

Tier I Environmental Assessment: Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58



AGRO-ENERGY **STABILITY PROGRAM**





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Acronyms and Abbreviations

Acronym	Meaning
AES	Agro-Energy Stability Program (Also known as FER)
APZ	Accident Potential Zone
ASD	Acceptable Separation Distance
AUGF	Authority to Use Grant Funds
CAA	Clean Air Act
CBRS	Coastal Barrier Resource System
CDBG	Community Development Block Grant
CFR	Code of Federal Regulations
CPD	Community Planning and Development
CO	Certifying Officer
CZ	Clear Zone
CZMA(P)	Coastal Zone Management Act / Area (Plan)
DNER	(Puerto Rico) Department of Natural and Environmental Resources
EA	Environmental Assessment
EO	Executive Order
EPA	(United States) Environmental Protection Agency
ERR	Environmental Review Record
ESA	Endangered Species Act
FER	Farm and Energy Resilience Program
FEMA	Federal Emergency Management Agency
FFRMS	Federal Flood Risk Management Standard
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GIS	Geographical Information System
HUD	Housing and Urban Development (Department of)
LMI	Low to Moderate Income
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPIAS	National Plan of Integrated Airport Systems
NPS	National Park Service
NRHP	National Register of Historic Places
NRCS	Natural Resources Conservation Service
NRI	Nationwide Rivers Inventory
PA	Programmatic Agreement
PRDOH	Puerto Rico Department of Housing (Departamento De La Vivienda)
RCRA	Resource Conservation and Recovery Act
RE	Responsible Entity
RPZ	Runway Protection Zone
RROF	Request for Release of Funds
SCS	Soil Conservation Service
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
T&E	Threatened and Endangered Species
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service



Change No.	Date	Change Description
1	06/30/25	Initial release.





Project Information

Project Name	Community Development Block Grant - Mitigation (CDBG-MIT): Agro-Energy Stability Program (AES)
Responsible Entity	Puerto Rico Department of Housing
Grant Recipient	Puerto Rico Department of Housing
Federal Agency	U.S. Department of Housing and Urban Development (HUD)
Project Location	Scattered locations throughout the Government of Puerto Rico
Grant Number	B-18-DP-72-0002
HUD Program	Community Development Block Grant – Disaster Recovery (CDBG-MIT)
Grant Award Amount	\$8,285,284,000.00
Estimated Total HUD Funded Amount	\$75,000,000.00
Direct Comments to:	606 Barbosa Ave., San Juan, PR 00918
Program Representative	Aldo A. Rivera Vázquez, PE / Assistant Secretary - Permits and Environmental Compliance Division Angel G. López-Guzmán, MSEM / Deputy Director - Permits and Environmental Compliance Division
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Consultant (if applicable)	N/A

Javier A. Mercado Barrera, MP

Preparer Name

Signature

Date

Aldo A. Rivera Vázquez, PE

RE Certifying Officer

[24 CFR 58.2(a)(2)]

Signature

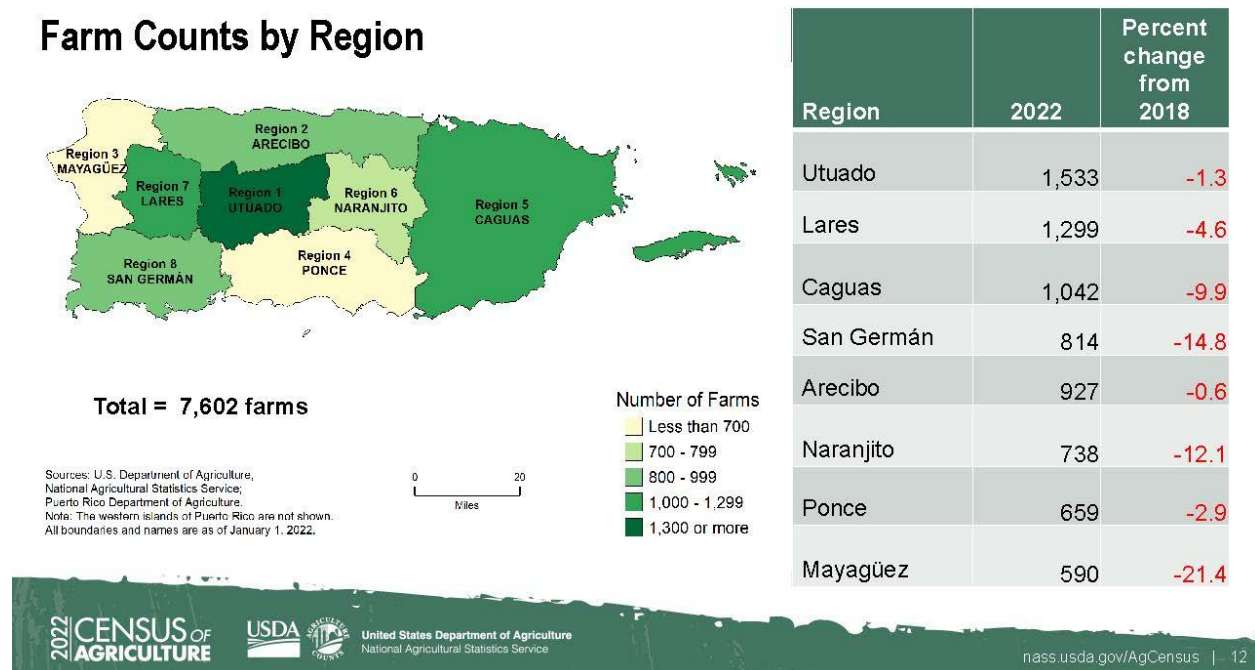
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Project Location

Proposed projects and actions under this Tiered Environmental Review Record will encompass the entire region of Puerto Rico, including all municipalities and covering both urban and rural areas, Figure 1 presents a global estimate of the potential farm pool available. Although the exact number of program applicants is currently unknown, there is a significant need for resilient and dependable renewable energy solutions across all types of agricultural operations on the island.

Figure 1. Number of Farms in Puerto Rico



Source: 1 2022 CENSUS of Agriculture USDA

This broad scope allows the program to address the unique agricultural energy needs found throughout the island, supporting a diverse range of farming operations essential to Puerto Rico's food security and economic resilience.

Puerto Rico's agricultural landscape is regionally diverse, with different regions specializing in various crops, livestock, and farming practices. For instance, the mountainous central and western regions focus heavily on coffee production, while the coastal areas support dairy farms and crop cultivation (Garffer, et al., 2020). By addressing energy resilience across all municipalities, the AES Program ensures tailored support that aligns with the specific agricultural practices and energy demands of each region.

Additionally, Puerto Rico faces frequent climate-related challenges, including hurricanes, flooding, and landslides, which pose significant risks to agricultural

productivity. These environmental vulnerabilities vary by region, with northern and central areas often experiencing high rainfall and flood risks, while southern areas face arid conditions. This program's renewable energy installations are essential for ensuring that farms have a reliable energy supply to maintain production, even in regions most impacted by severe weather.

Furthermore, many of Puerto Rico's rural agricultural areas, especially those in mountainous and remote locations, have limited access to reliable energy infrastructure (Garffer, et al., 2020). These regions are often more vulnerable to power disruptions, which can significantly impact farm productivity and local food supply. The AES Program addresses these challenges by providing renewable energy solutions to improve energy accessibility and resilience in these underserved areas, reinforcing the stability and viability of Puerto Rican agriculture.

This comprehensive approach to project location ensures that the AES Program will meet the diverse needs of Puerto Rico's agricultural sector, enhancing energy resilience, supporting sustainable food production, and strengthening rural economies across the entire island.

PRDOH, as the Responsible Entity, has determined that the AES Program will be reviewed using a Tiered Environmental Assessment approach. At the time of the Tier I review, the specific locations of farms applying for renewable energy enhancements are not yet known. Therefore, under 24 CFR 58.15 (Tiering) and 24 CFR 58.32 (Project Aggregation), PRDOH will aggregate similar activities into functional packages for a broad-level environmental review.

Given the island-wide scope of the AES Program and the diverse environmental conditions present across Puerto Rico, the Tier I review assesses general conditions that are applicable to all potential project locations. This includes broad environmental considerations, regulatory compliance, and potential cumulative impacts. Site-specific conditions, including unique geographic or environmental factors, will be evaluated during the Tier II review for each application to ensure compliance with all applicable regulations.

This approach ensures that island-wide environmental considerations are addressed comprehensively while allowing flexibility to account for the specific conditions of individual sites during Tier II evaluations.

Description of the Proposed Project

The Agro-Energy Stability Program¹ (the Farm and Energy Resilience Program (FER)) aims to foster economic development by enhancing agro-industrial capacity and infrastructure to support more resilient operations. Through the implementation of renewable energy solutions for agribusinesses and farmers, the Program will bolster their ability to withstand energy instability and challenges that may arise in the aftermath of disaster events. Investing in renewable energy development will ensure a steady and reliable energy supply capable of sustaining businesses and upholding supply chains vital to the food and agriculture industry sector, included in the Food, Water, and Shelter Lifeline identified in the CDBG-MIT Action Plan².

Eligible renewable Projects for the Program include Photovoltaic Systems (PVS) and Battery Storage Systems (BSS), which can be either new installations or expansions of existing systems tailored to meet eligible agribusinesses and farmers' current electricity demands.

Eligible activities under the Agro-Energy Program include:

- Costs of design and engineering services for the Project, including costs for any required design or engineering studies or surveys;
- Costs of any required permits for the project;
- Costs of equipment, including photovoltaic modules, charge controllers, transfer switches, inverters, metering equipment, balance equipment, batteries, voltage regulators, as well as mounting, cabling, and other electrical accessories to set up working Systems;
- Costs of site preparation and other work required prior to the installation of the System, including clearing, excavation, grading and leveling, and foundation work;
- Costs of mounting and anchoring structures such as racking systems or other structures that provide primary support for the System equipment;
- Costs of installation and commissioning of the System;
- Costs of required mitigation of hazardous materials, when applicable;
- Inspection and monitoring costs related to the installed Systems;
- The costs of training the end user on PVS and BSS operation and maintenance; and
- Any power grid interconnection costs related to typical interconnection requirements established by the electric power utility.

The Program will allow roof-mounted, ground-mounted, pole-mounted, or light frame (canopy) structure-mounted PVS installations, as long as they comply with all permitting requirements, laws, regulations, and codes. However, if the Participating Property has an existing structure that could provide primary support for the System as a roof-mounted installation, it should be considered before any of the other mounting solutions.

¹ [Agro-Energy Stability Program - CDBG-DR/MIT Recovery Funds](#)

² [CDBG-MIT Action Plan - CDBG-DR/MIT Recovery Funds](#)

The BSS must be a behind-the-meter system. Therefore, it must be connected to the electric utility customer's side of the electric meter.

Ineligible Use of Funds under the Agro-Energy Program include:

- Awards to Agricultural Businesses that are involved in the farming of any crop classified as a Schedule I controlled substance by the Controlled Substances Act5;
- Grant Agreements transfers;
- Tampering with, reselling, or exchanging the installed System;
- Use of equipment and services above market value;
- Utilization of used or refurbished equipment;
- Property improvements that are not directly associated with the development of a primary support for the renewable energy System;
- Installation of equipment that is not permanent and integral to the System support structure, as defined in Articles 250 and 252 of the Puerto Rico Civil Code and applicable federal regulations;
- Installation of equipment on land that is not Applicant-owned or controlled through an existing long-term lease agreement with a minimum term of fifteen (15) years;

The PRDOH will not be able to know specific numbers of farms that will be helped until applications are received. However, it is estimated that between 500 and 800 applications will be received from across all of Puerto Rico.

Statement of Purpose and Need for the Proposal

[40 CFR 1501.5\(c\)\(2\)\(i\) Purpose and need for the proposed agency action.](#)

In September 2017, Puerto Rico (Figure 2) experienced unprecedented devastation from two major hurricanes, Irma and Maria. Hurricane Maria, a Category 4 storm, directly impacted the entire island, resulting in one of the longest power outages in U.S. history (U.S. Department of Energy, 2024). These hurricanes not only caused immediate damage but also exposed long-standing vulnerabilities in Puerto Rico's electrical grid, which had become increasingly unreliable due to aging infrastructure and years of underinvestment. Communities across Puerto Rico, including agricultural areas, faced significant challenges as essential services were interrupted, power outages extended for months. These events underscored Puerto Rico's urgent need for energy resilience, particularly for sectors integral to public well-being, such as agriculture.

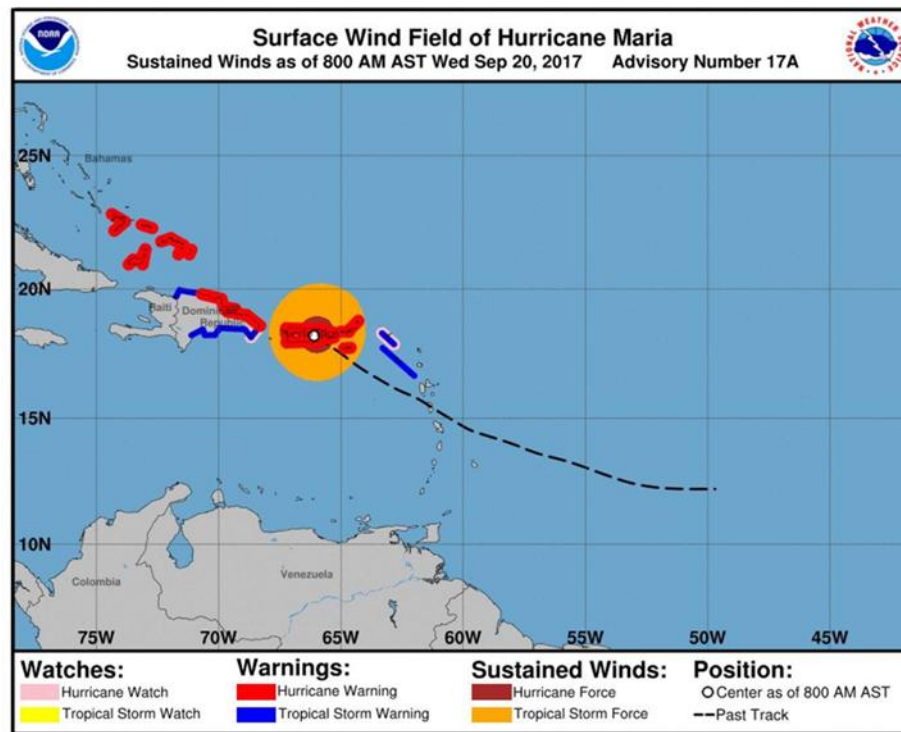
Figure 2. Puerto Rico Location



Source: 2 Puerto Rico Action Plan

The National Oceanic and Atmospheric Administration (NOAA) recorded Hurricane María winds (Figure 3) that reached up to 155 mph in the City of San Juan. Early estimates accurately captured extreme wind and rain threats, and a storm trajectory to impact the island head-on before proceeding northwest to the mainland US. Puerto Rico sustained hurricane force winds sweeping at maximum strength first through the islands of Vieques and Culebra, then the northeast coast before sweeping westward across the main island.

Figure 3. Hurricane Maria Wind Field



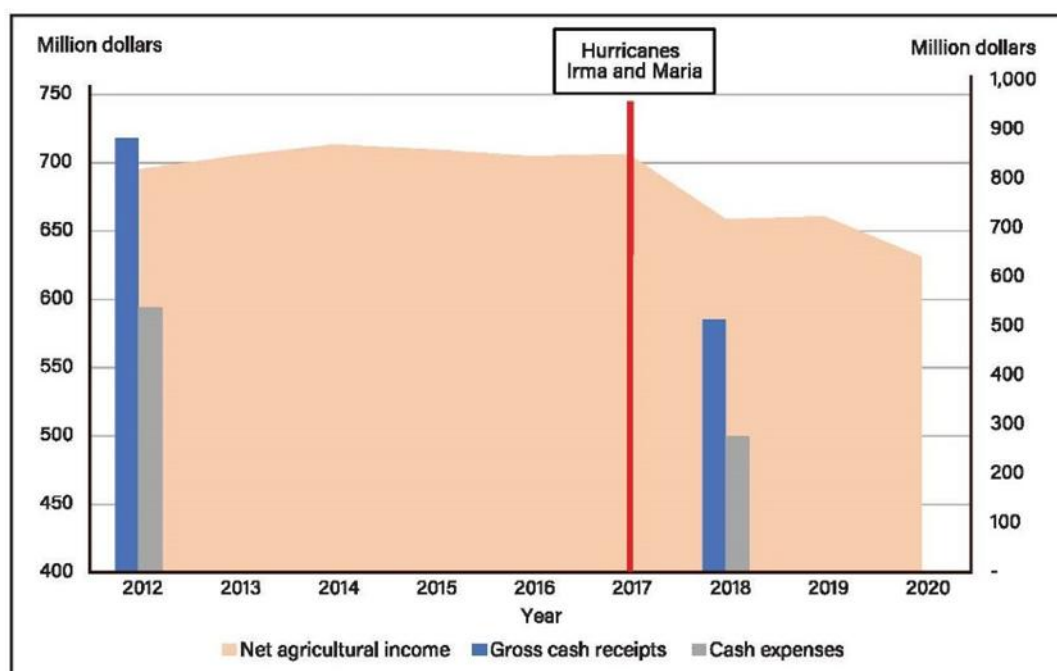
Hurricane Maria Wind Prediction, image courtesy of NOAA

Source: 3 Puerto Rico Action Plan

Puerto Rico's agricultural sector, a vital component of rural economic stability and food security, faced severe setbacks. The hurricanes destroyed over 80% of the 2017 agricultural crop value, resulting in approximately \$780 million in losses (PRDOH, 2024). Key crops such as plantains, bananas, and coffee were devastated, while essential infrastructure, including irrigation systems, storage facilities, and transportation networks, was also significantly damaged.

In addition to crop losses, the sector saw a steep decline in agricultural exports, which affected overall farm income and posed long-term recovery challenges. Economic losses led to a 26% drop in total farm sales (Figure 4) (Kenner, et al., 2023), and exports of agricultural products also decreased, further destabilizing rural economies. Smaller farms were particularly impacted, with those under 10 acres losing over half of their income. These events underscored the need for resilient, reliable energy sources to support continuous agricultural production, maintain local food supply chains, and stabilize the sector's economic contributions.

Figure 4. Puerto Rico Net Agricultural Income 2018



Source: 4 USDA 2023, Puerto Rico's Agricultural Economy in the Aftermath of Hurricane María

Existing Conditions and Trends

[24 CFR 58.40(a)] Determine existing conditions and describe the character, features and resources of the project area and its surroundings; identify the trends that are likely to continue in the absence of the project.

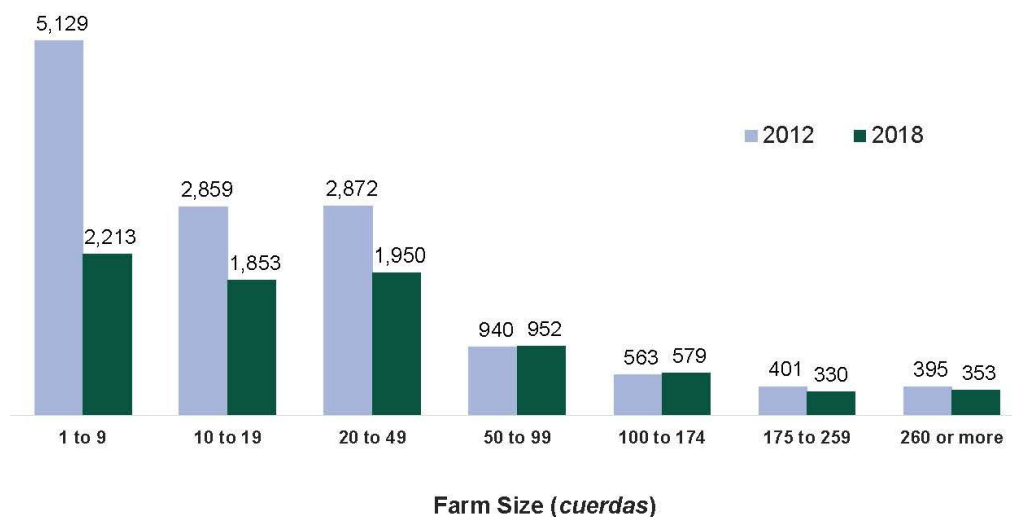
Puerto Rico's agricultural sector remains in recovery from the devastation caused by Hurricanes Irma and Maria. The hurricanes destroyed over 80% of the island's 2017 agricultural crop value, causing approximately \$780 million in damages (PRDOH, 2024).

In the aftermath, Puerto Rico's agricultural landscape saw substantial declines. Between 2012 and 2018, the number of farms decreased by 37.5%, and the land area under cultivation was reduced by 16.6%, highlighting the ongoing challenges to agricultural recovery (Kenner, et al., 2023). Smaller farms, particularly those under 10 acres (Figure 5), were disproportionately affected.

Figure 5. Number of Land in Farms by Size Class 2018

(U.S. Department of Agriculture, 2020)

Number of Farms by Size Class: 2012 and 2018



Source: 5 2018 CENSUS of Agriculture USDA

The hurricanes exposed vulnerabilities in Puerto Rico's agricultural sector, especially regarding energy stability. Farms depend on consistent power for essential operations like irrigation, refrigeration, and livestock care. However, Puerto Rico's aging electrical grid and frequent outages make these operations difficult to sustain. Many farms have incurred high operational costs from relying on expensive and unreliable fossil-fuel backups (Garffer, et al., 2020). The need for a resilient, independent power source is urgent, as it would mitigate the impacts of power disruptions and reduce the sector's dependence on costly, imported energy sources.

Climate change presents an ongoing threat, with predictions of more frequent and intense storms (Masson-Delmotte, V, et al., 2021). To adapt, Puerto Rico's agricultural sector must invest in resilient infrastructure that ensures continuity of operations even under extreme weather conditions. Renewable energy systems, particularly photovoltaic and battery storage solutions, provide a viable path forward by offering a sustainable and stable energy source (Garffer, et al., 2020). These systems would enable farms to recover quickly from disasters, reduce operational costs, and support Puerto Rico's goal of achieving 100% renewable energy by 2050³.

The AES Program is therefore positioned to address both current vulnerabilities and future resilience needs. By providing grants for renewable energy installations, the program will

³ "Puerto Rico Energy Public Policy Act" [Act. No. 17 of April 11, 2019]



support the agricultural sector's transition to sustainable energy, ensuring its long-term viability and contribution to Puerto Rico's food security and economic stability.

Funding Information

Grant Number	HUD Program	Funding Amount
B-18-DP-72-0002	Community Development Block Grant – Disaster Recovery (CDBG-MIT)	\$8,285,284,000.00

Estimated Total HUD Funded Amount:

\$75,000,000.00

Estimated Total Project Cost (HUD and non-HUD funds)

\$75,000,000.00



Compliance with 24 CFR 58.5, and 58.6 Laws and Authorities

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

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	If Yes: Describe compliance determinations made at the broad level. If No: Describe the policy, standard, or process to be followed in the site-specific review.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5		
Historic Preservation National Historic Preservation Act of 1966, as amended, particularly Section 106; 36 CFR Part 800	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The FER Program will comply with Section 106 of the National Historic Preservation Act (NHPA) using the framework established in the Programmatic Agreement (PA). This PA was originally executed on May 6, 2016, between FEMA, the Puerto Rico State Historic Preservation Office (SHPO), and the Puerto Rico Emergency Management Agency, and first amended on May 31, 2018. The PA was adopted by the Puerto Rico Department of Housing (PRDOH) through the HUD Addendum on December 18, 2018. A second amendment to the PA was executed on November 13, 2019, and a third amendment was executed on May 5, 2023. This last amendment extended the life of the PA until May 5, 2026.</p> <p>The PA provides a defined process for compliance with Section 106 by stipulating roles and responsibilities, exemptions for certain undertakings from Section 106 review (Programmatic Allowances), establishes protocols for consultation, facilitates the identification and evaluation of historic properties, and streamlines the assessment and resolution of adverse effects. These exemptions, or Programmatic Allowances are for activities that have been determined through FEMA's experience to have no or minimal potential to affect historic properties when implemented as specified in Appendix B of the PA. (see Appendix A1-1).</p> <p>The PA outlines specific activities, as defined in Appendix B: Programmatic Allowances, that have</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>been determined to have no or minimal effect on historic properties if implemented as specified without requiring formal SHPO consultation. The Programmatic Allowances consist of two tiers – First Tier and Second Tier.</p> <p>First Tier Allowances can be applied by staff whether or not they meet the Secretary of the Interior's Professional Qualifications Standards. These do not apply to projects within or adjacent to historic districts or individual properties determined to be eligible for or listed in the National Register of Historic Places (NRHP) nor a National Historic Landmark (NHL). Examples of these allowances relevant to the FER Program include:</p> <ul style="list-style-type: none"> • Repair, retrofit, and reconstruction of buildings, and structures less than forty-five (45) years old (at the time of review), unless located in or adjacent to a historic district; and • Replacement, relocation or installation of solar panels on the roof of buildings less than forty-five (45) years of age (at the time of review), except when located within or adjacent to a historic district. <p>Second Tier Allowances can only be applied by professionals meeting those qualifications. However, at this time there are limited allowances under this category that could be relevant to the FER Program. This includes:</p> <ul style="list-style-type: none"> • In-kind repair, replacements, and minor upgrades to landscaping elements (e.g., fencing, security gates, free standing walls, paving, existing parking lots, parking meters, planters, irrigation systems, lighting elements, signs, flag poles, ramps, steps). <p>If it is determined that a project (undertaking) meets allowances in its entirety, the Section 106 Review process can be completed by documenting the</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>applicable allowances in the project file, without SHPO consultation or notification. However, if the project involves a National Historic Landmark (NHL) and can be cleared on allowances, PRDOH will notify SHPO and the National Park Service (NPS) NHL Manager of the NPS Southeast Regional Office of this determination and provide the supporting documentation.</p> <p>If allowances cannot be applied to a project (undertaking) its entirety, then consultation as outlined in Stipulation II. C: Standard Project Review, is required with SHPO. Examples of activities that require consultation include but are not limited to: ground disturbing activities and/or installation of equipment on a structure 45 years in age or greater at the time of the review. Documentation will be submitted to SHPO that includes but is not limited to a detailed project description, an assessment of the project's direct and indirect/visual effects on historic properties within and adjacent to the project, and a recommendation. The SHPO will concur or not concur with the recommendation made by the Program.</p> <p>Activities with the potential to affect historic properties will be analyzed to ensure there will be no adverse effects. Resources such as the NPS's Technical Preservation Services Bulletin No. 52 "Interpreting the Secretary of the Interior's Standards for Rehabilitation: Incorporating Solar Panels in a Rehabilitation Project" (https://www.nps.gov/orgs/1739/upload/its-52-incorporating-solar-panels.pdf) and "Solar Panels on Historic Properties" (https://www.nps.gov/orgs/1739/solar-panels-on-historic-properties.htm) will be taken into account.</p> <p>Scope changes will be evaluated to determine if they can be cleared on Programmatic Allowances or if consultation must be initiated.</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p><u>Unanticipated Discoveries</u></p> <p>If unanticipated historic properties or archaeological resources are discovered during construction, all work will halt immediately. PRDOH will notify SHPO and the protocol as outlined in the PA per Stipulation III.B. Unanticipated Discoveries, Previously Unidentified Properties, or Unexpected Effects.</p> <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A1.</p> <p><u>Consultation for Tier II, if Required</u></p> <p>Puerto Rico State Historic Preservation Office</p> <p>National Park Service</p> <p>Refer to the Appendix C1 Tier II: Site-specific Project Review form and strategy for each individual property for compliance determination.</p>
Floodplain Management Executive Orders 11988 and 13690; 24 CFR Part 55; Puerto Rico Public Law No. 3 of September 1961, Planning Board Regulation 13.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<p>The Tier I broad-level review evaluates general floodplain conditions across Puerto Rico.</p> <p><u>Findings include:</u></p> <ul style="list-style-type: none"> • Program activities may occur in SFHAs or FFRMS floodplains due to Puerto Rico's geography. • Program activities are non-critical actions as defined by 24 CFR 55.2(b)(3). • Projects located entirely outside the FFRMS floodplain are deemed compliant with Executive Orders 11988 and 13690. <p><u>Tier II Site Specific Evaluations</u></p> <p>All applications will undergo a Tier II site-specific review to verify compliance with floodplain regulations. The following steps will be taken during Tier II reviews:</p> <p>Floodplain Identification</p> <ul style="list-style-type: none"> • Each application will be reviewed against

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>FEMA's current Preliminary FIRMS, Effective FIRMS, and ABFE maps to determine if a project site is located within a SFHA or the FFRMS floodplain.</p> <ul style="list-style-type: none"> The FFRMS will be determined using the 0.2-Percent-Annual-Chance Flood Approach (0.2 PFA). <ul style="list-style-type: none"> Where 0.2 PFA data is unavailable, the Freeboard Value Approach (FVA) will be used. <p>FFRMS Elevation:</p> <ul style="list-style-type: none"> All energy-related equipment, such as solar panels, inverters and battery storage units, must be installed above the minimum elevation level defined by FFRMS policy. <ul style="list-style-type: none"> The U.S. Department of Energy (DOE) and FEMA provide some recommendations on elevating and protecting energy-related equipment from flood risks. <ul style="list-style-type: none"> DOE Preventing and Mitigating Flood Damage to Solar Photovoltaic Systems FEMA Protecting Building Utility Systems from Flood Damage Floodproofing is not permitted under AES Program activities. <p>Substantial Improvement:</p> <ul style="list-style-type: none"> The cost of the proposed activity will be compared to the building's improvement value, based on the 2017 tax record if available or an independent appraisal. If the cost exceeds 50% of the structure's value, the project will be categorized as a substantial improvement and may be ineligible for funding, except for National Register of Historic Places-listed properties. <p>Eligibility Determination:</p> <ul style="list-style-type: none"> Sites entirely outside the FFRMS floodplain are deemed in compliance with Executive Orders 11988 and 13690. Sites located within regulated floodways, Coastal High Hazard Areas (Zones V or VE),

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>or within the inland limit of Coastal A Zones (Limit of Moderate Wave Action) will generally be ineligible for funding unless:</p> <ul style="list-style-type: none"> o The activity serves a functionally dependent use and meets all regulatory criteria under 24 CFR 55.8 and 55.12. • Floodproofing is not allowed; elevation is required for compliance. <p>Flood Insurance Requirement:</p> <ul style="list-style-type: none"> • Applications with buildings located in the SFHA must carry an NFIP-compliant flood insurance policy for the economic lifespan of the structure to maintain eligibility for funding. The amount of coverage must be at least equal to the development cost or the NFIP maximum coverage limit, whichever is less 42 U.S.C. § 4012a. <p>8-Step Decision Making Process</p> <ul style="list-style-type: none"> • Under 24 CFR 55.13(f), the 8-step decision-making process is not applicable to renewable energy projects that involve the installation of energy efficiency or renewable energy improvements on existing structures, provided the activities do not meet the definition of "substantial improvement" under 24 CFR 55.2(b)(12) and do not place equipment below the Federal Flood Risk Management Standard (FFRMS) floodplain elevation. <ul style="list-style-type: none"> o Projects that do not meet the criteria outlined in 24 CFR 55.13(f) will require compliance with the 8-Step Decision-Making Process as specified in 24 CFR 55.20. <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A2.</p> <p><u>Consultation for Tier II, if Required</u></p> <p>Municipality Floodplain Coordinator Puerto Rico Planning Board</p> <p>Refer to the Appendix C1: Tier II: Site-specific Project Review form and strategy for each individual property for compliance determination.</p>

<p>Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6</p>	<p>Was compliance achieved at the broad level of review?</p>	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
<p>Wetlands Protection</p> <p>Executive Order 11990 and 24 CFR 55 Subpart B; 89 FR 30850</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Under Executive Order 11990 and 24 CFR 55.16, the decision-making process outlined in 24 CFR 55.20 applies only to federal assistance for new construction in wetland locations.</p> <p>Project activities under the AES Program, which involve installing renewable energy systems (e.g., photovoltaic and battery storage systems) on agricultural lands, will be reviewed to avoid direct or indirect impacts on wetlands. These installations, primarily on previously disturbed or developed parcels, are expected to have no significant impact on wetland areas. However, any proposed project within or near designated wetland areas will undergo assessment during the Tier II review process.</p> <p>During Tier II, PRDOH will assess existing information about potential wetland presence. If necessary, a trained wetland professional will conduct a site inspection to confirm no wetlands are affected by the proposed action.</p> <p><u>Conditions for Funding Eligibility:</u></p> <ul style="list-style-type: none"> • 8-Step Decision-Making Process: For unavoidable wetland impacts, PRDOH will conduct an 8-step decision-making process to evaluate short- and long-term impacts, exploring mitigation and alternative site options. • Permitting and Compliance: Any disturbance to wetlands may require permits from relevant authorities, including the USACE, under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Appropriation Act of 1899. Only projects consistent with these regulations will be eligible for AES Program funding. • Best Management Practices (BMPs): BMPs for erosion and sediment control will be implemented for all activities near wetlands. These include sediment containment measures and erosion prevention during construction to protect adjacent wetlands and maintain water quality.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A3.</p> <p><u>Consultation for Tier II, if Required</u></p> <p>U.S. Army Corps of Engineers, Caribbean District, San Juan, Puerto Rico</p> <p>Refer to the Appendix C1: Tier II: Site-specific Project Review form and strategy for each individual property for compliance determination.</p>
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d) Puerto Rico Planning Board Regulation 12.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>The Coastal Zone Management Program (CZMP) is authorized by the Coastal Zone Management Act (CZMA) of 1972 and administered at the Federal level by the Coastal Programs Division within the National Oceanic and Atmospheric Administration's (NOAA) Office of Ocean and Coastal Resource Management. Puerto Rico's Coastal Program was approved by NOAA in 1978 and is regulated under 24 CFR 58.5(c). Puerto Rico's CZMP is administered by the DNER and is responsible for managing the maritime zone, coastal waters and submerged lands.</p> <p>The Puerto Rico Planning Board serves as the primary agency for managing coastal development. The CZMP authority applies to new construction, conversion, major rehabilitation, and substantial improvement activities. Projects that can affect the coastal zone must be carried out in a manner consistent with the approved Puerto Rico CZMP—under Section 307 of the CZMA of 1972, as amended.</p> <p>Any program site located outside of a designated Coastal Managements Zone is considered In Compliance because the project activities cannot affect the resource.</p> <p>Program application sites located inside a designated Coastal Management Zone will also be considered In Compliance with HUD and local regulations. PRDOH consulted with the Planning Board, who agreed by reviewing PRDOH's CDBG-DR/MIT project actions and issuing Resolution JP-</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>2024-004 on July 24, 2024, adopted August 16, 2024 (see Appendix A4).</p> <p>AES Program applications within a Coastal Zone do not require individual federal consistency determinations based on Section A.2 of the resolution, as they will not require a construction permit from the Puerto Rico Office of Permit Management.</p> <p>PRDOH determined this approach is compliant with Planning Board Joint Regulation 9473, Section 9.4.1.3, (a)(1) approved on June 16, 2023.</p> <ul style="list-style-type: none"> • Photovoltaic solar installations mounted on rooftops with a capacity of up to one (1) megawatt (MW-AC) do not require construction or use permits. Similarly, construction permits are not required for ground-mounted systems with a capacity of up to one hundred kilowatts (100 kW). <p>Projects that do not meet the standards outlined in Resolution JP-2024-004 will be subject to the normal coastal zone management consultation process, including a federal consistency determination, as required by applicable regulations.</p> <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A4.</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(c); 40 CFR Part 149	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>According to the US Environmental Protection Agency's Source Water Protection, Sole Source Aquifer Protection Program, there are no Sole Source Aquifers in Puerto Rico (Appendix A5-1). No further evaluation is required. The project is in compliance with the Safe Drinking Water Act.</p> <p><u>Regulatory Agency and Source Review</u> See Appendix A5.</p>
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The AES Program will adhere to the Endangered Species Act (ESA) and its implementing regulations to ensure that federally funded actions do not jeopardize the existence of threatened or endangered species or adversely modify their critical habitats. Compliance with ESA requirements will be determined during the site-specific Tier II evaluation to address potential impacts on listed species, candidate species, and designated critical habitats.</p> <p>There are four (4) different scenarios that may be required as part of this determination. They are:</p> <ol style="list-style-type: none"> 1. No Effect: This is the appropriate determination when no species are present on a proposed project activity area, or when the proposed project activity will not affect a listed species or designated critical habitat. No further consultation with the USFWS is required. 2. Self-Certification: A self-certification in accordance with the Blanket Certification can be achieved. The self-certification will be prepared and submitted to PRDOH. 3. Informal Consultation: This is the appropriate

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>determination when a proposed project activity does not fit the No Effect criteria; a criteria in the Blanket Certification; or when the proposed project activity may affect, but not likely to adversely affect federally listed species or designated critical habitat. The consultation with the USFWS' Caribbean Ecological Services Field Office will be initiated by PRDOH.</p> <p>4. Formal Consultation: This is the appropriate determination when the proposed project activity is Likely to Adversely Affect the species or habitat is made after Informal Consultation. The consultation will be initiated by PRDOH to the USFWS' Caribbean Ecological Services Field Office .</p> <p><u>Blanket Certification Activities</u></p> <p>Certain activities under the AES Program are eligible for Blanket Certification and will be confirmed during Tier II evaluations. In accordance with the USFWS, Caribbean Ecological Services Field Office Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development (Appendix A6-6), the following types of activities have a blanket clearance for this topic and do not need further review upon determination:</p> <ul style="list-style-type: none"> • Installation of solar panels, battery storage systems and/or associated utility infrastructure, either above ground or underground, on existing or new concrete pads, existing or new roofs, ground or pole mounted. <p>There is one threatened species, the Puerto Rican Boa that is found anywhere on the island, both urban and rural locations. The documentation of the Boa presence is not required for formal or informal consultation. However, a statement regarding the potential presence of the Boa and impacts is required. A Programmatic Biologic Opinion (PBO) has been prepared by the USFWS for mitigation measures regarding the Boa. The PBO is</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>shown in Appendix A6-7.</p> <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A6.</p> <p><u>Consultation for Tier II, if Required</u></p> <p>US Fish and Wildlife Service</p> <p>Puerto Rico Department of Natural and Environmental Resources</p> <p>Refer to the Appendix C1: Tier II: Site-specific Project Review form and strategy for each individual property for compliance determination.</p>
<p>Wild and Scenic Rivers</p> <p>Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>Congress designated portions of the Rio Mameyes, Rio de la Mina and Rio Icacos as National Wild & Scenic Rivers (NWSR) through the Caribbean National Forest (CNF) Wild and Scenic Rivers Act of 2002 (P.L. 107- 563 December 19, 2002). These rivers were added to the National Wild and Scenic River System under the authority of the Wild and Scenic River Act of 1968.</p> <p>The area encompasses approximately 2,848 acres which are publicly owned and under the administration of the USDA Forest Service. The designated portions and corridors lie in a confluence of the municipalities of Río Grande, Luquillo and Naguabo (Appendix A7-1).</p> <p>Any AES project located outside the municipalities of Río Grande, Luquillo, and Naguabo will be considered in compliance with the requirements of the Wild and Scenic Rivers Act, as it will not impact the designated portions of the Rio Mameyes, Rio de la Mina, or Rio Icacos.</p> <p>Site-specific Tier II assessments will verify proximity to designated NWSR portions or corridors of the Rio Mameyes, Rio de la Mina, and Rio Icacos.</p> <p><u>Consultation for Tier II, if Required</u></p> <p>Forest Service U.S. Department of Agriculture</p> <p>Puerto Rico Department of Natural and Environmental Resources</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Emissions associated with the AES Program's renewable energy installations are minimal, limited to the use of small, handheld, or residential-scale construction equipment for solar photovoltaic installations. Temporary, localized dust levels may occur on open spaces and indoor areas but will not impact air quality beyond these specific areas and remain well below federal General Conformity Rule de minimis thresholds (40 CFR 93.153(c)(1)). However, to ensure a comprehensive environmental review, worst case scenario emissions data from program activities will be analyzed collectively, even though emissions from only a subset of these activities might contribute.</p> <p>Municipalities in Nonattainment or Maintenance areas include Arecibo, Bayamon, Cataño, Guaynabo, Salinas, San Juan and Toa Baja.</p> <p>Cataño and parts of Toa Baja, Bayamón, Guaynabo, and San Juan are in nonattainment for the 2010 Sulfur Dioxide federal standard.</p> <p>Guaynabo was re-designated to maintenance for the particulate matter (PM10) federal standards.</p> <p>Parts of Arecibo are in nonattainment for 2008 Lead federal standard.</p> <p>Data is from the USEPA Green Book; current as of October 31, 2024.</p> <p><u>Assessment of Emission Sources for the Proposed Program</u></p> <p>The direct emissions associated with the AES Program are expected to originate primarily from land-based mobile sources used during the installation of renewable energy systems, such as photovoltaic panels and battery storage units, on agricultural properties. Installations will be primarily on the roofs of structures but ground installations are permitted in some instances. These sources could include equipment like compactors, loaders, backhoes,</p>

<p>Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6</p>	<p>Was compliance achieved at the broad level of review?</p>	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>												
		<p>cranes, and tractors, which may be necessary for site preparation and installation. Minimal to no indirect emissions are anticipated from AES Program activities, as the focus is on renewable energy improvements rather than large-scale construction or land alteration.</p> <p><u>Emission Methodology</u></p> <p>The methodology used to estimate air emissions associated with AES Program activities includes calculating fuel consumption for renewable energy installation processes and applying average pollutant emission factors for construction equipment based on EPA's Motor Vehicle Emission Simulator (MOVES). This approach estimates emissions from equipment such as loaders, backhoes, cranes, and tractors used during site preparation and installation. The general methodological steps for this assessment are detailed in Appendix A7.</p> <p><u>Air Emissions Assessment</u></p> <p>The proposed programs are estimated to occur from the beginning of 2025 to 2027. Annual air emissions were calculated for 2025, as a worst-case scenario since this is estimated to represent a full year of construction activity. The estimated annual air emissions for 2025 are presented below.</p> <table border="1" data-bbox="764 1377 1346 1587"> <thead> <tr> <th></th><th>Program Emissions (tons/year)</th><th>Conformity De Minimis Levels (tons/year)</th></tr> </thead> <tbody> <tr> <td>PM10</td><td>0.518</td><td>100</td></tr> <tr> <td>SO2</td><td>0.008</td><td>100</td></tr> <tr> <td>Pb</td><td>xxx</td><td>25</td></tr> </tbody> </table> <p>A comparison of the estimated annual air emissions for 2025 associated with the proposed program to the de minimis levels in the General Conformity regulation for PM10, Pb and SO2 indicates that the estimated annual air emissions are well below the de minimis levels. Since the estimated annual air emissions for 2025 are below the de minimis levels, the programs are presumed to conform, and a conformity determination is not required.</p>		Program Emissions (tons/year)	Conformity De Minimis Levels (tons/year)	PM10	0.518	100	SO2	0.008	100	Pb	xxx	25
	Program Emissions (tons/year)	Conformity De Minimis Levels (tons/year)												
PM10	0.518	100												
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Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A7.</p>
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>The Department of Agriculture Natural Resources Conservation Service (NRCS) makes determinations of prime and unique farmlands in Puerto Rico, and consultation with the NRCS is required if farmland that is protected under the FPPA is to be converted to nonagricultural uses. Appendix A8-1, shows farmlands in Puerto Rico.</p> <p>The AES Program will install solar panels and battery storage systems in a way that minimizes the footprint on active farmland—either by using non-productive areas (such as rooftops, barn structures, or marginal lands) to support critical farm operations, such as irrigation systems, refrigeration for produce storage, lighting for livestock facilities, or equipment used in crop production. By ensuring continuous energy access, these systems directly support and enhance agricultural productivity and resilience.</p> <p>According to the Farmland Protection Policy Act (FPPA) guidelines, federal programs that facilitate “on-farm structures needed for farm operations” are Not Subject to Provisions of FPPA.</p> <p>The AES Program improves agricultural operations, from lowering energy costs and reducing dependency on external power sources to</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>increasing the farm's resilience to natural events and power disruptions. This is necessary for maintaining and enhancing farm operations, aligning with FPPA's intention to support agricultural uses of farmland.</p> <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A8.</p>
Hazardous Materials, Contamination, Toxic Chemicals and Gases, and Radioactive Substances 24 CFR 58.5 (i) (2)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The AES Program ensures compliance with HUD's policy that all properties used in HUD-assisted programs are free of hazardous materials, contamination, toxic chemicals, gases, and radioactive substances where such hazards could adversely affect the health and safety of occupants or conflict with the intended utilization of the property. Compliance will be achieved during the Tier II site-specific review, as detailed below.</p> <p><u>Hazardous Material Facilities</u></p> <p>Tier II reviews will assess the proximity of hazardous material facilities, including dumps, landfills, industrial sites, and other locations with known or potentially hazardous waste. This evaluation will include a search for facilities handling hazardous materials within a 3,000-foot radius of the application site to identify any potential risks.</p> <p>Best available data sources such as EPA's GIS database, Superfund List, National Priorities List (NPL), Toxics Release Inventory, and Hazardous Waste (RCRA) databases, NEPAassist, will be consulted.</p> <p>Sites found to pose a risk of increased contamination exposure will require mitigation measures before approval or will be deemed</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>ineligible.</p> <p><u>Radon</u></p> <p>Based on a PRDOH memorandum dated September 27, 2024:</p> <p>Radon testing is deemed infeasible and impractical for Puerto Rico due to:</p> <ul style="list-style-type: none"> • Lack of updated, reliable scientific data. • Insufficient testing capacity with only two licensed professionals available on the island. • Logistical challenges and prohibitive costs for DIY test kits and analysis. <p>PRDOH consulted with relevant agencies, including USGS, CDC, Puerto Rico Department of Health, and EPA, which confirmed the absence of reliable data and logistical barriers to testing.</p> <p>HUD confirmed that PRDOH's documentation satisfies HUD's CPD Notice 23-103. Therefore, radon testing is not required for the AES Program, and no further Tier II evaluation is necessary for radon (See Appendix A10-2,).</p> <p><u>Asbestos</u></p> <p>Asbestos Containing Materials (ACM) regulations under EPA NESHAP (40 CFR 61.145 and 61.150) and Puerto Rico Law 9 will be followed.</p> <p>AES Program activities will not exceed regulated thresholds (160 square feet or 35 cubic feet of ACM). Therefore, program activities are compliant, and additional site-specific evaluations for ACM will not be necessary.</p> <p><u>Lead-Based Paint and Mold</u></p> <p>Commercial-only buildings are exempt from lead-based paint and mold assessments under HUD and EPA regulations unless the building houses childcare facilities or is part of a mixed-use residential structure.</p> <p>In applicable cases, Tier II reviews will include lead-based paint assessments following HUD's 24 CFR 35 Subpart J and mold evaluations using visual inspection and remediation standards.</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p><u>Mitigation and Best Practices</u></p> <p>Tier II reviews will prescribe site-specific mitigation measures as needed.</p> <p>Contractors will adhere to OSHA standards for hazardous material handling and comply with local environmental regulations.</p> <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A10</p> <p><u>Consultation for Tier II, if Required</u></p> <p>US Environmental Protection Agency, Region II Puerto Rico DNER</p> <p>Refer to the Appendix C1 Tier II: Site-specific Project Review form and strategy for each individual property for compliance determination.</p>
Environmental Justice Executive Order 12898	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>On January 21, 2025, President Trump issued the EO14173 titled "Ending Illegal Discrimination and Restoring Merit-Based Opportunity", which revoked EO 12898 and eliminated federal mandates requiring agencies to assess environmental justice impacts.</p> <p>As a result of this new executive action, there is no longer a federal requirement for the AES Program to evaluate environmental justice concerns as part of its environmental compliance review. The program will continue to adhere to all applicable HUD environmental review standards under 24 C.F.R. Part 58, but will no longer include an environmental justice analysis in its determinations.</p>
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6		

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994; 24 CFR 55.5	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>Compliance with floodplain management and flood insurance requirements for the AES Program will be addressed during the site-specific Tier II review, as detailed in Appendix C1.</p> <p>Flood Insurance Requirements:</p> <p>Appendix A10-1 outlines that Puerto Rico has numerous locations within the 100-year SFHA, with all communities participating in the National Flood Insurance Program (NFIP). For any application building found to have portions located within an SFHA, based on the current Effective FEMA Flood Insurance Rate Map (FIRM), the following actions will be required:</p> <p>NFIP-Compliant Flood Insurance Policy:</p> <ul style="list-style-type: none"> The applicant or future building owner must obtain and maintain an NFIP-compliant flood insurance policy. The amount of coverage must be at least equal to the development cost or the NFIP maximum coverage limit, whichever is less 42 U.S.C. § 4012a. <p>Restrictions for Prior Federal Flood Disaster Assistance Recipients</p> <ul style="list-style-type: none"> Per 24 CFR 55.5(a)(2) and the Flood Disaster Protection Act, no assistance will be provided to any person who previously received federal flood disaster assistance conditioned on obtaining and maintaining flood insurance, but failed to maintain the required policy. <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A10</p> <p><u>Consultation for Tier II, if Required</u></p> <p>Municipality Floodplain Coordinator</p> <p>Puerto Rico Planning Board</p> <p>Refer to Appendix C1: Tier II: Site-Specific Project Review form and strategy for each individual</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	If Yes: Describe compliance determinations made at the broad level. If No: Describe the policy, standard, or process to be followed in the site-specific review.
		property for compliance documentation.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	Compliance with CBRS requirements for the AES Program will be determined during the site-specific Tier II review, as detailed in Appendix C1. CBRS Restrictions: Federal assistance is not allowed for projects located within a Coastal Barrier Resources System (CBRS) unit unless they meet one of the specific exceptions listed in 16 USC § 3505. The AES Program activities are not exempt, meaning: <ul style="list-style-type: none"> Each project site will be evaluated to determine if it is partially or fully located within a CBRS unit. If any building is determined to be within a CBRS unit, that project will not qualify for AES Program funding, and the site will be dismissed from further consideration. <u>Regulatory Agency and Source Review</u> See Appendix A11. <u>Consultation for Tier II, if Required</u> US Fish and Wildlife Service Puerto Rico DNER Refer to Appendix C1: Tier II: Site-Specific Project Review form and strategy for each individual property for compliance documentation.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 51		

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>Under the AES Program the proposed actions involve the installation of renewable energy systems on existing agricultural and commercial structures, which do not create permanent noise sources or promote new development. Therefore, no site-specific noise assessment is required, as these installations are not anticipated to introduce or increase noise exposure levels in the surrounding areas.</p> <p>The AES Program's activities align with HUD noise standards by maintaining current land use without contributing to noise impacts or altering the noise environment. Best management practices adhering to local noise requirements shall be followed by Program contractors to minimize any temporary noise impacts during installation.</p>
Siting of HUD- Assisted Projects Near Hazardous Operations 24 CFR 51 Subpart C	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>The primary activities under the AES Program involve the installation of photovoltaic (solar) panels and battery storage systems, which do not introduce hazardous or flammable materials into the area. Solar panels and batteries, when installed per manufacturer and safety guidelines, do not create an explosive hazard and are therefore outside the scope of hazardous materials defined by 24 CFR 51 Subpart C.</p> <p>Additionally, the AES Program will ensure installations comply with relevant electrical and fire safety standards. Battery systems are in enclosures that meet safety and fire-resistance requirements, further reducing any risk of fire hazards. Renewable energy systems will be installed with appropriate separation from any fuel storage areas or hazardous agricultural materials, such as fertilizers and pesticides, to maintain safety and compliance.</p> <p>The AES Program will not involve development, construction, or rehabilitation actions that would increase residential densities or result in land conversion. None of these factors apply to the program, as funding is limited solely to renewable</p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>energy installations on existing agricultural and commercial buildings. Therefore, a site-specific evaluation for these factors is not required.</p>
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>HUD prohibits providing CDBG-DR assistance to any property located in an Airport Clear Zone (Runway Protection Zone for civil airports) or a Military Clear Zone, if the building is frequently used or occupied by people.</p> <p>For projects proposed within 2,500 feet of a civil airport (as defined in the Federal Aviation Administration's National Plan of Integrated Airport Systems, per 24 CFR 51.301(c)) or within 15,000 feet of a military airport, the following determinations must be made:</p> <p>Runway Protection Zone (RPZ) or Clear Zone (CZ):</p> <ul style="list-style-type: none"> If the site is located within an RPZ/CZ, the application will be deemed ineligible for funding unless: <ul style="list-style-type: none"> The activity is not frequently used or occupied by people, and Written assurance is obtained from the airport operator that there are no plans to acquire the land as part of an RPZ or CZ acquisition program (24 CFR 51.303(a)(2)). <p>Accident Potential Zone (APZ):</p> <p>If the site is located within an APZ:</p> <ul style="list-style-type: none"> Verify and document whether the planned activity is consistent with Department of Defense Land Use Compatibility Guidelines (24 CFR 51.303(b)). <p><u>Regulatory Agency and Source Review</u></p> <p>See Appendix A12.</p> <p><u>Consultation for Tier II, if Required</u></p>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR 50.4, 58.5, and 58.6	Was compliance achieved at the broad level of review?	<p>If Yes: Describe compliance determinations made at the broad level.</p> <p>If No: Describe the policy, standard, or process to be followed in the site-specific review.</p>
		<p>Appropriate civil airport operator / Department of Defense / National Guard military airfield liaison Federal Aviation Administration</p> <p>Refer to Appendix C1: Tier II: Site-Specific Project Review form and strategy for each individual property for compliance documentation.</p>

Environmental Assessment Factors

[24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27]

Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits or approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. All conditions, attenuation or mitigation measures have been clearly identified.

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

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Code	Impact Evaluation
Land Development		
Conformance with Plans/Compatible Land Use and Zoning/Scale and Urban Design	2	<p>The proposed AES Program activities, which focus on installing renewable energy systems such as photovoltaic panels and battery storage, will be implemented on agricultural lands or existing structures. These activities are compatible with current land uses and will not alter the existing land use patterns or urban fabric of the project areas.</p> <p>The program avoids activities that would lead to land conversion, increase residential densities, or result in urban sprawl. The renewable energy installations are designed to support agricultural and commercial operations, thereby maintaining the existing character and purpose of the project sites.</p> <p>All projects will be reviewed during the Tier II site-specific assessment to ensure consistency with local land use policies and compatibility with surrounding uses. Documentation of compliance will be included in the Tier II: Site-Specific Project Review form for each individual property.</p>

-Slope and Erosion	3	<p>The proposed AES Program activities, including the installation of renewable energy systems, may involve minor ground disturbance, such as for mounting photovoltaic panels or installing battery storage systems. These activities have the potential to cause minor erosion or sedimentation if not properly managed.</p> <p>To mitigate potential impacts, best management practices (BMPs) for erosion and sediment control will be implemented during construction. These may include, but are not limited to:</p> <ul style="list-style-type: none"> • Installing silt fences, sediment traps, or other sediment control devices. • Stabilizing disturbed soils promptly with vegetation or erosion control mats. • Avoiding construction activities during heavy rainfall periods. • Designing project layouts to minimize disturbance on steep slopes. <p>All projects will undergo Tier II site-specific assessments to identify areas with potential slope and erosion risks. Where risks are identified, site-specific mitigation measures will be included as conditions for project approval to ensure compliance with local and federal regulations.</p>
Soil Suitability	2	<p>The proposed AES Program activities, primarily focused on the installation of renewable energy systems, are expected to have minimal to no adverse impacts related to soil suitability. The majority of installations will occur on previously developed or disturbed lands, such as agricultural fields or existing structures, where soil suitability is not a critical concern.</p> <p>For ground-mounted renewable energy systems, Tier II site-specific reviews will evaluate soil characteristics to ensure the stability and feasibility of the proposed installations. In cases where soil conditions pose challenges (e.g., high shrink-swell potential, poor load-bearing capacity), appropriate engineering solutions will be employed.</p> <p>Documentation of soil conditions and any required mitigation measures will be included in the Tier II: Site-Specific Project Review form for each individual property.</p>
Hazards and Nuisances and Site Safety	2	<p>The proposed AES Program activities, including the installation of renewable energy systems, are not expected to create significant hazards, nuisances, or site safety concerns. All installations will adhere to applicable building codes, safety regulations, and best practices to ensure safe construction and operation.</p> <p>Potential hazards, such as electrical risks or equipment-related</p>

		<p>accidents during installation, will be mitigated through:</p> <ul style="list-style-type: none"> • The use of qualified contractors and licensed professionals. • Compliance with OSHA standards for workplace safety during construction activities. • Proper equipment handling, storage, and installation procedures to minimize risks. <p>For ground-mounted systems, site-specific Tier II reviews will assess potential nuisances, such as glare from solar panels or noise during construction. Where necessary, mitigation measures (e.g., site layout adjustments, construction hours or buffer zones) will be implemented to address localized concerns.</p> <p>Documentation of compliance with safety standards and mitigation of site-specific hazards will be recorded in the Tier II: Site-Specific Project Review form.</p>
Energy Consumption	2	<p>The implementation of the AES Program, particularly during the installation phase of renewable energy systems, is anticipated to result in minor energy consumption. This includes the use of construction equipment, tools, and vehicles, which may temporarily increase energy demand at project sites.</p> <p>Given the temporary nature and limited scale of energy consumption during the program's implementation, impacts are expected to be minor and localized.</p>
Noise – Contribution to community noise levels	3	<p>The implementation of the AES Program may result in temporary noise impacts during the installation of renewable energy systems, particularly from construction equipment and vehicle operations. These impacts are expected to be minor, localized, and limited to the duration of installation activities.</p> <p>To mitigate potential noise impacts:</p> <ul style="list-style-type: none"> • Construction activities will be restricted to daylight hours to minimize disturbances to nearby communities. • Equipment and vehicles will be equipped with noise-reduction features, such as mufflers, and will be maintained in good working condition. • Notification to nearby residents or businesses prior to the start of construction activities, where applicable. <p>Noise impacts will be evaluated to identify sensitive receptors, such as residential areas, schools, or hospitals, near project sites. Where necessary, noise impacts would be mitigated to the extent feasible.</p>

Air Quality – Effects of ambient air quality on project and contribution to community pollution levels	3	<p>he AES Program's implementation phase may result in temporary air quality impacts due to emissions from construction equipment, vehicles, and dust generation during site preparation activities. These impacts are expected to be minor, localized, and short-term.</p> <p>To mitigate potential air quality impacts:</p> <ul style="list-style-type: none"> • Use of well-maintained equipment to minimize emissions. • Implementing dust control measures, such as water spraying or covering loose soil, during ground-disturbing activities. • Limiting idling time for construction vehicles and machinery to reduce exhaust emissions. • Scheduling construction activities to minimize cumulative air quality impacts in areas with other ongoing projects. <p>Air quality impacts in each project location will be evaluated to identify sensitive receptors (e.g., residential zones, schools, or hospitals) Mitigation measures will be identified and enforced to the extent feasible.</p>
Socioeconomic		
Employment and Income Patterns	1	<p>The AES Program is expected to have a positive socioeconomic impact by creating temporary employment opportunities during the implementation phase, including jobs in construction, installation, and support services for renewable energy systems. These activities will provide economic benefits to local workers and contractors, particularly in rural and agricultural communities where job creation is critical.</p> <p>In the long term, the program will enhance the viability of agricultural operations by reducing energy costs and improving reliability, contributing to more stable income patterns for farmers and agribusinesses. This aligns with the AES Program's goal to bolster the agricultural sector as a key component of Puerto Rico's rural economy and food security.</p>
Demographic Character Changes/ Displacement	2	<p>The AES Program activities are not anticipated to cause any demographic character changes in the project areas. The installation of renewable energy systems on agricultural lands and existing structures will not lead to increased residential densities, induce population migration, or alter the composition of local communities.</p> <p>The program is focused on supporting the existing agricultural sector and rural communities, enhancing their resilience without introducing new developments that could disrupt the demographic character of the areas served.</p>

Environmental Justice	1	<p>On January 21, 2025, President Trump issued the EO 14173 titled "Ending Illegal Discrimination and Restoring Merit-Based Opportunity", which revoked EO 12898 and eliminated federal mandates requiring agencies to assess environmental justice impacts.</p> <p>As a result of this new executive action, there is no longer a federal requirement for the AES Program to evaluate environmental justice concerns as part of its environmental compliance review. The program will continue to adhere to all applicable HUD environmental review standards under 24 C.F.R. Part 58, but will no longer include an environmental justice analysis in its determinations.</p>
Community Facilities and Services		
Educational and Cultural Facilities	2	<p>The AES Program activities, focused on the installation of renewable energy systems on agricultural lands and existing structures, are not anticipated to impact educational or cultural facilities. The program does not involve the construction, expansion, or rehabilitation of facilities used for educational or cultural purposes.</p> <p>Contractors will assess the proximity of project activities to schools, libraries, museums, or other cultural resources to ensure no indirect impacts, such as noise or accessibility issues, occur during the installation process. If any potential concerns are identified, mitigation measures will be implemented to prevent disruption to these facilities.</p>
Commercial Facilities	1	<p>The AES Program is expected to have a positive impact on commercial facilities, particularly those in agricultural and rural areas. By providing renewable energy systems, such as photovoltaic panels and battery storage, the program will improve energy reliability and reduce operating costs for commercial facilities involved in agricultural production and supply chains. These improvements will help stabilize operations and enhance economic resilience.</p> <p>Installations involving ground disturbance or proximity to historic commercial structures will undergo Tier II site-specific reviews to ensure compliance with Section 106 of the National Historic Preservation Act. Any impacts on historic commercial facilities will be addressed in consultation with the Puerto Rico State Historic Preservation Office (SHPO), and mitigation measures will be implemented if necessary.</p>
Health Care and Social Services	2	<p>The AES Program activities are not anticipated to directly affect health care or social services facilities, as the program focuses on installing renewable energy systems on agricultural lands and existing structures. These activities do not involve construction, rehabilitation, or modifications to buildings providing medical or social services, such as hospitals, clinics, community centers, or non-profit service locations.</p> <p>The proximity of project activities to health care and social</p>

		services facilities will be assessed to ensure there are no temporary disruptions caused by noise, dust, or construction-related traffic. Mitigation measures, such as scheduling work outside peak service hours and implementing dust and noise control practices, will be applied as necessary.
Solid Waste Disposal/Recycling	3	<p>The implementation of the AES Program is anticipated to generate some solid waste during the installation of renewable energy systems, particularly from packaging materials, construction debris, and potential disposal of old or replaced equipment. These impacts are expected to be minor and localized but will require appropriate waste management practices.</p> <p>To mitigate potential impacts:</p> <ul style="list-style-type: none"> • Contractors will be required to segregate recyclable materials (e.g., metals, plastics, cardboard) from general waste and dispose of them at approved recycling facilities. • Non-recyclable construction debris will be transported to certified solid waste management facilities in compliance with local and federal waste disposal regulations. • Hazardous waste, if generated (e.g., batteries or electronic components), will be handled according to EPA and Puerto Rico Department of Natural Resources standards.
Wastewater/Sanitary Sewers	2	<p>The AES Program activities, focused on the installation of renewable energy systems, are not expected to generate significant wastewater or require connections to sanitary sewers. The program does not involve activities such as new construction or the rehabilitation of facilities that would increase wastewater discharge or necessitate additional sewer capacity.</p> <p>The potential for temporary wastewater generation from construction activities (e.g., worker facilities or equipment cleaning) will be assessed. If applicable, contractors will be required to:</p> <ul style="list-style-type: none"> • Use portable sanitary facilities during installation activities. • Ensure proper disposal of any wastewater generated, in compliance with local and federal regulations. <p>No long-term impacts to wastewater or sewer infrastructure are anticipated.</p>

Storm Water	3	<p>The AES Program activities, particularly installations involving ground disturbance, may result in temporary impacts to stormwater runoff during construction. These activities could lead to soil erosion and sedimentation if not properly managed.</p> <p>To mitigate potential impacts:</p> <ul style="list-style-type: none"> • Erosion and Sediment Control: Best management practices (BMPs), such as silt fences, sediment traps, and temporary vegetation, will be implemented to control erosion and prevent sediment from entering water bodies. • Site Design: Project sites will be assessed to ensure installations do not significantly alter natural stormwater drainage patterns or increase runoff volumes. • Construction activities will comply with the Puerto Rico Department of Natural and Environmental Resources stormwater management guidelines.
Water Supply	2	<p>The AES Program activities, focused on the installation of renewable energy systems, are not anticipated to significantly impact water supply systems. These activities do not involve water-intensive processes or new development requiring additional water connections or usage.</p> <p>For installations involving minor construction, any temporary water use (e.g., for dust control or equipment cleaning) will be limited in scope and sourced from existing, approved water supply systems. No long-term or significant demand on local water resources is expected.</p>
Public Safety - Police / Fire / Emergency Medical	2	<p>The AES Program activities are not anticipated to directly impact police, fire, or emergency medical services. The installation of renewable energy systems is localized to agricultural lands and existing structures, and it does not involve activities that would increase demand for public safety services or alter their operations. However, the installation of renewable energy systems, particularly battery storage units, introduces a potential fire risk that will require safety measures.</p> <p>To address these concerns:</p> <ul style="list-style-type: none"> • Battery Installation Safety: All battery systems will comply with applicable fire safety codes for the installation of stationary energy storage systems. • Contractors will follow best practices for energy storage system installation to reduce risks, including ensuring proper ventilation, spacing, and fire resistance measures.

Parks, Open Space, Recreation	2	<p>The AES Program activities are not anticipated to impact parks, open spaces, or recreational areas. Renewable energy installations will primarily occur on agricultural lands and existing structures, avoiding locations designated for public recreation or conservation purposes.</p> <p>Project locations will be assessed to ensure that:</p> <ul style="list-style-type: none"> • No installations encroach upon or disrupt the use of parks, open spaces, or recreational facilities. • Any adjacent recreational areas are protected from temporary construction disturbances, such as noise or dust.
Transportation and Accessibility	2	<p>The AES Program activities are not anticipated to impact transportation networks or accessibility. Renewable energy installations will primarily occur on agricultural lands and existing structures, with minimal effects on local traffic or public access.</p> <p>Potential impacts to transportation and accessibility will be assessed, including:</p> <ul style="list-style-type: none"> • Construction Traffic: Temporary increases in construction-related traffic, including the delivery of equipment and materials. • Access to Adjacent Properties: Ensuring that nearby properties and roads remain accessible during installation activities. <p>Mitigation measures, if necessary, may include:</p> <ul style="list-style-type: none"> • Scheduling deliveries and construction activities during non-peak traffic hours. • Implementing traffic control measures, such as signage or flaggers, where needed.
Natural Features		
Unique and Natural Features	3	<p>The AES Program activities are not anticipated to adversely impact unique or natural features, as renewable energy installations will primarily occur on previously disturbed agricultural lands or existing structures. However, installations proposed within Puerto Rico's Karst Special Zone may require additional evaluation.</p> <p>The karst region is known for its unique geological features, including limestone formations, caves, sinkholes, and underground rivers, which support diverse ecosystems and serve as critical water recharge zones.</p>

		<p>Mitigation Measures:</p> <ul style="list-style-type: none"> • Tier II site-specific reviews will assess the potential for impacts to the Karst Special Zone, including evaluating the proximity of installations to sensitive karst features. • Ground-disturbing activities in karst areas will be minimized, and mitigation measures, such as maintaining buffer zones. • Compliance with local regulations, including guidelines established for the Karst Special Zone under Puerto Rico's Department of Natural and Environmental Resources (DNER), will be ensured. <p>Documentation of compliance with regulations and site-specific mitigation measures will be included in the Tier II.</p>
Water Resources	3	<p>The AES Program activities, particularly those involving ground disturbance for renewable energy installations, have the potential to temporarily impact water resources with erosion and sedimentation.</p> <p>To mitigate potential impacts:</p> <ul style="list-style-type: none"> • Surface Water: Best management practices (BMPs) for erosion and sediment control, such as silt fences and sediment traps, will be implemented to protect surface water from runoff during construction activities. • Wetlands Protection: Activities near wetlands will comply with Executive Order 11990 and undergo Tier II site-specific reviews to avoid direct or indirect impacts. Any unavoidable impacts will require an 8-Step Decision-Making Process and appropriate permits, such as those from the U.S. Army Corps of Engineers (USACE), if applicable. <p>Tier II site-specific reviews will identify and assess the proximity of project sites to water resources. Where potential impacts are identified, site-specific mitigation measures will be required.</p>
Vegetation and Wildlife	3	<p>The AES Program activities may result in minor, localized impacts to vegetation and wildlife, particularly in areas where ground disturbance is required for the installation of renewable energy systems. These impacts could include the clearing of vegetation and ground preparation.</p> <p>To mitigate potential impacts:</p> <ul style="list-style-type: none"> • Endangered Species Protection: Tier II site-specific reviews will ensure compliance with the Endangered Species Act. • Vegetation Management: Ground disturbance will be minimized, and vegetation clearing will be limited to the immediate areas required for installation. It is not anticipated that trees, vegetation or native plant community habitats will be negatively affected.

		<ul style="list-style-type: none"> Wildlife Considerations: Construction activities will avoid sensitive periods for local wildlife, such as nesting or breeding seasons. Mitigation measures, such as buffer zones or adjusted work schedules, will be implemented if needed. <p>During Tier II reviews, site-specific assessments will evaluate the potential impacts on vegetation and wildlife, including the presence of critical habitats or migratory corridors.</p>
Climate and Energy		
Climate Change Impacts	1	<p>The AES Program is expected to have a positive impact on climate change by supporting the adoption of renewable energy systems, such as solar photovoltaic panels and battery storage, which reduce greenhouse gas emissions associated with traditional fossil fuel-based energy sources. These activities align with Puerto Rico's renewable energy goals, as established in Act 17-2019, targeting 40% renewable energy by 2025 and 100% by 2050.</p> <p>Positive Contributions:</p> <ul style="list-style-type: none"> Emission Reductions: By replacing or supplementing reliance on fossil fuel-based electricity, the program will lower carbon dioxide (CO₂) and other greenhouse gas emissions, contributing to climate change mitigation efforts. Resilience to Extreme Weather: The decentralized energy systems installed under the program enhance the resilience of agricultural operations to power outages caused by extreme weather events, which are increasing in frequency and intensity due to climate change. <p>Considerations:</p> <ul style="list-style-type: none"> Ensure that renewable energy installations are designed to withstand projected climate conditions, such as stronger hurricanes and flooding. <p>The AES Program will contribute to Puerto Rico's efforts to build a more resilient and sustainable agricultural sector while supporting global climate change mitigation goals.</p>
Energy Efficiency	1	<p>The AES Program directly supports energy efficiency by promoting the installation of renewable energy systems, such as solar photovoltaic panels and battery storage, on agricultural lands and existing structures. These systems are designed to reduce dependency on traditional energy sources, improve energy utilization, and lower overall energy costs for agricultural operations.</p> <p>Positive Contributions:</p>

		<ul style="list-style-type: none"> • Reduction in Energy Loss: On-site renewable energy generation minimizes transmission losses associated with centralized energy systems, improving overall energy efficiency. • Optimized Energy Usage: Battery storage systems allow for energy optimization by storing excess energy generated during peak production times and using it during high-demand periods, reducing reliance on the grid. • Modern Energy Technology: The program will encourage the use of energy-efficient technologies and systems that align with Puerto Rico's renewable energy targets under Act 17-2019. <p>Considerations:</p> <ul style="list-style-type: none"> • Evaluate the compatibility of proposed systems with existing site infrastructure. • Contractors will follow best practices to maximize system performance.
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Additional Studies Performed

No additional studies were performed for the preparation of this document.

Field Inspection (Date and completed by)

No field inspections were performed for the preparation of this document.

List of Permits Obtained

No permits were obtained for the preparation of this document.

Public Outreach

[24 CFR 58.43]

1. Preparation of FONSI

- The FONSI notice will be prepared upon completion of the Tier I environmental review, demonstrating that the proposed activities under the AES Program do not have significant adverse environmental impacts.
- The FONSI will detail findings and the basis for the determination, referencing the Environmental Assessment conducted.

2. Dissemination of the Notice

- Interested Parties: The FONSI notice will be distributed to stakeholders, local communities, and organizations with known interest in the program activities.
- Regulatory Agencies: Notices will be provided to relevant federal and local agencies.
- Public Notification:
 - The FONSI will be published in local newspapers of general circulation, providing the public with clear access to review the determination.
 - As an alternative or supplement, the notice will also be made available on an appropriate government website, ensuring accessibility for individuals with disabilities and those with limited English proficiency.

3. Public Display

- Copies of the FONSI will be made available at PRDOH building to interested parties.

4. Public Comment Period

- A minimum 15-day comment period will follow the publication of the FONSI notice, allowing stakeholders and the public to provide input. Comments will be reviewed and documented as part of the environmental review process.

5. Combined Notices for Efficiency

- If appropriate, the FONSI notice may be combined with the Notice of Intent to Request Release of Funds (NOI/RROF), per 24 CFR 58.70, to streamline the process. Combined notices will:
 - Clearly identify both purposes.
 - Allow for a unified 15-day comment period.

6. Documentation of Comments and Responses

- All public comments received will be documented, and responses will be provided in the environmental record.

Cumulative Impact Analysis

The AES Program's cumulative impact analysis considers the potential environmental effects of the program's activities in conjunction with past, present, and reasonably foreseeable future actions. The analysis evaluates the combined impacts to ensure compliance with NEPA and HUD regulations under 40 CFR 1508.7. The following areas have been evaluated to ensure both immediate and long-term effects are addressed.

Scope of Analysis

The AES Program involves the installation of renewable energy systems, such as solar panels and battery storage, primarily on agricultural lands and existing structures across Puerto Rico. The focus is on increasing energy resilience and sustainability without creating significant adverse environmental effects.

Past and Present Actions

- Hurricanes Irma and Maria: The widespread destruction from these hurricanes led to extensive reconstruction efforts, including agricultural sector recovery and energy infrastructure rebuilding. These efforts have increased land use activities but have also highlighted the need for sustainable and resilient energy solutions.
- Renewable Energy Investments: Puerto Rico's legislative mandates, such as Act 17-2019, have spurred increased adoption of renewable energy, particularly solar energy. This aligns with the AES Program's goals and contributes positively to climate resilience.

Reasonably Foreseeable Future Actions

- Energy Transition Goals: Puerto Rico's transition to 40% renewable energy by 2025 and 100% by 2050 will likely involve expanded renewable energy projects, further contributing to environmental benefits like reduced greenhouse gas emissions.
- Agricultural Sustainability Programs: Other initiatives aimed at improving agricultural productivity and resilience may overlap with AES Program activities.

Cumulative Impacts

Energy Infrastructure

AES Program activities complement ongoing renewable energy initiatives by incrementally increasing the island's reliance on clean energy sources. Cumulatively, these efforts contribute to Puerto Rico's renewable energy targets under Act 17-2019 and reduce greenhouse gas emissions, mitigating the broader impacts of climate change.

Land Use and Agricultural Impact

While installations are primarily focused on existing agricultural operations, the AES Program emphasizes maintaining current land use. This approach avoids substantial land-use changes or conversions. The geographic and temporal scoping of cumulative effects

indicates that these installations are unlikely to significantly alter the agricultural character of the island but instead bolster the resilience of current practices.

Water Resources and Quality

Program activities consider the cumulative impact of construction and agricultural runoff on water systems. While minor sedimentation risks may arise during installation, erosion and sediment control best practices will mitigate potential adverse effects.

Karst Region Impacts

Recognizing the ecological sensitivity of Puerto Rico's karst regions, cumulative effects analyses focus on groundwater recharge and ecosystem integrity. Site-specific reviews will ensure that projects in karst zones adhere to sustainable practices, avoiding degradation of these systems.

Social and Economic Benefits

The program's focus on energy stability supports socio-economic resilience, reducing the frequency and severity of disruptions to local economies. Incrementally, this stabilizes rural communities and enhances local food security by protecting agricultural production from power outages.

Environmental Sustainability and Climate Adaptation

AES activities are part of a cumulative regional effort to adapt to and mitigate climate impacts, including severe weather events and rising temperatures. By reducing fossil fuel dependence and increasing renewable energy capacity, the program contributes to Puerto Rico's climate adaptation framework.

The AES Program's cumulative impacts are expected to be minor and primarily beneficial, particularly in terms of increased energy resilience and reduced emissions. Potential adverse effects, such as impacts on water resources, land use, or sensitive ecological areas, will be mitigated through adherence to environmental regulations and site-specific reviews. The program aligns with Puerto Rico's long-term energy and sustainability goals while maintaining environmental integrity.

Alternatives

[24 CFR 58.40(e), [40 CFR 1501.5(c)(2)(ii)] Identify and discuss all reasonable alternative courses of action that were considered and were not selected, such as alternative sites, designs, or other uses of the subject site(s). Describe the benefits and adverse impacts to the human environment of each alternative, in terms of environmental, economic, and design contexts, and the reasons for rejecting each alternative. Also, finally discuss the merits of the alternative selected.

No Action: Under the “No Action” alternative, the AES Program would not provide funding for renewable energy installations in agricultural operations across Puerto Rico. While no immediate environmental impacts would result from this approach, the decision not to act carries significant risks and drawbacks:

Impact on Energy Resilience: Without renewable energy installations, agricultural businesses would remain highly vulnerable to frequent and severe power outages, especially given Puerto Rico's susceptibility to hurricanes and other extreme weather events. This would continue to disrupt operations and jeopardize food security and supply chains, particularly after disasters.

Economic Consequences: Many agricultural operations would likely face increased operational costs due to unreliable power and potentially expensive fossil fuel backup options. This could lead to higher food prices and impact the island's economic stability.

Environmental Implications: Failing to implement renewable energy solutions would result in continued reliance on Puerto Rico's fossil-fuel-based grid, perpetuating greenhouse gas emissions and other pollutants associated with traditional power generation.

The “No Action” alternative is therefore deemed inconsistent with the AES Program's objectives, which prioritize energy reliability, environmental sustainability, and disaster resilience.

Alternative Energy Sources:

Diesel Generators: Diesel generators are widely used in emergency backup power situations, offering a reliable solution for short-term energy needs. This alternative, however, presents several limitations and concerns when evaluated for the AES Program:

Environmental Impact: Diesel generators contribute significantly to air pollution, emitting greenhouse gases (CO₂, NO_x, and particulate matter) that exacerbate climate change and degrade air quality. Their use conflicts with the AES Program's emphasis on sustainable practices and long-term resilience.

Resource Dependence: Diesel fuel supply chains can be disrupted following natural disasters, leading to fuel shortages when generators are needed most. This makes diesel a less resilient option for agricultural operations that require consistent, long-term power.

Operational Costs: The ongoing cost of diesel fuel can be prohibitive for agricultural operations, particularly during prolonged outages. Rising fuel prices would increase financial strain on agribusinesses, making this option less economically viable compared to renewable energy solutions.

Given these drawbacks, diesel generators are not a preferred alternative due to their negative environmental impact, limited resilience, and high operational costs.

Natural Gas-Powered Generators: Natural gas generators offer a somewhat cleaner option compared to diesel, emitting lower levels of pollutants and greenhouse gases. However, they still present limitations in the context of the AES Program:

Infrastructure Limitations: In Puerto Rico, natural gas infrastructure is limited, particularly in rural areas where agricultural operations are located. Expanding infrastructure to support natural gas-powered energy could be costly and time-intensive.

Environmental Concerns: While cleaner than diesel, natural gas combustion still produces CO₂ emissions and methane leakage during extraction and transport, which poses a significant environmental risk. Methane is a potent greenhouse gas, undermining HUDs goal of reducing carbon footprint.

Reliability Risks: Like diesel, natural gas relies on external supply chains that can be disrupted during extreme weather events. This undermines its effectiveness as a resilience strategy in disaster scenarios.

Thus, natural gas generators offer marginally improved environmental benefits over diesel but do not align with the AES Program's sustainability and resilience priorities.

Wind Power Systems: Wind power is a renewable energy source that could complement or substitute for solar energy in some cases. However, several practical considerations make it less feasible for this program:

Site-Specific Limitations: Wind power requires specific site conditions to be viable, including consistent wind speeds and appropriate land availability. Many agricultural sites may lack these conditions, limiting wind's applicability across the diverse agricultural landscapes in Puerto Rico.

Installation and Maintenance Costs: Wind turbines generally have higher installation and maintenance costs than solar photovoltaic systems. This could lead to budgetary constraints within the AES Program, as more resources would need to be allocated per installation.

Environmental and Noise Impacts: Wind turbines can impact local wildlife, particularly birds and bats, and can generate noise pollution. These impacts may necessitate additional environmental reviews and mitigation measures, complicating the program's implementation.

Although wind power is a renewable source that contributes to carbon reduction, it is not as universally applicable as solar power for agricultural operations across Puerto Rico.

Preferred Alternative:

Solar Photovoltaic Systems with Battery Storage: The AES Program has identified solar photovoltaic systems combined with battery storage as the preferred alternative, given their alignment with the program's goals of sustainability, resilience, and economic feasibility. Solar power offers several benefits:

Environmental Benefits: Solar energy is a clean, renewable source that does not produce emissions during operation. By offsetting reliance on fossil fuels, it contributes to long-term carbon reduction goals, benefiting both local air quality and global climate resilience.

Resilience and Reliability: Paired with battery storage, solar systems can supply power even during grid outages, providing critical backup that allows agricultural operations to continue during and after disasters.

Economic Feasibility: The decreasing cost of solar technology makes it a cost-effective choice for agribusinesses, offering long-term energy savings compared to fossil fuel-based alternatives. With reduced reliance on fuel, these systems provide a more predictable and manageable operational cost structure.

Flexibility and Scalability: Solar systems can be tailored to the specific energy needs of each agricultural operation, allowing for scalable implementation across different types of farms and locations.

After analyzing all alternatives, solar photovoltaic systems with battery storage emerge as the most suitable solution. They align with the AES Program's mission to enhance energy resilience, minimize environmental impacts, and ensure economic viability for Puerto Rican agribusinesses. This alternative effectively addresses both immediate and long-term goals of energy stability, disaster preparedness, and environmental sustainability.

Summary of Findings and Conclusions

As proposed, the AES Program activities will support agricultural businesses in implementing renewable energy solutions to mitigate the impacts of rising energy costs and frequent power outages. The PRDOH plans to conduct a Tiered Environmental Review in the form of an Environmental Assessment (EA), followed by a Site-Specific Review for each property. This will include evaluations based on the requirements of 24 CFR Parts 58.5, 58.6, and 58.36.

This tiered review process will help assessing potential environmental effects by initially evaluating general environmental conditions at the program level and then conducting detailed, site-specific assessments. The approach allows for a comprehensive examination of potential impacts across Puerto Rico, addressing common environmental considerations early in the process. The subsequent site-specific reviews will focus on individual property factors, such as but not limited to proximity to protected habitats, historic preservation, floodplain concerns, site contamination risks, and other related laws

and authorities ensuring that each installation meets environmental standards. This systematic approach enhances review efficiency while ensuring compliance with NEPA and HUD regulations, safeguarding both the natural environment and public health as renewable energy solutions are deployed across the island.

Based upon completion of this Tier I Environmental Assessment, an environmental review of the proposed project indicates there will be no significant changes to existing environmental conditions across the impact categories implemented by HUD in response to the National Environmental Policy Act of 1969.

The following subject areas require analysis in this Tier I document before it can be concluded that a specific proposed project activity would have no significant environmental impacts on an individual site. In addition to the environmental assessment factors shown in Section 3.0, these authorities referenced under HUD's regulations at 24 CFR 58.5 are also included and are compliant with this broad review:

- Air Quality [40 CFR parts 6, 51, 61, 93]
- Coastal Zone Management [Coastal Zone Management Act sections 307(c) & (d)]
- Sole Source Aquifers [40 CFR 149]
- Farmland Protection [Farmland Protection Policy Act of 1981 Sections 1504(b) and 1541, 7 CFR 658]
- Noise Abatement and Control [24 CFR 51 Subpart B]
- Explosive and Flammable Hazards [24 CFR Part 51C]
- Wild and Scenic Rivers [36 CFR 297]

The following subject areas from 24 CFR 58.5 and 58.6 require site-specific analysis before the environmental review can be concluded as causing no significant impacts to the environment:

- Endangered Species Act [50 CFR 402; 16 USC 1531 et seq.]
- Wetlands Protection [Executive Order 11990 and 24 CFR Part 55]
- Airport Hazards (Runway Protection Zones and Clear Zones/Accident Potential Zones) [24 CFR Part 51 Subpart D]
- Coastal Barrier Resources [Coastal Barrier Resources Act]
- Flood Insurance [24 CFR 58.6]
- Floodplain Management [Executive Order 11988, and 24 CFR Part 55]
- Historic Preservation [National Historic Preservation Act, 36 CFR Part 800]
- Toxic Chemicals and Gases, Hazardous Materials, Contamination, and Radioactive Substances [24 CFR 58.5(i)(2)(i)) and 24 CFR Part 50.3(i)]

Mitigation Measures and Conditions

Under 24 CFR 58.40(d), the responsible entity must adopt mitigation measures to eliminate or minimize adverse environmental impacts, ensuring these conditions are incorporated into project contracts or other relevant documents. The necessity for mitigation measures is typically determined through site inspections and environmental screenings conducted for proposed construction sites. Based on the findings in the property inspection report and accompanying photographs, a Tier II Environmental Review Record (ERR) will be prepared. This ERR will provide a detailed description of the project and outline any required mitigation measures, ensuring compliance with applicable regulations and environmental protection standards.

General Compliance Measures

1. Permits and Conditions: All required federal, Puerto Rico, and local permits must be acquired before construction begins. Contractors will strictly adhere to all permit conditions, and PRDOH retains the authority to audit projects to ensure compliance with these conditions and any mitigation actions outlined in Tier II site-specific checklists.
2. Scope Modifications: If a project's scope of work changes significantly, the application for funding must be revised and resubmitted for re-evaluation.
3. Code Compliance: All work performed under the program must meet current applicable federal, Puerto Rico, and local building codes and standards.

Specific Compliance Categories

4. Historic Preservation
 - Compliance with Section 106 of the National Historic Preservation Act is required per 36 CFR Part 800. The Programmatic Agreement (PA) between FEMA, PRDOH, and SHPO governs Section 106 reviews.
 - Projects involving ground disturbance, work near historic districts, or buildings over 45 years old require Tier II evaluation to determine if they meet PA allowances or require formal consultation with SHPO.
 - If archaeological deposits are uncovered, work will stop immediately. PRDOH will consult SHPO, and mitigation will occur before resuming work. This includes securing the findings and restricting access to the area.
5. Endangered Species Act
 - All projects funded or authorized under the AES Program must comply with Section 7 of the Endangered Species Act (ESA) (16 U.S.C. § 1536), ensuring that no activity jeopardizes the existence of federally listed species or adversely modifies designated critical habitats.
 - Tier II site-specific environmental reviews will determine if project sites are within or adjacent to designated or proposed critical habitats and the possibility to find federally listed or candidate species.
 - PRDOH will consult with the USFWS and DNER when required.

- Projects must implement avoidance, minimization, and mitigation measures to reduce impacts.
6. Coastal Zone Management
 - Program activities must comply with PRDOH's agreement with the Puerto Rico Planning Board regarding coastal zone consistency. Projects that do not meet these standards will undergo the standard consultation process.
 7. Floodplain Management and Insurance
 - Properties located in SFHA must comply with 24 CFR 58.6(b), requiring National Flood Insurance Program (NFIP)-compliant policies for the economic life of the property.
 - Applications will be reviewed under PRDOH's Federal Flood Risk Management Standard (FFRMS)(24 CFR 55.7) implementation policy. Elevation requirements will be enforced.
 8. Environmental Protection
 - Air Quality: Contractors must comply with air pollution control standards and local regulations.
 - Noise: Contractors must equip gas-powered equipment with mufflers and comply with local noise ordinances.
 - Karst Topography: Projects in karst areas may require DNER review and permits, ensuring no adverse impact on sensitive geological features.
 - Stormwater and Erosion Control: Projects will include BMPs to control erosion and sedimentation, with Tier II reviews ensuring protection of water quality and nearby wetlands.
 - Wetlands and Water Quality: Tier II reviews will evaluate sites for wetlands or water features, requiring BMPs to control erosion and sedimentation and prevent debris from entering these areas. Projects impacting wetlands must obtain all required permits.
 9. Waste Management
 - Recycling and Waste Reduction: Puerto Rico's Law 70⁴ and Planning Board Joint Regulation 9473 for Permits for Construction Work and Land Use⁵, mandate reducing debris through recycling and sustainable practices.
 - Hazardous Materials: Contractors must adhere to federal and local laws for hazardous materials management, including those related to lead-based paint, asbestos and mold remediation.
 10. Energy and Resilience
 - Renewable energy installations will comply with wind resistance and structural safety requirements as per the Puerto Rico Building Code.

⁴ Ley para la Reducción y el Reciclaje de Desperdicios Sólidos en Puerto Rico/ Ley Núm. 70 de 18 de septiembre de 1992, según enmendada

⁵ Reglamento Conjunto 9473 Para La Evaluación Y Expedición De Permisos Relacionados Al Desarrollo, Uso De Terrenos Y Operación De Negocios

- All PVS and BSS equipment must be duly certified in accordance with Section IV of Regulation No. 7796⁶

11. Documentation and Public Notice

- The findings of the Environmental Assessment (EA), including conditions and mitigation measures, will be documented in the Tier I and Tier II environmental reviews. Public notices, including FONSI and NOI/RROF, will be published following 24 CFR 58.43 procedures.

⁶ Administración de Asuntos Energéticos – 7796-2010 – Reglamento para la Certificación de Sistemas de Energía Renovable



Determination

☒ **Finding of No Significant Impact (FONSI) [24 CFR 58.40(g)(1); 40 CFR 1508.27]**

(The project will not result in a significant impact on the quality of the human environment.)

☐ **Finding of Significant Impact [24 CFR 58.40(g)(2); 40 CFR 1508.27]**

(The project may significantly affect the quality of the human environment.)

Javier A. Mercado Barrera, MP

Preparer's Name

Signature

Date

Aldo A. Rivera Vázquez, PE

Certifying Officer's Name

Signature

Date

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

This document represents the Tier 1 or Broad-Level review only. As individual sites are selected, this review must be supplemented by individual Tier 2 or Site-Specific reviews for each site. All laws and authorities requiring site-specific analysis will be addressed in these individual reviews.



Sources

[40 CFR 1508.9(b)] (List and attach all evidence of inquiries and responses received at all stages of consultation and analysis)

FAA, National Plan for Integrated Airport Systems:

https://www.faa.gov/sites/faa.gov/files/airports/planning_capacity/npias/current/NPIAS-Report-2017-2021-Appendix-B-Part-6.pdf

John H. Chafee Coastal Barrier Resources System, Puerto Rico maps.

<https://www.fws.gov/library/collections/coastal-barrier-resources-system-maps-puerto-rico-us-virgin-islands>

National Park Service, National Registry of Natural Landmarks.

<https://www.nps.gov/subjects/nlandmarks/nation.htm>

U.S. Forest Service, National Wild and Scenic Rivers System:

<http://www.rivers.gov/puerto-rico.php>

Programmatic Agreement among the Federal Emergency Management Agency, the Puerto Rico State Historic Preservation Office and the Central Office for Recovery, Reconstruction and Resilience – amended to include the Puerto Rico Department of Housing. (Appendix A1-1)

MOVES5 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity

<https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves>

US Environmental Protection Agency, National Ambient Air Quality Standards, Nonattainment Areas for Criteria Pollutants (Green Book):

https://www3.epa.gov/airquality/greenbook/anayo_pr.html

U.S. Environmental Protection Agency, Envirofacts Mapper

<https://enviro.epa.gov/>

US Fish and Wildlife Service, Environmental Conservation Online System:

<https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=PR&stateName=Puerto%20Rico&statusCategory=Listed>

US Fish and Wildlife Service, Information for Planning and Consultation:

<https://ipac.ecosphere.fws.gov/>

Federal Emergency Management Agency, Flood Map Service Center:



<https://msc.fema.gov/portal/home>

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

Puerto Rico Coastal Zone Management Program Plan, September 2009.

<https://www.drna.pr.gov/wp-content/uploads/2021/08/PMZCPR-ingles-2009-final.pdf>

US EPA, Sole Source Aquifers:

<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>

US Geological Survey Concentration of Landslides Caused by Hurricane María:

<https://www.sciencebase.gov/catalog/item/59de6459e4b05fe04ccd39d8>

Puerto Rico Community Development Block Grant Disaster Recovery Action Plans.

<https://recuperacion.pr.gov/en/action-plan/>



References

- Garffer, Patricia, Shultz, C., Xiarchos, I. M., Rojowsky, W., D' Costa, P., . . . Pape, D. (2020). *Renewable Electricity Technologies to Increase the Resilience of the Food Supply System in Puerto Rico*. U.S. Department of Agriculture. Retrieved from https://data.fs.usda.gov/research/pubs/iitf/ja_iitf_2021_xiarchos_01.pdf
- Kenner, Bart, Russell, D., Constanza, V., Sowell, A., Pham, X., . . . Kaufman, J. (2023). *Puerto Rico's Agricultural Economy in the Aftermath of Hurricanes Irma and Maria: A Brief Overview*. U.S. Department of Agriculture. Retrieved from https://ers.usda.gov/sites/default/files/_laserfiche/publications/106261/AP-114.pdf?v=88352
- Masson-Delmotte, V, P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, . . . B. Zhou. (2021). *IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Six Assessment Report of the Intergovernmental Panel on Climate Change*. Retrieved from https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport.pdf
- PRDOH. (2024). *Action Plan - CDBG-DR*. Retrieved from The Puerto Rico Department of Housing: <https://recuperacion.pr.gov/en/action-plans/action-plan-cdbg-dr/>
- U.S. Department of Agriculture. (2020). *2017 Census of Agriculture Puerto Rico (2018) Island and Regional Data*. Retrieved from https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Outlying_Areas/Puerto_Rico/prv1.pdf
- U.S. Department of Agriculture. (2024). *2022 CENSUS of Agriculture Puerto Rico Island and Regional Data*. Retrieved from https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Census_by_State/Puerto_Rico/index.php
- U.S. Department of Energy. (2024). *Puerto Rico Grid Recovery and Modernization*. Retrieved from <https://www.energy.gov/gdo/puerto-rico-grid-recovery-and-modernization>

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A1 Historic Preservation





A1-1: Programmatic Agreement 3rd Amendment



**THIRD AMENDMENT TO THE PROGRAMMATIC AGREEMENT
AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO CENTRAL OFFICE FOR RECOVERY,
RECONSTRUCTION AND RESILIENCY**

WHEREAS, the Programmatic Agreement among the Federal Emergency Management Agency (FEMA), the Puerto Rico State Historic Preservation Officer (SHPO), and the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency (COR3) was executed on May 6, 2019; a First Amendment was executed on May 31, 2018, and a Second Amendment was executed on November 13, 2019; and

WHEREAS, pursuant to Stipulation IV.D.2 of this Agreement the Signatories may agree to extend the Agreement to cover additional calendar years through an amendment per Stipulation IV.A, provided that the original Agreement has not expired, and the Signatories agree to such extension; and

WHEREAS, as the original Agreement has not expired, the Signatories collectively agree to extend this Agreement for a period of three (3) years from May 5, 2023, the date of expiration of the Agreement; and

WHEREAS, Appendix A (FEMA Program Summaries) has been modified to reflect modifications in FEMA programs that have occurred since the implementation of the Agreement; and

WHEREAS, no other modifications have been made to the Agreement; and

NOW, THEREFORE, FEMA and SHPO as Signatories and COR3 as an Invited Signatory agree that the Agreement and all its terms, complete with all the Appendices, shall be extended for a period of three (3) years from May 5, 2023, the date of expiration of the Agreement, as follows:



**SECOND AMENDMENT TO PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO CENTRAL OFFICE FOR RECOVERY,
RECONSTRUCTION AND RESILIENCY**

WHEREAS, the Agreement was executed on May 6, 2016, and a First Amendment executed on May 31, 2018; and

WHEREAS, the Recipient's responsibilities for all current and previous disasters have been transferred by the Governor of Puerto Rico from the Puerto Rico Emergency Management Agency (PREMA) to the Puerto Rico Central Office of Recovery, Reconstruction and Resiliency (COR3); and

WHEREAS, in order to clarify FEMA's Section 106 compliance responsibilities resulting from the review of buildings less than 45 years old associated with FEMA's Public Assistance program, houses less than 45 years old associated with FEMA's Individual Assistance Program, and Tier I Allowances for the repair and retrofit of structures less than 45 years as outlined in Appendix B: Programmatic Allowances; and

WHEREAS, the definition of collapsed buildings and structures has been clarified and expanded in Appendix C: Criteria for Identification of Collapsed Buildings and Structures; and

WHEREAS, the process for private property debris removal (PPDR) has been modified to reflect the clarified roles between COR3 and Public Assistance Program, changes have been made to Appendix D: Private Property Debris Removal Program Process; and

WHEREAS, in order to address Archaeological Research Design and Data Recovery Plan, Section H has been added to Appendix F: Treatment Measures; and

NOW, THEREFORE, in accordance with Stipulation IV.A.1 of the Agreement, the Signatories and Invited Signatories agree to amend the Agreement, complete with all the Appendices below, as follows:



**FIRST AMENDMENT TO PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO EMERGENCY MANAGEMENT AGENCY**

WHEREAS, the Agreement was executed on May 6, 2016; and

WHEREAS, to minimize delays in the delivery of assistance by the Federal Emergency Management Agency (FEMA) in the aftermath of Hurricane Irma (DR-4336-PR) and Hurricane Maria (DR-4339-PR), the Agreement will be amended to include additional Programmatic Allowances under Appendix B for FEMA-funded activities which FEMA and SHPO have agreed will have no or minimal effect on historic properties if implemented as specified in this Appendix and will not require review by the State Historic Preservation Officer (SHPO); and

WHEREAS, in response to SHPO concerns regarding the anticipated new permanent housing construction program proposed in the aftermath of Hurricane Maria, SHPO and FEMA have agreed to remove “home replacement” from the list of actions exempted from Section 106 review as described in Stipulation I.A.7.a; and

WHEREAS, to ensure the appropriate application of the Programmatic Allowances (Appendix B), an expanded definition of “in-kind” as referenced in the Programmatic Allowances has been added to the introduction to Appendix B; and

WHEREAS, to ensure appropriate application of the Programmatic Allowances to ground disturbing activities, additional language has been added to the introduction of Appendix B regarding methods of identifying soil disturbance, types of projects that will likely disturb the soil horizon, and providing greater clarity on soil disturbance, especially as applicable to roads and parking area; and

WHEREAS, to address SHPO concerns resulting from the extensive FEMA-funded private property demolition that is anticipated in the aftermath of Hurricane Maria, **Appendix C: Criteria for Identification of Collapsed Structures** has been added to create common criteria for identifying collapsed structures; and

WHEREAS, to address SHPO concerns regarding the identification of buildings eligible for FEMA’s Private Property Debris Removal program **Appendix D: Private Property Debris Removal Program Process** has been added to ensure that only buildings meeting FEMA’s Public Assistance program eligibility guidelines will be reviewed for compliance with Section 106; and

WHEREAS, to address SHPO concerns regarding potential impacts to archaeological resources, **Appendix E: Low Impact Debris Removal Stipulations** has been added in order to provide Best Management Practices that will protect potential archaeological resources; and





WHEREAS, Appendix C: Treatment Measures has been retitled **Appendix F**.

NOW THEREFORE, in accordance with Stipulation IV.A.1 of the Agreement, the signatories and invited signatories agree to amend the Agreement, complete with all the Appendices below, as follows:



**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO EMERGENCY MANAGEMENT AGENCY**

WHEREAS, the mission of the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards; and

WHEREAS, FEMA makes assistance available to States, Territories, Commonwealths, communities, Federally recognized Indian Tribes (Tribes) and other eligible entities through programs (Programs) set forth in Appendix A, pursuant to the Homeland Security Act of 2002, Pub. L. No. 107-296 (2002) (codified as amended at 6 U.S.C. § 101 *et seq.*); Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 *et seq.*, (Stafford Act); the National Flood Insurance Act of 1968, Pub. L. No. 90-448 (1968) (as amended); the National Flood Insurance Reform Act of 1994, Pub. L. No. 103-325 (1994) (as amended); the Post-Katrina Emergency Management Reform Act of 2006, Pub. L. No. 109-295 (2006) (as amended); implementing regulations contained in Title 44 of the Code of Federal Regulations (CFR), Executive Order 13407 (2006); the Sandy Recovery Improvement Act, Pub. L. No. 113-2 (2013); and such other acts, Executive Orders, implementing regulations, or Congressionally authorized programs as are enacted from time to time; and

WHEREAS, FEMA has determined that implementing its Programs may result in Undertakings (as defined by 54 U.S.C. § 300301 and 36 CFR § 800.16(y)) that may affect properties listed in or eligible for listing in the National Register of Historic Places (National Register) pursuant to 36 CFR Part 60 (historic properties), and FEMA has consulted with the Puerto Rico State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA), Pub. L. No. 89-665 (1966) (codified at 54 U.S.C. § 306108 (as amended by Pub. Law No. 96-515 of December 14, 2014)), and the regulations implementing Section 106 of the NHPA (Section 106) at 36 CFR Part 800; and

WHEREAS, FEMA, the Advisory Council on Historic Preservation (ACHP), and the National Conference of State Historic Preservation Officers (NCSHPO) have determined that FEMA's Section 106 requirements can be more effectively and efficiently implemented and delays to the delivery of FEMA assistance minimized if a programmatic approach is used to stipulate roles and responsibilities, exempt certain Undertakings from Section 106 review, establish protocols for consultation, facilitate identification and evaluation of historic properties, and streamline the assessment and resolution of adverse effects; and

WHEREAS, FEMA has developed a Prototype Programmatic Agreement (FEMA Prototype Agreement) pursuant to 36 CFR § 800.14(b)(4) in consultation with the ACHP and NCSHPO



to serve as a basis for negotiation of a State specific Programmatic Agreement (Agreement) with the SHPO, State/Tribal Emergency Management Agency, and/or participating Tribe(s) or Native Hawaiian organization(s); and

WHEREAS, this Agreement conforms to the FEMA Prototype Agreement as designated by the ACHP on December 13, 2013, and therefore does not require the participation or signature of the ACHP; and

WHEREAS, in order to implement its Programs, FEMA will provide assistance to the Commonwealth of Puerto Rico that may provide monies and other assistance to eligible sub-recipients, and as such, the Central Recovery and Reconstruction Office of Puerto Rico (Recipients) that is typically responsible for administering funds provided under these Programs, has participated in this consultation, and FEMA has invited them to execute this Agreement as an Invited Signatory; and

WHEREAS, FEMA also may directly perform its own Undertakings pursuant to this Agreement; and

WHEREAS, there are no Federal Tribes recognized in the Commonwealth of Puerto Rico, and no known Tribal interests in the Commonwealth of Puerto Rico by non-resident Tribes, and therefore no Tribes were invited to execute this Agreement; and

WHEREAS, in anticipation or in the immediate aftermath of an event, impacted communities and the Commonwealth of Puerto Rico may conduct critical preparedness, response and recovery activities to safeguard public health and safety and/or to restore vital community services and functions before, during, and or following an event. Some of these activities may become Undertakings requiring Section 106 review subject to the terms of this Agreement, and FEMA shall coordinate the appropriate review as warranted; and

WHEREAS, for the review of specific Undertakings under this Agreement, FEMA may invite other agencies, organizations, and individuals to participate as consulting parties; and

NOW, THEREFORE, FEMA and SHPO as Signatories and the Recipients as Invited Signatory (collectively referenced hereafter as Signatories) agree that FEMA Programs in the Commonwealth of Puerto Rico shall be administered in accordance with the following Stipulations to satisfy FEMA's Section 106 and Section 110 responsibilities for all resulting Undertakings and effectively integrate historic preservation compliance considerations into the delivery of FEMA assistance. FEMA will not authorize implementation of an individual Undertaking until Section 106 review is completed pursuant to this Agreement.

STIPULATIONS

To the extent of its legal authority, and in coordination with other Signatories, FEMA shall ensure that the following measures are implemented:

I. GENERAL

A. Applicability

1. The execution of this Agreement supersedes the terms of the Programmatic Agreement among FEMA, SHPO, the Puerto Rico Emergency Management Agency, and the Puerto Rico Office of Management and Budget dated May 9, 2011, and the subsequent letter from the SHPO dated July 11, 2011, approving additional Allowances.
2. For FEMA Undertakings that also are within the jurisdiction of the Federal Communications Commission (FCC) and within the scope of its Section 106 Programmatic Agreements for communication facilities, FEMA defers Section 106 review in accordance with the ACHP Program Comment of October 23, 2009, amended September 24, 2015 (<http://www.ach.gov/docs/pc-wireless-communication.pdf>). The approval of funding for the FEMA Undertaking shall be conditioned upon the compliance of the sub-recipient with FCC's applicable Section 106 review. FEMA shall notify the SHPO when it applies the ACHP Program Comment to an Undertaking. FEMA remains responsible for any FEMA Undertakings it determines are outside the jurisdiction of FCC.
3. In the event of a Stafford Act major disaster or emergency declaration (Declaration), State, and local governments may lack the capability to perform or to contract for emergency work, and instead request that the work be accomplished by a Federal agency. Through a mission assignment (MA), FEMA may direct appropriate Federal agencies to perform the work. This Agreement shall apply to such Federal assistance undertaken by or funded by FEMA pursuant to Titles IV and V of the Stafford Act and 44 CFR Part 206.
4. FEMA may utilize this Agreement to fulfill its Section 106 responsibilities and those of other Federal agencies that designate FEMA, or another Federal agency, as the lead Federal agency pursuant to 36 CFR § 800.2(a)(2) with appropriate notification to the other Signatories and the ACHP regarding Undertakings that fall within the scope of this Agreement. When FEMA is not designated as the lead Federal agency, all Federal agencies, including FEMA, remain individually responsible for their compliance with Section 106. FEMA may also recognize another Federal agency as lead Federal agency for specific Undertakings as appropriate.
5. If another Federal program or Federal agency has concluded Section 106 consultation review and approved an Undertaking within the past five (5) years,

FEMA has no further requirement for Section 106 review regarding that Undertaking provided that FEMA:

- a. confirms that the scope and effect [as defined by 36 CFR § 800.16(i)] of its Undertaking are the same as that of the Undertaking reviewed by the previous agency;
- b. determines that the previous agency complied with Section 106 appropriately, and;
- c. adopts the findings and determinations of the previous agency.

FEMA shall document these findings in its project file in order to confirm that the requirements of Section 106 have been satisfied. Should FEMA, in consultation with SHPO determine that the previous Section 106 review was insufficient or involved interagency disagreements about eligibility, effect, and/or treatment measures, FEMA shall conduct additional Section 106 consultation in accordance with the terms of this Agreement.

6. With the written concurrence of the Signatories, other Federal agencies providing financial assistance for the same type of activities covered under the terms of this Agreement as outlined in Appendix A may satisfy their Section 106 responsibilities for such activities by accepting and complying in writing with the terms of this Agreement.
 - a. Other Federal agencies may include States and units of local government who have assumed environmental responsibilities of the U.S. Department of Housing and Urban Development and, acting as the Responsible Entity pursuant to 24 CFR Part 58, are responsible for environmental review, decision-making and action.
 - b. In such situations, the other Federal agency shall notify the Signatories in writing of its intent to use this Agreement to achieve compliance with its Section 106 requirements, and consult with the Signatories regarding its Section 106 compliance responsibilities. Resumes of staff who meet the Secretary of the Interior Professional Qualification Standard(s) and will review Second Tier projects in accordance with Appendix B of this Agreement shall be provided to the SHPO.
 - c. When amendments are made to the body of this Agreement, the other Federal Agencies utilizing the Agreement shall notify the Signatories in writing of its intent to use the Agreement as amended. Written notification by the other Federal agencies is not required when amendments are made to Appendices A, B C, D, E and F.

7. FEMA has determined that the following types of activities have limited or no potential to affect historic properties and FEMA has no further Section 106 responsibilities with regards to them, pursuant to 36 CFR § 800.3(a)(1):
- a. Pursuant to 44 CFR § 206.110(m), assistance to individuals and households provided under 44 CFR Part 206, Subpart D and Section 408 of the Stafford Act, including funding for owner occupied home repair, content replacement, personal property, transportation and healthcare expenses, is exempt from the provisions of Section 106. For ground disturbing activities, and construction related to 44 CFR §§ 206.117(b)(1)(ii) (temporary housing), 206.117(b)(3) (replacement housing), 206.117(b)(4) (permanent housing construction), 206.117(c)(1)(vi) (repair or replacement of privately owned access routes), and repair of multi-family housing units, FEMA shall conduct Section 106 review.
 - b. Administrative actions such as personnel actions, travel, procurement of services, supplies (including vehicles and equipment) for the support of day-to-day and emergency operational activities, and the temporary storage of goods provided storage occurs within existing facilities or on previously disturbed soils.
 - c. Granting of variances, and actions to enforce Federal, State, or local codes, standards or regulations.
 - d. Monitoring, data gathering, and reporting in support of emergency and disaster planning, response and recovery, and hazard activities.
 - e. Research and development of hazard warning systems, hazard mitigation plans, codes and standards, and education/public awareness programs.
 - f. Assistance provided for planning, studies, design and engineering costs that involve no commitment of resources other than staffing and associated funding.
 - g. Assistance provided for training, management and administration, exercises, and mobile/portable equipment purchases; with the exception of potential ground-disturbing activities and modification of existing structures.
 - h. Community Disaster Loans for funding to perform governmental functions for any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue.
 - i. Funding the administrative action of acquisition or lease of existing facilities where planned uses conform to past use or local land use requirements.
 - j. Funding the administrative action of acquiring properties in acquisition projects, including the real estate transaction

- k. Labor, equipment and materials used to provide security in the Declaration area, including lease, rental, purchase or repair of equipment or vehicles and payment for staff and contract labor.
 - l. Application of pesticides to reduce adverse public health effects, including aerial and truck-mounted spraying.
 - m. Unemployment assistance.
 - n. Distribution of food coupons.
 - o. Legal services.
 - p. Crisis counseling.
8. Any FEMA Programs authorized by the United States Congress in the future may be included in this Agreement in accordance with Stipulation IV.A, Amendments. Any change in the FEMA name, Programs, or organizational structure shall not affect this Agreement.

B. Roles and Responsibilities of the Signatories

1. FEMA:

- a. FEMA shall use Federal, State, sub-recipient, or contractor staff whose qualifications meet the Secretary of the Interior's (Secretary's) Professional Qualifications Standards (Professional Qualifications) set forth in the Federal Register at 48 Fed. Reg. 44716-01 (September 29, 1983), as amended (Qualified), in applying Second Tier Programmatic Allowances listed in Appendix B, completing identification and evaluation of historic properties and in making determinations of effects. FEMA shall review any National Register eligibility determination and make its own findings of effect resulting from the performance of these activities prior to submitting such determinations to the SHPO.
- b. In accordance with 36 CFR § 800.2(c)(4), FEMA may authorize the Recipients, or a sub-recipient through the Recipients, to initiate the Section 106 process with the SHPO and other consulting parties, assist in identifying other consulting parties with a demonstrated interest in the Undertaking, and prepare any necessary analyses and documentation, but FEMA shall remain responsible for determinations of National Register eligibility and findings of effect recommended by the authorized party. FEMA shall follow the process set forth in Stipulation I.B.1.a, FEMA Roles and Responsibilities, and notify the SHPO in writing when the Recipients or sub-recipient has been authorized to initiate consultation on FEMA's behalf.

- c. Prior to authorizing the release of funds for individual Undertakings requiring grant conditions pursuant to this Agreement, FEMA shall inform the Recipients of all stipulations and conditions and ensure that they are understood so they can be adequately conveyed to the sub-recipient. FEMA shall work in partnership with the Recipients to provide sub-recipient(s) with guidance on in-kind repair pursuant to *The Secretary of the Interior's Standards for the Treatment of Historic Properties 1995 (Standards)*, 36 CFR Part 68, or the most updated version, and techniques to avoid or minimize adverse effects to historic properties.
 - d. FEMA shall provide the Signatories and the ACHP with an annual report for actions taking place between November 1 and October 31 the previous year and will be made available to Signatories and Invited Signatory by December 31 of each year this Agreement is in effect. This annual report will summarize the actions taken to implement the terms of this Agreement, statistics on Undertakings reviewed, and recommend any actions or revisions to be considered, including updates to the appendices.
 - e. FEMA shall confer annually and as necessary with the other Signatories within thirty (30) days after issuance of the annual report, to review the report and/or discuss issues and concerns in greater detail. This review shall occur in person or by telephone as determined by FEMA.
 - f. FEMA shall notify the SHPO, as soon as practicable, following a Declaration to provide specific points of contact and other pertinent information about the Declaration.
 - g. FEMA may convene an initial scoping meeting with the Signatories and other interested parties as soon as practicable after each Declaration to address Declaration-specific issues and procedures.
 - h. FEMA shall ensure that all documentation resulting from Undertakings reviewed pursuant to this Agreement is consistent with applicable SHPO guidelines and the confidentiality provisions of 54 U.S.C. § 300301 and 36 CFR § 800.11(c).
 - i. FEMA will notify in writing the Federal Preservation Officer(s) of other Federal agency(s) utilizing the Agreement in accordance with Stipulation I.A.6. of any proposed amendments to the Agreement.
2. SHPO:
- a. SHPO shall review FEMA's determination of the Areas of Potential Effects (APE), National Register eligibility determinations, and FEMA's effect findings and respond within timeframes required by this Agreement.

- b. Upon request, the SHPO shall provide FEMA and/or its designee(s) with available information about historic properties (such as access to online systems or site files, GIS data, survey information, geographic areas of concern). Such data sharing may be memorialized in an agreement. Only Qualified FEMA staff and/or designee(s) shall be afforded access to protected historic property information.
- c. The SHPO shall identify staff or consultants to assist FEMA staff with their Section 106 responsibilities, and identify, in coordination with FEMA, those activities within the Section 106 review process that SHPO may perform for specific Undertakings as agreed in writing with FEMA.
- d. As requested, SHPO staff shall be reasonably available as a resource and for consultation through site visits, written requests, telephone conversations or electronic media (can only accept documents on a CD). In those instances where consultation with SHPO has occurred, FEMA shall provide a written summary via regular mail to SHPO, including any decisions that were reached.
- e. The SHPO may delegate some or all of its responsibilities under this Agreement to one or more Liaisons to serve as a dedicated point of contact for consultation with FEMA. The SHPO shall confer with FEMA about the selection of any Liaisons, the scope of responsibilities delegated and related implementing procedures. SHPO shall formally document these decisions for concurrence by FEMA. Liaisons are not required to be members of the SHPO staff.
- f. The SHPO shall participate in an initial scoping meeting in response to a Declaration.
- g. The SHPO may assist local jurisdictions and/or the Recipients in the Commonwealth of Puerto Rico with advance planning efforts to consider historic properties in the context of homeland security considerations, including disaster preparedness, response, recovery, and mitigation programs for which FEMA funding may be requested.
- h. The SHPO shall coordinate with FEMA, to identify consulting parties, including any communities, organizations, or individuals that may have an interest in a specific Undertaking and its effects on historic properties.
- i. The SHPO shall participate in annual reviews convened by FEMA to review the effectiveness of this Agreement in accordance with Stipulation I.B.1.e.

3. Recipient(s):

- a. The Recipient(s) shall ensure that their sub-recipient(s) understand and acknowledge conditions and potential requirements that may be placed upon Undertakings as a result of Section 106 consultation and the provisions of this Agreement.
- b. The Recipient(s) shall participate in an initial scoping meeting in response to a Declaration.
- c. The Recipient(s) shall ensure that their sub-recipient(s) understand that failure to comply with any project-specific conditions that have been placed on their grants could jeopardize FEMA funding.
- d. The Recipient(s) shall notify FEMA as soon as possible of any proposed change to the approved scope of work. The Recipient(s) shall direct their sub-recipient(s) not to implement the changes to the proposed scope of work until any additional review required by this Agreement is complete.
- e. The Recipient(s) shall ensure that its sub-recipient(s) are made aware that in the event of an unexpected discovery involving an Undertaking that has affected a previously unidentified historic property or human remains, or affected a known historic property in an unanticipated manner, the sub-recipient(s) will comply with Stipulation III.B, Unexpected Discoveries, Previously Unidentified Properties, or Unexpected Effects.
- f. The Recipient(s) shall ensure that in its sub-recipient(s) agreements, any scope of work involving ground disturbance, and resultant contracts to execute said work, provide for the protection of and notification protocols for unexpected discoveries or unexpected effects to historic properties and human remains.

C. Public Participation

1. FEMA recognizes that the views of the public are essential to informed decision making throughout the Section 106 consultation process. FEMA shall notify the public of proposed Undertakings in a manner that reflects the nature, complexity, significance of historic properties likely affected by the Undertaking, the likely public interest given FEMA's specific involvement, and any confidentiality concerns.
2. FEMA may consult with the Recipient(s), sub-recipient(s), SHPO, and other consulting parties to determine if there are individuals or organizations with a demonstrated interest in historic properties that should be included as a consulting party for the Undertaking in accordance with 36 CFR § 800.2(c)(5). If such parties are identified or identify themselves to FEMA, FEMA shall provide them with

information regarding the Undertaking and its effects on historic properties, consistent with the confidentiality provisions of 36 CFR § 800.11(c).

3. In accordance with the outreach strategy developed for an Undertaking in consultation with the SHPO for involving the public, FEMA shall identify the appropriate stages for seeking public input during the Section 106 consultation process. FEMA shall consider all views provided by the public regarding an Undertaking.
4. FEMA may also provide public notices and the opportunity for public comment or participation in an Undertaking through the public participation process of the National Environmental Policy Act (NEPA) and its implementing regulations set out at 44 CFR Part 10, and/or Executive Orders 11988 and 11990 relating to floodplains and wetlands as set out in 44 CFR Part 9, and as appropriate, Executive Order 12898, Environmental Justice, provided such notices specifically reference Section 106 as a basis for public involvement.
5. Should a member of the public object in writing to implementation of the Agreement's terms, FEMA will notify the other Signatories in writing and take the objection into consideration. FEMA shall consult with the objecting party and, if that party so requests, the other Signatories, for not more than thirty (30) days. In reaching its decision regarding the objection, FEMA shall take into consideration all comments from these parties. Within fifteen (15) days after closure of this consultation period, FEMA shall provide the other parties with its final decision in writing.

D. Timeframes and Communications

1. All time designations shall be in calendar days unless otherwise stipulated. If any Signatory does not object to FEMA's finding or determination related to an Undertaking within an agreed upon timeframe, FEMA may proceed to the next step in the consultation process as described in Stipulation II, Project Review.
2. Due to the varied nature of Undertakings, the individual response times to FEMA's requests for comment/concurrence will vary. These response times are contingent upon FEMA ensuring that its findings and determinations are made by Qualified staff and supported by documentation as required by 36 CFR § 800.11(d) and 36 CFR § 800.11(e), and consistent with FEMA guidance.
 - a. For Emergency Undertakings as outlined in Stipulation II.B, Expedited Review of Emergency Undertakings, the SHPO shall respond to any FEMA request for comments within three (3) days after receipt, unless FEMA determines the nature of the emergency action warrants a shorter time period.
 - b. For Undertakings associated with the Individual Assistance (IA) and Public Assistance (PA) programs, the response time for each request for concurrence

shall be a maximum of fifteen (15) days, or in accordance with temporary timelines established by FEMA on a Declaration by Declaration basis.

- c. For the Hazard Mitigation Grant Program (HMGP) and all non-disaster programs, the response time for each request for concurrence shall be a maximum of thirty (30) days.
3. The consulting parties may send and accept official notices, comments, requests for further information and documentation, and other communications required by this Agreement by e-mail.

II. PROJECT REVIEW

A. Programmatic Allowances

1. If FEMA determines an Undertaking conforms to one or more allowances in Appendix B of this Agreement, FEMA shall complete the Section 106 review process by documenting this determination in the project file, without SHPO review or notification.
2. If the Undertaking involves a National Historic Landmark (NHL) (<http://www.nps.gov/nhl/find/statelist/pr/PR.pdf>), FEMA shall notify the SHPO and the NPS NHL Program Manager of the NPS Southeast Regional Office (Atlanta Federal Center, 1924 Building, 100 Alabama Street SW, Atlanta, GA 30303. Phone: 404-507- 5792; FAX: 404-562-3202 Email: SER_NHL@nps.gov.) that the Undertaking conforms to one or more allowances. FEMA shall provide information about the proposed scope of work for the Undertaking and the allowance(s) enabling FEMA's determination.
3. If FEMA determines any portion of an Undertaking's scope of work does not conform to one or more allowances listed in Appendix B, FEMA shall conduct expedited or standard Section 106 review, as appropriate, for the entire Undertaking in accordance with Stipulation II.B, Expedited Review for Emergency Undertakings, or Stipulation II.C, Standard Project Review.
4. Allowances may be revised and new allowances may be added to this Agreement in accordance with Stipulation IV.A.3, Amendments.

B. Expedited Review for Emergency Undertakings

1. Determine Expedited Review
 - a. As part of the Declaration process, FEMA shall define the time interval during which the disaster causing incident occurs (the incident period, as defined in 44

CFR § 206.32(f)). FEMA may approve direct Federal assistance and/or funding for emergency work (as defined in 44 CFR § 206.201(b)) that occurs during the incident period, including work already completed, in response to an immediate threat to human health and safety or property. Pursuant to 36 CFR § 800.12(d), FEMA may conduct expedited review of emergency Undertakings for thirty (30) days from the beginning of the incident period.

- b. Should FEMA determine that it is necessary to extend the expedited review period for emergency Undertakings beyond the initial thirty (30) days, FEMA shall, in thirty (30)-day increments, as needed, notify in writing the Recipients, SHPO and ACHP.

2. Conduct Expedited Reviews

- a. If the emergency Undertaking is an immediate rescue and salvage operation conducted in response to an event to preserve life and property, FEMA has no Section 106 consultation responsibilities in accordance with 36 CFR § 800.12(d); or
- b. If the emergency Undertaking meets one or more of the Allowances in Appendix B of this Agreement, FEMA shall complete the Section 106 review process pursuant to Stipulation II.A.1, Programmatic Allowances.
- c. If FEMA determines that the emergency Undertaking would adversely affect a historic property during this expedited review period:
 - i. To the extent practicable, FEMA will propose treatment measures that would address adverse effects during implementation, and request the comments of the SHPO within three (3) days of receipt of this information unless FEMA determines the nature of the emergency warrants a shorter time period.
 - ii. FEMA may provide this information through written requests, telephone conversations, meetings, or electronic media (CD's only). In all cases, FEMA shall clarify that an "expedited review" is being requested for the Undertaking.
 - iii. FEMA shall take into account any timely comments provided by SHPO in making a decision on how to proceed.
 - iv. Should the SHPO not comment within three (3) days, FEMA shall complete Section 106 consultation for the Undertaking based on the available information.
 - v. FEMA shall notify the SHPO of the final decision, indicating how any comments received were considered in reaching that decision.

- C. Standard Project Review: For Undertakings not exempt from further Section 106 review, FEMA shall ensure that the following standard project review steps are implemented. In the interest of streamlining, FEMA may combine some or all of these steps during consultation in accordance with 36 CFR § 800.3(g).
1. Consulting Parties: FEMA shall consider all written requests of individuals and organizations to participate as consulting parties, and consult with the SHPO to identify any other parties that meet the criteria to be consulting parties and invite them to participate in the Section 106 process. FEMA may invite others to participate as consulting parties as the Section 106 consultation proceeds. FEMA shall invite any individual or organization that will assume a specific role or responsibility outlined in a Memorandum of Agreement (MOA) or Programmatic Agreement to participate as an invited signatory to the agreement.
 2. Area of Potential Effects:
 - a. For standing structures or buildings not adjacent to or located within the boundaries of a National Register listed or eligible district, Qualified staff may define the (Area of Potential Effect (APE) as the individual structure or building when the proposed Undertaking is limited to its repair or rehabilitation (as defined in 36 CFR § 68.2(b)).
 - b. For all other Undertakings, Qualified staff shall determine the APE in consultation with the SHPO. FEMA may consider information provided by other parties, such as local governments and the public, when establishing the APE.
 3. Identification and Evaluation: Qualified staff shall determine in consultation with the SHPO if the APE contains historic properties, including properties of religious and cultural significance. This may include the review of documentation provided by the Recipients or sub-recipient in coordination with the SHPO.
 - a. Level of Effort: FEMA shall make a reasonable and good faith effort to identify historic properties in accordance with 36 CFR § 800.4(b)(1). FEMA may consult with the SHPO to determine the level of effort and methodology necessary to identify and evaluate a variety of historic property types.
 - b. National Historic Landmarks: When FEMA identifies an Undertaking with the potential to affect an NHL, FEMA shall contact the NPS NHL Program Manager of the NPS Southeast Regional Office (Atlanta Federal Center, 1924 Building, 100 Alabama Street SW, Atlanta, GA 30303. Phone: 404-507-5792; FAX: 404-562- 3202 Email: SER_NHL@nps.gov.) in addition to the SHPO, and other consulting parties. The purpose of this notification is to ensure early coordination for the Undertaking which FEMA later may determine adversely affects the NHL

as outlined in Stipulation II.C.8.

- c. Determinations of Eligibility: FEMA shall review or determine National Register eligibility based on identification and evaluation efforts and consult with SHPO and other consulting parties regarding these determinations. Should the SHPO or another consulting party disagree with the determination of eligibility, FEMA shall either:
 - i. Elect to consult further with the objecting party until the objection is resolved;
 - ii. Treat the property as eligible for the National Register; or
 - iii. Obtain a determination of eligibility from the Keeper of the National Register in accordance with 36 CFR § 63.2(d)-(e) and 36 CFR § 800.4(c)(2).
4. Findings of No Historic Properties Affected: FEMA shall make a finding of “no historic properties affected” under the following circumstances:
 - a. If no historic properties are present in the APE; or
 - b. The Undertaking is designed to avoid effects to historic properties; or
 - c. The Undertaking does not affect the character defining features of a historic property.
 - d. FEMA shall notify the SHPO and any other consulting parties of this finding and provide supporting documentation in accordance with 36 CFR § 800.11(d). Unless the SHPO objects to the finding within the applicable timeframe outlined in Stipulation I.D, Timeframes and Communications, the Section 106 review of the Undertaking will have concluded.
 - e. If the SHPO objects to a finding of “no historic properties affected,” FEMA shall consult with the SHPO to resolve the disagreement.
 - i. If the objection is resolved, FEMA either may proceed with the Undertaking in accordance with the resolution or reconsider effects on the historic property by applying the criteria of adverse effect pursuant to Stipulation II.C.5, Application of the Criteria of Adverse Effect, below.
 - ii. If FEMA is unable to resolve the disagreement, it will forward the finding and supporting documentation to the ACHP and request that the ACHP review FEMA’s finding in accordance with 36 CFR § 800.4(d)(1)(iv)(A) through 36 CFR § 800.4(d)(1)(iv)(C). FEMA shall consider the ACHP’s recommendation in making its final determination. If FEMA’s final

determination is to reaffirm its “no historic properties affected” finding, the Section 106 review of the Undertaking will have concluded. Otherwise, FEMA will proceed to Stipulation II.C.5., below.

5. Application of the Criteria of Adverse Effect: If FEMA finds an Undertaking may affect historic properties in the APE, FEMA shall apply the criteria of adverse effect to historic properties within the APE(s), taking into account the views of the consulting parties and the public concerning effects in accordance with 36 CFR § 800.5(a).
 - a. If FEMA determines that an Undertaking does not meet the adverse effect criteria, FEMA shall propose a finding of “no adverse effect” in accordance with 36 CFR § 800.5(b).
 - i. FEMA shall notify the SHPO, and all other consulting parties of its finding and provide supporting documentation pursuant to 36 CFR §800.11(e).
 - ii. Unless a consulting party objects within the applicable timeframe outlined in Stipulation I.D, Timeframes and Communications, FEMA will proceed with its “no adverse effect” determination and conclude the Section 106 review.
 - iii. If a consulting party objects to a finding of “no adverse effect,” FEMA will consult with the objecting party to resolve the disagreement.
 - 1) If the objection is resolved, FEMA shall proceed with the Undertaking in accordance with the resolution, or;
 - 2) If the objection cannot be resolved, FEMA shall request that the ACHP review the findings in accordance with 36 CFR § 800.5(c)(3)(i)-(ii) and submit the required supporting documentation. FEMA shall consider the ACHP’s comments in making its final determination.
 - b. If FEMA finds the Undertaking may adversely affect historic properties, FEMA shall request through the Recipients that the sub-recipient revise the scope of work to substantially conform to the *Standards* for standing structures or buildings, or avoid or minimize adverse effects for National Register listed or eligible historic properties.
 - i. If the sub-recipient modifies the scope of work to avoid the adverse effect(s), FEMA shall notify the SHPO and all other consulting parties, and provide supporting documentation. Unless a consulting party makes a timely objection in accordance with the applicable timeframe outlined in Stipulation I.D, Timeframes and Communications, FEMA shall proceed with its “no adverse effect” determination, including any conditions, and conclude the Section 106 review.

- ii. If an Undertaking is not modified to avoid the adverse effect(s), FEMA shall initiate consultation to resolve the adverse effect(s) in accordance with Stipulation II.C.6, Resolution of Adverse Effects.
- 6. Resolution of Adverse Effects: If FEMA determines that an Undertaking may adversely affect a historic property, it shall resolve the effect(s) of the Undertaking in consultation with the SHPO, Recipients, sub-recipient, the ACHP, if participating, and other consulting parties, by one of the following methods depending upon the severity of the adverse effect(s) as well as determination of the historic property's significance on a local, state or national level. When FEMA determines an Undertaking will adversely affect an NHL, FEMA shall notify and invite the Secretary and ACHP to participate in consultation in accordance with 36 CFR § 800.10. When the ACHP participates in consultation related to an NHL, the ACHP shall report the outcome of the consultation to the Secretary and the FEMA Administrator.
 - a. Abbreviated Consultation Process: After taking into consideration the significance of the historic properties affected, the severity of the adverse effect(s) and avoidance or minimization of the adverse effect(s), FEMA may propose in writing to the consulting parties to resolve the adverse effect(s) of the Undertaking through the application of one or more Treatment Measures outlined in Appendix F as negotiated with the SHPO and other consulting parties. The use of these Treatment Measures shall not require the execution of an MOA or Programmatic Agreement.
 - i. In consultation with the SHPO and other consulting parties, FEMA shall propose in writing the implementation of a specific Treatment Measure, or combination of Treatment Measures, with the intent of expediting the resolution of adverse effects, and provide documentation as required by 36 CFR § 800.11(e) and subject to the confidentiality provisions of 36 CFR § 800.11(c). Unless a consulting party or the ACHP objects within fifteen (15) days of receipt of FEMA's proposal, FEMA shall proceed with the implementation of the Treatment Measure(s) and will conclude the Section 106 review.
 - ii. If any of the consulting parties or the ACHP objects within the fifteen (15) day review and comment period to the resolution of adverse effects through the application of the Abbreviated Consultation Process, FEMA shall resolve the adverse effect(s) using procedures outlined below in Stipulation II.C.6(b), MOA or Stipulation II.C.6.(c), Programmatic Agreement.
 - iii. Because funding and implementation details of Treatment Measures for specific Undertakings may vary by program, FEMA shall provide written notice to the consulting parties within sixty (60) days of the completion of the Treatment Measure(s). This written notice will serve as confirmation that

the Treatment Measure(s) for a specific Undertaking have been implemented. FEMA also shall include information pertaining to the completion of Treatment Measures in the annual report pursuant to Stipulation I.B.1.d, FEMA Roles and Responsibilities.

- b. Memorandum of Agreement: FEMA shall provide the ACHP with an adverse effect notice in accordance with 36 CFR § 800.6(a)(1) if it has not already provided such under the Abbreviated Consultation Process of this Agreement, if a consulting party or the ACHP objects in accordance with Stipulation II.C.6(a)(ii), or if FEMA in consultation with the SHPO and other consulting parties has determined that an MOA would be more appropriate to resolve the adverse effect(s). In consultation with the SHPO and other consulting parties, including the ACHP (if participating), FEMA shall develop an MOA in accordance with 36 CFR § 800.6(c) to agree upon treatment measures to avoid, minimize, and/or mitigate adverse effect(s) on historic properties. The MOA may also include treatment measures that serve an equal or greater public benefit in promoting the preservation of historic properties in lieu of more traditional treatment measures.
- c. Programmatic Agreement: Should the execution of an MOA be inappropriate given the similar nature of effects on historic properties, the inability to determine effects prior to approval of an Undertaking, or where other circumstances warrant, FEMA, shall consult with the SHPO and the ACHP, if participating, and any other consulting parties to develop a Programmatic Agreement in accordance with 36 CFR § 800.14(b) and identify programmatic conditions or treatment measures to govern the resolution of potential or anticipated adverse effects from certain complex project situations for an Undertaking or for multiple but similar Undertakings by a single sub-recipient.
- d. Objections: Should any signatory or consulting party object within the timeframes established by this Agreement to any plans, specifications, or actions taken pursuant to resolving an adverse effect, FEMA shall consult further with the objecting party to seek resolution. If FEMA determines the objection cannot be resolved, FEMA shall address the objection in accordance with Stipulation IV.B, Dispute Resolution.

III. OTHER CONSIDERATIONS

- A. Changes to an Approved Scope of Work: The Recipients shall notify FEMA and shall require a sub-recipient to notify the Recipient immediately when a sub-recipient proposes changes to an approved scope of work for an Undertaking.
 - 1. If FEMA determines the change meets a Programmatic Allowance or has no effect on the property, FEMA shall approve the change.

2. If the change can be modified to meet a Programmatic Allowance, or conform to any applicable SOI Standards, FEMA shall conclude its Section 106 review responsibilities.
 3. If FEMA determines that the change does not meet an Allowance, FEMA shall initiate consultation pursuant to Stipulation II.C, Standard Project Review.
- B. Unanticipated Discoveries, Previously Unidentified Properties, or Unexpected Effects:
1. Upon notification by a sub-recipient of an unexpected discovery, or if it appears that a Undertaking has affected a previously unidentified property or affected a known historic property in an unanticipated manner, in accordance with Stipulation I.B.3(e), Recipients Roles and Responsibilities, the Recipients shall immediately notify FEMA and require the sub-recipient to:
 - a. Stop construction activities in the vicinity of the discovery.
 - b. Take all reasonable measures to avoid or minimize harm to the property until FEMA has completed consultation with the SHPO, and any other consulting parties. Upon notification by the Recipients of a discovery, FEMA shall immediately notify the SHPO, and other consulting parties that may have an interest in the discovery, previously unidentified property or unexpected effects, and consult to evaluate the discovery for National Register eligibility and/or the effects of the Undertaking on historic properties.
 - c. If human remains are discovered, notify the local law enforcement office and coroner/medical examiner in accordance with applicable Commonwealth statute(s), and protect the remains from any harm. Notify the SHPO within twenty- four (24) hours of identifying human remains.
 - d. Assist FEMA in completing the following actions, as required:
 - i. FEMA shall consult with the SHPO and other consulting parties in accordance with the consultation process outlined in Stipulation II, Project Review, to develop a mutually agreeable action plan with timeframes to identify the discovery or previously unidentified property, take into account the effect(s) of the Undertaking, resolve adverse effect(s) if necessary, and ensure compliance with applicable Federal, State, and local statutes.
 - ii. FEMA shall coordinate with the Recipients and the sub-recipient regarding any needed modification to the scope of work for the Undertaking necessary to implement recommendations of the consultation and facilitate proceeding with the Undertaking.
 - iii. In cases where discovered human remains are determined to be native to

Puerto Rico, FEMA shall follow the guidelines outlined in the ACHP's *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects* (2007) and any state-specific policies that may be in force.

C. Curation

1. FEMA and the Recipients shall ensure that recovered artifacts and related documentation are curated in a suitable repository as agreed to by FEMA and SHPO, following applicable federal guidelines (36 CFR Part 79).
2. When an Undertaking will adversely affect a National Register listed or eligible archaeological site, FEMA may treat the adverse effect by providing for the recovery of significant information through archaeological data recovery. FEMA shall consult with the SHPO and other consulting parties to prepare a research design (data recovery plan), including a specific plan for curation. This plan will incorporate any relevant curation provisions contained in ACHP's "*Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites*" published in the Federal Register (64 Federal Register 27085-27087 (May 18, 1999)), or other provisions agreed to by the consulting parties. No excavation should be initiated before FEMA acceptance and approval of the curation plan.
 - a. As stipulated in the curation plan, artifacts, as well as field and laboratory records sufficient to document the collection, shall be curated at a facility that meets the standards of, and in accordance with the provisions of 36 CFR Part 79, "Curation of Federally Owned and Administered Archaeological Collections," and applicable State requirements.

D. Review of Undertakings Initiated Before Completion of Section 106 Review

1. In accordance with Section 110(k) of the NHPA, FEMA shall not grant assistance to a sub-recipient who, with intent to avoid the requirements of this Agreement or Section 106 of the NHPA, has intentionally significantly and adversely affected a historic property to which the assistance would relate, or having legal power to prevent it, allowed an adverse effect to occur. However, if after consultation with the SHPO and ACHP, FEMA determines that extraordinary circumstances justify granting assistance despite the adverse effect created or permitted by the sub-recipient, FEMA shall complete consultation for the Undertaking pursuant to the terms of this Agreement.
2. FEMA shall specifically advise the Recipients and shall require that the Recipients advise its sub-recipient in writing that they may jeopardize Federal funding if work is performed without all required local, State, and Federal licenses, permits, and/or approvals, including the completion of the Section 106 process. FEMA also shall document this requirement in its Record of Environmental Consideration, as applicable, as well as all project approval documents specifying the project scope

and limits, and containing all conditions and caveats.

3. In circumstances where FEMA determines a sub-recipient has initiated an Undertaking without willful intent to avoid the requirements of this Agreement or Section 106 of NHPA, FEMA shall proceed as follows:
 - a. Determine if the Undertaking is of a type for which FEMA has no further Section 106 responsibilities, namely:
 - i. An Undertaking listed in Stipulation I.A.7; or
 - ii. An immediate rescue and salvage operation in accordance with 36 CFR § 800.12(d); or
 - iii. A Programmatic Allowance as described under Stipulation II.A.
 - b. In any such cases listed in Stipulation III.D.3.a., above, FEMA shall document this determination in the project files, and consider the Undertaking Section 106 compliant.
 - c. If FEMA determines the Undertaking would have required Section 106 review, FEMA shall coordinate with the SHPO to determine if consultation is feasible.
 - i. If after coordination with the SHPO, FEMA determines that consultation is feasible, FEMA shall review the Undertaking in accordance with Stipulation II.C, Standard Project Review.
 - ii. If after coordination with the SHPO, FEMA determines that review is infeasible, FEMA shall document the outcome to the Section 106 review process, and the applicable FEMA program shall take the outcome into account before making a decision whether to fund the Undertaking. FEMA shall provide written notification of its funding decision to the Recipients, SHPO and ACHP.
4. FEMA shall ensure that all Undertakings considered for after the fact review in accordance with this stipulation are included in the annual report.

IV. IMPLEMENTATION OF AGREEMENT

A. Amendments

1. If any Signatory determines that an amendment to the terms of this Agreement must be made, the Signatories shall consult for no more than thirty (30) days to seek amendment of the Agreement.

2. An amendment to this Agreement, exclusive of the appendices, shall be effective only when it has been signed by all the Signatories.
3. Appendix A (FEMA Program Summaries), Appendix B (Programmatic Allowances), Appendix C (Criteria for Identification of Collapsed Structures), Appendix D (Private Property Debris Removal Program Process), Appendix E (Low Impact Debris Removal Stipulation), and Appendix F (Treatment Measures) may be amended at the request of FEMA or another Signatory in the following manner:
 - a. FEMA, on its own behalf or on behalf of another Signatory, shall notify the other Signatories of the intent to modify the current Appendix or Appendices and shall provide the Signatories a draft of the updated Appendix or Appendices.
 - b. If no other Signatory objects in writing within thirty (30) days of receipt of FEMA's proposed modification, FEMA shall date and sign the amended Appendix and provide a copy of the amended Appendix to the other Signatories. Such an amendment shall go into effect on the date FEMA transmits the amendment to the other Signatories.

B. Dispute Resolution

1. Should any Signatory object in writing to the terms of this Agreement, FEMA shall consult with the objecting party for not more than thirty (30) days to resolve the objection.
2. If the objection is resolved within thirty (30) days, FEMA shall proceed in accordance with the resolution.
3. If FEMA determines within thirty (30) days that the objection cannot be resolved, FEMA shall forward to ACHP all documentation relevant to the objection, including FEMA's proposed resolution. Within thirty (30) days of receipt, ACHP will:
 - a. Concur in FEMA's proposed resolution; or
 - b. Provide FEMA with recommendations, which FEMA shall take into account in reaching a final decision regarding the objection; or
 - c. Notify FEMA that the objection will be referred for comment in accordance with 36 CFR § 800.7(a)(4), and proceed to do so.
4. FEMA shall take into account any ACHP recommendations or comments, and any comments from the other Signatories, in reaching a final decision regarding the objection. FEMA shall provide in writing to the ACHP and Signatories a summary of its final decision before authorizing any disputed action to proceed. The Signatories shall continue to implement all other terms of this Agreement that are

not subject to objection.

5. If the ACHP does not respond within thirty (30) days, FEMA may assume the ACHP has no comment and proceed with its proposed resolution to the objection after providing the ACHP and Signatories a written summary of its final decision.

C. Severability and Termination

1. In the event any provision of this Agreement is deemed by a Federal court to be contrary to, or in violation of, any applicable existing law or regulation of the United States of America, only the conflicting provision(s) shall be deemed null and void, and the remaining provisions of the Agreement shall remain in effect.
2. FEMA, the SHPO, ACHP, or Recipients may terminate this Agreement by providing thirty (30) days written notice to the other Signatories, provided that the Signatories consult during this period to seek amendments or other actions that would prevent termination. If this Agreement is terminated, FEMA shall comply with Section 106 through other applicable means pursuant to 36 CFR Part 800. Upon such determination, FEMA shall provide all other Signatories and the ACHP with written notice of the termination of this Agreement.
3. This Agreement may be terminated by the implementation of a subsequent Agreement, pursuant to 36 CFR § 800.14(b), that explicitly terminates or supersedes this Agreement, or by FEMA's implementation of Alternate Procedures, pursuant to 36 CFR § 800.14(a).

D. Duration and Extension

1. This Agreement shall remain in effect from the date of execution for a period not to exceed seven (7) years unless otherwise extended pursuant to Stipulation IV.D.2 below, or terminated pursuant to Stipulation IV.C.2 or IV.C.3, Severability and Termination. The Agreement shall remain in effect for Declarations made prior to expiration of the Agreement in order to minimize delays in delivery of FEMA assistance.
2. The Signatories may collectively agree to extend this Agreement to cover additional calendar years, or portions thereof, through an amendment per Stipulation IV.A., provided that the original Agreement has not expired.

E. Execution and Implementation

1. This Agreement may be executed in counterparts, with a separate page for each Signatory, and shall become effective on the date of the final signature of FEMA and the SHPO.



2. FEMA shall ensure that each Signatory is provided with a complete copy of the Agreement, including an original set of signatures.
3. Execution and implementation of this Agreement evidence that FEMA has afforded ACHP a reasonable opportunity to comment on FEMA's administration of all referenced Programs, and that FEMA has satisfied its Section 106 responsibilities for all individual Undertakings of its referenced Programs.





**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO CENTRAL OFFICE FOR RECOVERY,
RECONSTRUCTION AND RESILIENCY**

SIGNATORY PARTY

FEDERAL EMERGENCY MANAGEMENT AGENCY

JOHN J MCKEE Digitally signed by JOHN J
MCKEE
Date: 2023.04.25 15:32:18 -04'00'

By: _____
John McKee
Regional Environmental Officer
FEMA Region 2

Date: _____

DAVID S WARRINGTON Digitally signed by DAVID S WARRINGTON
Date: 2023.05.03 14:49:37 -04'00'

By: _____
David Warrington
Regional Administrator
FEMA Region 2

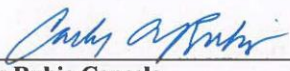
Date: _____



**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO CENTRAL OFFICE FOR RECOVERY,
RECONSTRUCTION AND RESILIENCY**

SIGNATORY PARTY

PUERTO RICO STATE HISTORIC PRESERVATION OFFICER

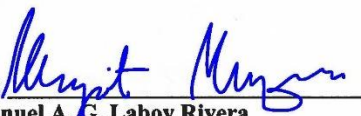
By: 
Carlos Rubio Cancela
State Historic Preservation Officer

Date: April 20, 2023

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER,
AND THE PUERTO RICO CENTRAL OFFICE FOR RECOVERY,
RECONSTRUCTION AND RESILIENCY**

SIGNATORY PARTY

**THE PUERTO RICO CENTRAL OFFICE FOR RECOVERY, RECONSTRUCTION AND
RESILIENCY (COR3)**

By: 
Manuel A. G. Laboy Rivera
Executive Director

Date: April 25, 2023

Puerto Rico Central Office for Recovery, Reconstruction and Resiliency

Appendix A

FEMA Program Summaries

This Appendix may be amended in accordance with Stipulation IV.A., Amendments.

Disaster Programs

The following programs are authorized under Titles IV and V of the Stafford Act.

Advance of Nonfederal Share

The Stafford Act and its implementing regulations authorize FEMA to advance or loan to a state, tribal government, local government, or applicant the portion of PA for which the state or tribal government is responsible pursuant to the cost-sharing provisions of the Stafford Act.

Community Disaster Loan Program

The Stafford Act authorizes FEMA to make community disaster loans to help local governments that have incurred significant revenue losses due to a presidentially declared major disaster if necessary for a local government to perform its governmental functions

Fire Management Assistance Grant Program (FMAG)

The FMAG is available to State, Tribal, and local governments for the mitigation, management, and control of fires on publicly or privately owned lands.

Hazard Mitigation Grant Program (HMGP)

The HMGP provides grants to States, Territories, Tribes, local governments, and private nonprofit organizations to implement long-term hazard mitigation measures after a Declaration.

Individual Assistance Programs (IA)

The Stafford Act authorizes a wide variety of direct and financial assistance to individual and households affected by a Declaration, and FEMA has implemented these authorities under the umbrella of its Individual Assistance Program, which include crisis counseling (Section 416); disaster legal services (Section 415); unemployment assistance (Section 410); food coupons (Section 412); case management (Section 426); and funeral services, minor home repairs, and temporary housing assistance (Section 408). It should be noted that other Federal agencies provide disaster assistance programs, services, and activities to individuals as well, including the U.S. Small Business Administration, U.S. Department of Agriculture, and U.S. Department of Labor, but these other assistance programs are not subject to the terms of this Agreement.

Public Assistance Program (PA)

The Stafford Act authorizes federal assistance for state, territorial, tribal, and local governments and certain private non-profit entities to respond to emergencies and to respond to and recover from major disasters. FEMA has administratively combined these authorities under the umbrella of its Public Assistance Program. The Public Assistance Program provides a broad range of assistance. First, it provides direct services and financial assistance for emergency assistance, such as emergency evacuation, sheltering, and debris removal. Second, it provides financial

assistance for the permanent restoration of disaster-damaged facilities. Third, it includes emergency transportation and emergency communications assistance.

Resilience Programs – Mitigation

Community Assistance Program – State Services Support Elements (CAP-SSSE)

The CAP-SSSE Program provides financial assistance to states to provide technical assistance to communities in the National Flood Insurance Program (NFIP) and to evaluate community performance in implementing NFIP floodplain management activities.

Cooperating Technical Partners Program (CTP)

The CTP Program provides financial assistance to states, local and Tribal governments, institutions of higher education, and other organizations to build upon and enhance the existing capabilities of these entities to increase local involvement in, and ownership of flood hazard identification, flood map maintenance, risk assessment, and risk communication to encourage responsible floodplain management and support their jurisdictional responsibilities as participating members of the NFIP.

Flood Mitigation Assistance Program (FMA)

The FMA Program provides grants to States, Territories, Tribal entities, and local governments for planning and carrying out activities designed to reduce the risk of flood damage to structures covered under contracts for flood insurance under the NFIP.

National Earthquake Hazard Reduction Program (NEHRP)

The NEHRP provides financial assistance to certain organizations to mitigate earthquake losses in the United States through basic and directed research and implementation activities.

National Public Infrastructure Pre-Disaster Hazard Mitigation Program (aka Building Resilient Infrastructure and Communities (BRIC))

Authorized by Section 1234 of the Disaster Recovery Reform Act, this Program is funded as a six (6) percent set aside from disaster expenses, to provide support to states, local communities, tribes and territories a greater investment in a broad range of eligible hazard mitigation activities before a disaster. Guiding principles of the BRIC program are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

Resilience Programs - Preparedness

Assistance to Firefighters Grant Program (AFG)

The AFG program provides funding for purchase of equipment and retrofit or construction of fire stations to improve first responder capabilities.

Emergency Management Performance Grants (EMPG)

The purpose of the EMPG is to provide Federal funds to states to assist state, local, territorial, and tribal governments in preparing for all hazards emergency preparedness capabilities.

Homeland Security Grant Program (HSGP)

The HSGP plays an important role in the implementation of the National Preparedness System by providing funding to states and urban areas to prevent, protect against, mitigate, respond to, and recover from acts of terrorism and other threats. HSGP is comprised of three interconnected grant programs: (1) the State Homeland Security Program (SHSP), (2) the Urban Areas Security Initiative (UASI), and (3) the Operation Stonegarden (OPSG). Together, these grant programs and other future projects that may be included under the HSGP fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, management, and administration.

State Homeland Security Program (SHSP)

The SHSP supports state, tribal, territorial, and local preparedness activities that address high priority preparedness gaps across all core capabilities that support terrorism preparedness.

Urban Areas Security Initiative (UASI) Program

The UASI program assists high-threat, high-density Urban Areas in efforts to build, sustain, and deliver the capabilities necessary to prevent, protect against, mitigate, respond to, and recover from acts of terrorism.

Operation Stonegarden (OPSG)

The OPSG Program supports enhanced cooperation and coordination among Customs and Border Protection (CBP), United States Border Patrol (USBP), and Federal, state, local, tribal, and territorial law enforcement agencies. The OPSG Program provides funding to support joint efforts to secure the United States' borders along routes of ingress from international borders to include travel corridors in states bordering Mexico and Canada, as well as states and territories with international water borders.

Intercity Bus Security Grant Program (IBSGP)

The IBSGP provides funding to strengthen the Nation's critical infrastructure against risks associated with potential terrorist attacks. IBSGP provides funding for critical infrastructure hardening and other physical security enhancements to support transit operators serving the Nation's highest-risk metropolitan areas.

Intercity Passenger Rail – Amtrak (IPR) Program

Provides funds to protect critical surface transportation infrastructure and the traveling public from acts of terrorism and increase the resilience of the Amtrak rail system.

Integrated Public Alert and Warning System (IPAWS)

The Integrated Public Alert and Warning System (IPAWS) was established by Executive Order 13407 in 2006. In the event of a national emergency, the President may use IPAWS to send a message to the American people quickly and simultaneously through multiple communications

pathways. FEMA has identified several radio transmission sites across the nation with significantly powerful signals for this purpose, and FEMA is responsible for upgrading, maintaining, and managing the agency installed and owned auxiliary fuel systems at each of these radio transmission sites.

National Dam Safety Program (NDSP)

The NDSP provides financial assistance to states to strengthen their dam safety programs, to include activities such as dam safety training, increasing dam inspections, increasing the submission and testing of emergency action plans, coordinating with state preparedness officials, identification of dams to be repaired or removed, and conducting dam safety awareness workshops. NDSP also administers the Rehabilitation of High Hazard Potential Dams Grant Program which provides technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams.

Nonprofit Security Grant Program (NSGP)

NSGP provides funding in order to integrate the preparedness activities of nonprofit organizations that are at high risk of a terrorist attack with broader state and local preparedness efforts.

Port Security Grant Program (PSGP)

The PSGP provides funding to port authorities, facility operators, and State and local agencies for activities associated with implementing Area Maritime Security Plans (AMSPs), facility security plans and other port-wide risk management efforts. PSGP funds are intended to improve port-wide maritime security risk management; enhance maritime domain awareness; support maritime security training and exercises; and maintain or reestablish maritime security mitigation protocols that support port recovery and resiliency capabilities with a focus on weapons of mass destruction, cybersecurity, and attacks on soft targets.

Staffing for Adequate Fire and Emergency Response Grant Program (SAFER)

The SAFER Program provides financial assistance to fire departments and volunteer firefighter interest organizations to help them increase or maintain the number of training front line firefighters available in their communities.

Transit Security Grant Program (TSGP)

The TSGP provides funds to eligible public transportation systems (which include intra-city bus, ferries and all forms of passenger rail) for the protection of critical transportation infrastructure and the travelling public from acts of terrorism and to increase the resilience of transit infrastructure.

Tribal Homeland Security Grant Program (THSGP)

THSGP provides funding directly to eligible tribes to support the building, sustainment, and delivery of core capabilities to enable Tribes to strengthen their capacity to prevent, protect against, mitigate, respond to, and recover from potential terrorist attacks.

Appendix B

Programmatic Allowances

This list of Programmatic Allowances enumerates FEMA funded activities that based on FEMA experience have no or minimal effect on historic properties if implemented as specified in this Appendix and will not require review by the SHPO.

The Programmatic Allowances consist of two tiers – First Tier and Second Tier. Staff may apply First Tier allowances whether or not they meet professional historic preservation qualification standards, while only staff meeting the applicable SOI Professional Qualifications Standards in accordance with Stipulation I.B(1)(a) of this Agreement may apply Second Tier allowances.

When referenced in the Programmatic Allowances, “in-kind” shall mean of the same or similar material, and the result shall match all physical and visual aspects, including: form, color, and workmanship. When severity of deterioration requires replacement of a character-defining feature, the new feature shall match the existing in design, color, texture and, where possible, materials. *“Character-defining” refers to all those visual aspects and physical features that comprise the appearance of every historic building. Character-defining elements include the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.*¹ The in-kind repair provided for in both First and Second Tier allowances in Appendix B should be limited to pre-existing architectural features and physical components of buildings and structures.

When referenced in the allowances, “previously disturbed soils” shall refer to soils that are not likely to possess intact and distinct soil horizons and have the reduced likelihood of possessing historic properties within their original depositional contexts in the area and to the depth to be excavated.

Specifically, “disturbed ground” is defined for purposes of this document as the modification of natural landscapes or landforms through removal of natural soils through ground-disturbing activities such as cuts, grading and excavation and/or the deposition of non-native soils or materials to existing or original ground surface such as fill. In the case of the deposition of fill, disturbance is only considered for the depth of the fill layer. Intact soils could exist underneath the fill layer. Note that activities such as agricultural plowing and disking are not considered disturbance. In addition, in some areas, particularly historic urban areas, construction activities associated with early utilities, creation of roadways and/or parking lots, may constitute a “disturbed” context but may be of historic significance and will need to be evaluated. Therefore, context is important. Guides to assist in identifying prior disturbed ground may come from the following: historic maps, soil borings, soil reports, utility records, pavement core records, etc.

¹ Nelson, Lee H. *Architectural Character – Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character*, Preservation Brief 17, Department of the Interior, September 1988.

Soil disturbance can be established through cultural resource surveys, site inspections, or construction drawings that clearly depict the depth of prior ground disturbance. Examples of activities that would create disturbed soil horizons include: the installation of culverts, foundations, and below ground utilities; excavation for footings; and the construction of dams, bridge abutments, and other structures.

Soil disturbance under a parking lot or road is limited to the depth of prior construction. Soils beneath the depth of prior construction may be undisturbed. Undisturbed soils may exist under areas where additional material (e.g. soil or gravel) has been placed in order to raise land surface (e.g. road beds, railroad alignments, and building paths). The addition of soil may not constitute significant disturbed ground beyond the added soil layer.

I. First Tier Allowances

A. GROUND DISTURBING ACTIVITIES AND SITE MODIFICATION, when proposed activities described below substantially conform to the original footprint and/or are performed in previously disturbed soils, including the area where the activity is staged.

1. Debris Removal

- a Debris removal and collection, including removal of uprooted trees, limbs and branches from public rights of way and public areas and areas as well as the transport and disposal of such waste to existing licensed waste facilities or landfills. This includes the temporary establishment and expansion of non-hazardous debris staging, reduction, and disposal areas at licensed transfer stations, or existing hard- topped or graveled surfaces (e.g. parking lots, roads, athletic courts) but not the creation of new or temporary access roads. This does not include partially uprooted trees in archeologically sensitive areas such as cemeteries, battlegrounds, historic landscapes, historic parks, and historic districts.
- b Removal of debris from private property, provided that buildings are not affected, ground disturbance is minimal and in-ground elements, such as driveways, walkways or swimming pools, are left in place.
- c Chipping and disposal of woody debris by broadcasting within existing rights-of- way.
- d Sediment removal from man-made drainage facilities, including retention/detention basins, ponds, ditches, and canals, in order to restore the facility to its pre-disaster condition. The sediment may be used to repair eroded banks or disposed of at an existing licensed or permitted spoil site.

- e. Dewatering flooded developed areas by pumping.
2. Temporary Structures and Housing
- a. Staging, installation and removal of temporary structures for use as school classrooms, offices, or temporary shelters for essential public service agencies, such as police, fire, rescue and medical care, as well as temporary housing for disaster personnel and survivors at the following types of locations:
 - i. Single units on private residential sites when all utilities are installed above ground or tie into pre-existing utility lines.
 - ii. Existing RV/Mobile Home Parks and campgrounds with pre-existing utility hookups;
 - iii. Paved areas, such as parking lots and paved areas at such facilities as conference centers, shopping malls, airports, industrial port facilities business parks, and military bases when all utilities are installed above ground or tie into pre-existing utility lines.
 - iv. Sites that have been previously prepared for planned construction, such as land being developed for public housing, office buildings, city parks, ball fields, schools, etc. when all utilities are installed above-ground or tie into pre-existing utility lines.
 - v. Areas previously filled to depths of at least six feet so that subsurface utilities can be installed.
 - b. Temporary repair to single-family, residential properties to ensure safe shelter with access to essential electrical supply, solar panels, HVAC, hot water, natural gas and potable water, and protection from elements such as weatherproofing, and securing broken doors and windows. Temporary repairs must be reversible.
3. Recreation and Landscaping
- a. Installation of temporary removable barriers.
 - b. In-kind repairs, installation, or replacement, and minor upgrades/mitigation of bollards and associated protective barriers when in previously disturbed areas.
 - c. Repair or replacement of existing driveways, parking areas and walkways with materials of similar appearance in a manner that does not disturb historic landscape materials or features.

4. Borrow material
 - a Borrow material if it is derived from a commercial source, a stock tank berm, dug-outs, or a reclaimed ditch provided the original surface of the ground is not impacted by the removal method from the ditch.

B. BUILDINGS AND STRUCTURES

1. Repair, retrofit, and reconstruction of buildings, and structures less than forty-five (45) years old, unless located in or adjacent to a historic district.
2. Removal of water, soil, muck or mud by physical or mechanical means.
3. Installation of exterior security features and early warning devices on existing light poles or other permanent utilities.
4. Installation of grab bars in buildings less than 45 years old as required for compliance with the Americans with Disabilities Act (ADA). This allowance applies only to the actual installation; any other work that may be required to allow for the installation of grab bars are not covered under this allowance.
5. Dry vacuuming for mold removal.
6. Repair of existing wheelchair ramps, including minor modifications to meet codes and standards.
7. Replacement, relocation or installation of solar panels on the roof of buildings less than forty-five (45) years of age, except when located within or adjacent to a historic district.

C. TRANSPORTATION FACILITIES, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including any staging areas.

1. Roads and Roadways
 - a Paving and repair of roads to pre-disaster geometric design standards and conditions using in-kind materials, shoulder medians, clearances, curbs, and side slopes. This allowance does not include improvement to existing roadways and appurtenances.
 - b Repair and replacement of metal and concrete culverts no greater than 42" in diameter, with no headwalls or concrete headwalls, when culverts are returned to predisaster size and location. This allowance does not allow for upgrades.

- c Construction of temporary emergency access roads in previously disturbed soils to allow for passage of emergency vehicles.
 - d Repairs to road slips and landslides that do not require grading of undisturbed soils on the up-hill side of the slip.
 - e Re-establishment, armoring and/or upgrading of existing roadway ditches.
 - f In-kind repair or replacement of traffic control devices such as traffic signs and signals, delineators, pavement markings, traffic surveillance systems.
 - g Installation and removal of temporary traffic control devices, including pre-formed concrete barriers and fencings.
 - h In-kind repair or replacement of roadway safety elements such as barriers, guardrails, and impact-attenuation devices. In the case of guardrails, the addition of safety end treatments is permitted.
 - i Replacement of vehicles.
2. Airports
- a In-kind repair or replacement of existing runway surfaces and features (e.g. asphalt, concrete, gravel, and dirt) and associated air transportation safety components and systems (e.g. lighting bars, beacons, signage and weather sensors).
3. Rail Systems
- a In-kind repair or replacement of safety components.
 - b In-kind repair or replacement of existing track system and passenger loading areas.

D. FEES AND SERVICES

- 1. Reimbursement of a sub-recipient's insurance deductible, not to exceed \$2,500.

II. Second Tier Allowances

A. GROUND DISTURBING ACTIVITIES AND SITE WORK, when proposed activities described below substantially conform to the original footprint and/or are performed in previously disturbed soils, including the area where the activity is staged.

1. Footings, Foundations, Retaining Walls, Slopes, and Slope Stabilization Systems
 - a In-kind repair, replacement, reinforcement and minor hardening of footings, foundations, retaining walls, slopes, riprap, and slope stabilization systems (e.g., gabion baskets, crib walls, soldier pile and lag walls) if related ground disturbing activities are within the boundary of previously disturbed soils.
 - b Installation of perimeter drainage (e.g. French drains) when performed in previously disturbed soils.
2. Recreation and Landscaping
 - a In-kind repairs or replacement, and minor upgrades to recreational facilities and features (e.g. playgrounds, campgrounds, fire pits, dump stations and utility hook-ups, swimming pools, athletic fields and signage, batting cages, basketball courts, swing sets, pathways, simple wooden/wire stream crossings).
 - b In-kind repair, replacements, and minor upgrades to landscaping elements (e.g., fencing, security gates, free standing walls, paving, existing parking lots, parking meters, planters, irrigation systems, lighting elements, signs, flag poles, ramps, steps).
3. Piers, Docks, Boardwalks, Boat Ramps, and Dune Crossovers
 - a In-kind repair and replacement and minor upgrades to existing piers, docks, boardwalks, boat ramps, boarding bridges, gate arms (and associated features) and dune crossovers in areas of previously disturbed soils.
4. Cemeteries
 - a Removal of woody debris such as branches and limbs, from cemeteries, provided that heavy equipment and other machinery are not operated or staged on areas potentially containing human remains.

B. BUILDINGS AND STRUCTURES

1. Interior Work: Floors, Walls, Stairs, Ceilings and Trim

- a. In-kind repair and replacement of floors, walls, stairs, ceilings, and/or trim, lighting and/or built-in appurtenances (e.g., bookcases and auditorium seating). The allowance does not apply to decorative finishes, including murals, glazed paint, gold leaf, or ornamental plaster.
- b. Replacement of damaged vinyl or linoleum floor tile or rolls (including floor tile containing asbestos) with contemporary floor tile of the same dimension and thickness, and similar texture or pattern.
- c. Painting and surface preparation provided color and finish are matched to pre-existing finish, and the coating and preparation is limited to material repaired or replaced immediately adjacent thereto.
- d. Interior cleaning of surfaces using a weak solution of household bleach and water solutions. The allowance applies to interior finishes, including plaster and wallboard, provided the cleaning is restricted to damaged areas and does not affect adjacent materials.
- e. Use of portable de-humidification systems, provided no changes are made to character-defining features (specifically for mold remediation).
- f. Non-destructive or concealed testing for hazardous materials (e.g., lead paint, asbestos) or for assessment of hidden damages.
- g. The removal of asbestos tiles (floor, ceilings, or walls) and replacement with materials of similar appearance.

2. Building Contents

- a. Repair or replacement of building contents including furniture, movable partitions, computers, cabinetry, supplies, and equipment and any other moveable items which are not character defining features of a historic property

3. Utilities and Mechanical, Electrical, and Security Systems

- a. In-kind repair or replacement, or limited upgrading of interior or exterior utility systems, including mechanical (e.g., heating, ventilation, air conditioning), electrical, and plumbing systems (water tanks, freshwater and drainage). This allowance does not provide for the installation of new exposed ductwork.
- b. The elevation of heating, ventilation, and air conditioning systems (HVAC) and

mechanical equipment, as long as the building is not located in or within the viewshed of an eligible National Register Historic District, and the HVAC unit is installed or located where it is not visible from the street.

- c. Installation or replacement of interior fire detection, fire suppression, or security alarm systems. The allowance does not apply to surface mounted wiring, conduits, piping, etc., unless previously existing, provided that installation of the system hardware does not damage or cause the removal of character-defining architectural features and can be easily removed in the future.
 - d. Installation of building communication and surveillance security systems, such as cameras, closed-circuit television, lighting, alarm systems, and public address systems, provided that installation of the system hardware does not damage or cause the removal of character-defining architectural features and can be easily removed in the future.
 - e. Installation of exterior security features and early warning devices on existing light poles or other permanent utilities. New wiring will be sub-surface to the greatest extent possible or, where exposed, will be enclosed in conduit that is painted to match the existing surface.
 - f. Installation of building access security devices, such as card readers, enhanced locks, door alarms, and security scanners (e.g., metal detectors), provided the device does not damage or cause the removal of character-defining architectural features and can be removed in the future without impacts to significant architectural features.
 - g. Installation of mechanical equipment within existing mechanical closets, chases, and unfinished attics or basements when ducts are not visible in occupied spaces of the building and access to the ducts does not require demolition of walls or ceilings in occupied spaces of the building.
4. Windows and Doors
- a. In-kind repair of damaged or severely deteriorated windows and window frames, shutters, storm shutters (use models already reviewed by SHPO), doors and door frames, and associated hardware, where profiles, elevations, details and materials match those of the originals.
 - b. In-kind replacement of window panes. Clear plate, double, laminated or triple insulating glazing can be used, provided it does not result in altering the existing window material, tint, form, muntin profiles, or number of divided lights. This allowance does not apply to the replacement of intact decorative glass.
 - c. Replacement of windows and doors, where the existing windows and doors are

beyond repair. Replacement windows and doors must match the appearance, size, design, materials, proportions, and profiles of the existing windows/doors. In order to ensure the proposed windows/doors meet the Standards, photographs of the existing doors or windows and shop drawings and/or specifications for the proposed replacements must be reviewed by appropriate FEMA SOI-qualified staff.

- d. Replacement of exterior, utilitarian, non-character-defining metal doors and frames leading into non character-defining spaces with metal blast resistant doors and frames.
 - e. Installation or application of safety and/or security window film on **existing** window panes, provided that it does not result in altering the existing tint or appearance of the pane. This allowance does not apply to the application of film on existing intact or decorative glass.
 - f. Installation of interior storm windows or doors, exterior storm or wood screen doors, on residential buildings, in a manner that does not harm or obscure the historic windows or trim.
5. Exterior Walls, Cornices, Porches, and Foundations
- a. In-kind repainting of surfaces, provided that destructive surface preparation treatments are not used, such as water blasting, sandblasting, power sanding and chemical cleaning.
 - b. In-kind repair of walls, porches, foundations, columns, cornices, siding, balustrades, stairs, dormers, brackets, trim, lighting, and their ancillary components or in-kind replacement of severely deteriorated or missing or lost features, as long as the replacement pieces match the original in detail and material. Any ground disturbance will be limited to previously disturbed soils.
 - c. In-kind repair or replacement of signs or awnings.
 - d. Installation of temporary stabilization bracing or shoring, provided such work does not result in additional damage, significant loss of historic fabric, or irreversible alteration, and does not affect known archaeological sites or features or is located in an area with high potential for significant archaeological sites.
 - e. Anchoring of walls to floor systems, provided the anchors are embedded and concealed from exterior view.
 - f. In-kind repair of concrete and masonry walls, columns, parapets, chimneys, or cornices; or limited in-kind replacement of damaged components including

comparable brick, and mortar that matches the color, strength, content, rake, and joint width, provided that the mortar is of the appropriate composition for all adjacent masonry unit types.

- g Bracing and reinforcing of walls, chimneys and fireplaces, provided the bracing and reinforcing are either concealed from exterior view or reversible in the future.
 - h Strengthening of foundations and the addition of foundation bolts, provided that visible new work is in-kind, including mortar that matches the color, content, strength, rake, and joint width where occurring.
 - i Repairs to and in-kind replacement of elements of curtain wall assemblies or exterior cladding that is hung on the building structure, usually from floor to floor, and when the color, size reflectivity, materials, and visual patterns are unaltered.
6. Roofing
- a Installation of scaffolding, polyethylene sheeting, or tarps, provided such work will not result in additional damage or irreversible alterations to character defining features or significant loss of historic fabric.
 - b In-kind repair, replacement, or strengthening of roofing, rafters, fascia, soffits, gutters, verge boards, leader boxes, downspouts, or other damaged roof system components.
 - c Repairs to flat roof cladding, including changes in roofing materials, where the repairs are not highly visible from the ground level.
7. Weatherproofing and Insulation
- a Caulking and weather-stripping to complement the color of adjacent surfaces or sealant materials.
 - b In-kind repair or replacement of insulation systems, provided that existing interior plaster, woodwork, exterior siding, or exterior architectural detail is not altered.
8. Structural Retrofits
- a The installation of the following interior retrofits/upgrades, provided that such upgrades are not visible on the exterior: attic bracing, cross bracing on pier and post foundations; fasteners; collar ties; gussets; tie downs; strapping and anchoring of mechanical, electrical, and plumbing equipment; concealed anchoring of furniture; installation of plywood diaphragms beneath first floor

joists, above top floor ceiling rafters, and on roofs; and automatic gas shut-off valves.

- b. Replacement, repair, or installation of lightning rods.
- c. Interior earthquake bracing used on refrigerators and against-the-wall shelving in schools and other public buildings.

9. Demolition and Reconstruction

- a. Activities related to the demolition and/or reconstruction of buildings or structures, provided the proposed activities substantially conform to the original footprint. Activities will follow the **Criteria for Identification of Collapsed Buildings and Structures in Appendix C** and the **Low Impact Debris Removal Stipulations in Appendix E**, and are performed in previously disturbed soils (including staging areas) as identified by an SOI-qualified archaeologist, and:
 - i. The building/structure subject to demolition or reconstruction was formally determined not eligible for listing in the National Register within the past ten (10) years and is not located within or adjacent to a historic district listed in or eligible for listing in the National Register.
 - ii. Any demolition and/or reconstruction occurring within or adjacent to a historic district listed in or eligible for listing in the National Register shall be reviewed in accordance with Stipulation II.C, Standard Project Review of this Agreement.

10. Americans with Disabilities Act (ADA) Compliance

- a. Installation of new wheelchair ramp on the front or other entrance of a structure visible from a public right-of-way, in a manner that does not remove, compromise or damage the existing historic materials or features, and would be completely reversible without damage to historic fabric.
- b. Installation of small-scale interior modifications required for compliance with the Americans with Disabilities Act (ADA). This does not include relocation or demolition of interior walls or modification of openings on interior and exterior walls.

11. Safe Rooms

- a. Installation of individual safe rooms within the property limits of a residence where the installation would occur within the existing building or structure and within previously disturbed soils.

12. Flood-proofing on Secondary Façades

- a Activities related to flood-proofing and minor upgrades on secondary façades. A secondary façade is an elevation that does not face a public thoroughfare, mews or court, and does not possess historically significant architectural features. Minor upgrades include replacement of exterior utilitarian, non-character-defining doors or windows with new doors or windows, the addition of new elements (such as storm panels or flood panels) to exterior doors or windows, and the installation of metal grating at basement window wells.

13. Previously Determined Ineligible

- a Repair or retrofit of buildings/structures that have been previously determined ineligible for listing in the National Register within the last five (5) years.

C. TRANSPORTATION FACILITIES, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

1. Roads and Roadways

- a Repair of roads to pre-disaster geometric design standards and conditions using in-kind materials, shoulders, medians, clearances, curbs, and side slopes. This allowance permits minor improvement to meet current code and standards or hazard mitigation measures, such as those designed to harden exposed surfaces, including the application of gravel armoring to side slopes and ditches.
- b In-kind repair to historic paving materials for roads and walkways.
- c In-kind repair or replacement, or minor upgrade of culvert systems and arches beneath roads or within associated drainage systems, including provision of headwalls, riprap and any modest increase in capacity for the purposes of hazard mitigation or to meet current codes and standards, provided that the work substantially conforms to the existing footprint, or falls within the footprint of the washed out location, and does not involve an increase in roadway width. For stone or brick culverts or arches beneath roadways, this allowance only applies to in-kind repair.
- d In-kind repair or replacement of road lighting systems, including period lighting fixture styles.
- e In-kind repair or replacement of road appurtenances such as curbs, berms, fences, parking lots, storm drains, catch basins, fire hydrants and sidewalks.

- f Stabilization of hazardous slopes within transportation rights-of-way. Stabilization methods may include the installation of retaining walls and systems such as gabion baskets, crib walls, and soldier pile and lag walls. Work shall not exceed the limits of the previously disturbed rights-of-way and shall not take place within the APE of any historic property listed or eligible for listing in the National Register. This allowance does not apply to any work in historic districts listed or eligible for listing in the National Register.

2. Bridges

- a Installation of a temporary (Bailey-type) bridge within a previously disturbed location, such as a former bridge location, to allow passage of emergency vehicles.
- b In-kind repair or replacement of bridges and bridge components (e.g. abutments, wing walls, piers, decks, and fenders) in previously disturbed soils.

D. UTILITIES, COMMUNICATIONS SYSTEMS AND TOWERS, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

1. General

- a In-kind repair or replacement, or minor upgrading, small scale realignment, and elevation of utilities and associated features and structures within previously disturbed soils of rights-of-way or utility corridors.
- b Installation of new utilities and associated features within previously disturbed soils of rights-of-way or utility corridors.
- c Directional boring of new/replacement service lines and related appurtenances involving boring or trenching for silt fencing within previously disturbed soils of rights-of-way or utility corridors.
- d In-kind repair or replacement, or minor upgrade of water towers provided activities take place within previously disturbed soils. Ground-level facilities may be added or expanded in previously disturbed areas. This allowance does not apply to masonry water towers.
- e Temporary storage of supplies and equipment (poles, cables spools, pedestals, etc.) where no ground disturbance will occur; this does not include construction of temporary access routes.
- f Repair in-kind or replacement of metal utilitarian structures to house or protect utilities, such as pump houses and electrical transformer houses, as well as

related elements, such as oil tanks and exposed pipelines, except when located within a historic district.

- g Repair or replacement of utility lines (e.g. sewer, gas, and water) located within the property boundary of the structure, when performed in previously disturbed soils.
- h Repair or replacement of septic tanks, drain fields, and well pumps in previously disturbed soils.

2. Generators and Utilities

- a In-kind repair or replacement, or minor upgrades, elevation, and/or installation of generators, HVAC systems, and similar equipment provided that activities occur within previously disturbed soils and/or any roof mounted equipment is not visible from the ground level.
- b Underground cable replacements of any length when the replacement cable is placed within three feet of the same trench as an existing or failed cable except when in proximity (two hundred [200] meters or six hundred fifty [650] feet) to a known archeological site.
- c Replacement of power poles in pre-existing locations, including increase in the pole diameter. Relocation or construction of new poles are allowed in:
 - i. urban or suburban settings between the edge of roadway and the sidewalk, or
 - ii. rural settings along roadway shoulders.
- d New construction of a single pole overhead line is permissible when the auguring, pole placement, and line placement is conducted from within the previously disturbed public or private right-of-ways, or when the lines will not pass within or through any areas known or has the potential to contain human remains, archeological resources, or any other historic properties except when in close proximity (two hundred [200] meters or six hundred fifty [650] feet) to a known archaeological site or within the view shed of historic districts listed or eligible for listing on the National Register.
- e Directional boring for replacement or installation of new service lines and related appurtenances, where ground disturbance would involve no greater than ten (10) square foot excavation units for directional boring equipment to be placed. These units would be placed in areas for directional drill to begin and end where needed to complete boring.

3. Communication Equipment/Systems and Towers

- a Acquisition, installation, or operation of communication and security equipment/systems that use existing distribution systems, facilities, or existing infrastructure right-of-way.
- b The collocation of communication and security equipment on existing towers and buildings/structures less than forty-five (45) years in age, provided that the work does not increase existing tower height or footprint by more than 10% and occurs within previously disturbed soils.
- c Enhancement, repair or replacement of existing communication towers and antenna structures provided the work does not increase existing tower height or footprint by more than 10% and occurs within previously disturbed soils.
- d Installation of new temporary (not to exceed twelve (12) months) communications towers and antenna structures provided that the work occurs does not require modification of buildings/structures forty-five (45) years or older and occurs within previously disturbed soils.
- e Installation of new communication towers, less than two hundred (200) feet tall, in previously developed urban complexes when the work does not require modification of buildings/structures forty-five (45) years or older, occurs within previously disturbed soil, and is not within one-half mile of the boundaries of a historic property.
- f Substantially in-kind repair or replacement of antenna towers.
- g Ground disturbing activities related to new poles for tsunami warning sirens provided the excavation will only affect previously soils and there are no properties listed on the National Register of Historic Places within two hundred and fifty (250) feet of the proposed location.

E. WATER RESOURCE MANAGEMENT AND CONTROLS, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

1. Canal Systems

- a In-kind repairs or replacement to canal systems and associated elements.

2. Bulkheads, Breakwaters, Seawalls, Revetments, and Berms

- a In-kind repair or replacement of bulkheads, breakwaters, seawalls, and revetments, provided the work occurs in previously disturbed soils.



3. Dams, Levees, Locks, and Floodwalls
 - a In-kind repair of dams, levees, locks, floodwalls and related features, including spillways, tide gates, and fuse plugs, provided the work occurs in previously disturbed soils.
4. Fish Hatcheries
 - a In-kind repair or replacement of fish hatcheries and fish ladders.
5. Waste-Water Treatment Lagoon Systems
 - a In-kind repair or replacement, or minor upgrades of waste-water treatment lagoon systems.
6. Outfall Systems
 - a In-kind repair, replacement, or minor upgrades to outfall pipes along beaches or inland waterways.



Appendix C

Criteria for Identification of Collapsed Buildings and Structures

The following criteria for determining whether a building or structure is collapsed will be applied by FEMA to support identification of buildings and structures eligible for the following programs: Public Assistance Private Property Debris Removal (PPDR); Individual Assistance Permanent Housing Construction-Repair (PHC-R) subject to Section 106 review as per Stipulation I.7.a. of this Agreement; Public Assistance and Hazard Mitigation projects. Any structure/building that meets one or more of the identified criteria below is considered to lack integrity and will not be considered eligible for listing in the National Register of Historic Places:

- A. The structure is collapsed forming a pile of debris and rubble, or rubble has already been removed from property (unable to identify as a structure/building).
- B. The structure has been displaced from its original block/lot parcel.
- C. The structure is certified as an imminent threat, structurally unstable and unsafe for human habitation by building code officials in the municipality (decreed by municipal ordinance).
- D. The structure demonstrates the following characteristics listed below (porches should not be considered):
 - 1. Minimally wracked or canted. Wracked or canted is defined as “moved by forces in multiple dimensions which have distorted what was a rectangular shape into a parallelogram; twisted, not merely shifted or tilted”.
 - 2. Missing two or more full elevations of a single floor and/or missing additional stories (second or third floors).

Appendix D

Private Property Debris Removal Program Process

The following process for Private Property Debris Removal (PPDR) will be followed by FEMA to ensure that only buildings and structures meeting FEMA's Public Assistance and Hazard Mitigation Programs (FEMA Programs) eligibility requirements will be reviewed for compliance with Section 106.

- A. Local building authorities will be responsible for submitting properties to the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency (COR3), and then to FEMA Programs for inclusion in the PPDR program.
- B. FEMA Programs staff shall submit five photographs of each property, including one of each elevation and one of the streetscape.
- C. Accurate GPS coordinates will be submitted for each property.
- D. FEMA Programs will review each application (including photos) to ensure that each property meets program eligibility.
- E. Only properties that the FEMA Programs has reviewed and found eligible will be submitted to EHP for review.
- F. Demolition will not include removal of slabs or driveways.
- G. The contractor will be required to test for asbestos and to abate the nuisance appropriately.
- H. Demolition contracts shall include Low Impact Debris Removal Stipulations (LIDRS), as defined in Appendix E, and an "Unanticipated Discoveries" clause.
- I. Properties in the PPDR program and the PHC-R program (subject to Section 106 review as per Stipulation I.7.a. of this Agreement), will be reviewed by a team composed of SHPO and FEMA historic preservation specialists meeting the Secretary of the Interior's (SOI) Professional Qualifications for architecture and archeology.
 1. FEMA will maintain a record of the following determinations and document in correspondence to SHPO:
 - a. conforms to one or more allowances in Appendix B
 - b. finding of no historic properties affected
 - c. finding of no adverse effect
 2. If FEMA determines that the undertaking may adversely affect historic properties, then FEMA will follow standard review process established in



Stipulation II.C.5. and 6. of this Agreement.

- J. FEMA Historic Preservation staff may conduct spot inspections to ensure that the requirements are adhered to as described in this Appendix.
- K. Completed reviews shall be documented in correspondence to SHPO. SHPO concurrence will document the completion of the Section 106 review process.



Appendix E

Low Impact Debris Removal Stipulations

Desktop Review: Prior to any soil disturbing activities, all properties will be reviewed in order to identify known historic properties and archaeologically sensitive areas.

Low Impact Debris Removal Stipulations (LIDRS) will be applied as a Best Management Practice to protect potential archaeological resources.

A. General Approach to Minimize Impact to Soil:

1. When using heavy equipment, work from hard or firm surfaces to the fullest extent possible, to avoid sinking into soft soils.
2. The sub-recipient will, to the fullest extent possible, ensure that its contractors minimize soil disturbance when operating heavy equipment on wet soils (6 inches or less).
3. Excavation and burial of debris on-site is not permitted.

B. Activity-Specific Guidelines:

1. *Woody Debris Removal (including Rootballs)*

The sub-recipient will ensure to the fullest extent possible that all prior Public Assistance Program guidance regarding woody debris removal is followed.

2. *Filling Voids*

Any voids which require filling because they are a “health and safety issue” will be filled with suitable fill from an approved source.

3. *Surface Grading and Site Clean-Up*

The sub-recipient will ensure to the fullest extent possible that its contractor limits site grading to within six (6) inches of the existing surface elevation (e.g., sidewalk level, driveway level, slab level, etc.).

4. *If the building or structure has been destroyed by the event and there are remaining structural features or utilities that require removal, then:*

- a. Utility lines will be disconnected and capped. In cases where there are no shut-off valves, limited excavation within the utility rights-of-way will be required to cap these service lines.
- b. Shearing off of utilities or other structure features is strongly encouraged so that

further soil disturbance is minimized.

5. *Demolition: If the building or structure has been destroyed by the event and there are remaining structural features that require removal, then the following applies for the removal of the features listed below:*

a. Foundation Removal

The sub-recipient will ensure, to the fullest extent possible, that the contractors will limit excavation to within two (2) feet of the foundation perimeter and will not excavate more than six (6) inches below the depth of the foundation to minimize soil disturbance.

b. Slab/Driveway/Sidewalk Removal

The sub-recipient will ensure, to the fullest extent possible, that the contractor will limit excavation to within one (1) foot of the slab/driveway/sidewalk perimeter and will not excavate more than six (6) inches below the depth of the asphalt/concrete to minimize soil disturbance.

c. Oil Tank Relocation/Removal

- i. The sub-recipient will ensure, to the fullest extent possible, that approved methods will be used in locating an underground oil tank. Approved methods include using a magnetometer, probe, or GPR system. Trenches are not permitted.
- ii. The sub-recipient will inform landowners, to the fullest extent possible, of best practice guidelines for oil tank removal and will ensure that they are made aware of state regulations for contamination remediation. Best practices for tank removal would be to use smaller machines with approximately two (2) foot wide buckets for excavation to reduce potential soil disturbance.

d. Septic Tanks

- i. The sub-recipient will ensure, to the fullest extent possible, that fill required by the decommissioning of septic tanks is from an approved, established borrow source.
- ii. Utility lines will be disconnected and capped. In cases where there are no shut-off valves, limited excavation within the utility right-of-way will be required to cap these service lines.
- iii. Shearing off of utility lines at the ground surface is strongly encouraged so that further soil disturbance is minimized.

C. Treatment of Unanticipated Discoveries

1. *Archaeological Materials/Human Remains*

- a. If debris removal activities disturb archaeological artifacts (e.g. old bricks, ceramic pieces, historic bottle glass or cans, coins, beads, stones in the form of tools, pieces of crude clay pottery, etc.), archaeological features (e.g. grave markers, house foundations, cisterns, etc.), or human remains, the sub-recipient will ensure, to the fullest extent possible, that the Contractor immediately stops work in the vicinity of the discovery and takes all reasonable measures to avoid or minimize harm to the finds. In such cases, the sub-recipient will immediately inform SHPO and FEMA (also in accordance with commonwealth guidelines, the local law enforcement medical examiner for human remains) of the discovery for further guidance. The sub-recipient will ensure that the Contractor does not proceed with work in the area of concern until FEMA staff has completed consultation with the SHPO and other interested parties, as necessary.
- b. To ensure compliance with all applicable state and local laws, and permission from all appropriate parties is obtained to remove remains, the sub-recipient is responsible to determine appropriate legal measures under Puerto Rico law.

D. FEMA reserves the right to conduct unannounced field inspections and observe debris removal activities to verify compliance with LIDRS. Failure to comply with these stipulations may jeopardize the sub-recipient's receipt of federal funding.

E. FEMA and the SHPO have agreed that the sub-recipient is responsible for ensuring that their demolition Contractor adheres to these work restrictions for FEMA-funded undertakings.

Appendix F

Treatment Measures

When avoidance or minimization of adverse effects is not appropriate, the following Treatment Measures are suggested for the resolution of adverse effects:

If Undertakings may or will result in adverse effects, FEMA, the Recipients, sub-recipient, and SHPO, may develop a treatment measure plan that includes one or more of the following Treatment Measures, depending on the nature of historic properties affected and the severity of adverse effects.

A. Recordation

1. Digital Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a digital photography package prepared by staff or contractors meeting the Secretary's Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate. The digital photography package will meet the standards cited in the NPS' *National Register of Historic Places Photographic Policy May 2013* or subsequent revisions (<http://www.nps.gov/nr/publications/bulletins/photopolicy/index.htm>).
 - a. The digital photography package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. However, interior photographs will only be subject to this if a request for access is approved by the property owner and/or lessee. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.
 - b. The digital photography package shall include printed color copies of the digital photographs (on appropriate paper, per *NPS Photographic Policy*), a CD/DVD of the digital photographs, a completed state architectural inventory form, and a written site history of the historic property.
 - c. The designated responsible party shall submit the digital photography package to the SHPO, or review and approval. Once approved by the SHPO the designated responsible party shall submit a copy of the approved documentation to a state or local historical society, archive, and/or library for permanent retention.

2. **35mm Black and White Photography Package:** Prior to project implementation, the designated responsible party shall oversee the successful delivery of a 35 mm film black and white film photography package prepared by staff or contractors meeting the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.
 - a. The 35 mm film black and white film photography package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. However, interior photographs will only be subject to this if a request for access is approved by the property owner and/or lessee. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.
 - b. The 35 mm film black and white film photography package shall include one (1) full set of 35mm film black and white photographs printed on acid-free paper, the corresponding 35mm film negatives in acid-free sleeves, a completed state architectural inventory form, and a written site history of the historic property.
 - c. The designated responsible party shall submit the 35 mm black and white film photography package the SHPO for review and approval. Once approved by the SHPO, the designated responsible party shall submit a copy of the approved documentation to a state or local historical society, archive, and/or library for permanent retention.
3. **Large Format Photography Package:** Prior to project implementation, the designated responsible party shall oversee the successful delivery of a large format photography package prepared by staff or contractors meeting the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.
 - a. The large format photography package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. However, interior photographs will only be subject to this if a request for access is approved by the property owner and/or lessee. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address,

direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

- b. The large format film photography package shall include one (1) full set of 4x5 or 5x7-inch photographs printed on acid free paper, the corresponding 4x5 or 5x7-inch negatives in acid-free sleeves, a completed state architectural inventory form, and a written site history of the historic property.
- c. The designated responsible party shall submit the large format film photography package to the SHPO for review and approval. Once approved by the SHPO, and/or participating the designated responsible party shall submit a copies of the approved documentation to a state or local historical society, archive, and/or library for permanent retention.

B. Public Interpretation

Prior to project implementation, FEMA, the Recipients, and sub-recipient shall work with the SHPO to design an educational interpretive plan. The plan may include signs, displays, educational pamphlets, websites, workshops and other similar mechanisms to educate the public on historic properties within the local community, state, or region. Once an interpretive plan has been agreed to by the parties, SHPO and the designated responsible party shall continue to consult throughout implementation of the plan until all agreed upon actions have been completed by the designated responsible party.

C. Historical Context Statements and Narratives

Prior to project implementation, FEMA, the Recipients, and sub-recipient shall work with the SHPO to determine the topic and framework of a historic context statement or narrative the designated responsible party shall be responsible for completing. The statement or narrative may focus on an individual property, a historic district, a set of related properties, or relevant themes as identified in the statewide preservation plan. Once the topic of the historic context statement or narrative has been agreed to, the designated responsible party shall continue to coordinate with the SHPO through the drafting of the document and delivery of a final product. The designated responsible party shall use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

D. Oral History Documentation

Prior to project implementation, FEMA, the Recipients, and sub-recipient shall work with the SHPO to identify oral history documentation needs and agree upon a topic and list of interview candidates. Once the parameters of the oral history project have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO through the data collection, drafting of the document, and delivery of a final product. The designated responsible party shall use staff or contractors that meet the

Secretary's Professional Qualifications for the appropriate discipline.

E. Historic Property Inventory

Prior to project implementation, FEMA, the Recipients, and sub-recipient shall work with the SHPO to establish the appropriate level of effort to accomplish a historic property inventory. Efforts may be directed toward the resurvey of previously designated historic properties and/or districts which have undergone change or lack sufficient documentation, or the survey of new historic properties and/or districts that lack formal designation. Once the boundaries of the survey area have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO through the data collection process. The designated responsible party shall use SHPO standards for the survey of historic properties and SHPO forms as appropriate. The designated responsible party shall prepare a draft inventory report, according to SHPO templates and guidelines, and work with the SHPO until a final property inventory is approved. The designated responsible party shall use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

F. National Register and National Historic Landmark Nominations

Prior to project implementation, FEMA, the Recipients, and sub-recipient shall work with the SHPO to identify the individual properties that would benefit from a completed National Register or National Historic Landmark nomination form. Once the parties have agreed to a property, the designated responsible party shall continue to coordinate with the SHPO through the drafting of the nomination form. The SHPO shall provide adequate guidance to the designated responsible party during the preparation of the nomination form and shall formally submit the final nomination to the Keeper for inclusion in the National Register. The designated responsible party shall use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

G. Geo-References of Historic Maps and Aerial Photographs

Prior to project implementation, FEMA, the Recipients, and sub-recipient shall work with the SHPO to identify the historic maps and/or aerial photographs for scanning and geo-referencing. Once a list of maps and/or aerial photographs have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO through the scanning and geo-referencing process and shall submit drafts of paper maps and electronic files to the SHPO, for review. The SHPO shall have final approval on the quality of the documentation provided by the designated responsible party. The final deliverable produced by the designated responsible party shall include a paper copy of each scanned image, a geo-referenced copy of each scanned image, and the metadata relating to both the original creation of the paper maps and the digitization process.

H. Archaeological Research Design and Data Recovery Plan

FEMA shall develop a data recovery plan with a research design in consultation with Recipient(s), subrecipient, SHPO, and other consulting parties, as appropriate, to recover data from archaeological properties listed in, or eligible for listing in the NRHP, which will be adversely affected by ground-disturbing activities that are part of the Undertaking. The research design and data recovery plan will be consistent with the Secretary of the Interior's Guidelines for Archeological Documentation (http://www.nps.gov/history/local-law/arch_stnds_7.htm) and the Advisory Council on Historic Preservation's (ACHP) recommendations on the recovery of significant information from archaeological sites as update in 2009, at https://www.achp.gov/protecting-historic-properties/Section_106_Archaeology_Guidance. This treatment measure does not apply to the excavation of burials or burial objects.



A1-2: Puerto Rico National Register of Historic Places



**PROPIEDADES DE PUERTO RICO
INCLUIDAS EN EL
REGISTRO NACIONAL DE LUGARES HISTORICOS**

Servicio Nacional de Parques
Departamento de lo Interior de los Estados Unidos de América

Oficina Estatal de Conservación Histórica
OFICINA DEL GOBERNADORA
San Juan de Puerto Rico

REVISADA:
8 de abril de 2025

POR:
Sr. José E. Marull
Especialista en Propiedad Histórica Sénior

REGISTRO NACIONAL DE LUGARES HISTORICOS
Oficina Estatal de Conservación Histórica
8 de abril de 2025

Clave -Designación común de la propiedad; [Nombre según aparece en la lista del Registro Nacional de Lugares Históricos en Washington, D.C.]; <Otro nombre o designación utilizada para identificar la propiedad>; Dirección; (Fecha de inclusión: día, mes, año); Código del Servicio de Información del Registro Nacional, NRIS.

ADJUNTAS, Municipio de

Puente de las Cabañas - {Las Cabañas Bridge}; <Bridge #279>; Carretera Estatal #135, kilómetro 82.4; (19/JUL/95); 95000838.

Quinta Vendrell - <Granja San Andrés>; Barrio Portugués, intersección de las Carreteras Estatales #143 y #123; (09/FEB/06); 06000028.

Escuela Washington Irving - {Washington Irving Graded School}; Calle Rodolfo González esquina Calle Martínez de Andino; (26/MAYO/15); 15000274.

Carretera Núm. 6 - <PR-123; PR-10; Antigua #10; Road #6>; PR-123, desde kilómetro 26.5 hasta kilómetro 48.5; (14/SEPT/21); SG 100006909.

Casa Foreman - {Foreman, Mr. & Mrs. Clark, Mountain Retreat}; Barrio Portugues, Carretera 123, kilómetro 29.9 (Camino Foreman); (06/DIC/21); SG 100007218.

Ayuntamiento de Adjuntas - <Casa Alcaldía de Adjuntas>; Calle Rius Rivera esquina Calle San Joaquín; (7/ABRIL/25); SG 100011645.

AGUADA, Municipio de

Puente de Coloso - <Puente Núm. 1142>; Carretera Estatal #418, kilómetro 5, Barrios Guanábano y Espinar; (29/DIC/10); 10001102.

AGUADILLA, Municipio de

Faro de Punta Borinquén - <Punta Borinquén Light>; Aledaño a la Carretera Estatal #107; (22/OCT/81); 81000559.

Iglesia de San Carlos Borromeo - {Church San Carlos Borromeo of Aguadilla}; Localizada en la Calle Diego mirando a la plaza del pueblo; (18/SEPT/84); 84003124.

Antiguo Cementerio - {Old Urban Cemetery}; <Cementerio Municipal>;

-1-

REGISTRO NACIONAL DE LUGARES HISTORICOS
Oficina Estatal de Conservación Histórica
8 de abril de 2025

Clave -Designación común de la propiedad; [Nombre según aparece en la lista del Registro Nacional de Lugares Históricos en Washington, D.C.]; <Otro nombre o designación utilizada para identificar la propiedad>; Dirección; (Fecha de inclusión: día, mes, año); Código del Servicio de Información del Registro Nacional, NRIS.

Localizado al pie de la montaña y playa cercana a la entrada norte del pueblo en el área llamada Cuesta Vieja; (02/ENE/85); 85000042.

Corte de Distrito de Aguadilla - {District Courthouse}; <Museo de Arte de Aguadilla>; Localizado en el cruce de las Calles Betances y Progreso; (02/ENE/85); 85000041.

Residencia Cardona - {Cardona Residence}; <Bufete Quiñones Elias>; Calle Betances #55; (02/ENE/85); 85000040.

Residencia López - {Residence López}; <Residencia Herrera López>; Calle Progreso #67; (02/ENE/85); 85000043.

El Parterre -- Ojo de Agua - Delimitado por las Calles Muñoz Rivera, Gonzalo Firpo, De Diego y Mango; (13/ENE/86); 86000781.

Casa de Piedra - <Residencia Amparo Roldán>; Calle Progreso #14; (03/ABR/86); 86000704.

Fuerte de la Concepción - {Fuerte de la Conception}; <El Fuerte; Escuela Carmen Gómez Tejera>; Calle Stahl; (03/ABR/86); 86000703.

AGUAS BUENAS, Municipio de

Parque de Bombas Maximiliano Merced - <Parque Maximiliano Merced; Antiguo Parque de Bombas de Aguas Buenas>; Calle Muñoz Rivera #42; (14/NOV/12); 12000934.

AIBONITO, Municipio de

Iglesia de San José de Aibonito - {Church of San José of Aibonito}; Calle Emeterio Betances adjunto a la plaza del pueblo; (10/DIC/84); 84000451.

Villa Julita - Avenida San José #401; (19/DIC/86); 86003491.

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Carretera Central - <Military Road; PR-1; PR-14>; PR-14, kilómetro 42.8 al kilómetro 61.6; (02/MAYO/19); SG100003686.

Centro Comunal La Plata - [La Plata Community Center]; PR-173, kilómetro 1.5, Barrio La Plata; (04/OCT/21); MP100007066.

AÑASCO, Municipio de

Puente de Añasco - <Puente Núm. 65, Puente Salcedo, Añasco River Bridge>; Carretera Estatal #2, kilómetro 146.1; (18/ENE/11); 11000018.

Distrito Escolar Hostos-Ramírez de Arellano - {Hostos-Ramírez de Arellano School District}; <Eugenio María de Hostos Graded School, Sergio Ramírez de Arellano School>; Calle 65 de Infantería, en un bloque urbano donde está (al oeste) de la Iglesia Parroquial de San Antonio Abbad; (23/OCT/17); MP 100001762.

ARECIBO, Municipio de

Faro de Arecibo - <Faro de los Morrillos de Arecibo; Arecibo Light>; Localizado al noreste del pueblo de Arecibo, adjunto a la Carretera Estatal #66; (23/NOV/77); 77001546.

Casa Ulanga - <Antiguo Tribunal Superior de Arecibo>; Calle Gonzalo Marín #7; (26/JUL/82); 82003822.

Teatro Oliver - {Corregimiento Plaza Theatre}; Calle Llaguerry esquina Calle Toribio Pagán; (06/ENE/86); 86000041.

Casa Alcaldía de Arecibo - Avenida José de Diego; (29/SEPT/86); 86002762.

Edificio Oliver - Avenida José De Diego #64; (01/OCT/86); 86002764.

Casa Córdova - <Casa de las Conchas>; Calle Gonzalo Marín #14; (17/NOV/86); 86003185.

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Paseo Víctor Rojas - <El Fuerte; Paseo de Damas>; Calle Gonzalo Marín esquina con la Avenida De Diego; (19/NOV/86); 86003188.

Residencia en Gonzalo Marín 101 - {Calle Gonzalo Marín 101}; <Citibank>; Calle Gonzalo Marín #101; (19/NOV/86); 86003183.

Residencia en Gonzalo Marín 61 - {Calle Gonzalo Marín No. 61}; <Residencia Abreu>; Calle Gonzalo Marín #61; (09/JUN/88); 88000645.

Palacio del Marqués de las Claras - <Casino de Arecibo>; Calle Gonzalo Marín #58; (12/JUL/88); 88000964.

Casa de la Diosa Mita - Calle Fernández Juncos #251; (09/SEPT/88); 88000966.

Puente de Cambalache - {Cambalache Bridge}; <Puente Francés>; Al oeste de la Carretera #2, kilómetro 72; (19/JUL/95); 95000831.

Observatorio de Arecibo - {National Astronomy and Ionosphere Center} <Arecibo Observatory>; Barrio Esperanza, Sector San Rafael, Carretera #625; (22/DIC/15); 07000525.

Escuela Federico Degetau - {Federico Degetau Consolidated Rural School}; <Escuela Segunda Unidad Federico Degetau>; Carretera #622, kilómetro 68; (26/MAYO/20); MP100005236.

Escuela Franklin Delano Roosevelt - {Franklin Delano Roosevelt Graded School}; <La Escuela Roosevelt; La Roosevelt>; Calle Betances final; (08/FEB/21); MP100006152.

Carretera Núm. 6 - <PR-123; PR-10; Antigua #10; Road #6>; PR-123, desde kilómetro 68.2 hasta kilómetro 79.9 y PR-6609, desde kilómetro 0 hasta kilómetro 4.6; (14/SEPT/21); SG 100006909.

ARROYO, Municipio de

Faro de Punta de las Figuras - <Punta Figuras Light>; Localizado al sureste del

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pueblo de Arroyo; (22/OCT/81); 81000687.

BARCELONETA, Municipio de

Escuela Rafael Balseiro Maceira - {Maceira, Rafael Balseiro, School}; <Escuela Rafael Balseiro>; Calle Georgetti #1; (28/ AGOS/12); 12000583.

BARRANQUITAS, Municipio de

Casa Natal de Luis Muñoz Rivera - <Museo-Biblioteca Muñoz Rivera>; Calles Muñoz Rivera y Manuel Torres; (04/SEPT/84); 84003139.

Batey Palo Hincado - {Palo Hincado Site}; <BA-1>; vecindad del pueblo de Barranquitas; (2/SEPT/99); 99001021.

El Cortijo - Carretera #162, kilómetro 18.5, Barrio Pueblo; (11/SEPT/18); SG100002934.

BAYAMON, Municipio de

Cementerio Nacional - {Puerto Rico National Cemetery}; Carretera Estatal #168; (26/SEPT/83); 83002298.

Casa Natal Dr. José Celso Barbosa - <Casa Barbosa>; Calle Barbosa #13; (24/ AGOS/84); 84003156.

Iglesia de la Santa Cruz - {Church Santa Cruz of Bayamón}; Calle Muñoz Rivera, adjunto a la plaza del pueblo; (18/SEPT/84); 84003162.

Farmacia Serra - Calle Degetau #11; (04/ MAYO/89); 88000685.

Puente Marqués de la Serna - {Marqués de la Serna Bridge}; <Bridge # 379; Puente de Bayamón>; Carretera Estatal #890, kilómetro 24.1; (19/JUL/95); 95000850.

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Puente Plata - {Plata Bridge}; <Bridge #374>; Carretera Estatal #167, kilómetro 0.9; (19/JUL/95); 95000849.

Casa Agustín Stahl - {Casa Dr. Agustín Stahl Stamm}; Calle José Martí #14; (04/FEB/11); 10001216.

CABO ROJO, Municipio de

Faro de los Morrillos de Cabo Rojo - <Cabo Rojo Light>; Localizado al sureste del Pole Ojea en Cabo Rojo; (22/OCT/81); 81000685.

Punta Ostiones - <Ostiones; CR 067>; Aproximadamente 1 kilómetro oeste de la Carretera #308, Barrio Miradero; (26/AGOS/04); 04000908.

Escuela James L. M. Curry - {James L. M. Curry Graded School} - Calle Betances; (30/DIC/19); MP100004855.

CAGUAS, Municipio de

Escuela Vocacional Aguayo Aldea - {Aguayo Aldea Vocational High School}; <La Vocacional>; Localizado en el cruce de la Calle San Juan y Calle Principal; (04/AGOS/87); 87001311.

Escuela Superior Gautier Benítez - {Benítez, Gautier, High School}; <La Gautier>; Localizado en las Calles Gautier Benítez y Cristóbal Colón; (15/JUN/88); 88000657.

Logia Unión y Amparo No. 44 - <Logia Masónica de Caguas>; Calle Acosta #39; (15/JUN/88); 88000661.

Alcaldía de Caguas - Calle Muñoz Rivera #42; (22/MAR/89); 88001307.

Primera Iglesia Bautista de Caguas - <Centro Musical Criollo José Ignacio Quintón>; Esquina de las calles Ruíz Belvis e Intendente Ramírez; (24/SEPT/08); 08000949.

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Puente #6 - {Puente No. 6}; <Bridge #6; Pontón La Concepción; La Concepción Bridge>; Carretera #798, kilómetro 1.0, Barrio Río Cañas; (28/MAYO/09); 09000361.

Carretera Central - <Military Road; PR-1; PR-14>; PR-14, kilómetro 40.0 al kilómetro 48.3; (02/MAYO/19); SG100003686.

CAMUY, Municipio de

Antiguo Casino Camuyano - <Antiguo Casino>; Localizado en las Calle Estrella esquina Calle Muñoz Rivera; (26/ENE/84); 84003123.

Hacienda La Sabana - Localizado en la Carretera Estatal #119; (14/FEB/85); 85000295.

Iglesia de Piedra {Ernesto Memorial Chapel}; <Iglesia Metodista de Piedra>; Localizado en la intersección de las Carreteras Estatales #486 y #488, Barrio Abra Honda; (08/JUL/10); 10000453.

CANOVANAS, Municipio de

Puente de Villarán - {Villarán Bridge}; <Bridge #99; Puente de Canóvanas>; Carretera Estatal #9959, kilómetro 3; (19/JUL/95); 95000835.

CAROLINA, Municipio de

Edificio Alcaldía - Localizado en Calle Ignacio Arzuaga esquina Calle De Diego; (28/DIC/83); 83004197.

Iglesia de San Fernando de Carolina - {Church of San Fernando of Carolina}; Calle Muñoz Rivera adjunto a la plaza del pueblo; (18/SEPT/84); 84003160.

Quebrada Maracuto - Localizado en la Quebrada Maracuto en el área aledaña a la

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Carretera #853 entre los caminos locales "Ruiz" y "Febres"; (27/AGOS/04); 04000909.

CATAÑO, Municipio de

Destilería de Bacardí - {Bacardí Distillery}; <Bacardí Corporation>; Carretera #165, kilómetro 2.6, intersección de Carretera Estatal #888, Parque Industrial Bay View; (06/AGOS/10) 10000524.

Santuario de San Martín de Porres - {Sanctuary of Blessed Martin de Porres}; <National Sanctuary San Martín de Porres>; Calle Oeste Cementerio; (11/ENE/17); SG 100000503.

CAYEY, Municipio de

Iglesia de Nuestra Señora de la Asunción - {Church Nuestra Senora del la Asunción of Cayey}; Calle Muñoz Rivera adjunto a la plaza del pueblo; (10/DIC/84); 84000454.

Puente de Arenas - {Arenas Bridge}; <Bridge #466, Puente Río La Plata>; Carretera Estatal #735, kilómetro 1.3; (19/JUL/95); 95000843.

Puente La Liendre - {La Liendre Bridge}; <Bridge #467>; Carretera Estatal #735, kilómetro 0.7; (19/JUL/95); 95000844.

Puente del Río Matón - {Río Matón Bridge}; <Bridge #177>; Carretera Estatal #14, kilómetro 63.2; (19/JUL/95); 95000841.

Casa de Juana Rodríguez Morales - {Juana Rodríguez Morales House}; <Espada Cervoni House>; Calle Núñez Romeu #7; (06/ABR/05); 05000257.

Carretera Central - <Military Road; PR-1; PR-14; PR-735>; Múltiple tramos: PR-1, kilómetro 52.4 al kilómetro 53.6; PR-14 kilómetro 61.6 al kilómetro 72.8; PR-735, kilómetro 0 al kilómetro 1.2 & kilómetro 2.1 al kilómetro 2.7; (02/MAYO/19); SG100003686.

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Carretera No. 4 - <PR-15>; PR-15 kilómetro 11.3 al kilómetro 25.7; (30/OCT/20); SG100005741.

CEIBA, Municipio de

Parque de Bombas de Ceiba - {Ceiba Fire Station}; Avenida Lauro Piñeiro #226; (13/FEB/13); 13000012.

CIALES, Municipio de

Puente de Manatí en Mata de Plátano - {Manatí Bridge at Mata de Plátano}; <Bridge #321; Puente Juan José Jiménez>; Carretera Estatal #6685, kilómetro 9.7; (19/JUL/95); 95000847.

CIDRA, Municipio de

La Bolero - <La Bolero Manufacturing Plant>; Carretera #173 kilómetro 0.5; (28/AGOS/12); 12000584.

Carretera Central - <Military Road; PR-1; PR-14, PR-735>; Múltiple tramos: PR-1, kilómetro 48.3 al kilómetro 52.4; PR-735, kilómetro 0.2 al kilómetro 2.1; (02/MAYO/19); SG100003686.

Teatro Iberia - <Centro Cultural Cidreño>; Calle José de Diego #24, (5/OCT/23); SG100009465.

COAMO, Municipio de

Iglesia de San Blas de Illescas - {Church San Blas De Illescas of Coamo}; Calle Braschi en la plaza del pueblo; (10/DIC/84); 84000463.

Ermita Nuestra Señora de la Valvanera - {Hermitage Church of Nuestra Señora de

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Valvanera of Coamo}; Localizada en la Calle Quintón esquina Calle Carrión Maduro; (31/MAR/86); 86000700.

Residencia Picó Pomar - {Pomar, Pico, Residence}; <Museo Histórico de Coamo>; Localizado en esquina de las Calles Mario Braschi y José Quintón; (12/JUL/88); 88000961.

Casa Blanca - Calle José I. Quintón #17; (28/ABRIL/92); 92000379.

Puente General Méndez Vigo - {General Méndez Vigo Bridge}; <Bridge #173; Puente Río Las Minas>; Carretera Estatal #14, kilómetro 30.4; (19/JUL/95); 95000839.

Puente Padre Iñigo - {Padre Iñigo Bridge}; <Bridge #174; Puente de Coamo>; Carretera Estatal #14, kilómetro 34.2; (19/JUL/95); 95000840.

Puente de las Calabazas - <Bridge #175; Bridge over the Cuyón River>; Carretera Estatal #14, kilómetro 39.3, Barrio Cuyón; (17/FEB/09); 09000042.

Carretera Central - <Military Road; PR-1; PR-14>; PR-14, kilómetro 23.7 al kilómetro 42.8; (02/MAYO/19); SG100003686.

COMERIO, Municipio de

Cueva La Mora - Carretera Estatal #775, Barrio La Vega Redondo; (10/MAR/83); 83002292.

Puente del Río Hondo - {Río Hondo Bridge}; <Bridge #339>; Carretera Estatal #156, kilómetro 26.9; (19/JUL/95); 95000842.

Desarrollo Hidroeléctrico de Comerio - {Comerio Hydroelectric Development}; Carretera 167, kilómetro 39.9 a kilómetro 6.0; (1/SEPT/22) SG100008110).

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COROZAL, Municipio de

Puente Mavilla - {Mavilla Bridge}; <Bridge #354>; Carretera Estatal #159, kilómetro 17.7; (19/JUL/95); 95000848.

CULEBRA, Municipio de

Faro de Isla Culebritas - <Isla Culebrita Light>; Localizado en la parte sureste de la Isla de Culebritas; (22/OCT/81); 81000686.

DORADO, Municipio de

Escuela Jacinto López Martínez - {Martínez, Jacinto López, Grammar School}; Localizado en las Calles Norte y San Quintín; (11/OCT/88); 88001846.

Residencia Antonia Ramírez - {Ramírez, Doña Antonia, Residencia}; <Hacienda Hernández>; Carretera Estatal #693; (11/OCT/88); 88001847.

Hacienda de Carlos Vassallo - <Casa Hacienda de Don Oscar Nevares; Hacienda de Río Nuevo>; Carretera Estatal #693; (22/MAR/89); 88001848.

Casa del Rey - <Casa de la Guardia de las Milicias; Parador; Cárcel Municipal; Casa Alonso; Casa Goenága>; Calle Méndez Vigo #292; (19/MAYO/89); 89000408.

Residencia Don Andrés Hernández - <Residencia de Don Modesto Hernández>; Calle Norte #196; (22/MAYO/89); 89000428.

Nafragio Antonio López - {SS Antonio López Shipwreck Site and Remains}; vecindad de Dorado; (09/FEB/94); 93001593.

FAJARDO, Municipio de

Faro de las Cabezas de San Juan - Localizado al noreste de Soroco; (22/OCT/81);

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81000692.

Iglesia de Santiago Apóstol - {Church Santiago Apostol of Fajardo}; Localizado en la plaza del pueblo; (18/SEPT/84); 84003144.

Aduana de Fajardo - {U.S. Custom House}; Calle Unión, Puerto Real; (10/FEB/88); 88000077.

FLORIDA, Municipio de

Fábrica de Fomento De Luxe Florida- {De Luxe Florida} <De Luxe Caribe Inc.>; Carretera Estatal #642, kilómetro 11.1; (14/NOV/12); 12000935.

GUANICA, Municipio de

Faro de Guánica - Localizado al sur del pueblo de Guánica; (28/MAR/77); 77001549.

Hacienda Santa Rita - <Casa de la Hacienda Santa Rita; Ingenio Santa Rita>; Carretera Estatal #116, kilómetro 32.7; (05/ENE/84); 84003147.

Campo de Batalla de Yauco - {Yauco Battle Site}; <Yauco Battlefield Site; Batalla de Yauco; Hacienda Quiñones; Hacienda Desideria; Hacienda Santa Rita>; Delimitado por la Hacienda Santa Rita, Carreteras #389, #116, #116R, Río Loco y Seboruco; (2/SEPT/08); 00001383.

Escuela James Garfield - {James Garfield Graded School}; Calle 65 de Infantería; (26/MAYO/15); 15000275.

GUAYAMA, Municipio de

Iglesia Parroquial de San Antonio de Padua de Guayama - Calle Ashford #5; (30/JUL/76); 76002248.

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Ingenio Azucarero Vives - <Hacienda Vives>; Avenida Central, Barrio Machete; (01/SEPT/76); 76002249.

Casa Cautiño - Calle Vicente Palés Arés esquina Calle Palmer; (11/JUN/84); 84003137.

Escuela Eleuterio Derkes - {Eleuterio Derkes Grammar School}; <La Escuela de Magueyes>; Calle José María Angueli; (04/AGOS/87); 87001312.

Puente de Cayey - {Cayey Bridge}; <Bridge #181>; Carretera Estatal #15, kilómetro 1; (19/JUL/95); 95000845.

Carretera No. 4 - <PR-15>; PR-15 kilómetro 0 al kilómetro 11.3; (30/OCT/20); SG100005741.

GUAYANILLA, Municipio de

Escuela Padre Nazario - {Padre Nazario School}; <Padre José M. Nazario School>; Calle Concepción #4; (14/NOV/12); 12000936.

Hacienda Fortuna - <Hacienda Mattei>; Barrio Sierra Baja, PR-375, kilómetro 1.5; (31/MARZO/25); SG 100011591.

GUAYNABO, Municipio de

Iglesia Parroquial de San Pedro Mártir de Guaynabo - Localizado en la Plaza de Recreo; (08/SEPT/76); 76002250.

Ruinas de Caparra - {Caparra}; Carretera Estatal #2, kilómetro 6.3; (28/FEB/84); 84003155.

Oficina de Telégrafo y Teléfono - <Telegraph and Telephone Station>; Calle José E. Carazo #1729; (3/JUL/12); 12000396.

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GURABO, Municipio de

Iglesia de San José de Gurabo - {Church of San Jose of Gurabo}; Localizado frente a la plaza de recreo entre las Calles Santiago Norte y Eugenio Sánchez López - Este; (18/SEPT/84); 84003142.

HATILLO, Municipio de

Iglesia de Nuestra Señora del Carmen - {Church Nuestra Señora del Carmen of Hatillo}; Calle Luis M. Lacombe frente a la plaza del pueblo; (10/DIC/84); 84000443.

HORMIGUEROS, Municipio de

Santuario de Nuestra Señora de la Monserrate de Hormigueros y Casa del Peregrino - {Santuario de la Monserrate de Hormigueros and Casa del Peregrino}; <Santuario de Nuestra Señora de Monserrate e Iglesia Parroquial de Hormigueros>; Calle Peregrinos #1 en la Carretera Estatal #344; (17/ABR/75); 75002134.

Puente Silva - {Silva Bridge}; <Bridge #71>; Carretera Estatal #114, kilómetro 4; (19/JUL/95); 95000834.

Puente Torrens - {Torrens Bridge}; <Bridge #208; Puente Blanco; Puente Colorao>; Carretera Estatal #319, kilómetro 1.5; (11/MAYO/00); 00000423.

Casa Márquez - <Hacienda Valentina>; Calle Segundo Ruíz Belvis #8, esquina Calle Mateo Fajardo; (1/JUN/15); 15000311.

HUMACAO, Municipio de

Casa Roig - Calle Antonio López #66; (17/NOV/77); 77001550.

Iglesia de Dulce Nombre de Jesús - {Church Dulce Nombre de Jesus of Humacao};

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Localizada en la plaza del pueblo; (18/SEPT/84); 84003140.

Casa de Palmira López de Pereyó - {López de Pereyó, Palmira, House}; <Casa Pereyó>; Calle Font Martelo esquina Minerva y Orión; (14/ABR/95); 95000435.

Panteón de la Familia Guzmán - {Guzman Family Pantheon}; <Ermita Guzmán; Capilla del Perpetuo Socorro>; Calle Padre Rivera esquina Miguel Casilla; (17/ABR/95); 95000436.

Casa de Aduanas de Humacao - {Humacao Custom House}; <Escuela Francisco Isern>; Localizado en el cruce de las Calles Marina y Aduana; (18/MAYO/95); 95000599.

Escuela Antonia Sáez - {Sáez, Antonia, School}; <Plaza de Mercado>; Localizado adjunto a las Calles Font Martelo, Isidoro Ortiz, Tomás Cruz y Jesús Carrasquillo; (18/MAYO/95); 95000597.

Tribunal de Distrito - {Humacao District Courthouse}; <Casa Alcaldía de Humacao>; Localizado en el cruce de las Calles Vidal y Antonio López; (18/MAYO/95); 95000596.

ISABELA, Municipio de

Ermita de San Antonio de Padua de la Tuna - {Hermitage of San Antonio de Padua de la Tuna}; vecindad del pueblo de Isabela; (02/DIC/83); 83004193.

JAYUYA, Municipio de

La Piedra Escrita - <PR JY015; PRSHPO JY 15>; Carretera #144, kilómetro 7.5, Barrio Coabey, Sector Boquerón; (15/ENE/03); 02001720.

JUANA DIAZ, Municipio de

Iglesia de San Juan Bautista y San Ramón Nonato de Juana Díaz - {Church San

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Juan Bautista y San Ramon Nonato of Juana Diaz}; <Iglesia de San Ramón Nonato de Juana Díaz>; Localizada en plaza del pueblo; (10/DIC/84); 84000465.

Cueva Lucero - <JD-5; Guayabal II>; Barrio Guayabal; (29/SEPT/08); 08000936.

Carretera Central - <Military Road; PR-1; PR-14>; PR-14, kilómetro 10.0 al kilómetro 23.7; (02/MAYO/19); SG100003686.

JUNCOS, Municipio de

Escuela José Miguel Gallardo - {José Miguel Gallardo School}; <Biblioteca José Miguel Gallardo>; Paseo Escuté Final esquina Calle Algarín; (14/NOV/12); 12000937.

Cárcel Municipal de Juncos - Calle Agüeybaná esquina Calle Baldorioty; (29/ENE/25); SG100011436.

LAJAS, Municipio de

Escuela Luis Muñoz Rivera - {Luis Muñoz Rivera School}; Calle 65 de infantería esquina Calle M. Dávila; (19/DIC/12); 12001076.

Escuela Oliver Hazard Perry - {Oliver Hazard Perry Graded School}; <Escuela Perry>; Calle San Blas esquina Calle Concordia; (13/DIC/16); 16000852.

LARES, Municipio de

Batey Callejones - {Callejones Site}; <LR-2>; vecindad del pueblo de Lares; (02/SEPT/99); 92001022.

Hacienda Los Torres - <Casona Los Torres>; Intersección Carreteras #111 y #129; (28/SEPT/06); 06000896.

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LAS MARIAS, Municipio de

Escuela Eugenio María de Hostos - {Eugenio María de Hostos School}; Avenida Matías Brugman; (19/DIC/12); 12001077.

LAS PIEDRAS, Municipio de

Cueva del Indio - <LP-6 Cueva del Indio> Aproximadamente 1.2 kilómetros de la Carretera #198, Barrio Quebrada Arenas; (04/SEPT/03); 03000884

LOIZA, Municipio de

Parroquia del Espíritu Santo y San Patricio - Localizada en la plaza del pueblo; (08/SEPT/76); 76002251.

Cueva de los Indios - <Cueva de Pta. Maldonado>; Localizada adjunto a la Carretera Estatal #187 dentro de la Reserva Estatal de Piñones; (24/JUN/82); 82003823.

Sitio del accidente aéreo de Roberto Clemente Walker - {Roberto Clemente Walker Crash Site}; <Roberto Clemente Crash Site, Punta Maldonado; Piñones>; Carretera 187, kilómetro 6, Punta Maldonado y área del Océano Atlántico; (31/ AGOS/22); SG100008070.

LUQUILLO, Municipio de

Fábrica de Fomento La Williams - {Williams Products Corporation}; <La Williams>; Carretera Estatal #992, kilómetro 0.3; (14/NOV/12); 12000938.

MANATI, Municipio de

Hacienda Azucarera La Esperanza - <Ingenio Esperanza; La Esperanza>; Localizada al noroeste de la Carretera Estatal #616; (11/ AGOS/76); 76002190.

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Iglesia de Nuestra Señora de la Candelaria y San Matías - {Church Nuestra Señora de la Candelaria y San Matías of Manatí}; <Nuestra Señora de la Candelaria de Manatí>; Calle Patriota Pozo en la plaza del pueblo; (18/SEPT/84); 84003130.

Plaza del Mercado de Manatí - Delineada por las Calles Quiñones, Padial y Baldorioty; (19/AGOS/88); 88001303.

La Colectiva Tabacalera - Calle Quiñones #18; (01/SEPT/88); 88001305.

Residencia Brunet Calaf - {Brunet--Calaf Residence}; Localizada en el cruce de las Calles Quiñones y Patriota Pozo; (01/SEPT/88); 88001306.

MARICAO, Municipio de

Iglesia de San Juan Bautista de Maricao - {Church San Juan Bautista of Maricao}; Calle Baldorioty en la plaza del pueblo; (18/SEPT/84); 84003125.

Puente del Treinta - {"Del Treinta" Bridge}; <Bridge #261; Puente del Río Prieto>; Carretera #128, kilómetro 32.7; (19/JUL/95); 95000846.

Vivero de Peces de Maricao - <Fish Hatchery; Criadero de Peces, Criadero Insular de Peces>; Carretera 401, kilómetro 1.7, Barrio Maricao Afuera; (21/FEB/17); MP 100000667.

MAUNABO, Municipio de

Faro de Punta de la Tuna - <Punta Tuna Light>; Localizado al sureste del Puerto Maunabo; (22/OCT/81); 81000688.

Casa Alcaldía de Maunabo - <Alcaldía de Maunabo>; Calle Santiago Iglesias Núm. 8; (23/AGOS/22); SG100008050.

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MAYAGUEZ, Municipio de

Edificio José de Diego - <Administration Building - Mayagüez Campus, U.P.R.>; Recinto Universitario de Mayagüez, Universidad de Puerto Rico; (18/NOV/77); 77001553.

Asilo de Pobres - <Asilo Municipal>; Calle Post, Bloque 417, Lote 6; (02/DIC/85); 85003087.

Casa Consistorial de Mayagüez - <Alcaldía de Mayagüez>; Calle Peral; (02/DIC/85); 85003046.

Teatro Yagüez - Localizado en las Calles McKinley y Basora; (02/DIC/85); 85003086.

Plaza Pública - <Plaza de Colón>; Calle McKinley; (03/DIC/85); 85003085.

Logia Adelpia - Calle Sol 64E, Bloque 357, Lote 8; (19/FEB/86); 86000323.

Casa Solariega de José de Diego - {La Case Solariega de José De Diego}; <Residencia Leria Esmoris>; Calle Liceo #52; (03/ABR/86); 86000624.

Correo y Corte Federal - {U.S. Post Office and Courthouse}; <Correo>; Localizado en las Calles McKinley y Pilar DeFillo; (21/MAYO/86); 86001169.

Residencia Ramírez de Arellano en Guanajibo - <Residencia Ramírez de Arellano>; Carretera Estatal #102; (05/FEB/87); 86003192.

Aduana de Mayagüez - {U.S. Custom House}; Avenida González Clemente esquina Calle McKinley; (10/FEB/88); 88000076.

Residencia Gómez - {Gómez Residencia}; Calle Méndez Vigo #60; (15/JUN/88); 88000656.

Residencia Heyliguer - {Residencia Heygler}; Calle Liceo #51; (12/JUL/88); 88000962.

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Residencia Ramírez Fuentes - {Fuentes, Ramírez, Residencia}; Calle Méndez Vigo #117; (12/JUL/88); 88000965.

Cementerio Municipal de Mayagüez - <Cementerio Viejo>; Localizado en el extremo sur de la Calle Post; (25/AGOS/88); 88001247.

Residencia Durán Esmoris - {Esmoris, Duran, Residencia}; Calle Méndez Vigo Bloque 204, Lote 204; (07/SEPT/88); 88000655.

Residencia Nazario Rivera - {Rivera, Nazario, Residencia}; Calle Post #105; (13/SEPT/88); 88000686.

MOCA, Municipio de

Hacienda Iruena Labadí - {Hacienda Iruena Manor House}; <Hacienda Labadí Manor House>; Localizada al sur de la Carretera Estatal #2, kilómetro 115.7; (14/AGOS/87); 87000735.

Hacienda Enriqueta - <La Enriqueta>; Localizada al norte de la Carretera Estatal PR-125, kilómetro 0.9; (29/MAYO/2024); SG100010389.

MONA, Isla de

Faro de la Isla de Mona - <Isla Mona Light>; Localizado en el lado este de la Isla; 22/OCT/81); 81000689.

Isla de Mona - <Amona, Mona Island>; Localizado en la vecindad de Mayagüez; (17/DIC/93); 93001398.

MOROVIS, Municipio de

Escuela José Fontán - {Fontán, Jose, School}; <José Fontán School>; Calle del Carmen esquina Calle Principal Final; (28/AGOS/12) 12000582.



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NAGUABO, Municipio de

Villa del Mar - <El Castillo>; Localizada en la Playa de Naguabo, Carretera Estatal #3, kilómetro 66.2; (23/JUN/83); 83002293.

Iglesia de Nuestra Señora del Rosario - {Church Nuestra Senora del Rosario of Naguabo}; Localizada en la plaza del pueblo; (10/DIC/84); 84000456.

Puente #122 - {Bridge #122}; Carretera Estatal #3, kilómetro 9; (19/JUL/95); 95000836.

Icacos Petroglyph Group - <Petroglifo de Río Blanco; 46 Naguabo #5; Upper Icacos; Y-11; Icacos Petroglyph Site, FS #08160000002>; Yunque National Forest, Naguabo; (01/DIC/15); 15000855.

NARANJITO, Municipio de

Escuela Guillermo Esteves - <Guillermo Esteves Junior High School; Escuela Intermedia Mercedes Rosado; Mercedes Rosado Middle School>; Calle Georgetti (Carretera #164 interior) esquina Calle Achiote; (19/DIC/12); 12001078.

OROCOVIS, Municipio de

Cueva La Espiral - <OR-31>; Barrio Bauta Abajo; (20/SEPT/11); 11000673.

PATILLAS, Municipio de

Escuela María Dávila Semidey - {María Dávila Semidey School}; <Escuela María Dávila Semidey>; Calle Muñoz Rivera #300; (14/NOV/12); 12000939.

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PEÑUELAS, Municipio de

Escuela Daniel Webster - {Daniel Webster School}; <Escuela Daniel Webster; La Webster>; Calle Luis Muñoz Rivera #255; (14/NOV/12); 12000940.

PONCE, Municipio de

Centro Ceremonial Indígena de Tibes - {Centro Ceremonial Indígena}; <Batey Indígena de Tibes>; Carretera Estatal #503; (14/ABR/78); 78003381.

Castillo de Serrallés - Cerro El Vigía; (03/NOV/80); 80004494.

Faro de Cayo Cardona - {Faro del Puerto de Ponce}; <Cayo Cardona Light>; Localizado al sur de Ponce en el Cayo Cardona; (22/OCT/81); 81000691.

Faro de la Isla de Caja de Muertos - <Isla de Caja de Muerto Light>; Localizado al sureste de Ponce en la Isla de Caja de Muertos; (22/OCT/81); 81000690.

Cementerio Antiguo de Ponce - <Cementerio Municipal de Ponce; Cementerio Civil de Ponce>; Torres #1 y Calle Frontispicio; (05/ENE/84); 84003149.

Parque de Bombas de Ponce - Plaza de las Delicias; (12/JUL/84); 84003150.

Residencia Villaronga - {Villaronga House}; Calle Reina #106; (24/AGOS/84); 84003151.

Catedral de Nuestra Señora de Guadalupe - {Cathedral Nuestra Señora de Guadalupe of Ponce}; Localizada en la plaza del pueblo; (10/DIC/84); 84000467.

Casa Fernando Luis Toro - {Toro, Fernando Luis, Casa}; <Casa Chavier>; Calle Obispado #3, La Alhambra; (05/MAR/86); 86000421.

Casa Miguel C. Godreau - {Godreau, Miguel C., Casa}; Calle Reina #146; (30/ABR/86); 86000894.

Iglesia de la Santísima Trinidad - {Iglesia de la Santísima Trinidad}; <Holy Trinity

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Church>; Localizada en la Calle Marina en el cruce de las Calles Mayor y Abolición; (26/SEPT/86); 86002766.

Residencia Rosaly-Batiz - {Rosaly--Batiz House}; <Batiz Residence>; Calle Villa #125; (29/SEPT/86); 86002768.

Mercado de las Carnes - <Plaza de los Perros>; Localizado en la Callejuela que une las Calles Mayor y León; (17/NOV/86); 86003199.

Casa Alcaldía de Ponce - {Casa Alcaldía de Ponce --City Hall}; Localizada al sur de la Plaza de las Delicias; (19/NOV/86); 86003197.

Albergue Caritativo Tricoche - <Hospital Tricoche>; Calle Tricoche; (14/MAYO/87); 87000769.

Antiguo Cuartel Militar Español de Ponce - <El Castillo>; Calle Castillo Final; (14/MAYO/87); 87000772.

Antiguo Hospital Militar Español de Ponce - <Asilo de Ciegos de Ponce>; Localizado en las Calles León, Antocha y Bondad; (14/MAYO/87); 87000770.

Banco Crédito y Ahorro Ponceño - <Banco de Santander>; Localizado en las Calles Marina y Amor; (25/JUN/87); 87001002.

Banco de Ponce - Localizado en las Calles Amor y Comercio; (25/JUN/87); 87001003.

Ponce High School - <Ponce High>; Calle Cristina; (04/AGOS/87); 87001310.

Casino de Ponce - <Antiguo Casino de Ponce>; Localizado en la Calles Marina y Luna; (28/OCT/87); 87001818.

Residencia Subirá - {Subirá House}; <Residencia Frau>; Calle Reina #107; (28/OCT/87); 87001826.

Iglesia Metodista Unida de Ponce - {Missionary Society of Methodist Episcopal Church}; <Primera Iglesia Metodista Unida de Ponce>; Calle Villa #135;

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(29/OCT/87); 87001822.

Residencia Armstrong Toro - {Armstrong-Toro House}; <Casa de las Cariátides>; Calle Unión #9; (29/OCT/87); 87001821.

Residencia Font Ubidez - {Font-Ubides House}; <Residencia Monsanto>; Calle Castillo #34; (29/OCT/87); 87001825.

Residencia Oppenheimer - {Oppenheimer House}; <Casa del Abogado>; Calle Salud #34; (29/OCT/87); 87001824.

Aduana de Ponce - {U.S. Custom House}; Calle Bonaire en el cruce con la Calle Aduana Playa de Ponce; (10/FEB/88); 88000073.

Residencia Salazar Candal - {Salazar--Candal House}; Calle Isabel #53; (09/JUN/88); 88000663.

Residencia Zaldo de Nebot - {Nebot, Zaldo de, Residencia}; <Residencia Fornaris>; Calle Marina #27; (09/JUN/88); 88000643.

Cementerio Católico San Vicente de Paul - <Cementerio Católico de Ponce>; Localizado adjunto a la Carretera Estatal #10; (25/AGOS/88); 88001249.

Hacienda Buena Vista - <Hacienda Vives>; Carretera #10, kilómetro 16.8, Barrio Magüeyes; (17/OCT/94); 91001499.

Casa de la Masacre de Ponce - Localizado en la Calle Marina #32; (20/OCT/05); 05001098.

Iglesia Metodista Mc Cabe Memorial - {Mc Cabe Memorial Church} <Playa de Ponce Methodist Church> Avenida Eugenio María de Hostos #835; (11/ABR/08); 08000283.

Casa Paoli - Localizado en la Calle Mayor #17; (01/OCT/09); 09000769.

Edificio YMCA - [Ponce Young Men's Christian Association (YMCA) Building]; Calle Nazaret #7843, Urbanización Santa María; (4/JUN/12); 12000331.

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Casa Vives - <Casa Familia Vives>; Calle Paseo Antocha #88, esquina Calle Castillo; (13/FEB/13); 13000013.

Edificio Empresas Ferré - <Centros Sor Isolina Ferré Inc.>; Avenida Eugenio María de Hostos #834; (27/AGOS/13); 13000638.

Edificio Municipal de la Playa de Ponce - <Alcaldía Playa de Ponce; Estación de Bomberos Playa de Ponce>; Calle Alfonso XII #28, esquina Avenida Padre Noel; (27/AGOS/13); 13000639.

Puente Río Portugués - <Bridge 0145; Puente Río Portugués Playa Ponce; Portugués River Bridge>; Avenida Eugenio María de Hostos, kilómetro 3.5, Carretera Estatal #10; (06/ENE/15); 14001134.

Acueducto Alfonso XII - Calle Acueducto; (30/DIC/19); MP100004854.

Carretera Núm. 6 - <PR-123; PR-10; Antigua #10; Road #6>; PR-123, desde kilómetro 9.2 hasta kilómetro 26.5; (14/SEPT/21); SG 100006909.

Teatro La Perla - [La Perla Auditorium and Public Library]; <El Teatro La Perla; La Perla>; Calle Mayor esquina Cristina; (27/SEPT/21); SG 100007054.

Escuela Pública de Ponce 1913 - {Ponce Public School 1913}; <Escuela Hemeterio Colón y Waren; La Hemeterio; La Colón>; Calle Concordia; (23/AGOS/22); MP100008052.

Casa Ricardo Ruiz Mari - Calle Arias #14, Playa de Ponce; (29/MAYO/24); MP100010382.

Puente Río Inabón - <Puente Núm. 25>; Carretera Núm. 1, kilómetro 120.4; (29/MAYO/24); MP100010383.

Casa Serrallés - <Museo de la Música Puertorriqueña>; Calle Reina Isabel #45, esquina Calle Salud; (13/MARZO/25); SG100011511.

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QUEBRADILLAS, Municipio de

Puente Blanco - Localizado al noreste del pueblo de Quebradillas adjunto a la Carretera Estatal #485; (23/FEB/84); 84003126.

Teatro Liberty - Calle Rafols #157; (04/MAYO/89); 88000963.

RINCON, Municipio de

Faro de Punta Higuero - <Punta Higuero Light>; Localizado al noroeste de Rincón adjunto a la Carretera Estatal #413; (22/OCT/81); 81000560.

Museo Tecnológico Bonus Dr. Modesto Iriarte - {Boiling Nuclear Superheater (Bonus) Reactor Facility}; Sector Punta Higuero, al final de la Carretera #413; (14/NOV/07); 07001194.

RIO GRANDE, Municipio de

Parque de Bombas de Río Grande - {Río Grande Fire Station}; <Parque de Bombas de Río Grande>; Calle Juan González #6 esquina Calle Del Carmen; (29/ENE/13); 12001248.

Baño Grande - <Piscina de la Mina; La Piscina; FS#08160000014; CNF-06-01>; Carretera Estatal #191, kilómetro 11.85, El Yunque National Forest; (28/FEB/17); MP100000685.

Baño de Oro - <La Piscina Pequeña, FS#8160000015>; PR 191, kilómetro 12.1, El Yunque National Forest; (21/ENE/20); MP100004891.

Sitio de petroglifos Jiménez - {Jimenez Petroglyph Site}; <Petroglifo de Jimenez, CNF-07-02, FS#08160000036>; 280 metros al norte de la Carretera Estatal PR-9966; (28/MAYO/24); RS100008398.

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Torre Monte Britton - {Mt. Britton Tower}; <Atalaya; El Pequeño Morro; FS#08160000013>; 181 metros al sureste de la FS Carretera 10, kilómetro 1.3; (30/MAYO/24); MP100010421.

SABANA GRANDE, Municipio de

Iglesia de Isidro Labrador y Santa María de la Cabeza de Sabana Grande - {Church of San Isidro Labrador and Santa María de la Cabeza of Sabana Grande}; Calle Ángel G. Martínez en la plaza del pueblo; (10/DIC/84); 84000460.

Residencia Lassise Schettini - {Lassise-Schettini House}; <La Quinta>; Localizada al final de la Calle Ángel Ramírez; (21/OCT/87); 87001823.

Casa de Berta Sepúlveda - {Sepúlveda, Berta, Residence}; Calle Muñoz Rivera #37, Sabana Grande; (17/JUN/94); 94000624.

Hacienda San Francisco - <Hacienda Quilichini>; Callejón de la Hacienda; (17/ABR/95); 95000287.

Cementerio Masónico de la Respetable Logia Igualdad Núm. 23 de Sabana Grande - {Cementerio Masónico de la Resp. Logia Igualdad Núm. 23 de Sabana Grande}; Carretera #121; (13/FEB/13); 13000014.

Escuela James Fenimore Cooper - {James Fenimore Cooper Graded School}; Calle San Isidro # 20, esquina Calle Luis Muñoz Rivera; (26/MAYO/15); 15000277.

SALINAS, Municipio de

Distrito Histórico de la Central Aguirre - {Central Aguirre Historic District}; <Aguirre; Central Aguirre>; al sur del cruce de la Carretera Estatal #705 y la Carretera Estatal #3, kilómetro 151.3; (23/OCT/02); 02001208.

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SAN GERMAN, Municipio de

Iglesia del Convento Porta Coeli - {Convento de Porta Coeli}; <Museo de Arte Religioso>; Localizada en la Plaza de Porta Coeli; (08/SEPT/76); 76002252.

Casa de los Ponce de León - Calle Dr. Santiago Veve #13; (09/MAR/83); 83002295.

Hacienda Buena Unión - <Trapiche del Guama; Hacienda Acosta>; Carretera Estatal #362, kilómetro 4.8; (23/AGOS/83); 83002296.

Iglesia de San Germán de Auxerre - {Church San German Auxerre of San German}; Calle De la Cruz mirando a la plaza del pueblo; (10/DIC/84); 84000461.

Alcantarilla Pluvial sobre la Quebrada Manzanares - <Los Túneles de San Germán; Vaulted Brick Tunnel Storm Sewer System>; Localizada en las Calles Ferrocarril y Esperanza; (12/ABR/90); 90000552.

Residencia Jaime Acosta y Forés - {Jaime Acosta y Fores Residence}; <Casa de Doña Delia Acosta>; Calle Dr. Santiago Veve #70; (24/MAYO/90); 90000767.

Distrito Histórico de San Germán - {San German Historic District}; <Partido de San Germán, Villa de San Germán Auxerre, Nueva Salamanca, Cuidad de las Lomas>; Delimitado por las Calles Luna, Estrella, Concepción, Javilla y Ferrocarril; (16/FEB/94); 94000084.

Torre de Observación - [Observation Tower]; <Torre de Piedra; Santa Ana Tower>; Carretera Estatal 120, kilómetro 14, Barrio Cain Alto, Bosque Estatal de Maricao; (01/MAYO/16); 16000236.

SAN JUAN, Municipio de

La Fortaleza - Calle Fortaleza en la isleta de San Juan entre la Bahía de San Juan y la Calle Recinto Oeste; (15/OCT/66); 66000951.

Sitio Histórico Nacional de San Juan - {San Juan National Historic Site}; Complejo de fortificaciones que rodea la ciudad del Viejo San Juan y Fortín San Juan de la

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Cruz en el Cañuelo, Toa Baja; (15/OCT/66); 66000930.

Zona Histórica de San Juan - <Casco de San Juan>; Localizado en el triángulo noroeste de la isleta de San Juan; (10/OCT/72); 72001553.

Archivo y Biblioteca General de Puerto Rico - {Cárcel de Puerta de Tierra}; <Hospital Civil; Cárcel Provincial; Edificio Bacardí; Archivo y Biblioteca Nacional>; Avenida Ponce de León, Parada #8, Puerta de Tierra; (11/AGOS/76); 76002253.

Antiguo Casino de Puerto Rico - Avenida Ponce de León #1, Puerta de Tierra; (22/SEPT/77); 77001554.

Capitolio de Puerto Rico - Avenida Ponce de León y Avenida Muñoz Rivera, Puerta de Tierra; (18/NOV/77); 77001555.

Hotel Normandie - Avenida Ponce de León y Calle San Gerónimo; (29/AGOS/80); 80004295.

Faro del Castillo del Morro - {Faro de Morro}; <Faro del Morro; Puerto San Juan Light>; Localizado sobre el bastión de Ochoa en el hornabeque del Castillo de San Felipe del Morro; (22/OCT/81); 81000693.

Residencia del Superintendente de Faros - {Superintendent of Lighthouses' Dwelling}; Localizado en la Puntilla dentro de los predios de la base de la Guardia Costanera; (22/OCT/81); 81000694.

Casa de España - Avenida Ponce de León, Parada 1½, Puerta de Tierra; (05/JUL/83); 83002294.

Escuela de Medicina Tropical - {School of Tropical Medicine}; Avenida Ponce de León, Parada #2, Puerta de Tierra; (29/SEPT/83); 83002297.

Fortín de San Gerónimo de Boquerón - <Museo de Historia Militar de Puerto Rico>; Punta del Boquerón, Puerta de Tierra; (11/OCT/83); 83004199.

Biblioteca Carnegie - Avenida Ponce de León, Parada #1½, Puerta de Tierra;

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(20/OCT/83); 83004196.

Pórtico y Capilla de la Universidad del Sagrado Corazón - {Administration Building}; <Colegio de las Reverendas Madres del Sagrado Corazón>; Localizado entre las Calles Rosales y San Antonio, Parada #26½, Santurce; (26/OCT/83); 83004195.

Polyorín de Miraflores - <Capilla de Antigua Base Naval>; Localizado en la antigua base naval de Miramar; (09/MAR/84); 84003172.

El Falansterio de Puerta de Tierra - <El Falansterio>; Delineado por las Avenida Fernández Juncos, y las Calles Matías Ledesma y San Juan Bautista, Puerta de Tierra; (03/MAYO/84); 84003166.

Torre y Cuadrángulo Universidad de Puerto Rico - {University of Puerto Rico Tower and Quadrangle}; Recinto Universitario de Río Piedras, Universidad de Puerto Rico, mirando hacia la Avenida Ponce de León; (17/MAYO/84); 84003174.

Edificio Miami - {Miami Building}; Avenida Ashford #868, Santurce; (23/AGOS/84); 84003169.

Capilla de Nuestra Señora de Lourdes - {Nuestra Señora de Lourdes Chapel}; Avenidas Ponce de León y Miramar; (27/SEPT/84); 84003171.

Iglesia de San Mateo de Cangrejos - {Church of San Mateo de Cangrejos of Santurce}; Localizada en la esquina de Calle San Jorge y la Avenida Eduardo Conde; (02/ENE/85); 85000044.

Asilo de Niñas de Miramar - {Colegio de las Madres del Sagrado Corazón}; Avenida Ponce de León, Miramar, Santurce; (21/NOV/85); 85002908.

Iglesia, Escuela, Convento y Casa Parroquial de San Agustín - {Church, School, Convent and Parish House of San Agustín}; Avenida Ponce de León #265, Puerta de Tierra; (30/DIC/85); 85003194.

Central High School - <La Central>; Avenida Ponce de León, Santurce; (04/AGOS/87); 87001309.

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Escuela Superior Rafael M. Labra - {Rafael M. Labra High School}; <La Labra>; Localizada en el cruce de las avenidas Ponce de León y Roberto H. Todd; (04/AGOS/87); 87001308.

Aduana de San Juan - {U.S. Custom House}; Calle Puntilla #1; (10/FEB/88); 88000075.

Antiguo Correo y Corte Federal - {U.S. Post Office and Courthouse}; <Antiguo Edificio Federal de San Juan>; Localizado en bloque urbano delineado por la Calle San Justo, Calle Tanca, Calle Comercio y Calle Recinto Sur; (28/MAR/88); 87000694.

Casa Aboy-Lompre - {Residencia Aboy--Lompre}; Avenida Ponce de León #900, Miramar, Santurce; (22/MAR/89); 88001304.

Escuela Brumbaugh - {Escuela Brambaugh}; <Puerta de Tierra Public School>; Localizado en el cruce de la Calle San Juan Bautista y la avenida Ponce de León, Puerta de Tierra; (05/MAYO/89); 89000324.

Escuela Graduado José Celso Barbosa - Avenida Ponce de León; (19/MAYO/89); 89000406.

Residencia en Concordia 659 - {House at 659 Concordia Street}; Localizada en la Calle Concordia #659, Miramar; (18/OCT/91); 91001501.

Residencia en La Paz 663 - {House at 663 La Paz Street}; Localizada en la Calle La Paz #663, Miramar; (18/OCT/91); 91001500.

Residencia en McKinley 665 - {House at 665 McKinley Street}; Localizada en la Calle McKinley #665, Miramar; (19/OCT/91); 91001502.

Residencia en La Paz 659 - {House at 659 La Paz Street}; Localizada en la Calle La Paz #659, Miramar; (30/ENE/92); 91002007.

Puente General Norzagaray - {General Norzagaray Bridge}; <Bridge #4; Puente de los Frailes>; Carretera Estatal #873, kilómetro 0.8; (19/JUL/95); 95000833.

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Puente de Río Piedras - {Río Piedras Bridge}; <Bridge #3>; Carretera Estatal #8839; kilómetro 12.5; (19/JUL/95); 95000832.

Línea Avanzada - {Línea Avanzada [Advanced Defense Line]}; <Línea de Apostaderos; Primera Línea Defensiva; Reducto de San Gerónimo del Boquerón; Cabeza de Puente de San Antonio; Batería del Escambrón; Polvorín de San Gerónimo>; sector este de la Isleta de San Juan; (25/SEPT/97); 97001136.

Puerto Rico Ilustrado/Edificio El Mundo - Calle San José #254, Viejo San Juan; (25/SEPT/97); 97001137.

Casa Klumb - <Cody Ranch>; Calle Ramón B. López #1, Río Piedras; (14/NOV/97); 97001307.

Edificio de Apartamentos Figueroa - {Figueroa Apartments}; <Pinto-Lugo Rivera Building>; Avenida Fernández Juncos #601, Miramar; (14/SEPT/00); 00001124.

Edificio Aboy - <El Faro>; Calle Aboy #603, Miramar, San Juan; (28/SEPT/01); 01001069.

Penitenciaría Estatal de Río Piedras - {Puerto Rico Island Penitentiary}; <Presidio Insular; Penitenciaría Estatal; Oso Blanco>; Localizado al sur de la Carretera Estatal #21; (07/MAR/03); 03000100.

Edificio Victory Garden - Localizado en la Avenida Ponce de León #1001 esquina Calle Elisa Colberg, Santurce; (13/OCT/04); 04001149.

Edificio del Valle - Localizado en la Avenida Ponce de León #1118, San Juan; (20/NOV/04); 04001243.

Edificio Patio Español - Localizado en la Calle Cruz #153, San Juan; (18/FEB/05); 05000061.

Gran Logia Espiritual Número 1 - <Casa de las Almas>; Localizado en la Calle Antosanti #1612; (08/JUN/06); 06000507.

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Corte Suprema de Puerto Rico - {Supreme Court Building}; Localizado en el extremo este del Parque Luis Muñoz Rivera; (14/JUN/06); 06000506.

Acueducto de San Juan - <"San Juan Water Works", "Río Piedras Filtration Plant", Antiguo Acueducto del Río Piedras, Primer Acueducto de San Juan>; Calle Flamboyán adjunto al Jardín Botánico y a la Estación Agrícola de Río Piedras; (21/JUN/07); 07000585.

Parque Luis Muñoz Rivera - {Rivera, Luis Muñoz, Park}; Parada #8, Avenida Ponce de León, Puerta de Tierra; (14/NOV/07); 07001195.

La Giralda - Calle José Martí #651; (11/AGOS/08); 08000786.

Puente Martín Peña - [Martín Peña Bridge]; <Bridge #185; Martín Peña Channel Bridge>; Carretera #25, kilómetro 8, Barrio de Santurce; (27/AGOS/08); 08000856.

Hotel Condado Vanderbilt - {Condado Vanderbilt Hotel}; <Grande Hotel Condado Vanderbilt; The Condado Hotel; Hotel Condado; Condado Beach Hotel; Hyatt Puerto Rico Hotel>; Avenida Ashford #1055; (25/NOV/08); 08001110.

Puente Ferroviario San Antonio - {San Antonio Railroad Bridge}; <Puente Ferroviario San Antonio; Puente #1571; Bridge No. 1571>; Localizado en el Caño de San Antonio en el extremo oeste de la Isleta de San Juan; (30/SEPT/09); 09000789.

Planta Piloto de Ron - Carretera Estatal #1, Estación Experimental Agrícola, Río Piedras; (26/JUL/10); 10000501.

Casa Dra. Concha Meléndez Ramírez - <Casa Biblioteca Dra. Concha Meléndez Ramírez>; Calle Vilá Mayo #1400, esquina Calle Manuel Rodríguez; (30/JUN/11); 11000414.

Residencia Luis Muñoz Marín - <Finca de Trujillo Alto>; Carretera Estatal #877, kilómetro 0.4; (29/SEPT/11); 11000712.

Distrito Histórico del Viejo San Juan - {Distrito Histórico del Viejo San Juan – Old

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San Juan Historic District}; <Ciudad de Puerto Rico; San Juan de Puerto Rico; Viejo San Juan; Ciudad Capital; Zona Histórica de San Juan; Casco Histórico de San Juan; Antiguo San Juan; San Juan Historic Zone>; Delimitado por las Avenidas Muñoz Rivera & Ponce de León, Paseo de Covadonga y Calles J.A. Corretjer, Nilita Vientos Gastón, Recinto Sur de la Tanca y del Comercio; (30/JUL/12); 12000465.

Estadio Municipal Hiram Bithorn - {Hiram Bithorn Municipal Stadium}; <El Bithorn>; Avenida Franklin Delano Roosevelt, Hato Rey; (22/ENE/14); 13001118.

Villa Victoria - <YWCA Headquarters>; Avenida Ponce de León #905; (06/ENE/15); 14001135.

Templo del Maestro - Avenida Constitución, Parada 8; (19/ABRIL/16); 16000189.

Edificio Comunidad de Orgullo Gay de Puerto Rico - <Casa Orgullo>; Calle Saldaña #3, Río Piedras; (02/MAYO/16); 16000237.

Mural "La Familia" - Avenida Borinquén #2030; (23/OCT/17); SG 100001763.

Casa Vigil - <Casa de la Familia Vigil; Residencia Vigil>; Calle Ferrocarril #1018, Río Piedras; (23/JUL/18); SG 100002694.

Residencia de Señoritas Universidad de Puerto Rico; Río Piedras - Recinto de Río Piedras, Universidad de Puerto Rico, cerca de la intersección de las Avenidas Gándara y Barbosa; (23/JUL/18); SG 100002695.

Distrito Histórico Instituto Loaiza Cordero para niños ciegos - {Instituto Loaiza Cordero para niños ciegos Historic District}; <Instituto de Niños Ciegos de Puerto Rico; Instituto Puertorriqueño de Niños Ciegos>; Avenida Fernández Juncos #1312, Santurce; (23/OCT/18); RS100002935.

Distrito Histórico de Puerta de Tierra - [Puerta de Tierra Historic District]; Isleta de San Juan al este del Distrito Histórico del Viejo San Juan, San Juan; (15/OCT/19); RS100002936.

Escuela Rafael Cordero - {Rafael Cordero Graded School}; <Escuela Ocupacional de Comercio Rafael Cordero Molina; La Cordero>; Calle Aurora esquina Hoare,

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Parada 15, Santurce; (19/NOV/20); MP100005816.

Escuela Ruiz Belvis - <Escuela Graduada S. Ruiz Belvis; Escuela Elemental Segundo Ruiz Belvis>; Avenida Fernández Juncos, Parada 16½, Santurce; (31/AGOS/22); MP100008115.

Casa Dr. Bailey K. Ashford - <La Casona>; Avenida Ashford Núm. 1312; (16/SEPT/22); SG100008175 .

Casa González Cuyar - <Sede Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico; Fundación por la Arquitectura>; Calle del Parque #225, Santurce; (4/MARZO/24); SG100010033.

SAN LORENZO, Municipio de

Iglesia de Nuestra Señora de las Mercedes de San Miguel de Hato Grande - {Nuestra Señora de las Mercedes de San Miguel de Hato Grande}; <Las Mercedes>; Calle Colón frente a la plaza del pueblo; (08/DIC/83); 83004194.

Residencia Machín-Ramos - <Residencia Machín>; Calle Eugenio Sánchez López; (05/MAYO/89); 88001180.

SAN SEBASTIAN, Municipio de

Iglesia de San Sebastián Mártir - {Church San Sebastián Martir of San Sebastián}; Calle Severo Arana adjunto a plaza del pueblo; (18/SEPT/84); 84003132.

SANTA ISABEL, Municipio de

Escuela de la Comunidad Martín Brumbaugh - {Brumbaugh, Dr. Martin G., Graded School}; Calle Eugenio María de Hostos #33; (04/FEB/11); 10001217.

Sistema de Riego de tres haciendas - <S1-53; Sio200031; Al sur de la Carretera PR-

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52, norte y PR-1, oeste y este de la carretera PR-153; (13/DIC/16); 16000853.

Iglesia Cristiana - <Iglesia Evangélica Unida de Santa Isabel>; Calle Muñoz Rivera #110; (28/MAYO/24); SG100010384.

TOA ALTA, Municipio de

Iglesia de Nuestra Señora de la Concepción y San Fernando - {Church of Nuestra Señora de la Concepción y San Fernando of Toa Alta Municipality}; <Iglesia de San Fernando de Toa Alta>; Avenida Ponce de León adjunto a plaza del pueblo; (18/SEPT/84); 84003158.

TOA BAJA, Municipio de

Iglesia Parroquial de San Pedro Apóstol de Toa Baja - <Iglesia Parroquial de San Pedro y San Matías Apóstoles de Toa Baja>; Calle Las Flores #47; (17/ABR/75); 75002135.

Hacienda Santa Elena - {Santa Elena Hacienda}; Localizada al norte de las Carreteras #2 y #165; (24/SEPT/92); 83004662.

Ermita Nuestra Señora de la Candelaria del Plantaje - <Hacienda Candelaria; Ermita del Plantaje>; Carretera #866, Barrio Sabana Seca; (30/JUN/15); 15000398.

TRUJILLO ALTO, Municipio de

Puente de Trujillo Alto - <Puente de metal sobre el Río Grande de Loiza; Río Grande de Loiza Bridge; Bridge #427>; Carretera #181, kilómetro 5.6; (28/ENE/10); 09001289.

UTUADO, Municipio de

Iglesia de San Miguel Arcángel - {Church San Miguel Arcángel of Utuado}; Calle

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Dr. Barbosa frente a la plaza del pueblo; (10/DIC/84); 84000447.

Parque Ceremonial Indígena Caguana - {Caguana Ceremonial Ball Court Site}; Carretera Estatal #11, kilómetro 12.3; (17/DIC/92); 92001671.

Puente Blanco - {Blanco Bridge}; <Bridge #152>; Carretera #10, kilómetro 48.1; (19/JUL/95); 95000837.

Bateyes de Viví - <El Hoyo, "Dance Ground Butterbaughs Estate", Vega del Hoyo>; Localizado en el Barrio Viví Arriba, Carretera #605, kilómetro 5.6; (21/JUNIO/07); 07000584.

Carretera Núm. 6 - <PR-123; PR-10; Antigua #10; Road #6>; PR-123, desde kilómetro 48.5 hasta kilómetro 68.2; (14/SEPT/21); SG 100006909.

VEGA ALTA, Municipio de

Iglesia de la Inmaculada Concepción - {Church Inmaculada Conception of Vega Alta}; Plaza del pueblo; (18/SEPT/84); 84003128.

VEGA BAJA, Municipio de

Panteón Otero-Martínez - Antiguo cementerio de Vega Baja adjunto a la Carretera Estatal #670; (30/JUL/84); 84003135.

Iglesia de Santa María del Rosario - {Church Santa María del Rosario of Vega Baja}; <Nuestra Señora del Rosario>; Plaza del pueblo; (18/SEPT/84); 84003133.

Casa Alonso - Calle Betances #34; (13/DIC/96); 96001491.

Sitio de Paso del Indio - {Paso del Indio Site}; <VB-4>; Aproximadamente a una milla de la confluencia del Río Cibuco y del Río Indio; (25/JUL/07); 07000583.

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VIEQUES, Municipio de

Faro de Vieques - Adjunto a Carretera Estatal #38; (17/ NOV/ 77); 77001551.

Fortín del Conde de Mirasol - {Fuerte de Vieques}; <El Fuerte; El Fortín>; Calle del Fuerte; (18/ NOV/ 77); 77001552.

Hacienda Casa del Francés - <Sportmen's House>; Localizado al noroeste de Esperanza; (18/ NOV/ 77); 77001548.

Algodones 2 - <12VPr2-204>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001037.

Algodones 3 - <12VPr2-205>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001038.

Algodones 6 - <12VPr2-229>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001032.

Camp García - <Campo Asilo; Camp García Petroglyph; 12VPr2-164>; Barrio Puerto Ferro; (21/ AGOS/ 91); 91001041.

Llave 13 - <12VPr2-175>; Barrio Llave; (21/ AGOS/ 91); 91001036.

Loma Jalova 3 - <12VPr2-219>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001034.

Yanuel 9 - <12VPr2-220>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001033.

Monte Largo 2 - <12VPr2-172>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001042.

Playa Grande 9 - <12VPr2-212>; Barrio Llave; (21/ AGOS/ 91); 91001035.

Ventana 4 - <12VPr2-171>; Barrio Punta Arenas; (21/ AGOS/ 91); 91001039.

Yanuel 8 - <12VPr2-173>; Barrio Puerto Diablo; (21/ AGOS/ 91); 91001043.

Le Pistolet - <12VPr2-168>; Barrio Punta Arenas; (22/ AGOS/ 91); 91001040.

Central Playa Grande - <12VPr2-101>; Barrio Llave; (10/ SEPT/ 92); 92001236.

REGISTRO NACIONAL DE LUGARES HISTORICOS
Oficina Estatal de Conservación Histórica
8 de abril de 2025

Clave -Designación común de la propiedad; [Nombre según aparece en la lista del Registro Nacional de Lugares Históricos en Washington, D.C.]; <Otro nombre o designación utilizada para identificar la propiedad>; Dirección; (Fecha de inclusión: día, mes, año); Código del Servicio de Información del Registro Nacional, NRIS.

Distrito Arqueológico Laguna Jalova - {Laguna Jalova Archeological District}; <Western Friendly Front Line; Target Two Run-In Line; 12VPr2-45 & 12VPr2-81>; Barrio Puerto Diablo; (10/SEPT/92); 92001237.

Distrito Arqueológico Ventana - {Ventana Archeological District}; <12VPr2-5 & 12VPr2-61>; Barrio Llave; (10/SEPT/92); 92001238.

Distrito Histórico Resolución - {Resolution Historic District}; <Marquesado; 12VPr2-13 & 12VPr2-122>; Barrio Punta Arenas; (10/SEPT/92); 92001242.

Paramayón 2 - <Punta Vaca; 12VPr2-66>; Barrio Llave; (10/SEPT/92); 92001241.

Playa Vieja - <12VPr2-70>; Barrio Punta Arenas; (10/SEPT/92); 92001235.

Punta Jalova - <12VPr2-44>; Barrio Puerto Diablo; (10/SEPT/92); 92001239.

Casa Delorme Anduze No. 2 - <Casa de Rosendo Delorme, Antonio Mellado St. #355>; Calle Antonio Mellado #355, Isabel Segunda; (22/NOV/93); 93001205.

Casa Augusto Delorme - {Casa Augusto Delorme}; <Casa de Pablo Delorme, Calle Benítez Guzmán #7>; Calle Benítez Guzmán #7, Isabel Segunda; (02/FEB/94); 93001555.

Casa Delorme Anduze - {Delorme--Anduze House}; <361 Mellado St., Rosendo Delorme House>; Calle Antonio Mellado #361, Isabel Segunda; (02/FEB/94); 93001556.

Casa Smaine Ortiz - {Smaine--Ortiz House}; <Porfirio Ortiz House>; Calle Antonio Mellado #341, Isabel Segunda; (02/FEB/94); 93001554.

Farmacia de Vieques - {Vieques Pharmacy}; <Farmacia "Liberty Drug", Antiguo Correo de Vieques, Bar Plaza>; Intersección de las Calles Carlos LeBrun y Víctor Duteil, Isabel Segunda; (02/MAR/94); 94000061.

Casa Alcaldía de Vieques - <Casa de Gobierno; Casa Municipal; Casa del Rey; Ayuntamiento>; Intersección de las Calles Carlos LeBrun y Benítez Guzmán, Isabel Segunda; (17/MAR/94); 94000174.

-39-

REGISTRO NACIONAL DE LUGARES HISTORICOS
Oficina Estatal de Conservación Histórica
8 de abril de 2025

Clave -Designación común de la propiedad; [Nombre según aparece en la lista del Registro Nacional de Lugares Históricos en Washington, D.C.]; <Otro nombre o designación utilizada para identificar la propiedad>; Dirección; (Fecha de inclusión: día, mes, año); Código del Servicio de Información del Registro Nacional, NRIS.

Casa de Rafael Acevedo - {Acevedo, Rafael, House}; <Mirella Acevedo Sanes House>; Calle Victor Duteil entre las Calles San José y Baldorioty, Isabel Segunda; (17/MAR/94); 94000249.

Casa de Jaime Puig Lemoine - <Casa de Carmen Puig>; Calle 65 de Infantería #161, pueblo de Isabel Segunda; (14/ ABRIL/ 94); 94000363.

Las Tumbas de I.J. María Le Guillou - <Las Tumbas de Le Guillou; The Tombs of Le Guillou>; Calle Santa María #200, cerca del pueblo de Isabel Segunda; (26/ AGOS/94); 94000923.

VILLALBA, Municipio de

Escuela Walter Mc Kown Jones - {Walter Mc K. Jones School}; <Escuela Walter Mc Kown Jones; La Mc Jones>; Calle Luis Muñoz Rivera #28 al frente de la estación de transportación pública Ismael Zaragoza Meléndez; (29/ ENE/ 13); 12001249.

YABUCOA, Municipio de

Parque de Bombas de Yabucoa - {Yabucoa Fire Station}; <Parque de Bombas de Yabucoa>; Calle Luis Muñoz Rivera #22; (13/ FEB/ 13); 13000015.

YAUCO, Municipio de

Casa Franceschi Antongiorgi - <Casa Flemming>; Esquina de las Calles 25 de julio y Barbosa mirando hacia la plaza del pueblo; (16/ ENE/ 85); 85000113.

Casa Filardi - {Filardi House}; <Casa Muñoz>; Calle 25 de julio esquina Calle Baldorioty; (16/ ENE/ 85); 85000116.

Casona Cesari - <Casa de las Doce Puertas>; Localizada en el cruce de la Calle 25 de julio y de la Calle Matienzo Cintrón; (16/ ENE/ 85); 85000114.

REGISTRO NACIONAL DE LUGARES HISTORICOS
Oficina Estatal de Conservación Histórica
8 de abril de 2025

Clave -Designación común de la propiedad; [Nombre según aparece en la lista del Registro Nacional de Lugares Históricos en Washington, D.C.]; <Otro nombre o designación utilizada para identificar la propiedad>; Dirección; (Fecha de inclusión: día, mes, año); Código del Servicio de Información del Registro Nacional, NRIS.

Chalet Amill - Calle Mattei Lluberas #33; (16/ENE/85); 85000115.

Residencia González Vivaldi - Calle Mattei Lluberas #26; (05/FEB/87); 86003201.

Casa Agostini - Localizada en la Calle San Rafael entre las Calles del Río y Comercio; (09/JUN/88); 88000682.

Logia Masónica Hijos de la Luz - <Logia Masónica>; Avenida José C. Barbosa, Barrio Pueblo Sur; (09/JUN/88); 88000684.

Teatro Ideal - <Teatro de la Plaza>; Localizado en la Calle Comercio entre las Calles San Rafael y José Celso Barbosa; (09/JUN/88); 88000683.

Unidad de Salud Pública de Yauco - [Public Health Unit at Yauco]; Calle Comercio #64, Barrio Pueblo; (14/OCT/21); MP100007078.



A1-3: Traditional Urban Centers





ADJUNTAS



 Survey area Parcels

Survey area acreage: 61

Total parcels within survey area: **489**

PR State Historic Preservation Office
December 16, 2020





AGUADA



 Survey area  Parcels

Survey area acreage: 72

Total parcels within survey area: **598**

PR State Historic Preservation Office
December 16, 2020





AGUADILLA



 Survey area  Parcels

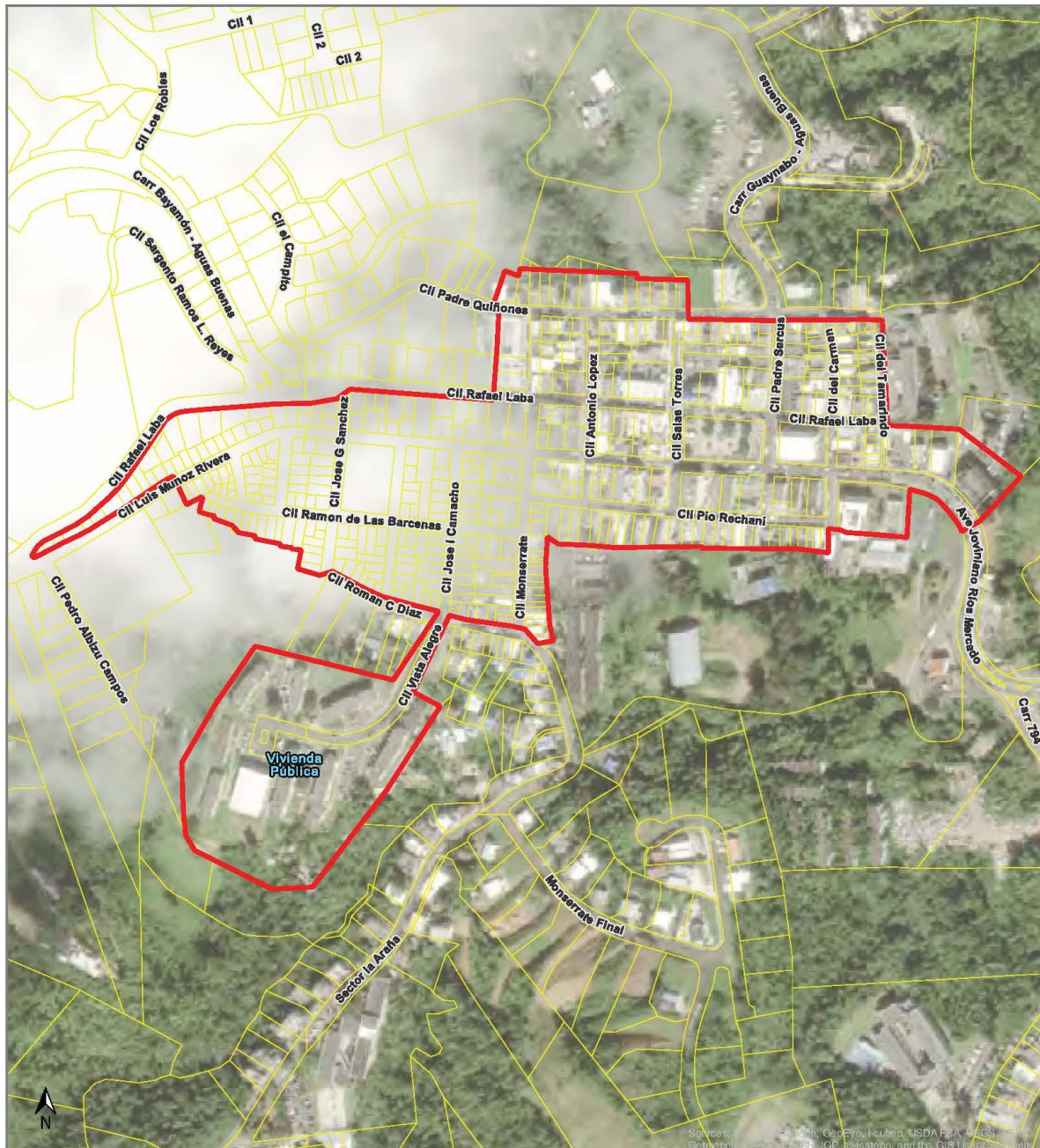
Survey area acreage: 106

Total parcels within survey area: **879**

PR State Historic Preservation Office
December 16, 2020



AGUAS BUENAS



 Survey area  Parcels

Survey area acreage: **28**

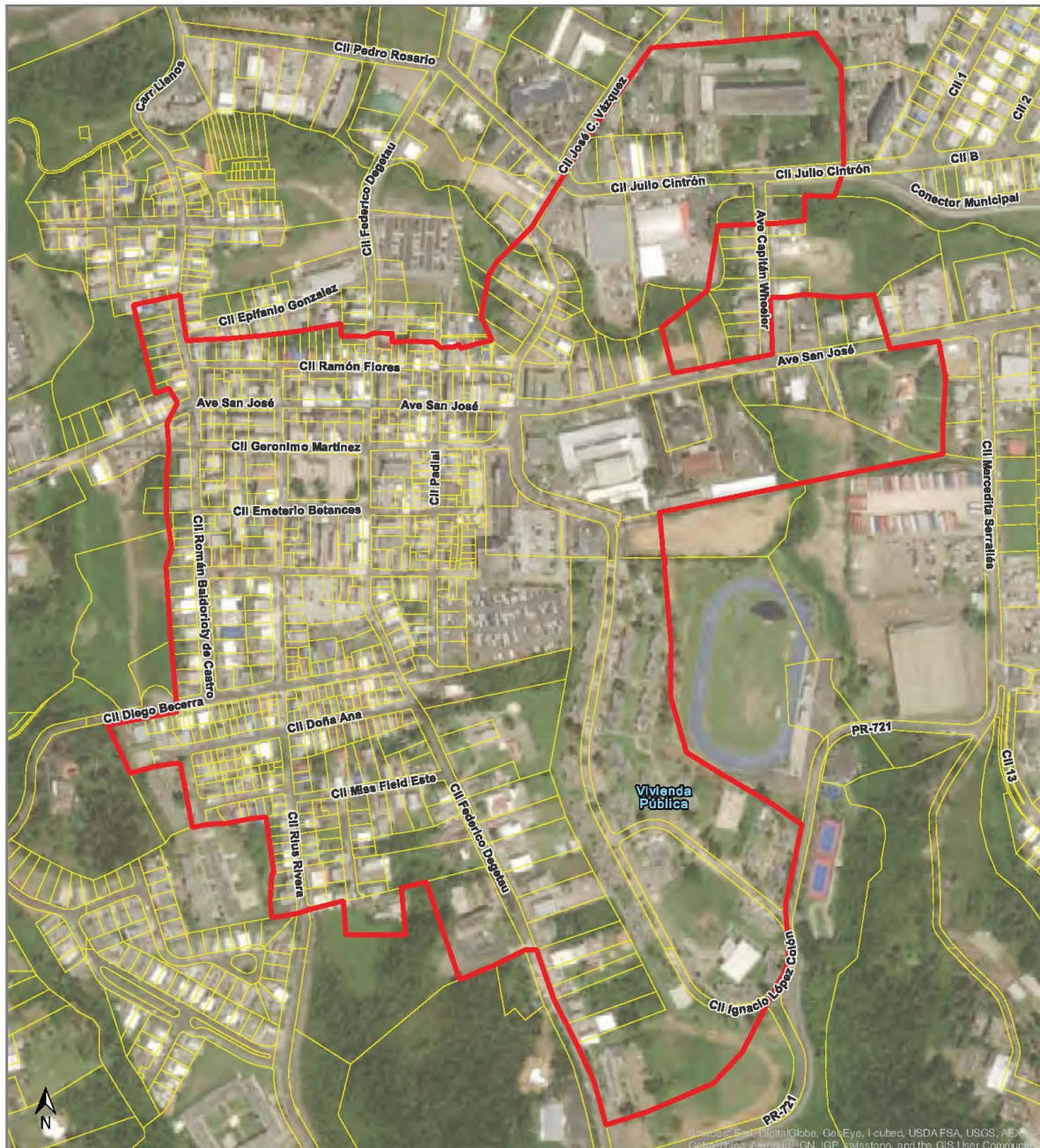
Total parcels within survey area: **409**

PR State Historic Preservation Office
December 16, 2020





AIBONITO



Survey area Parcels

Survey area acreage: **89**

Total parcels within survey area: **545**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





AÑASCO



 Survey area  Parcels

Survey area acreage: 70

Total parcels within survey area: **517**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





ARECIBO



Survey area Parcels

0 100 200 m

Survey area acreage: **193**

Total parcels within survey area: **1500**

PR State Historic Preservation Office
December 16, 2020





ARROYO



Survey area Parcels

0 100 200 m

Survey area acreage: 75

Total parcels within survey area: 581

PR State Historic Preservation Office
December 16, 2020





BARCELONETA



Survey area Parcels

Survey area acreage: **35**

Total parcels within survey area: **144**

PR State Historic Preservation Office
December 16, 2020





BARRANQUITAS



 Survey area  Parcels

Survey area acreage: **35**

Total parcels within survey area: **264**

PR State Historic Preservation Office
December 16, 2020



BAYAMÓN



 Survey area  Parcels

0 100 200 m

Survey area acreage: 173

Total parcels within survey area: 1183

PR State Historic Preservation Office
December 16, 2020





CABO ROJO



 Survey area  Parcels

Survey area acreage: 104

Total parcels within survey area: **969**

PR State Historic Preservation Office
December 16, 2020



CAGUAS



Survey area Parcels

0 100 200 m

Survey area acreage: **316**

Total parcels within survey area: **2067**

PR State Historic Preservation Office
December 16, 2020





CAMUY



Survey area Parcels

0 100 200 m

Survey area acreage: **28**

Total parcels within survey area: **453**

PR State Historic Preservation Office
December 16, 2020





CANÓVANAS



Survey area Parcels

0 100 200 m

Survey area acreage: **34**

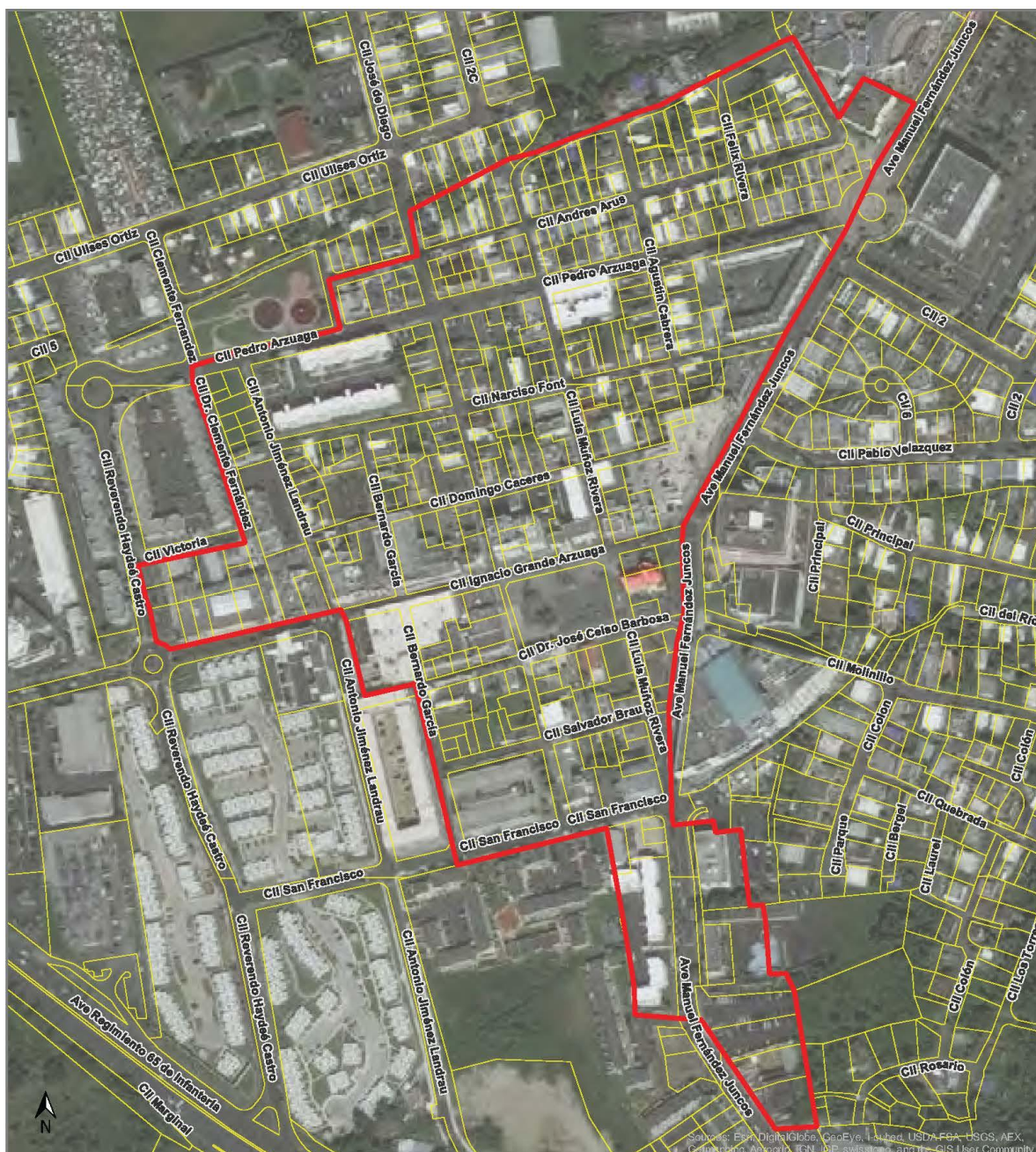
Total parcels within survey area: **230**

PR State Historic Preservation Office
December 16, 2020





CAROLINA



 Survey area  Parcels

Survey area acreage: 42

Total parcels within survey area: **347**

PR State Historic Preservation Office
December 16, 2020





CATAÑO



 Survey area  Parcels

Survey area acreage: 137

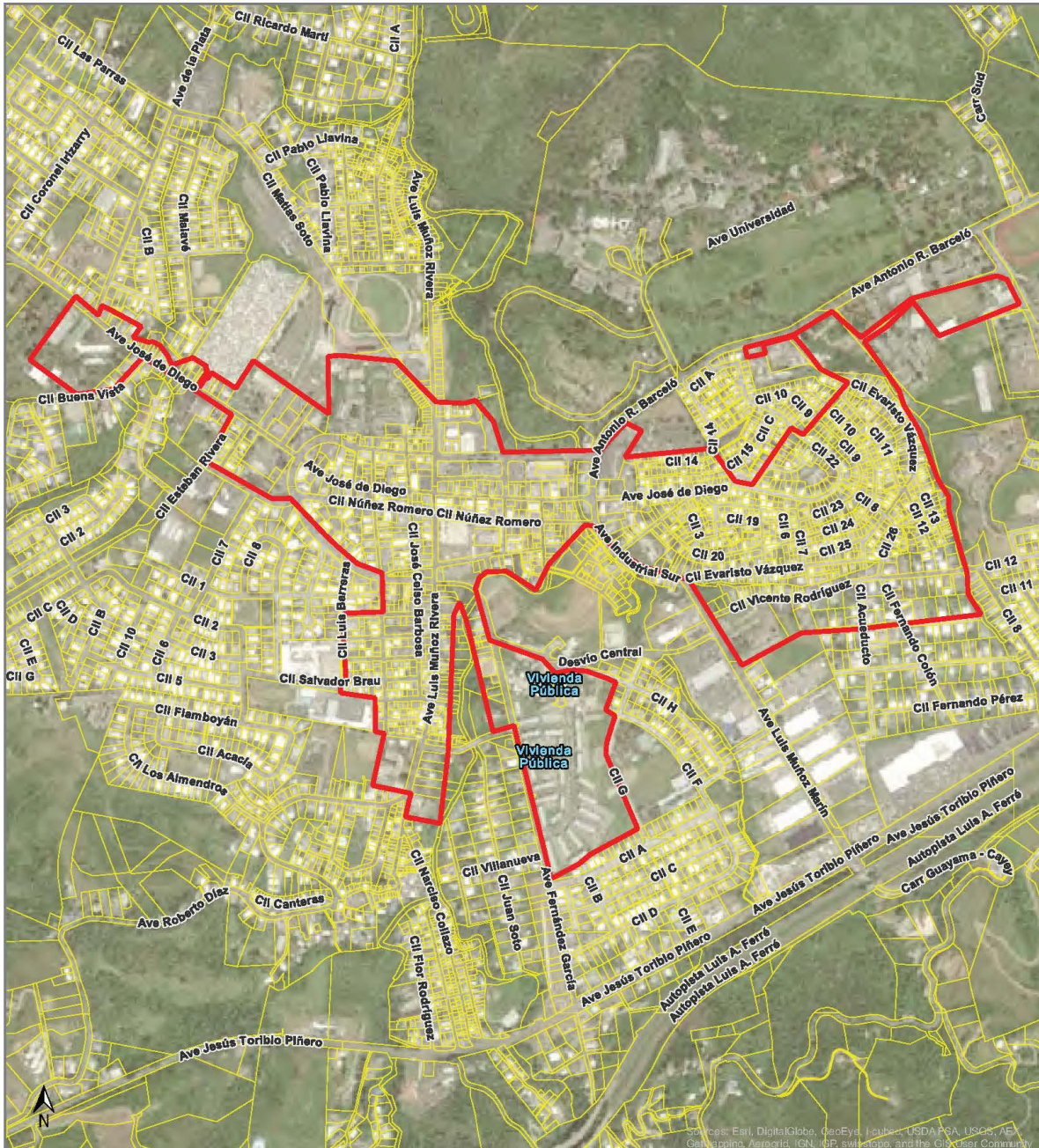
Total parcels within survey area: **1274**

PR State Historic Preservation Office
December 16, 2020





CAYEY



Survey area Parcels

0 100 200 m

Survey area acreage: **169**

Total parcels within survey area: **1454**

PR State Historic Preservation Office
December 16, 2020





CEIBA



Survey area Parcels

0 100 200 m

Survey area acreage: 25

Total parcels within survey area: 194

PR State Historic Preservation Office
December 16, 2020





CIALES



Survey area Parcels

0 100 200 m

Survey area acreage: **28**

Total parcels within survey area: **243**

PR State Historic Preservation Office
December 16, 2020





CIDRA



Survey area Parcels

Survey area acreage: **34**

Total parcels within survey area: **393**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





COAMO



Survey area Parcels

0 100 200 m

Survey area acreage: **160**

Total parcels within survey area: **1650**

PR State Historic Preservation Office
December 16, 2020





COMERÍO



 Survey area  Parcels

Survey area acreage: 40

Total parcels within survey area: **384**

PR State Historic Preservation Office
December 16, 2020





COROZAL



Survey area Parcels

Survey area acreage: **49**

Total parcels within survey area: **411**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





DORADO



Survey area Parcels

0 100 200 m

Survey area acreage: **42**

Total parcels within survey area: **412**

PR State Historic Preservation Office
December 16, 2020





FAJARDO



Survey area Parcels

Survey area acreage: **93**

Total parcels within survey area: **855**

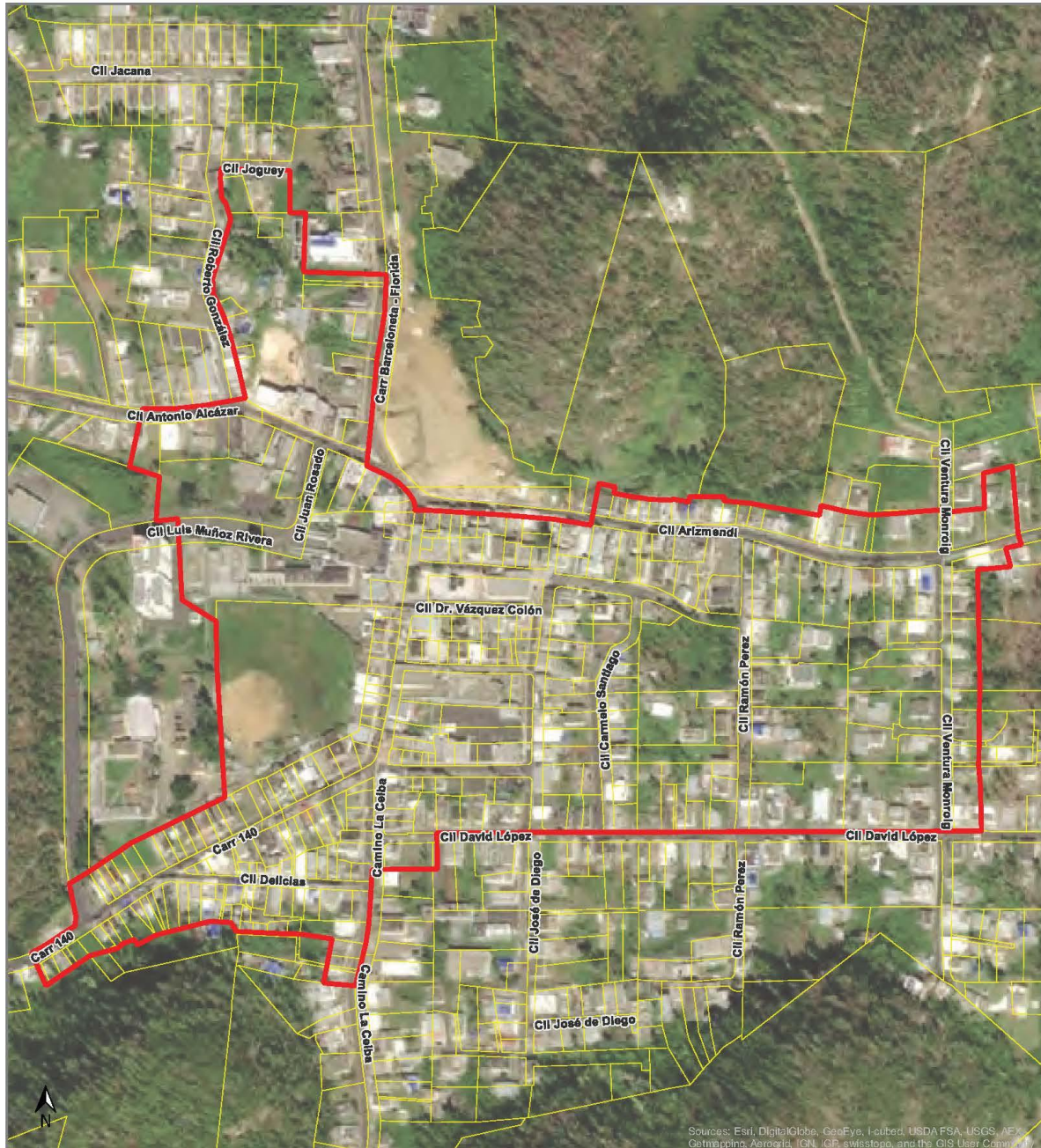
0 100 200 m

PR State Historic Preservation Office
December 16, 2020





FLORIDA



Survey area Parcels

0 100 200 m

Survey area acreage: **46**

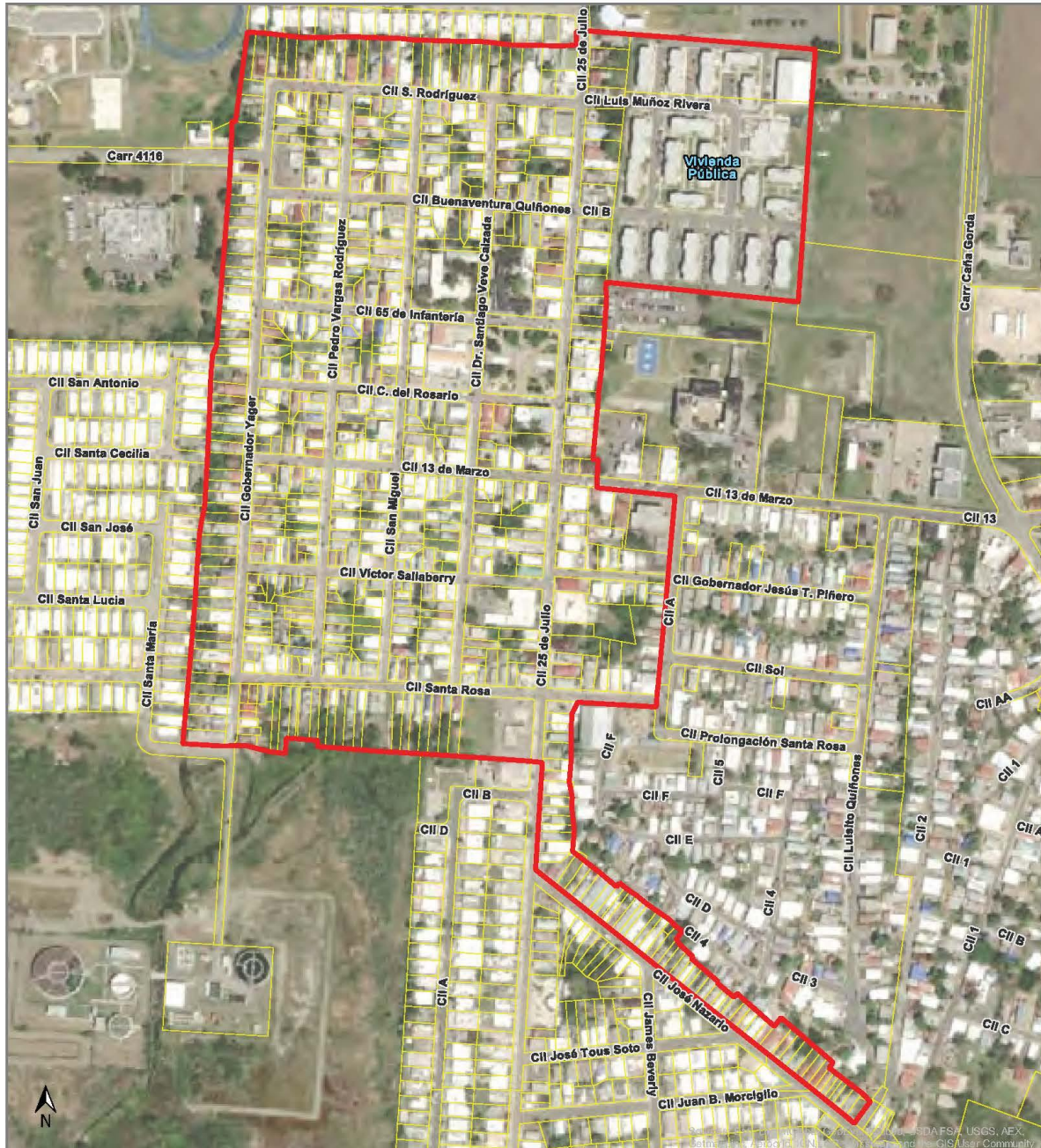
Total parcels within survey area: **298**

PR State Historic Preservation Office
December 16, 2020





GUÁNICA



Survey area Parcels

Survey area acreage: **64**

Total parcels within survey area: **680**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





GUAYAMA



 Survey area  Parcels

Survey area acreage: **261**

Total parcels within survey area: **2339**

PR State Historic Preservation Office
December 16, 2020



GUAYANILLA



Survey area Parcels

0 100 200 m

Survey area acreage: **47**

Total parcels within survey area: **219**

PR State Historic Preservation Office
December 16, 2020





GUAYNABO



Survey area Parcels

0 100 200 m

Survey area acreage: **18**

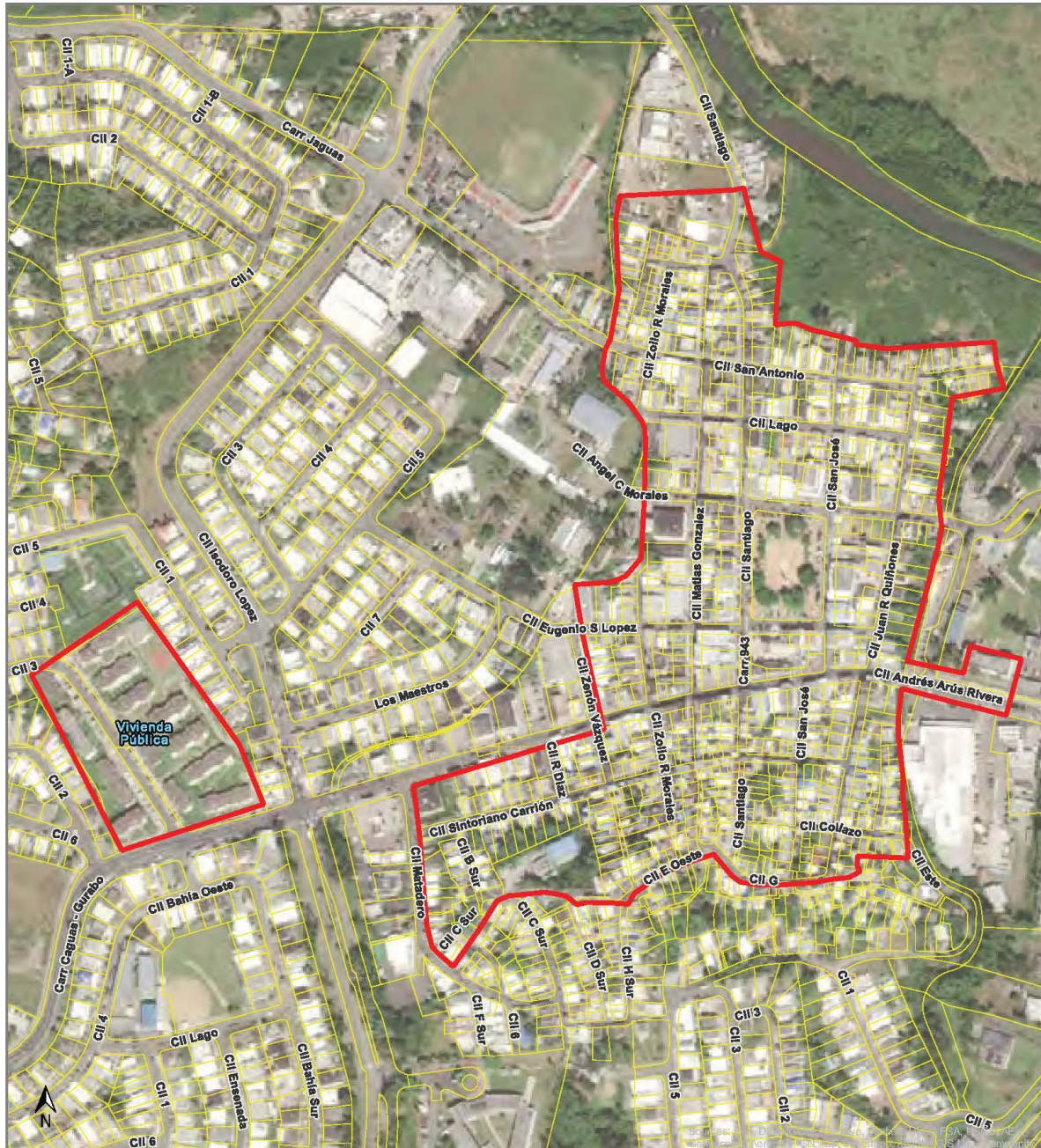
Total parcels within survey area: **138**

PR State Historic Preservation Office
December 16, 2020





GURABO



Survey area Parcels

0 100 200 m

Survey area acreage: **42**

Total parcels within survey area: **626**

PR State Historic Preservation Office
December 16, 2020





HATILLO



Survey area Parcels

0 100 200 m

Survey area acreage: **38**

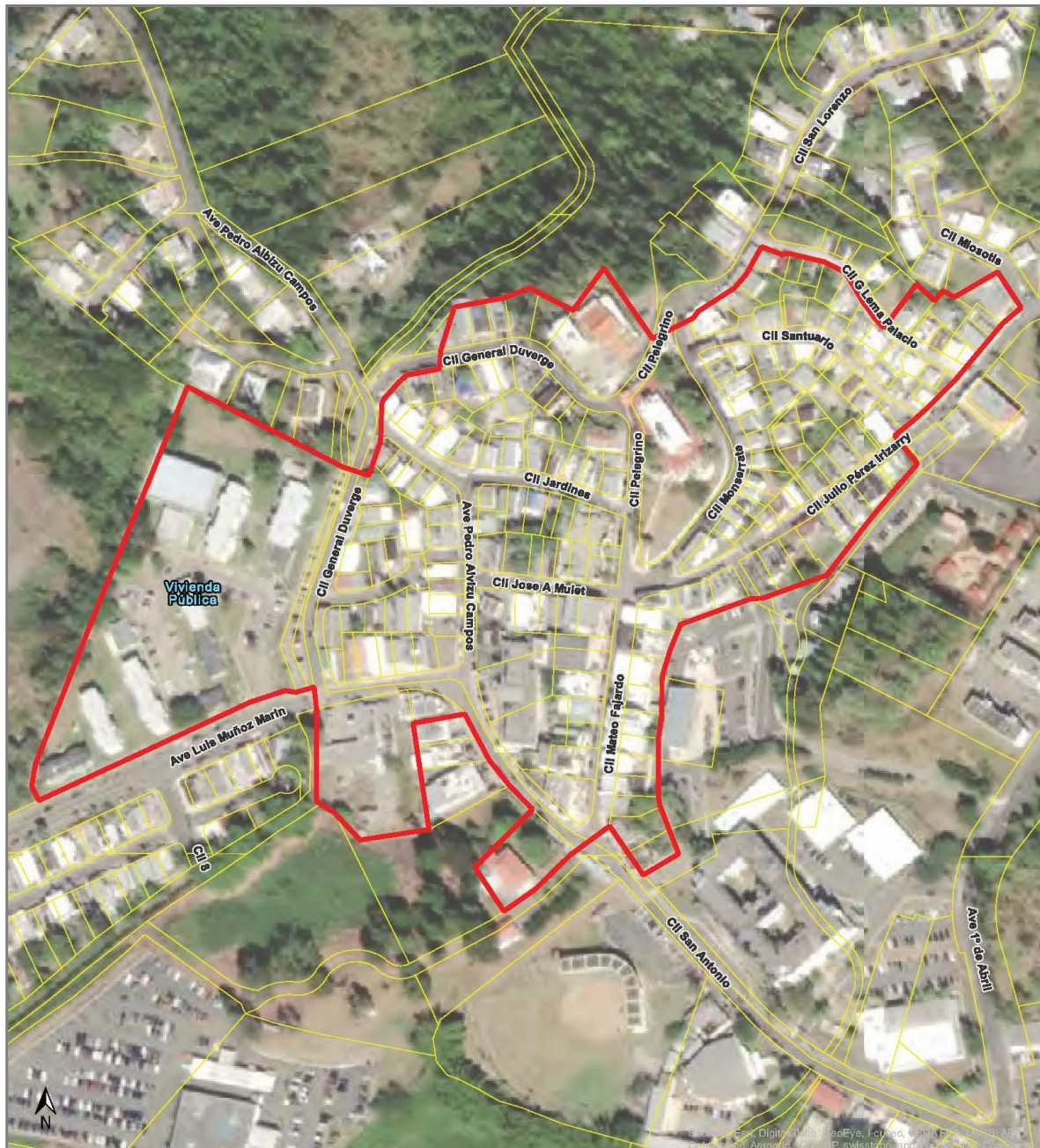
Total parcels within survey area: **307**

PR State Historic Preservation Office
December 16, 2020





HORMIGUEROS



Survey area Parcels

0 100 200 m

Survey area acreage: 22

Total parcels within survey area: 190

PR State Historic Preservation Office
December 16, 2020





HUMACAO



Survey area Parcels

0 100 200 m

Survey area acreage: 125

Total parcels within survey area: 972

PR State Historic Preservation Office
December 16, 2020





ISABELA



Survey area Parcels

0 100 200 m

Survey area acreage: **44**

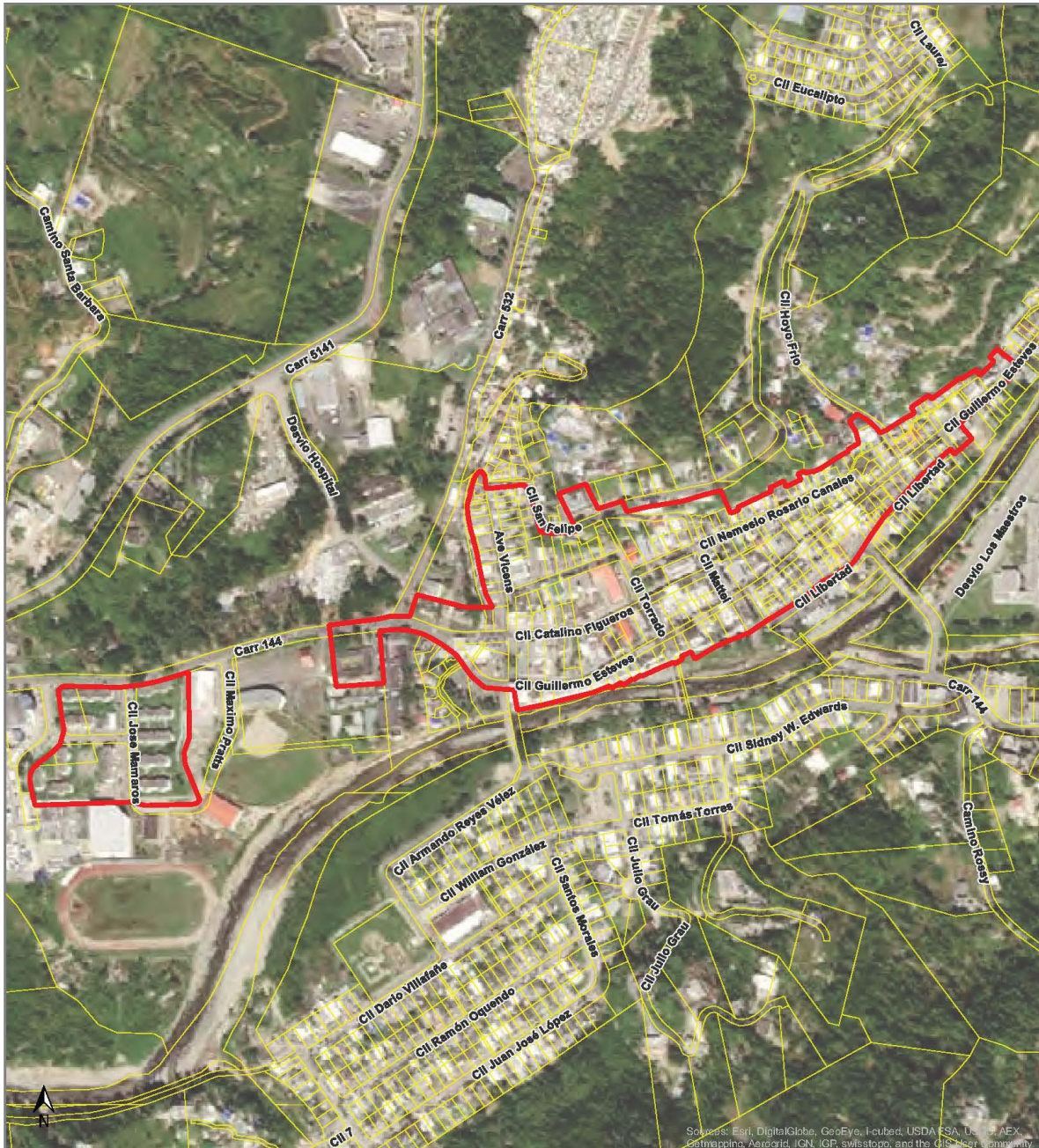
Total parcels within survey area: **545**

PR State Historic Preservation Office
December 16, 2020





JAYUYA



Survey area Parcels

Survey area acreage: 29

Total parcels within survey area: 230

PR State Historic Preservation Office
December 16, 2020





JUANA DÍAZ



 Survey area  Parcels

Survey area acreage: 73

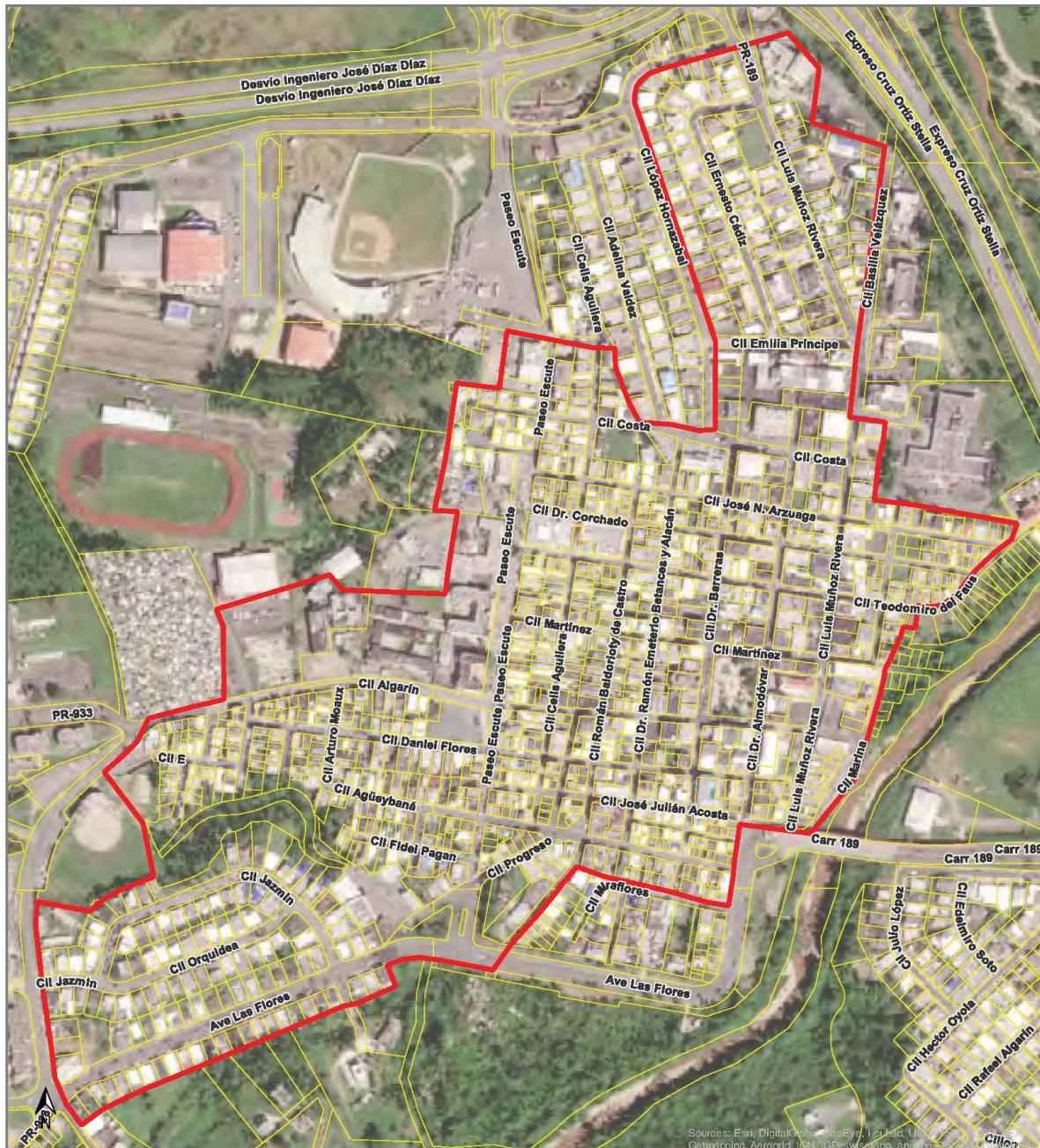
Total parcels within survey area: **508**

PR State Historic Preservation Office
December 16, 2020





JUNCOS



Survey area Parcels

0 100 200 m

Survey area acreage: 96

Total parcels within survey area: 1106

PR State Historic Preservation Office
December 16, 2020





LAJAS



 Survey area  Parcels

Survey area acreage: 31

Total parcels within survey area: **265**

PR State Historic Preservation Office
December 16, 2020



LARES



Survey area Parcels

0 100 200 m

Survey area acreage: **28**

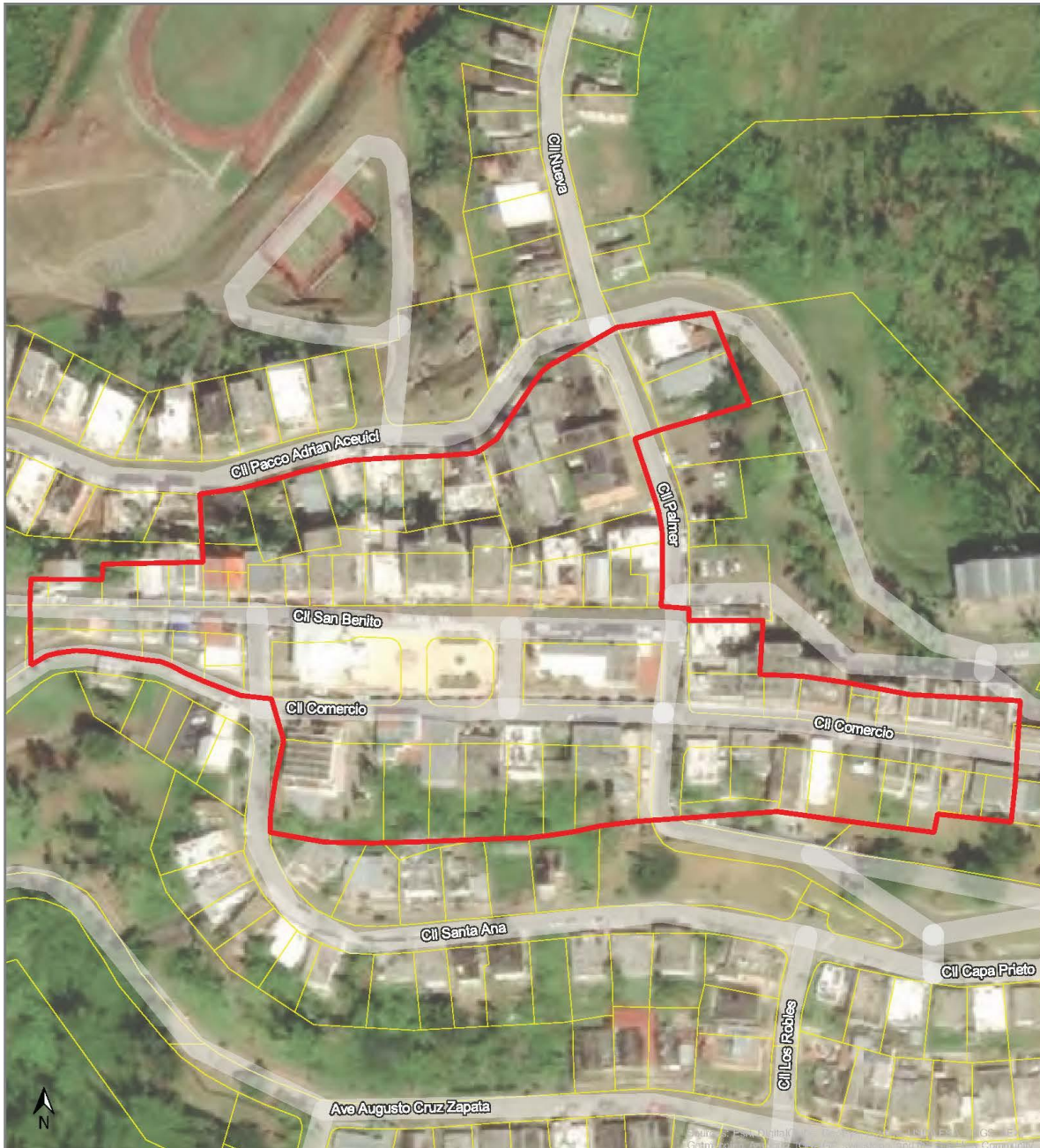
Total parcels within survey area: **237**

PR State Historic Preservation Office
December 16, 2020





LAS MARÍAS



Survey area Parcels

0 100 200 m

Survey area acreage: 7

Total parcels within survey area: 64

PR State Historic Preservation Office
December 16, 2020





LAS PIEDRAS



Survey area Parcels

Survey area acreage: **44**

Total parcels within survey area: **475**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





LOÍZA



Survey area Parcels

0 100 200 m

Survey area acreage: 20

Total parcels within survey area: 191

PR State Historic Preservation Office
December 16, 2020





LUQUILLO



 Survey area  Parcels

Survey area acreage: 42

Total parcels within survey area: **430**

PR State Historic Preservation Office
December 16, 2020



MANATÍ



 Survey area  Parcels

Survey area acreage: **83**

Total parcels within survey area: **1184**

PR State Historic Preservation Office
December 16, 2020





MARICAO



Survey area Parcels

0 100 200 m

Survey area acreage: 15

Total parcels within survey area: 177

PR State Historic Preservation Office
December 16, 2020





MAUNABO



Survey area Parcels

0 100 200 m

Survey area acreage: **24**

Total parcels within survey area: **266**

PR State Historic Preservation Office
December 16, 2020





MAYAGÜEZ



 Survey area  Parcels

Survey area acreage: **554**

Total parcels within survey area: **4123**

PR State Historic Preservation Office
December 16, 2020





MOCA



Survey area Parcels

0 100 200 m

Survey area acreage: 17

Total parcels within survey area: 166

PR State Historic Preservation Office
December 16, 2020





MOROVIS



Survey area Parcels

Survey area acreage: 29

Total parcels within survey area: 272

PR State Historic Preservation Office
December 16, 2020





NAGUABO



Survey area Parcels

0 100 200 m

Survey area acreage: **53**

Total parcels within survey area: **608**

PR State Historic Preservation Office
December 16, 2020





NARANJITO



Survey area Parcels

Survey area acreage: **24**

Total parcels within survey area: **158**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





OROCOVIS



Survey area Parcels

0 100 200 m

Survey area acreage: **22**

Total parcels within survey area: **206**

PR State Historic Preservation Office
December 16, 2020





PATILLAS



 Survey area  Parcels

Survey area acreage: **37**

Total parcels within survey area: **439**

PR State Historic Preservation Office
December 16, 2020



PEÑUELAS



Survey area Parcels

Survey area acreage: **39**

Total parcels within survey area: **325**

PR State Historic Preservation Office
December 16, 2020





QUEBRADILLAS



Survey area Parcels

0 100 200 m

Survey area acreage: **41**

Total parcels within survey area: **318**

PR State Historic Preservation Office
December 16, 2020





RINCÓN



Survey area acreage: 8

Total parcels within survey area: 86

PR State Historic Preservation Office
December 16, 2020





RÍO GRANDE



 Survey area  Parcels

Survey area acreage: **46**

Total parcels within survey area: **432**

PR State Historic Preservation Office
December 16, 2020





SABANA GRANDE



Survey area Parcels

Survey area acreage: **77**

Total parcels within survey area: **853**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





SALINAS



 Survey area  Parcels

Survey area acreage: 76

Total parcels within survey area: **559**

A horizontal scale bar with tick marks at 0, 100, and 200 m.

PR State Historic Preservation Office
December 16, 2020



SAN GERMÁN



Survey area Parcels

Survey area acreage: **125**

Total parcels within survey area: **814**

PR State Historic Preservation Office
December 16, 2020





SAN LORENZO



Survey area Parcels

Survey area acreage: **49**

Total parcels within survey area: **670**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





SAN SEBASTIÁN



 Survey area  Parcels

Survey area acreage: 47

Total parcels within survey area: **376**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020



SANTA ISABEL



 Survey area  Parcels

Survey area acreage: **95**

Total parcels within survey area: **607**

PR State Historic Preservation Office
December 16, 2020





TOA ALTA



Survey area Parcels

0 100 200 m

Survey area acreage: 26

Total parcels within survey area: 224

PR State Historic Preservation Office
December 16, 2020





TOA BAJA



Survey area Parcels

0 100 200 m

Survey area acreage: **28**

Total parcels within survey area: **212**

PR State Historic Preservation Office
December 16, 2020





UTUADO



Survey area Parcels

Survey area acreage: 61

Total parcels within survey area: 548

PR State Historic Preservation Office
December 16, 2020





VEGA ALTA



Survey area Parcels

Survey area acreage: **56**

Total parcels within survey area: **513**

0 100 200 m

PR State Historic Preservation Office
December 16, 2020





VEGA BAJA



Survey area Parcels

0 100 200 m

Survey area acreage: 75

Total parcels within survey area: 484

PR State Historic Preservation Office
December 16, 2020





VILLALBA



Survey area Parcels

0 100 200 m

Survey area acreage: **28**

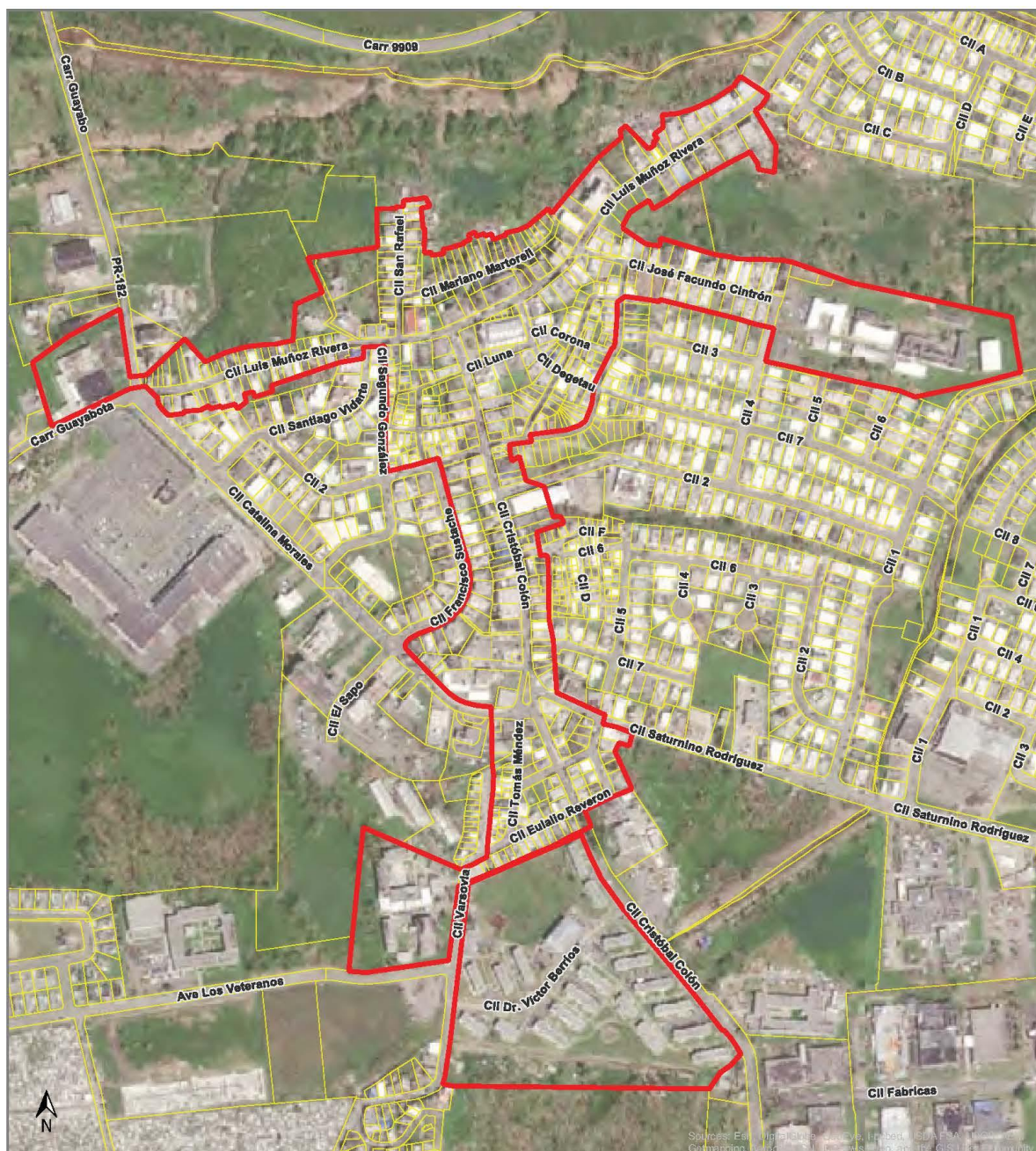
Total parcels within survey area: **120**

PR State Historic Preservation Office
December 16, 2020





YABUCOA



 Survey area  Parcels

Survey area acreage: 60

Total parcels within survey area: **518**

PR State Historic Preservation Office
December 16, 2020



YAUCO



Survey area Parcels

0 100 200 m

Survey area acreage: 132

Total parcels within survey area: 1141

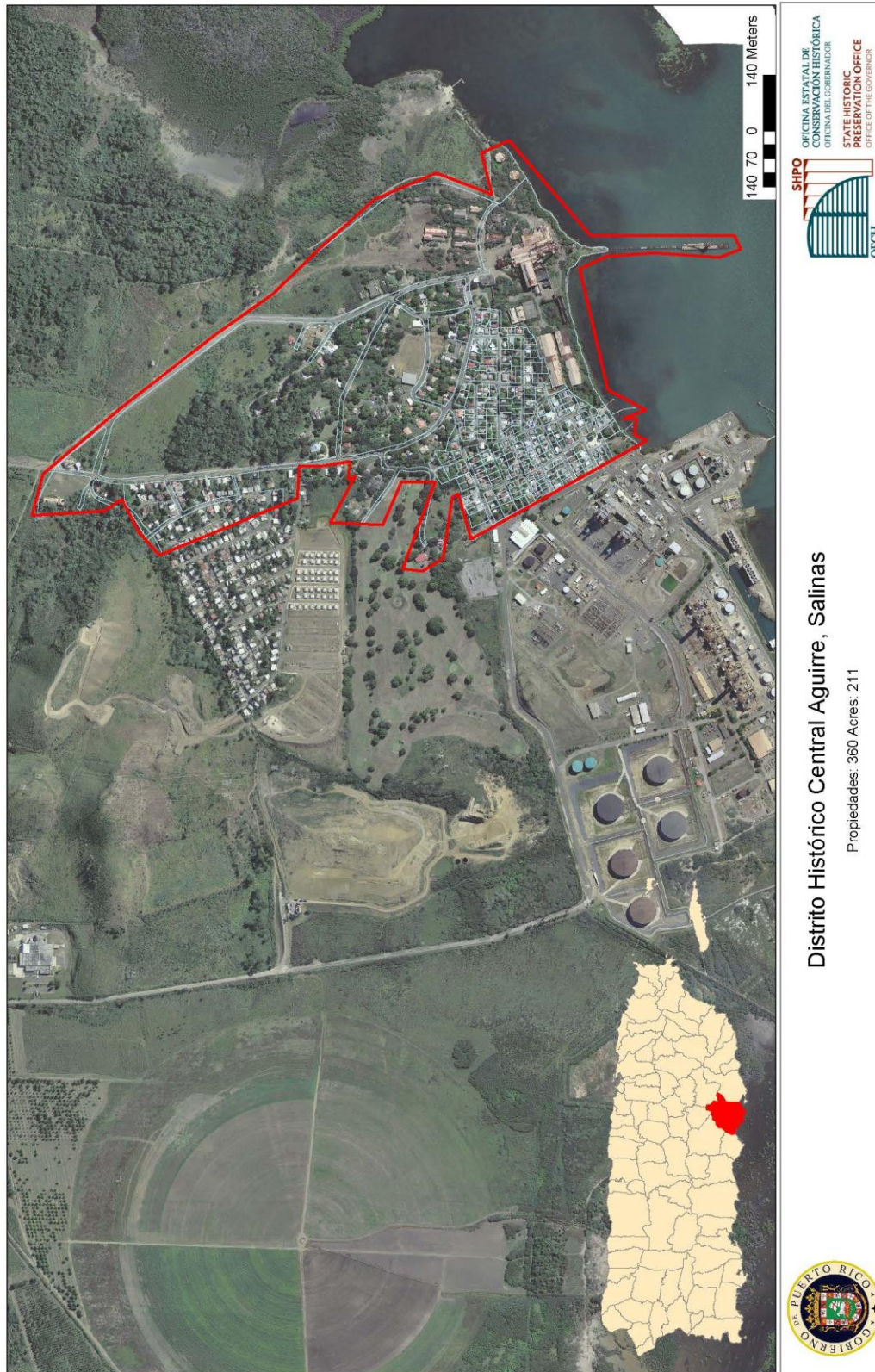
PR State Historic Preservation Office
December 16, 2020





A1-4: Communities and Urban Remnants







Comunidad de Castañer, Lares

Propiedades: 97 Acres: 178





Culebra
Propiedades: 104 Acres: 10

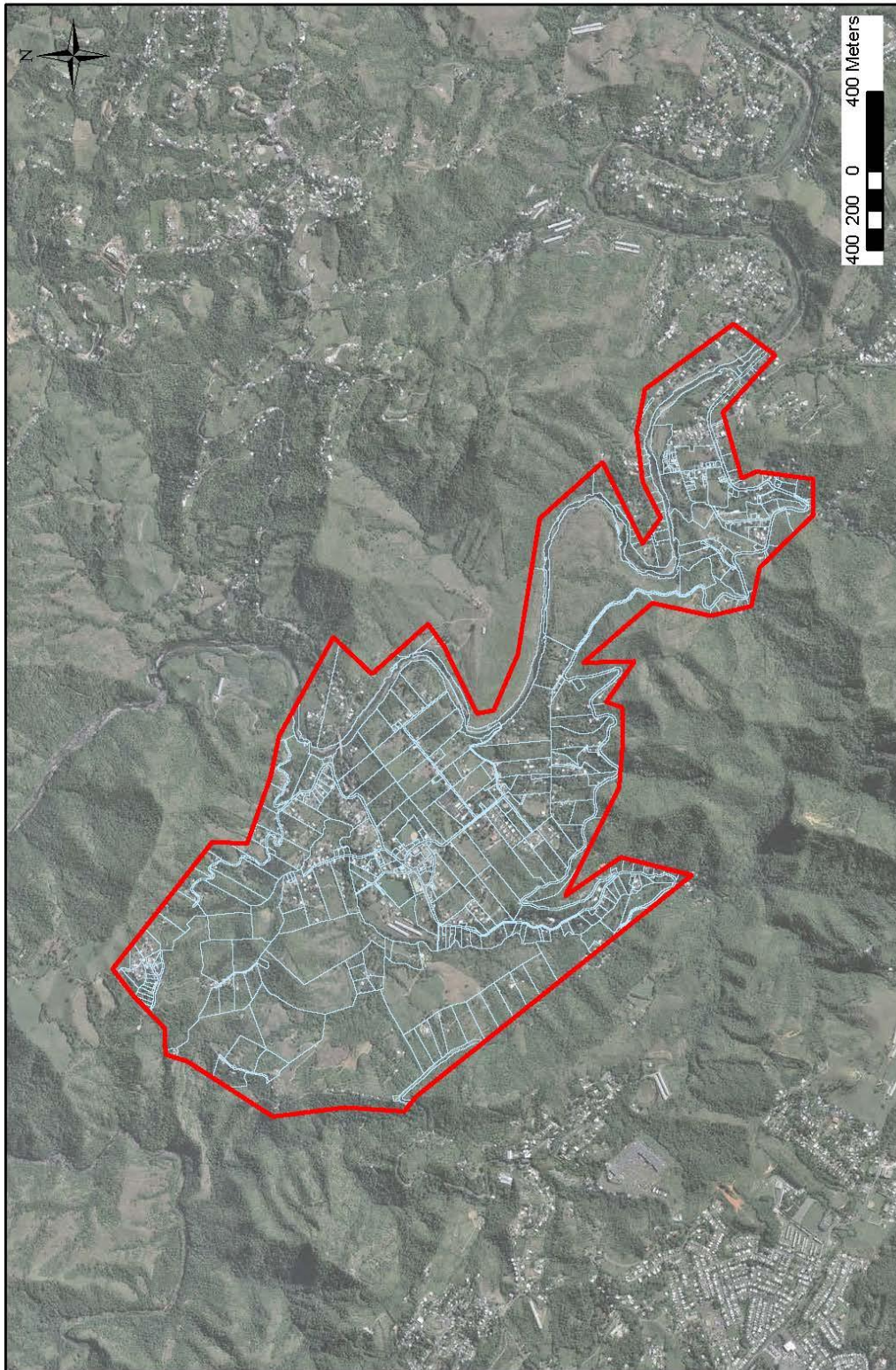




Comunidad de Ensenada, Guánica

Propiedades: 576 Acres: 105







SHPO
OFICINA ESTATAL DE
CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR



OECH
STATE HISTORIC
PRESERVATION OFFICE
OFFICE OF THE GOVERNOR

La Plata, Aibonito

Propiedades: 392 Acres: 1,348



GOBIERNO DE PUERTO RICO
GOVERNMENT OF PUERTO RICO



Comunidad de Palo Seco, Toa Baja

Propiedades: 198 Acres: 32

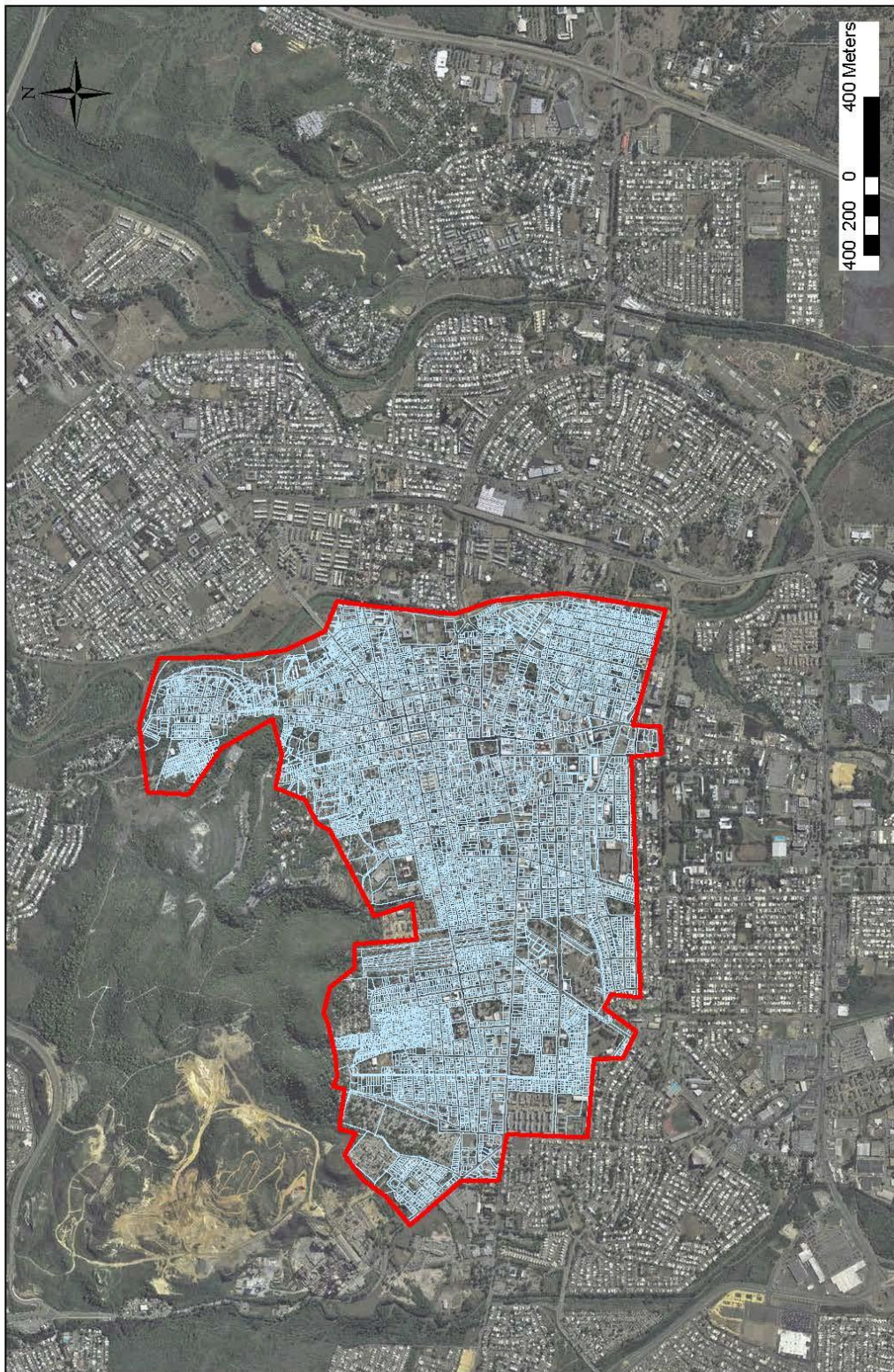




Comunidad La Parguera, Lajas

Propiedades: 626 Acres: 64





Ponce
Propiedades: 10,285 Acres: 1,185

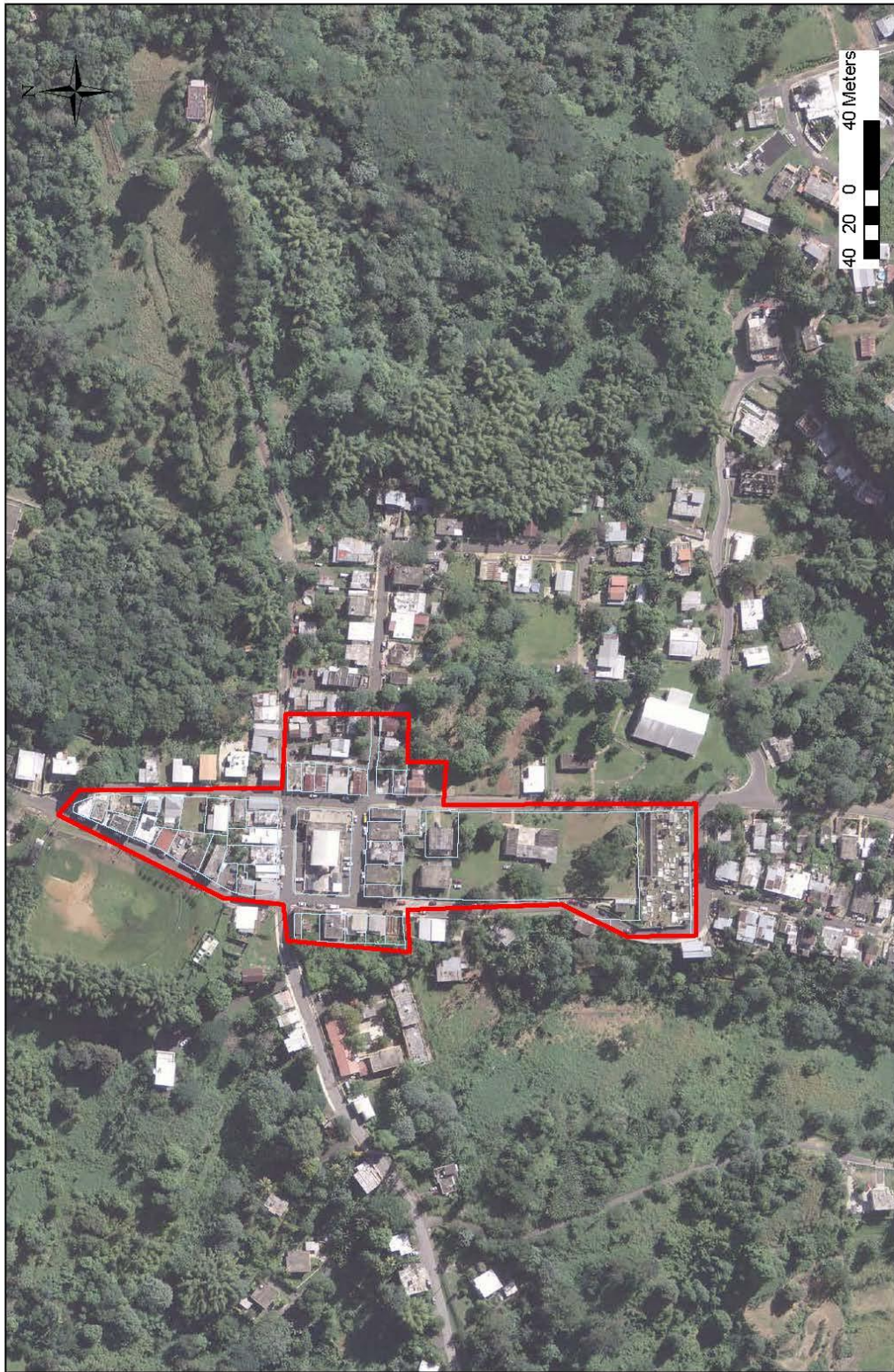




Río Piedras, San Juan

Propiedades: 3,193 Acres: 376





Comunidad Rosario, San Germán

Propiedades: 60 Acres: 7





Vieques
Propiedades: 377 Acres: 35





A1-5: Communication with PR SHPO





From: environmentcdbg
To: carubio@prshpo.pr.gov
Cc: [Aldo A. Rivera-Vazquez](#)
Bcc: [Alberto Mercado](#)
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Thursday, March 27, 2025 10:15:50 AM
Attachments: [AES \(FER\)_SHPO_Consultation Letter_PRDOH.pdf](#)
[image003.png](#)

Greetings Mr. Rubio-Concelo,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienoo.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infoedbg@vivienoo.pr.gov



DEPARTAMENTO DE LA

VIVIENDA

GOBIERNO DE PUERTO RICO

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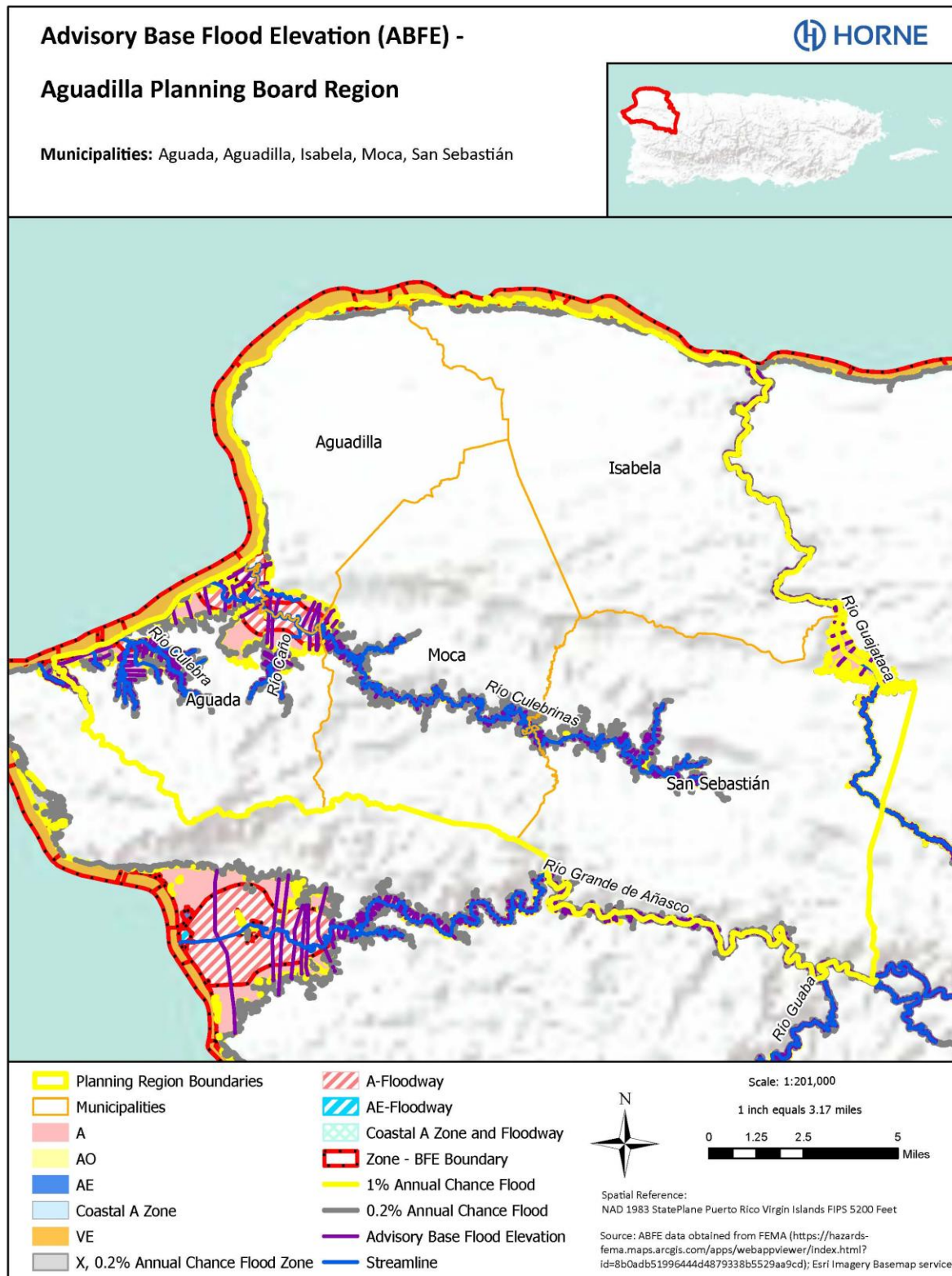
A2: Floodplain





A2-1: Advisory Base Flood Elevation Maps

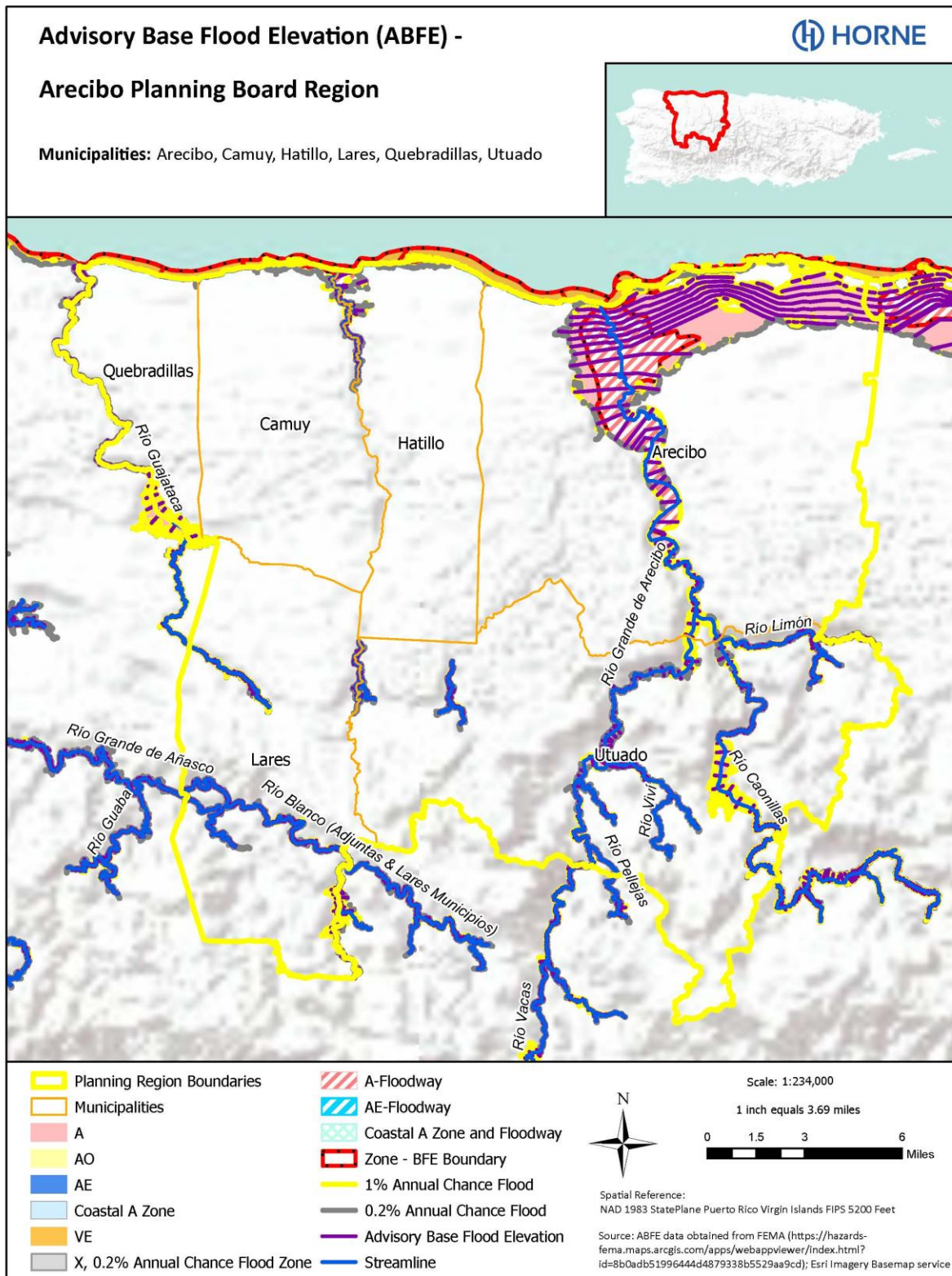




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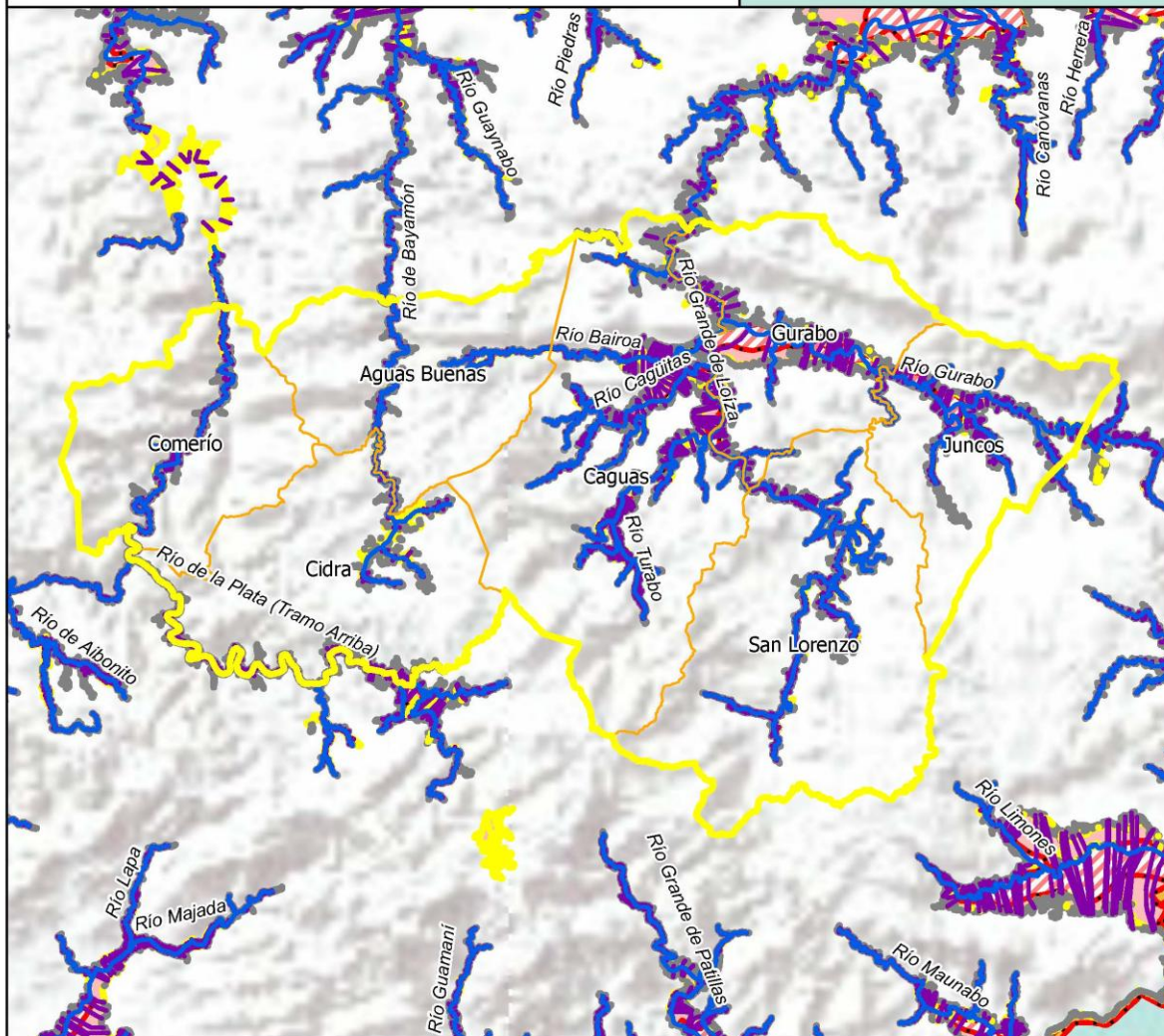
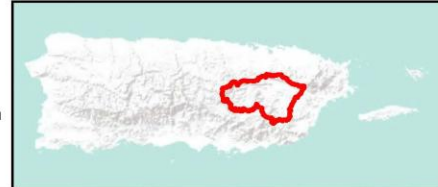


Advisory Base Flood Elevation (ABFE) -



Caguas Planning Board Region

Municipalities: Aguas Buenas, Caguas, Cidra, Comerío, Gurabo, Juncos, San Lorenzo



Planning Region Boundaries

Municipalities

A

AO

AE

Coastal A Zone

VE

X, 0.2% Annual Chance Flood Zone

A-Floodway

AE-Floodway

Coastal A Zone and Floodway

Zone - BFE Boundary

1% Annual Chance Flood

0.2% Annual Chance Flood

Advisory Base Flood Elevation

Streamline

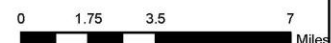


Spatial Reference:
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Scale: 1:242,000

1 inch equals 3.82 miles



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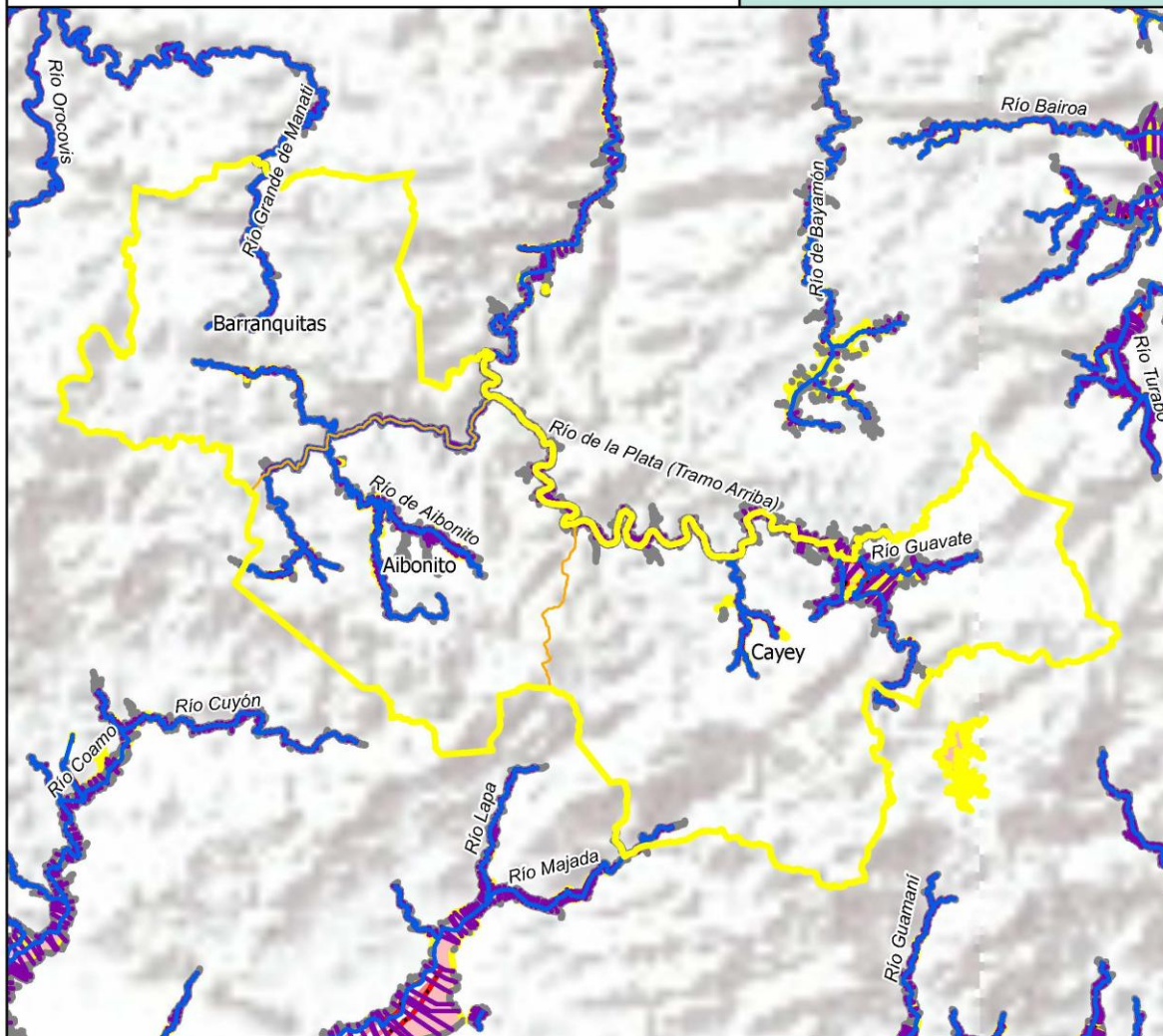


Advisory Base Flood Elevation (ABFE) -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey



Planning Region Boundaries

Municipalities

A

AO

AE

Coastal A Zone

VE

X, 0.2% Annual Chance Flood Zone

A-Floodway

AE-Floodway

Coastal A Zone and Floodway

Zone - BFE Boundary

1% Annual Chance Flood

0.2% Annual Chance Flood

Advisory Base Flood Elevation

Streamline

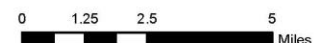


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Scale: 1:186,000

1 inch equals 2.94 miles



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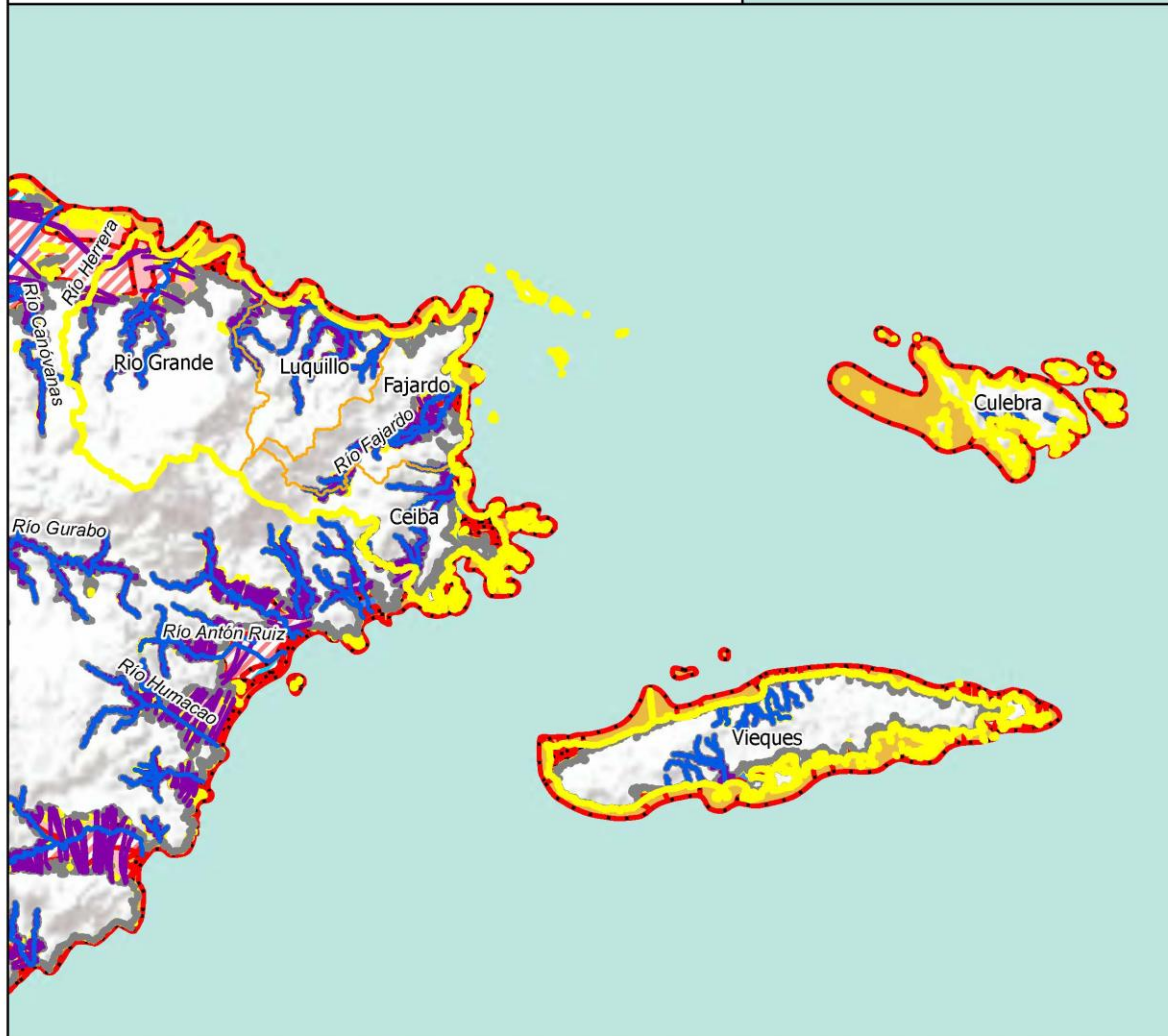


Advisory Base Flood Elevation (ABFE) -



Fajardo Planning Board Region

Municipalities: Ceiba, Culebra, Fajardo, Luquillo, Rio Grande, Vieques



Planning Region Boundaries

Municipalities

A

AO

AE

Coastal A Zone

VE

X, 0.2% Annual Chance Flood Zone

A-Floodway

AE-Floodway

Coastal A Zone and Floodway

Zone - BFE Boundary

1% Annual Chance Flood

0.2% Annual Chance Flood

Advisory Base Flood Elevation

Streamline

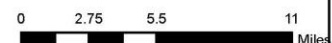


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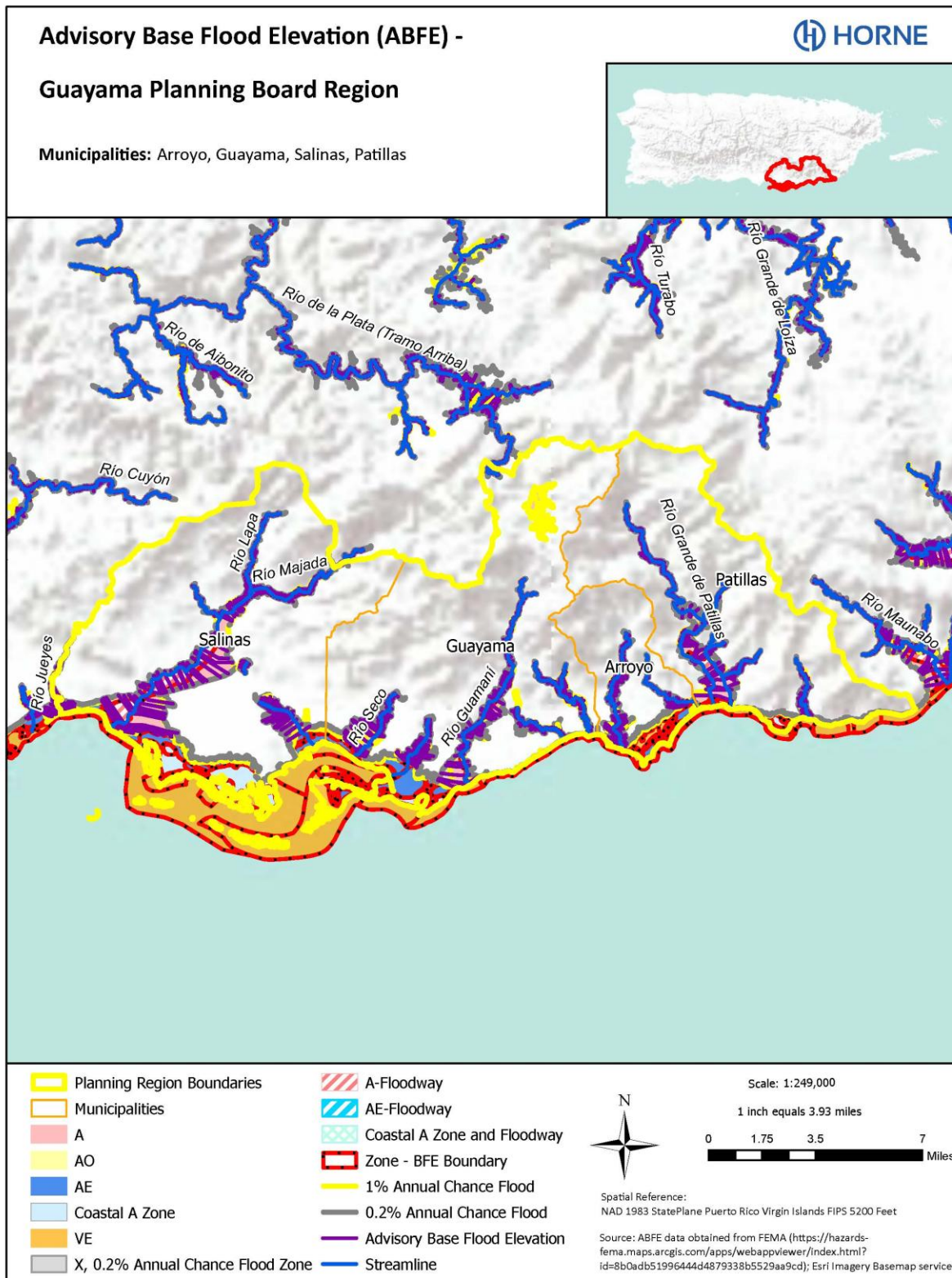
1 inch equals 5.97 miles



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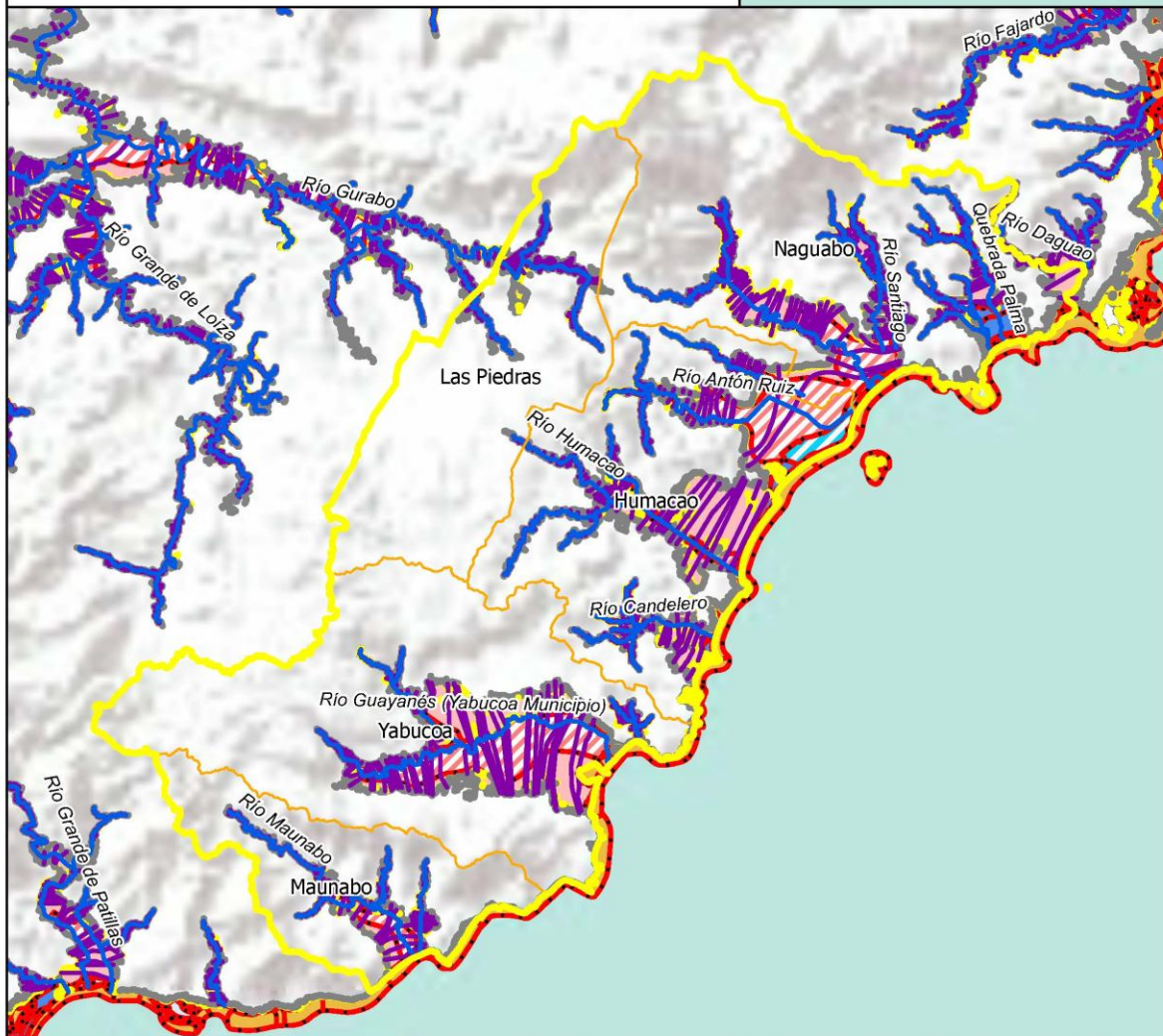
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Advisory Base Flood Elevation (ABFE) -



Humacao Planning Board Region

Municipalities: Humacao, Las Piedras, Maunabo, Naguabo, Yabucoa



Planning Region Boundaries

Municipalities

A

AO

AE

Coastal A Zone

VE

X, 0.2% Annual Chance Flood Zone

A-Floodway

AE-Floodway

Coastal A Zone and Floodway

Zone - BFE Boundary

1% Annual Chance Flood

0.2% Annual Chance Flood

Advisory Base Flood Elevation

Streamline



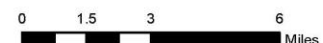
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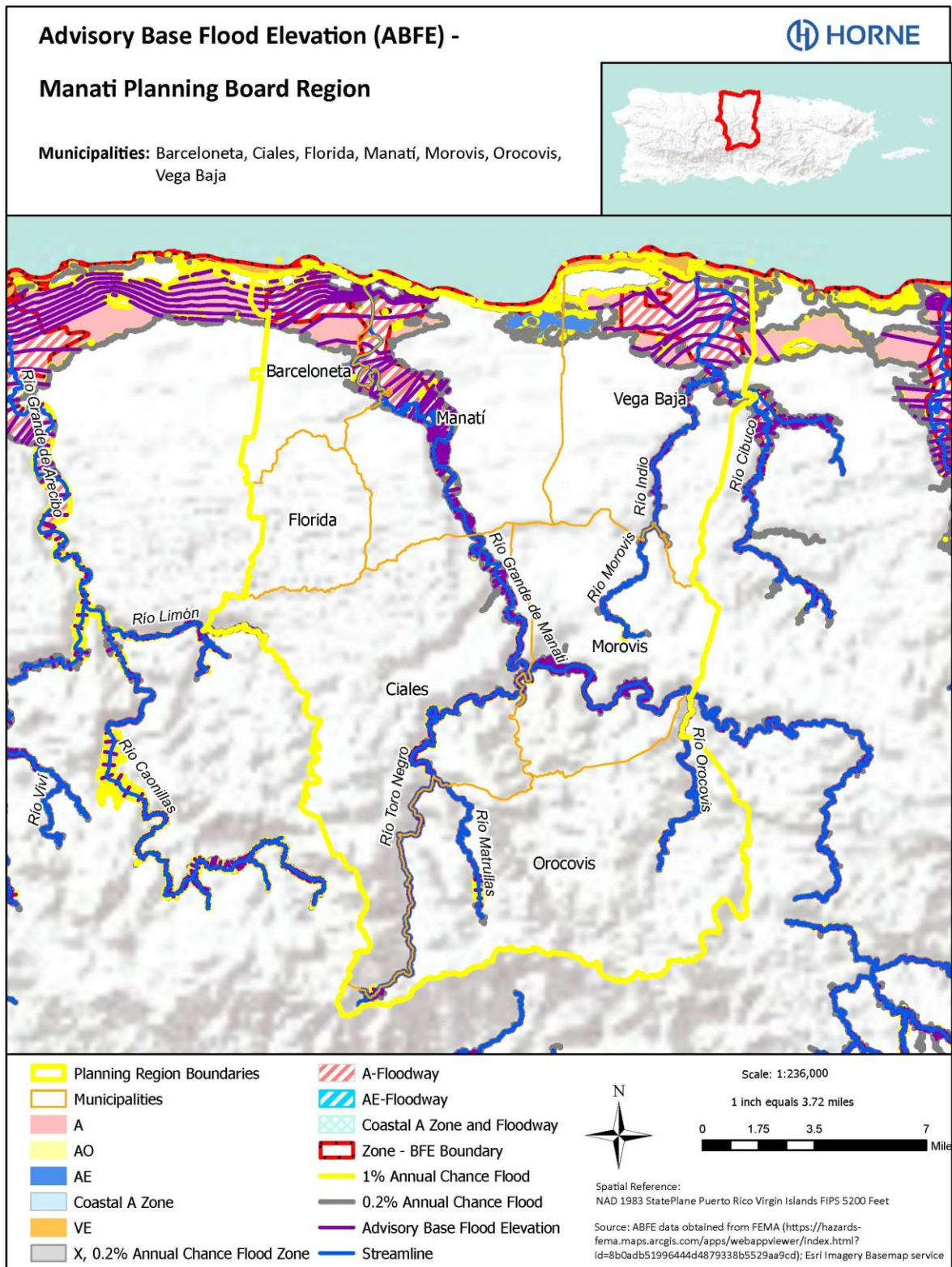
1 inch equals 3.42 miles



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Advisory Base Flood Elevation (ABFE) -



Mayaguez Planning Board Region

Municipalities: Añasco, Cabo Rojo, Hormigueros, Lajas, Las Marías, Maricao, Mayagüez, Rincón, Sabana Grande, San Germán



- | | |
|----------------------------------|-------------------------------|
| Planning Region Boundaries | A-Floodway |
| Municipalities | AE-Floodway |
| A | Coastal A Zone and Floodway |
| AO | Zone - BFE Boundary |
| AE | 1% Annual Chance Flood |
| Coastal A Zone | 0.2% Annual Chance Flood |
| VE | Advisory Base Flood Elevation |
| X, 0.2% Annual Chance Flood Zone | Streamline |

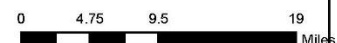


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Scale: 1:643,000

1 inch equals 10.15 miles



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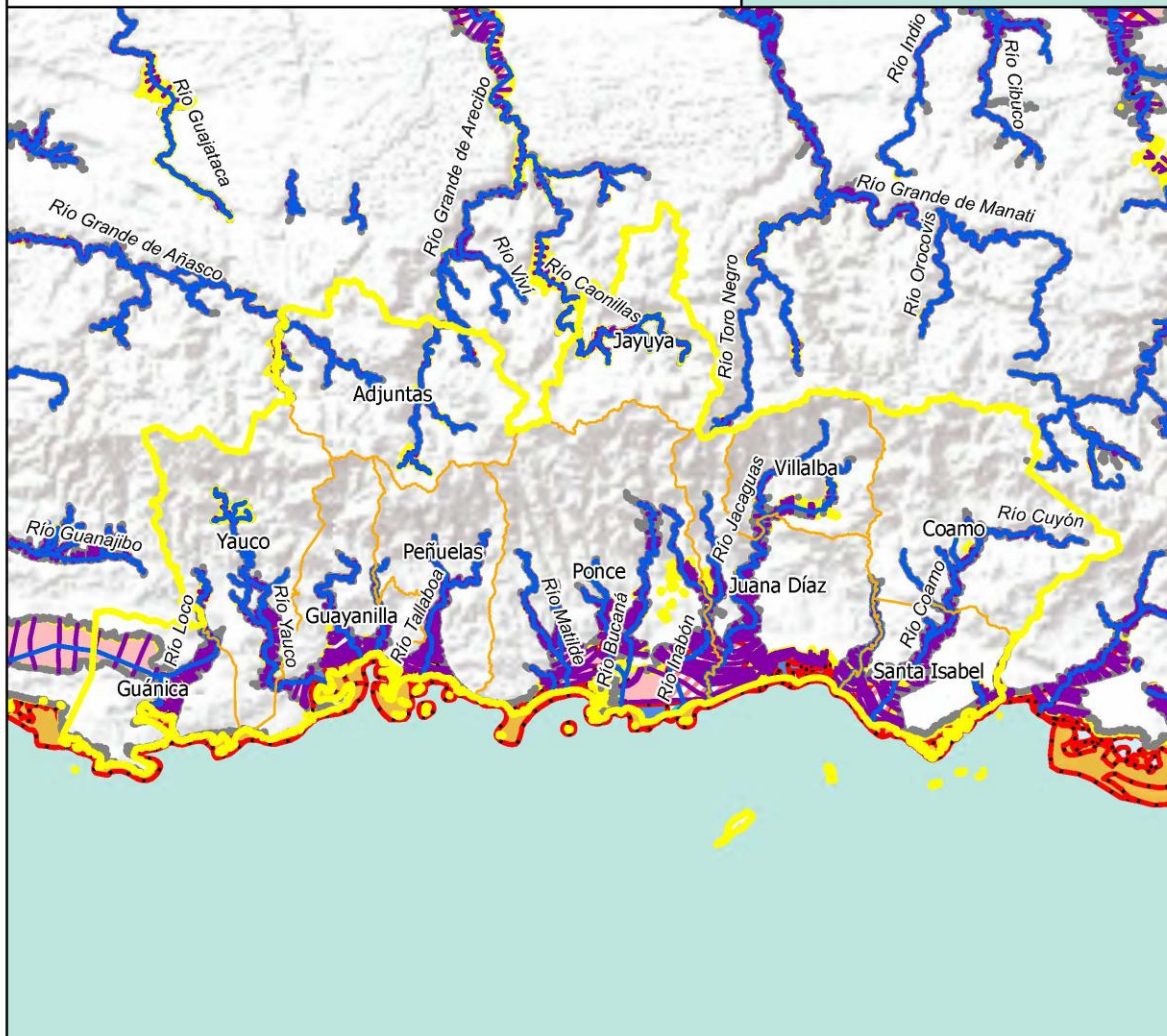


Advisory Base Flood Elevation (ABFE) -



Ponce Planning Board Region

Municipalities: Adjuntas, Coamo, Guánica, Guayanilla, Jayuya, Juana Díaz, Peñuelas, Ponce, Santa Isabel, Villalba, Yauco



- | | |
|----------------------------------|-------------------------------|
| Planning Region Boundaries | A-Floodway |
| Municipalities | AE-Floodway |
| A | Coastal A Zone and Floodway |
| AO | Zone - BFE Boundary |
| AE | 1% Annual Chance Flood |
| Coastal A Zone | 0.2% Annual Chance Flood |
| VE | Advisory Base Flood Elevation |
| X, 0.2% Annual Chance Flood Zone | Streamline |

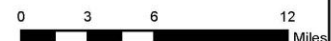


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Scale: 1:419,000

1 inch equals 6.61 miles



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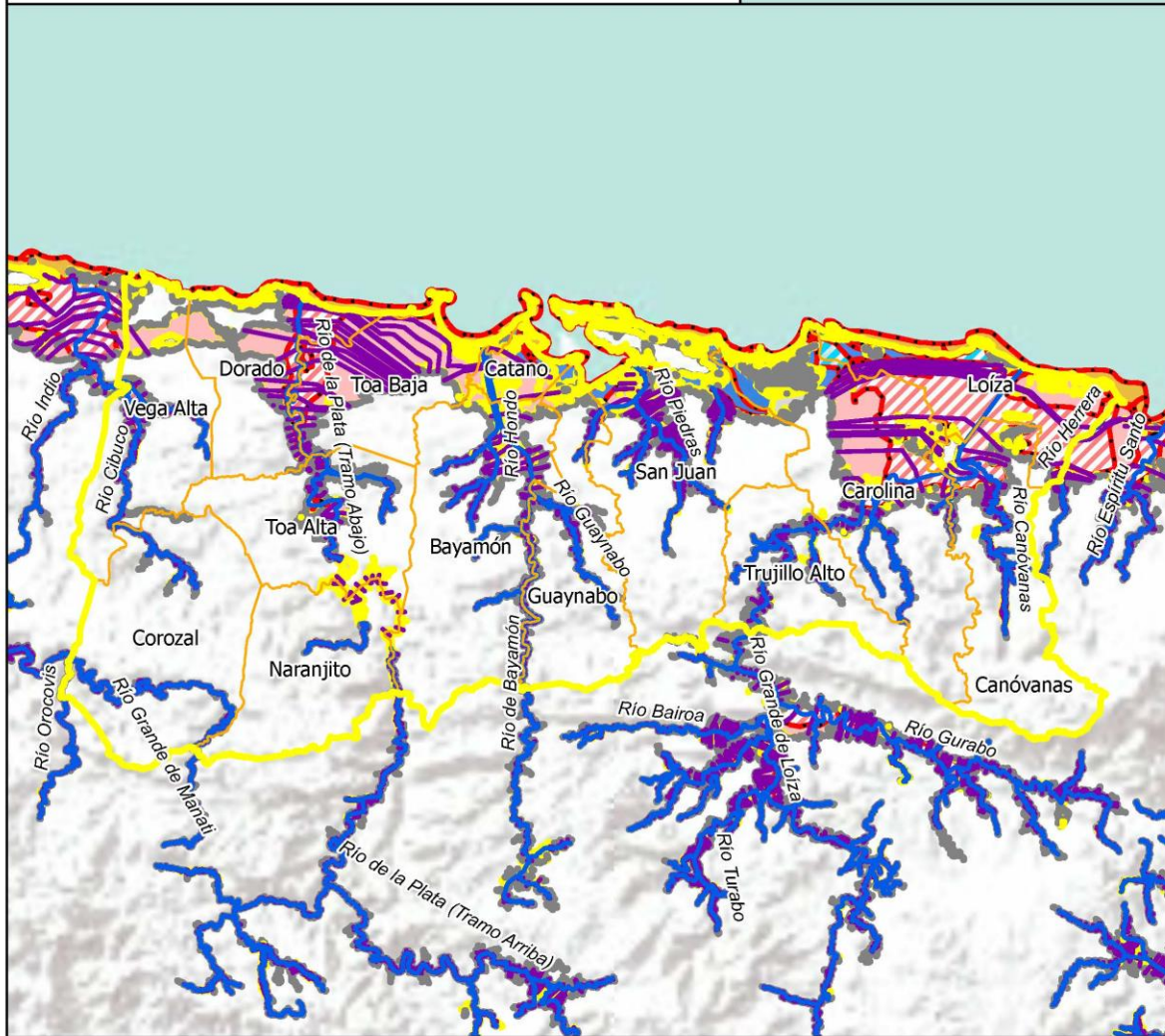


Advisory Base Flood Elevation (ABFE) -



San Juan Planning Board Region

Municipalities: Bayamón, Canóvanas, Carolina, Corozal, Dorado, Guaynabo, Loíza, Naranjito, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta



Planning Region Boundaries

Municipalities

A

AO

AE

Coastal A Zone

VE

X, 0.2% Annual Chance Flood Zone

A-Floodway

AE-Floodway

Coastal A Zone and Floodway

Zone - BFE Boundary

1% Annual Chance Flood

0.2% Annual Chance Flood

Advisory Base Flood Elevation

Streamline



Spatial Reference:

NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Source: ABFE data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>); Esri Imagery Basemap service

Scale: 1:319,000

1 inch equals 5.03 miles



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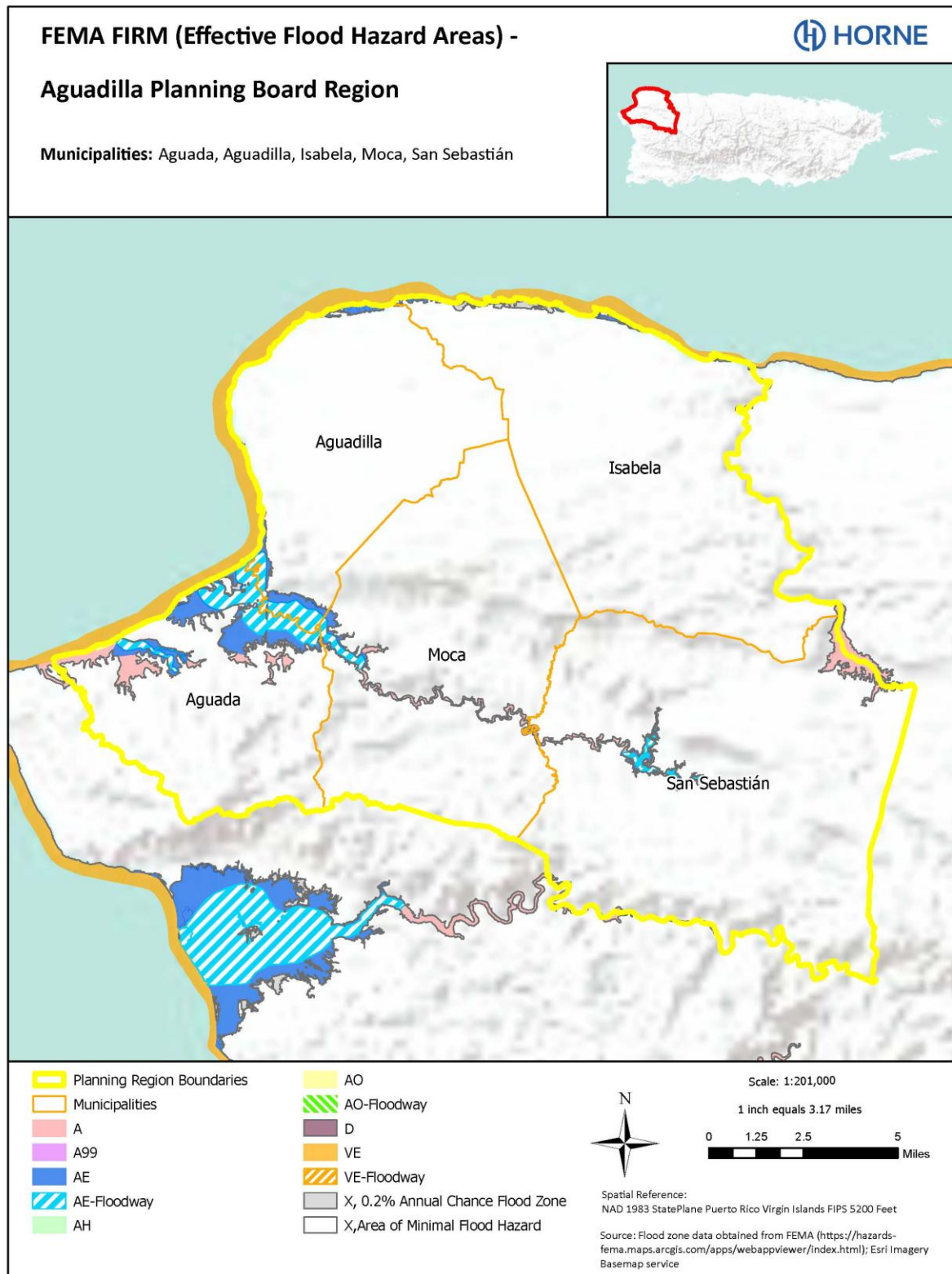
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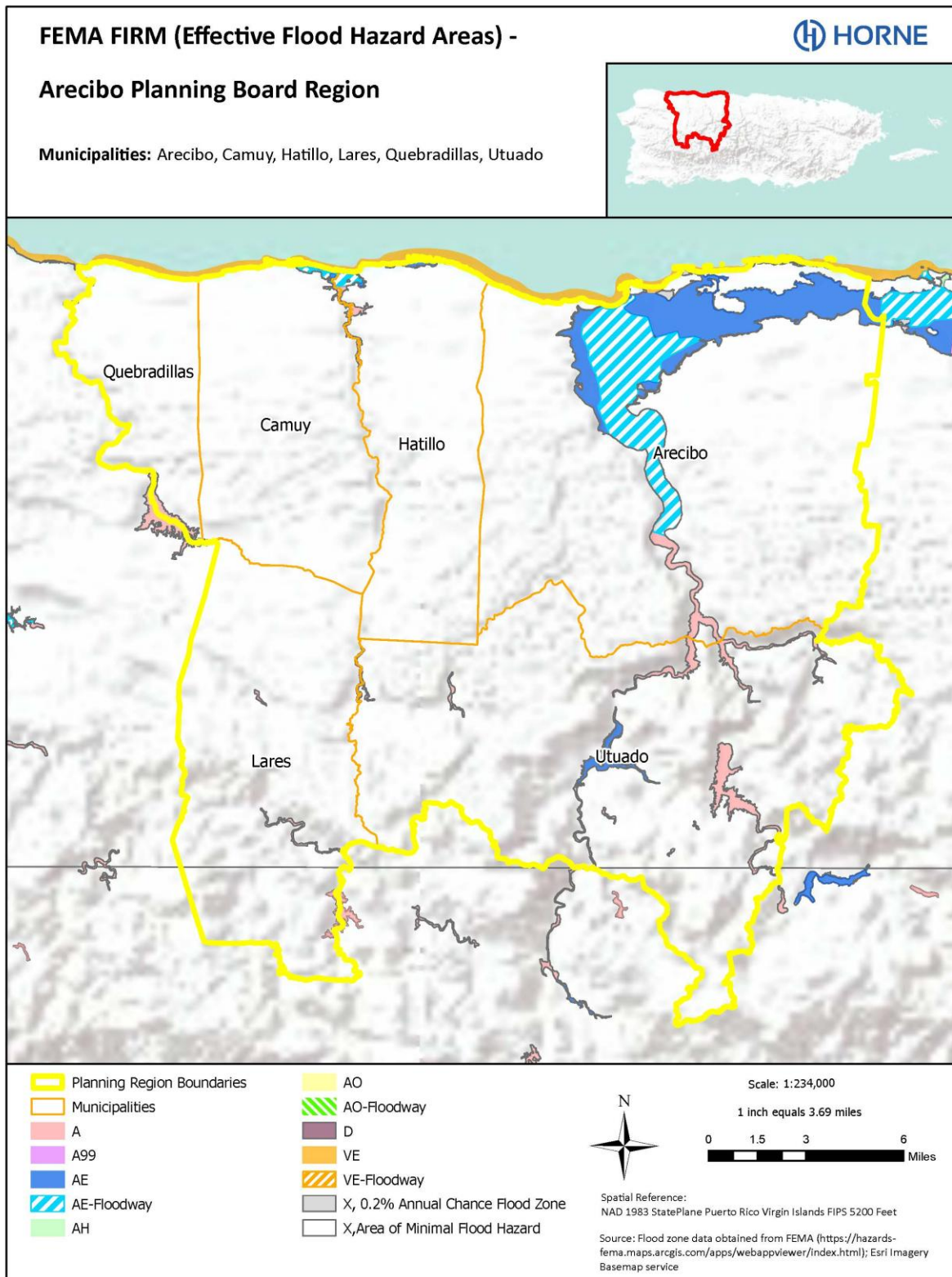




A2-2: National Flood Hazard Maps







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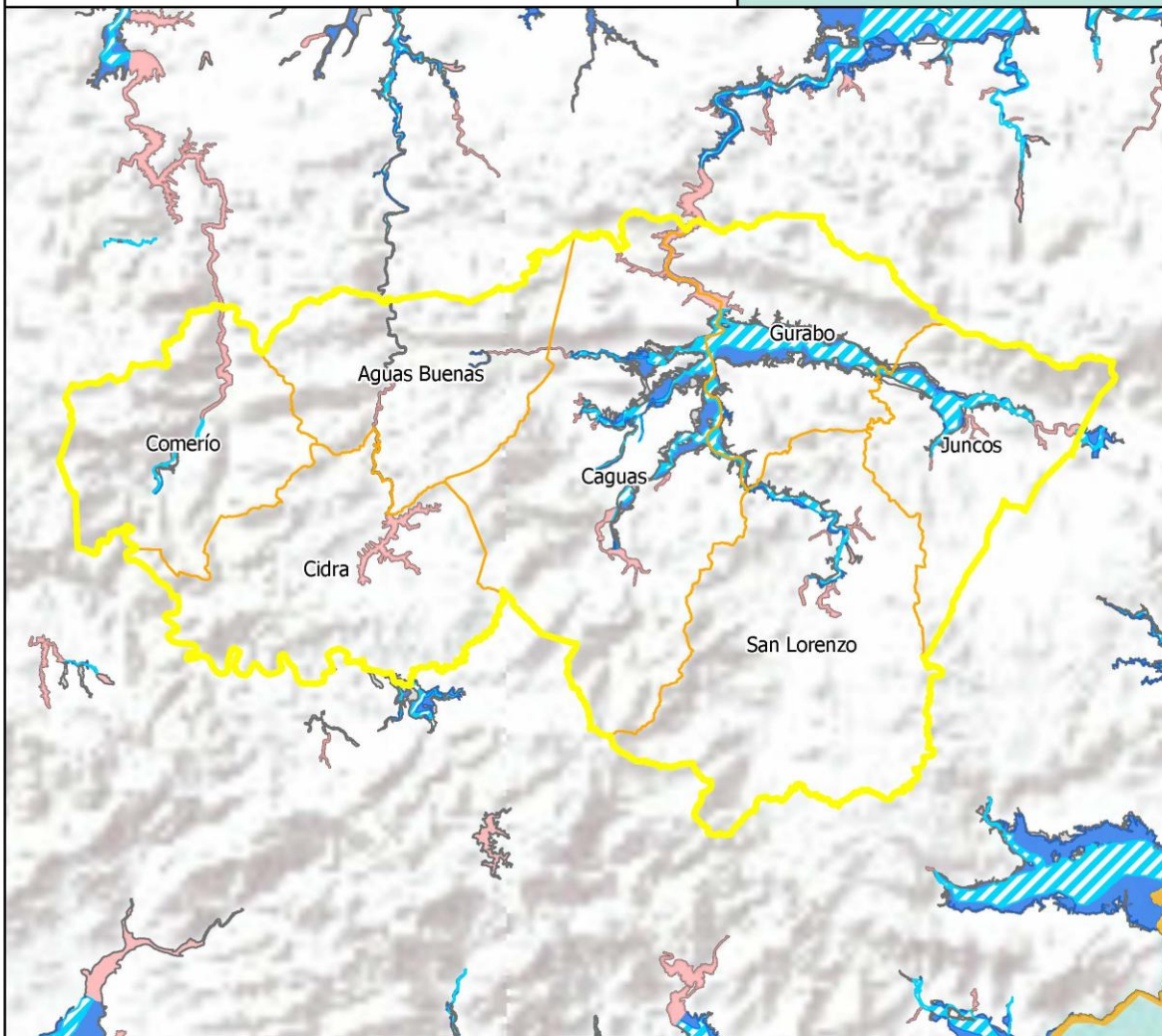
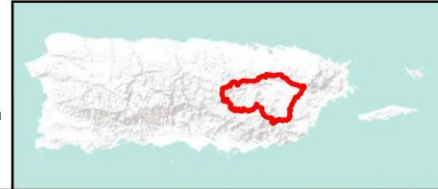


FEMA FIRM (Effective Flood Hazard Areas) -



Caguas Planning Board Region

Municipalities: Aguas Buenas, Caguas, Cidra, Comerío, Gurabo, Juncos, San Lorenzo



- Planning Region Boundaries
- Municipalities
- A
- A99
- AE
- AE-Floodway
- AH

- AO
- AO-Floodway
- D
- VE
- VE-Floodway
- X, 0.2% Annual Chance Flood Zone
- X, Area of Minimal Flood Hazard

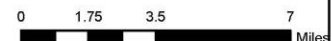


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Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

Scale: 1:242,000

1 inch equals 3.82 miles



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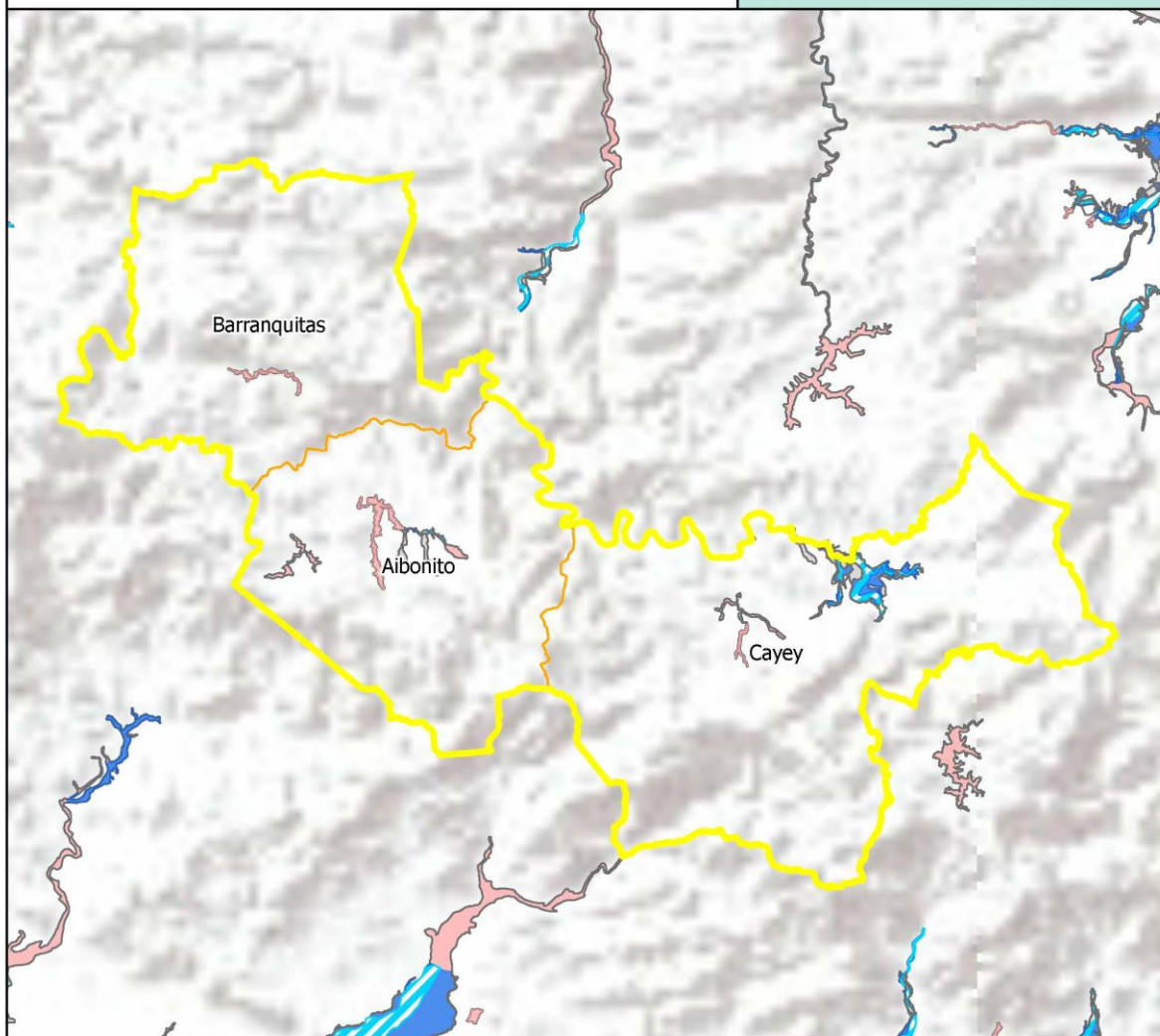


FEMA FIRM (Effective Flood Hazard Areas) -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey

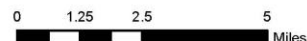


- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Scale: 1:186,000

1 inch equals 2.94 miles



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

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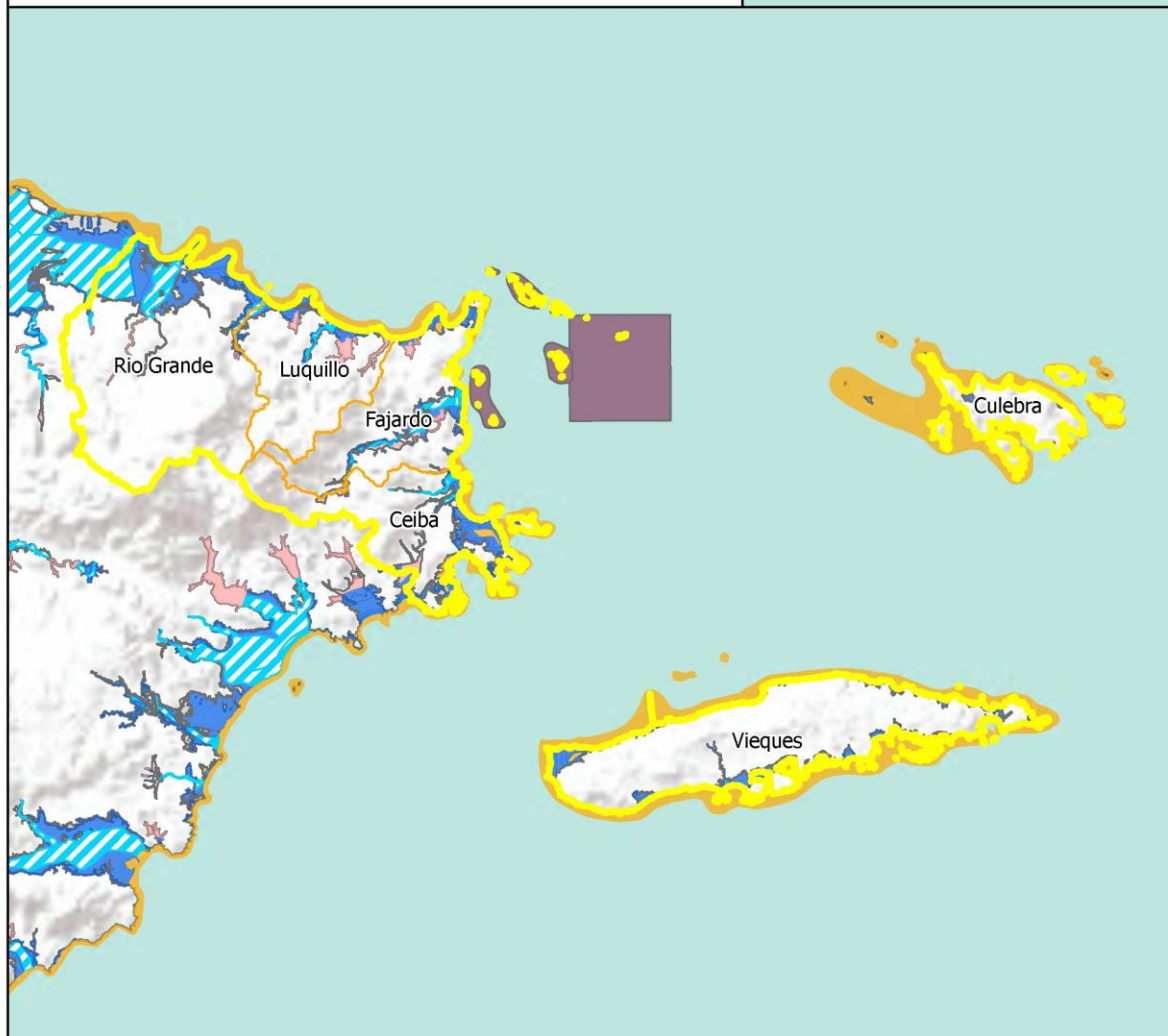


FEMA FIRM (Effective Flood Hazard Areas) -



Fajardo Planning Board Region

Municipalities: Ceiba, Culebra, Fajardo, Luquillo, Rio Grande, Vieques



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Scale: 1:378,000

1 inch equals 5.97 miles



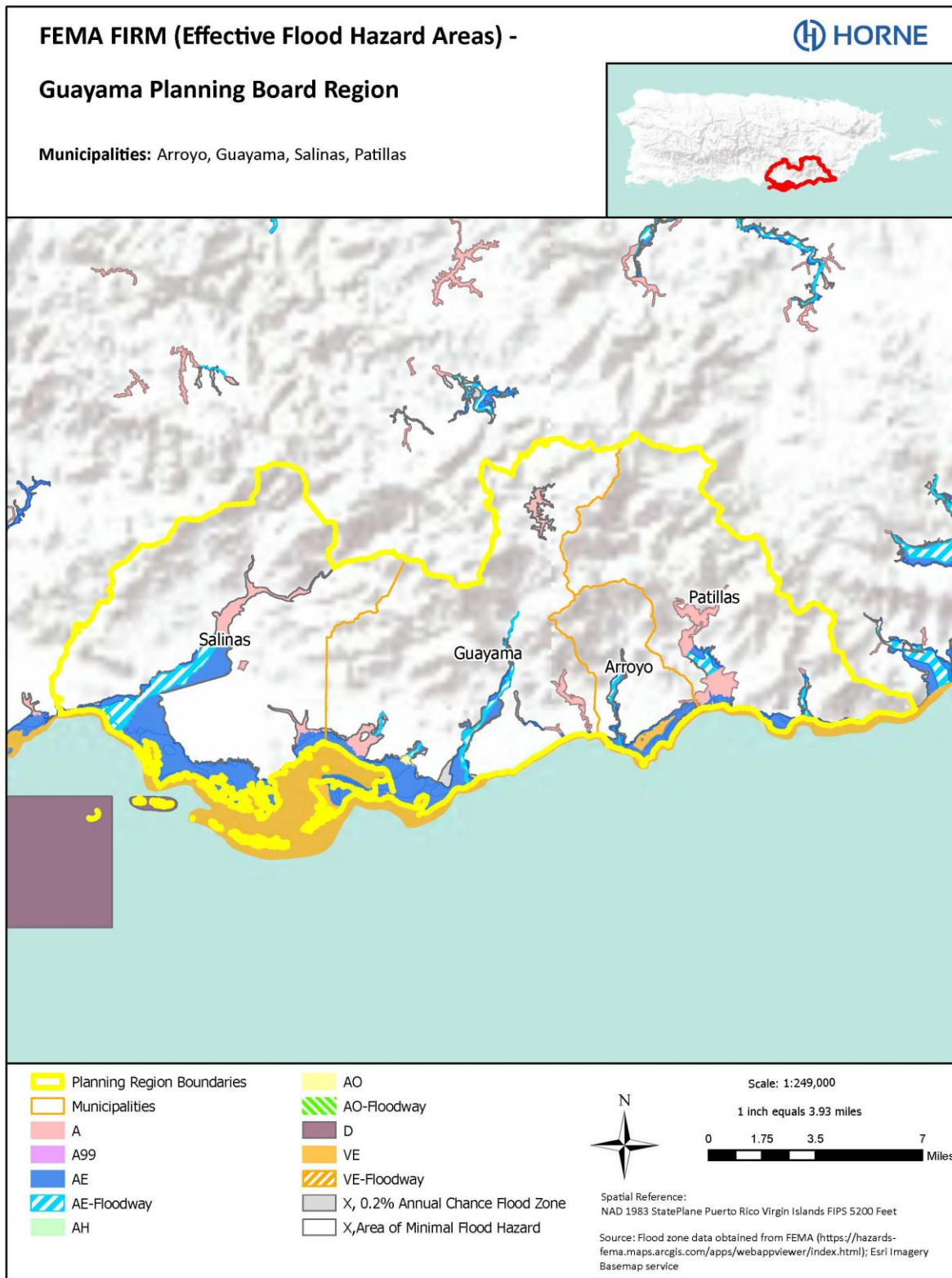
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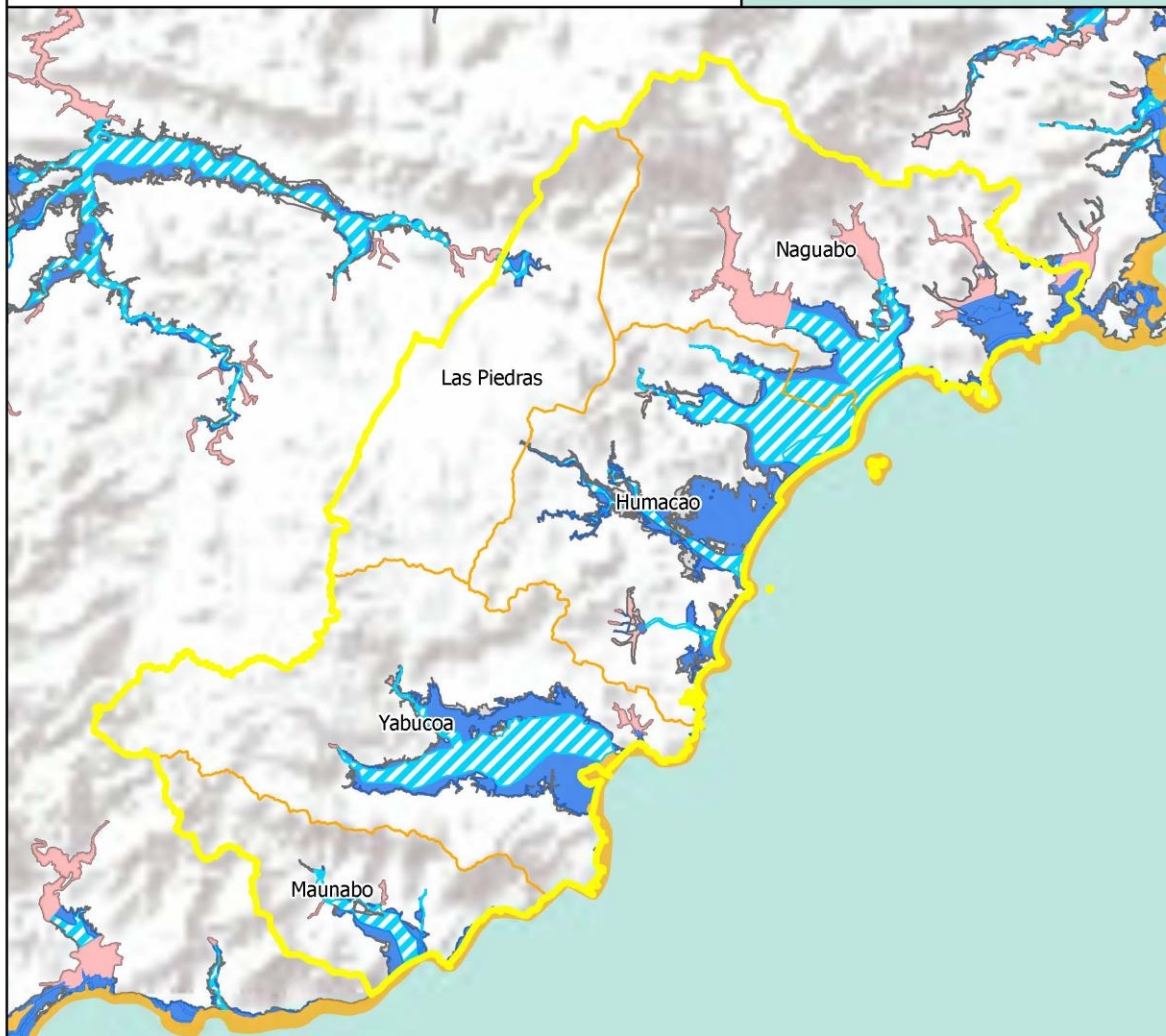
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FEMA FIRM (Effective Flood Hazard Areas) -



Humacao Planning Board Region

Municipalities: Humacao, Las Piedras, Maunabo, Naguabo, Yabucoa



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Spatial Reference:
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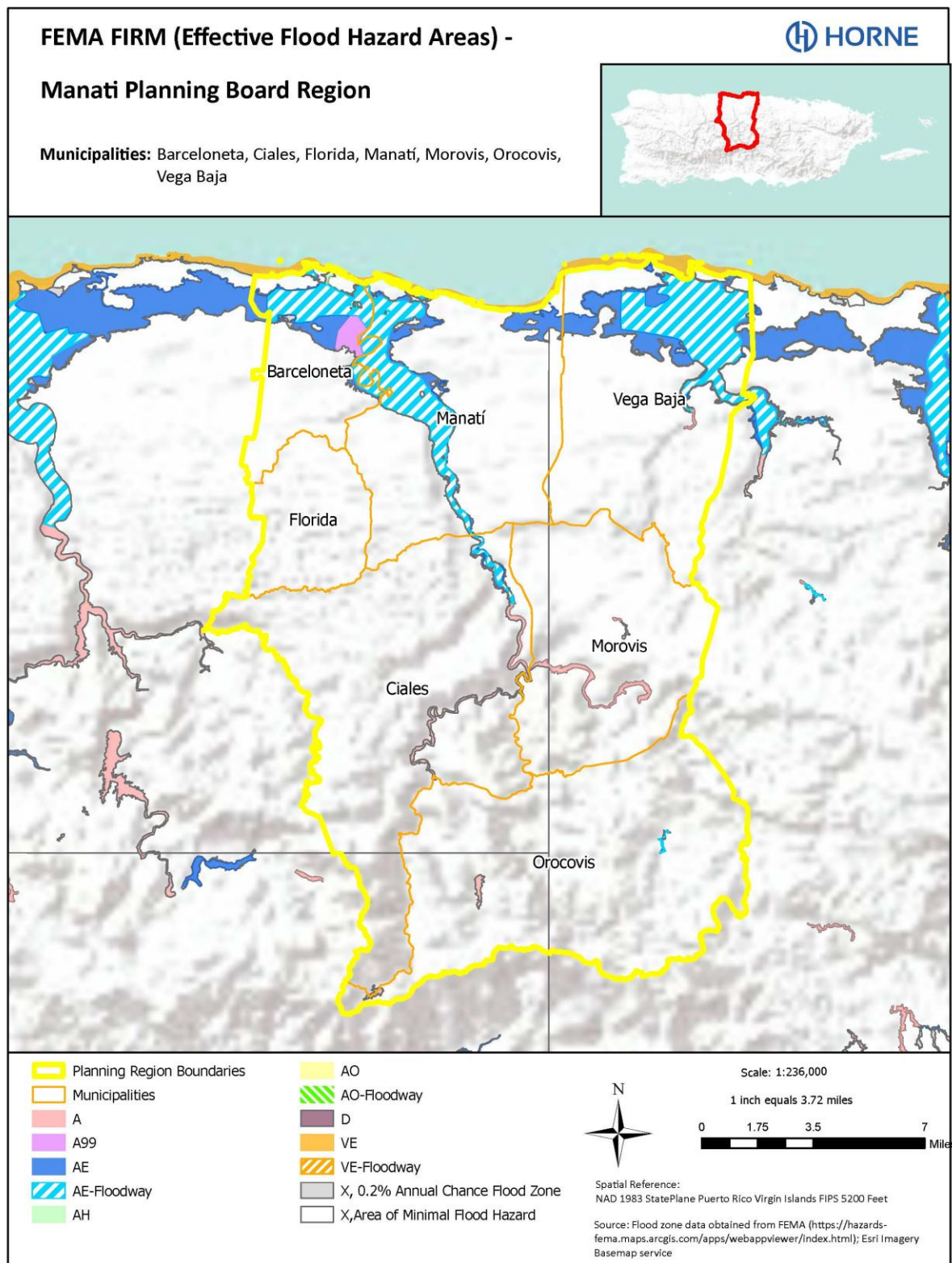
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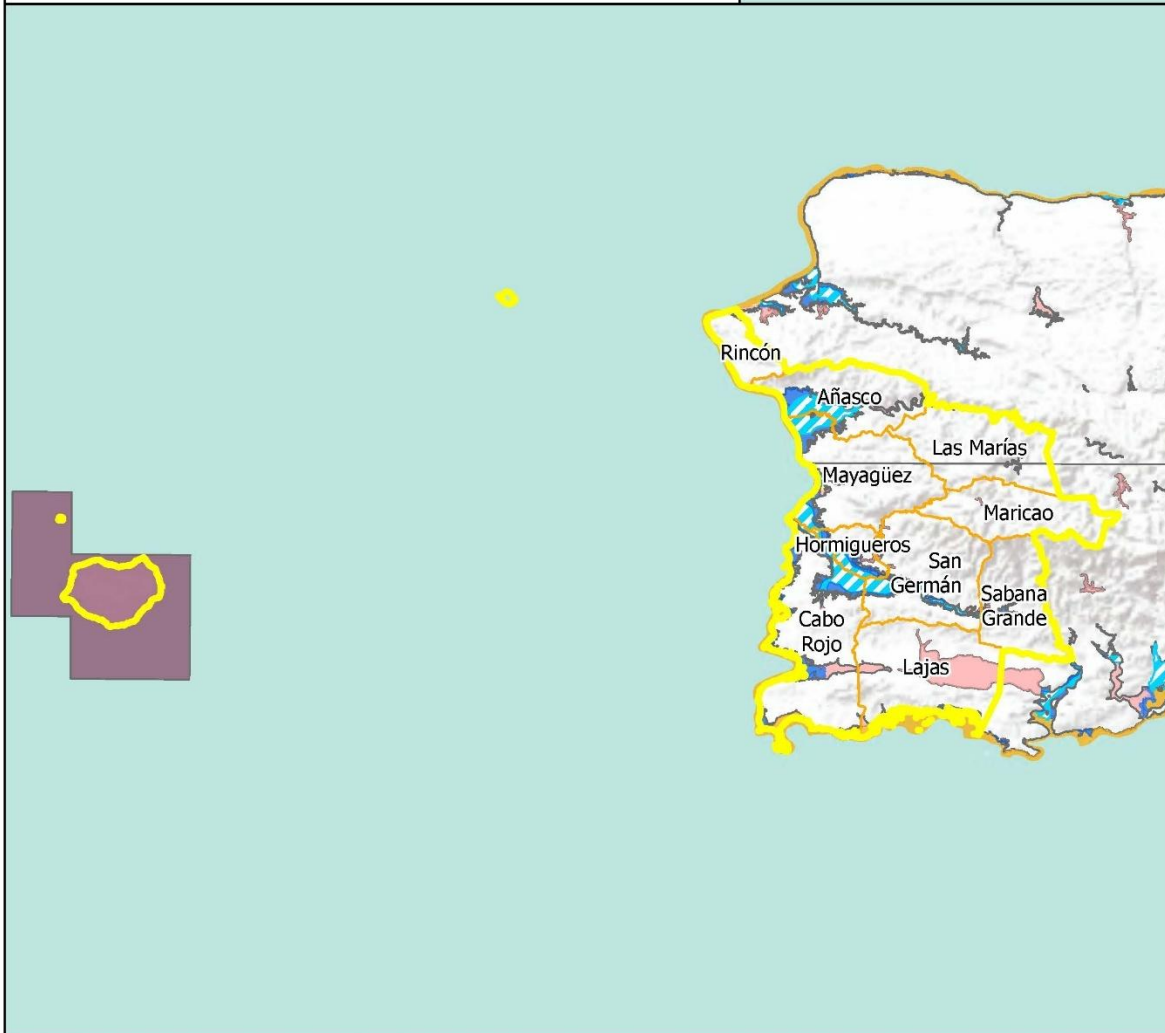
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FEMA FIRM (Effective Flood Hazard Areas) -



Mayaguez Planning Board Region

Municipalities: Añasco, Cabo Rojo, Hormigueros, Lajas, Las Marías, Maricao, Mayagüez, Rincón, Sabana Grande, San Germán

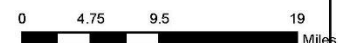


- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Scale: 1:643,000

1 inch equals 10.15 miles



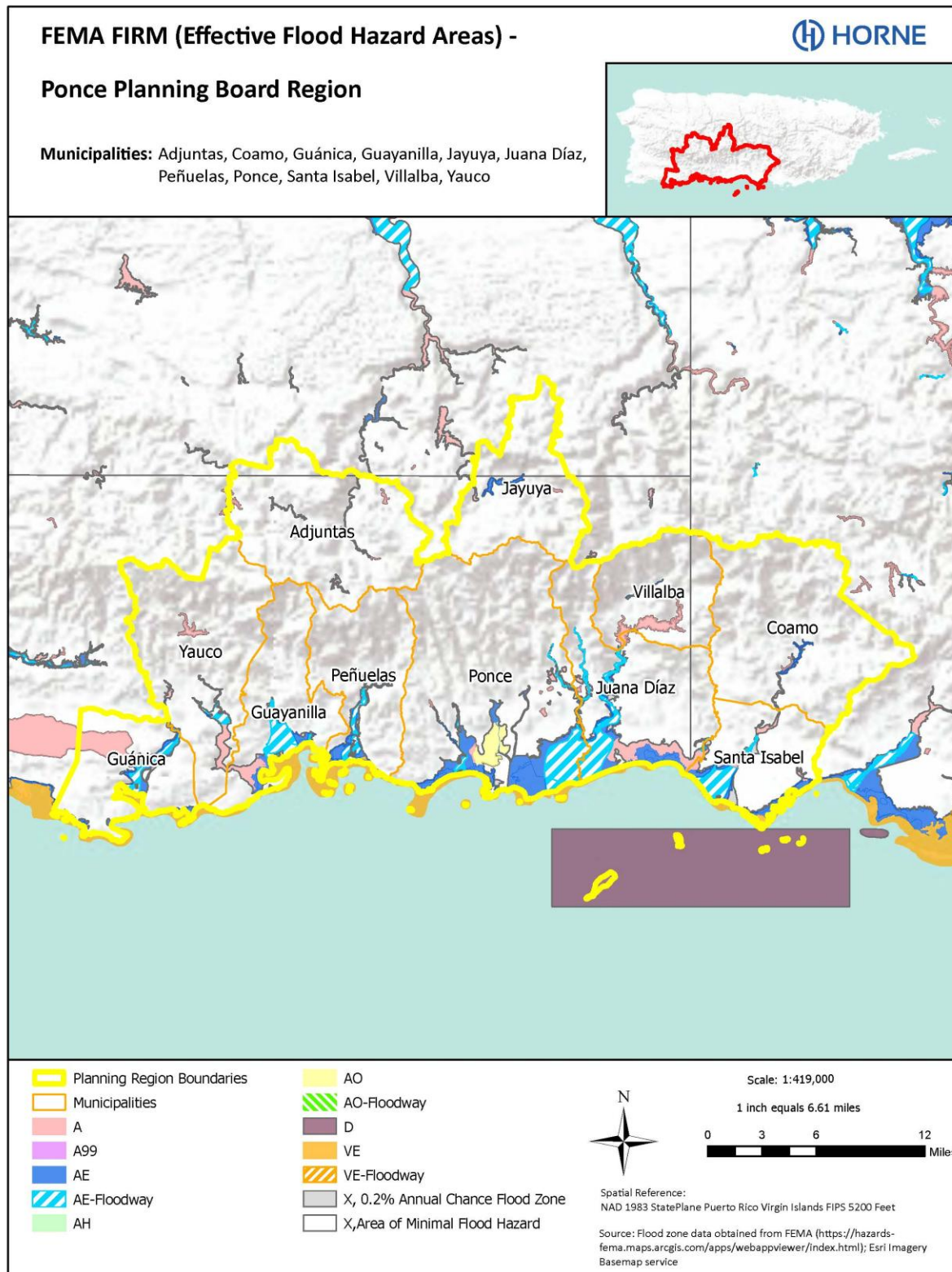
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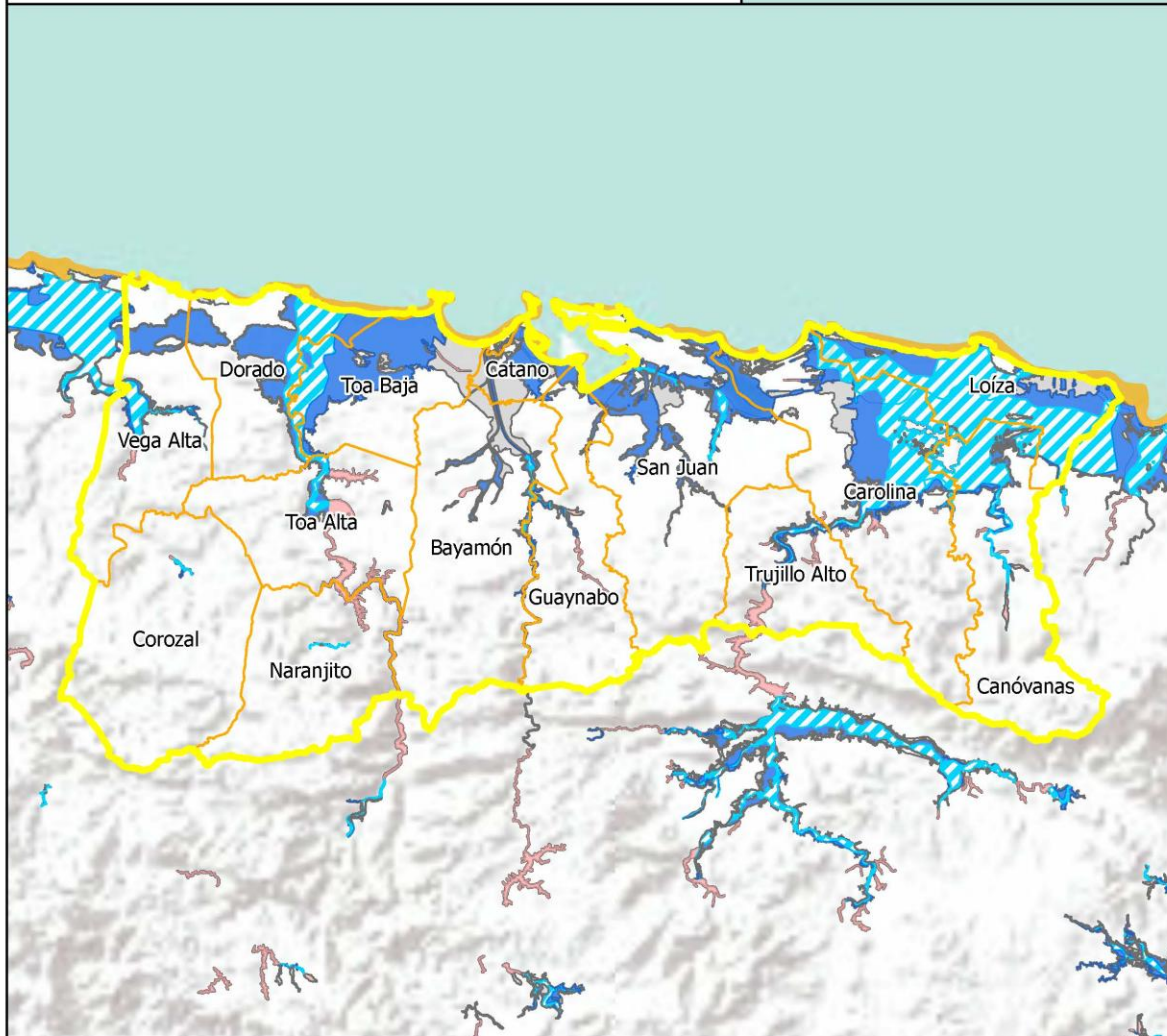
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FEMA FIRM (Effective Flood Hazard Areas) -



San Juan Planning Board Region

Municipalities: Bayamón, Canóvanas, Carolina, Corozal, Dorado, Guaynabo, Loíza, Naranjito, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |

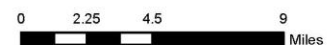


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Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

Scale: 1:319,000

1 inch equals 5.03 miles



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A2-3: Preliminary Flood Hazard Maps



PFIRM: Available Panels for Puerto Rico



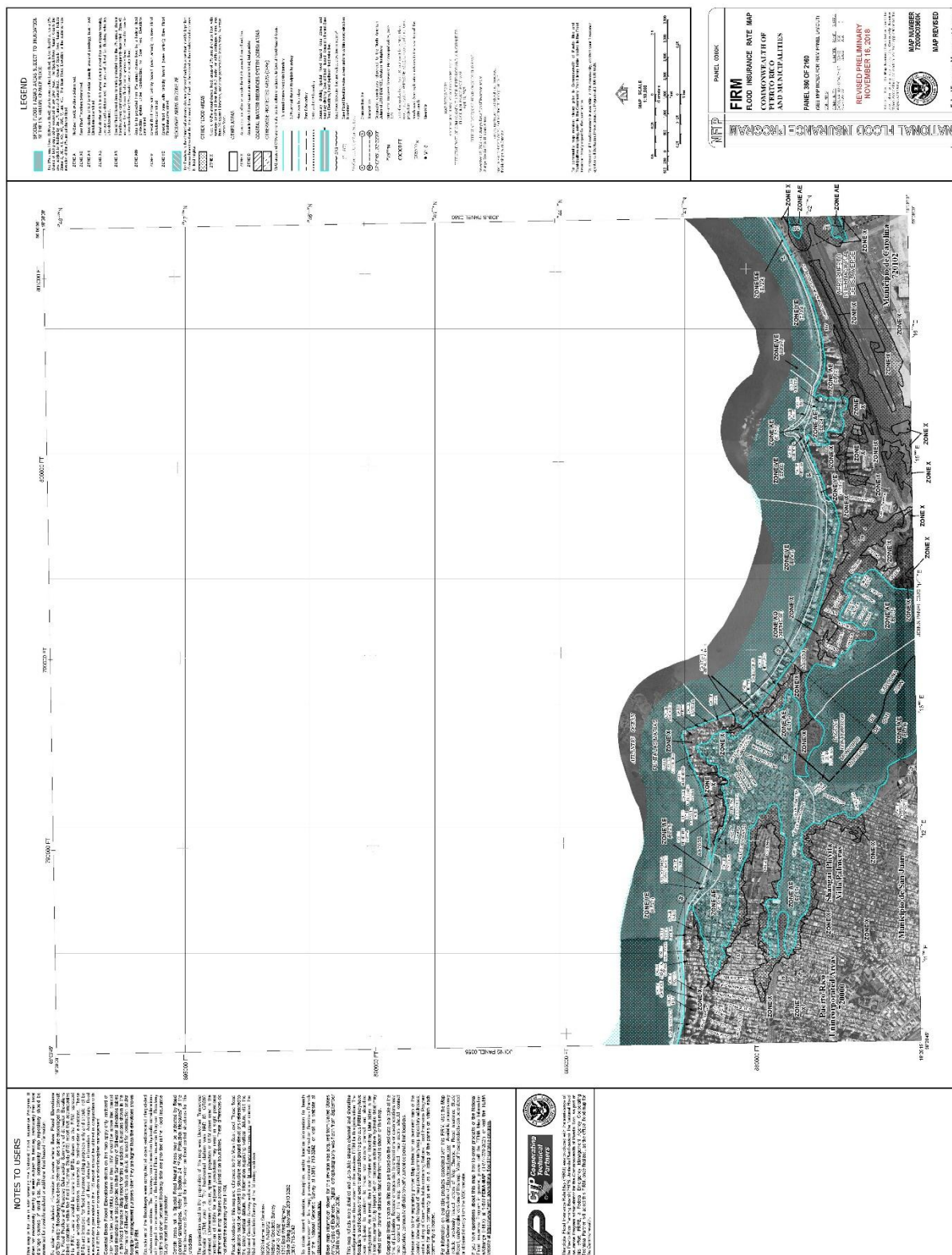
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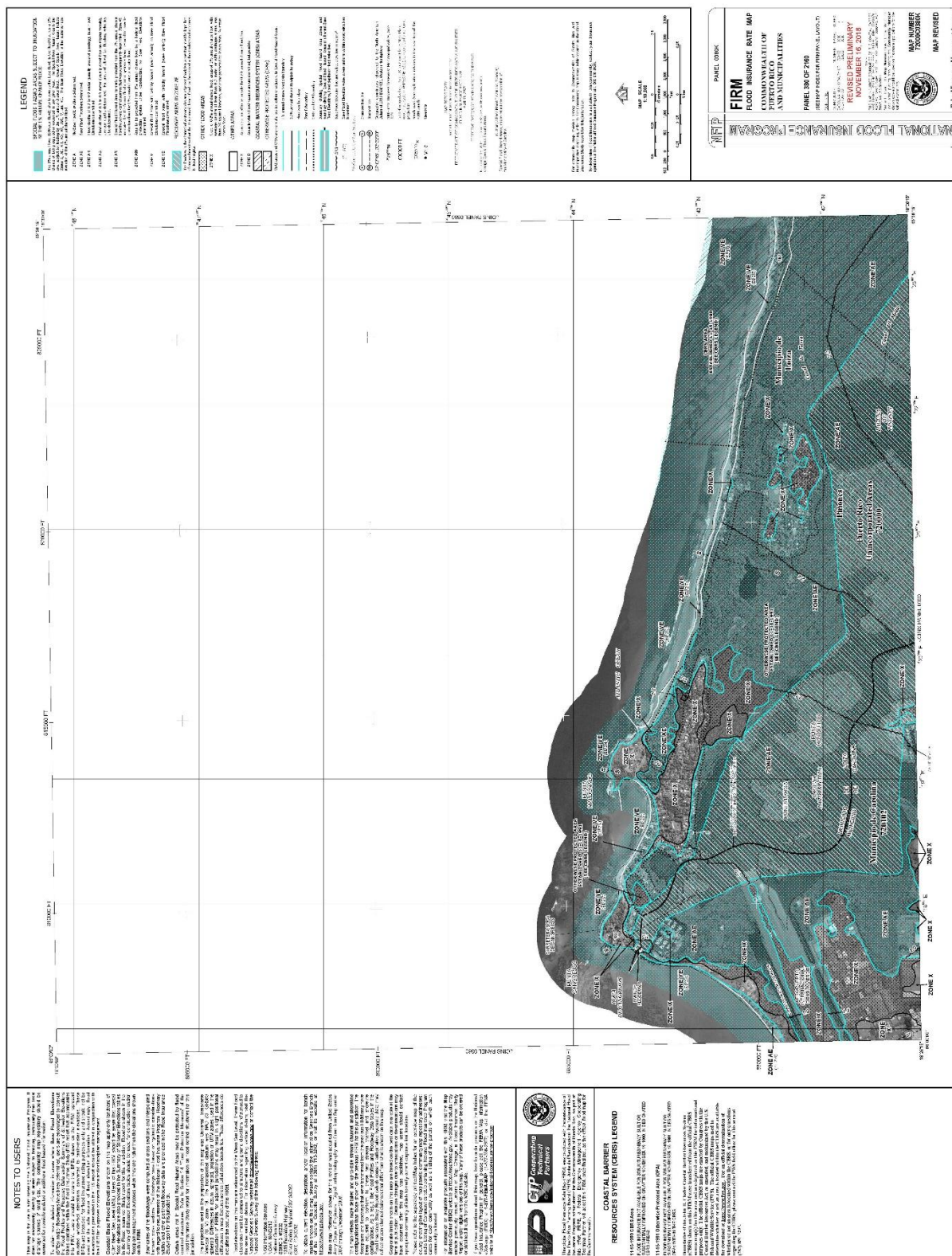
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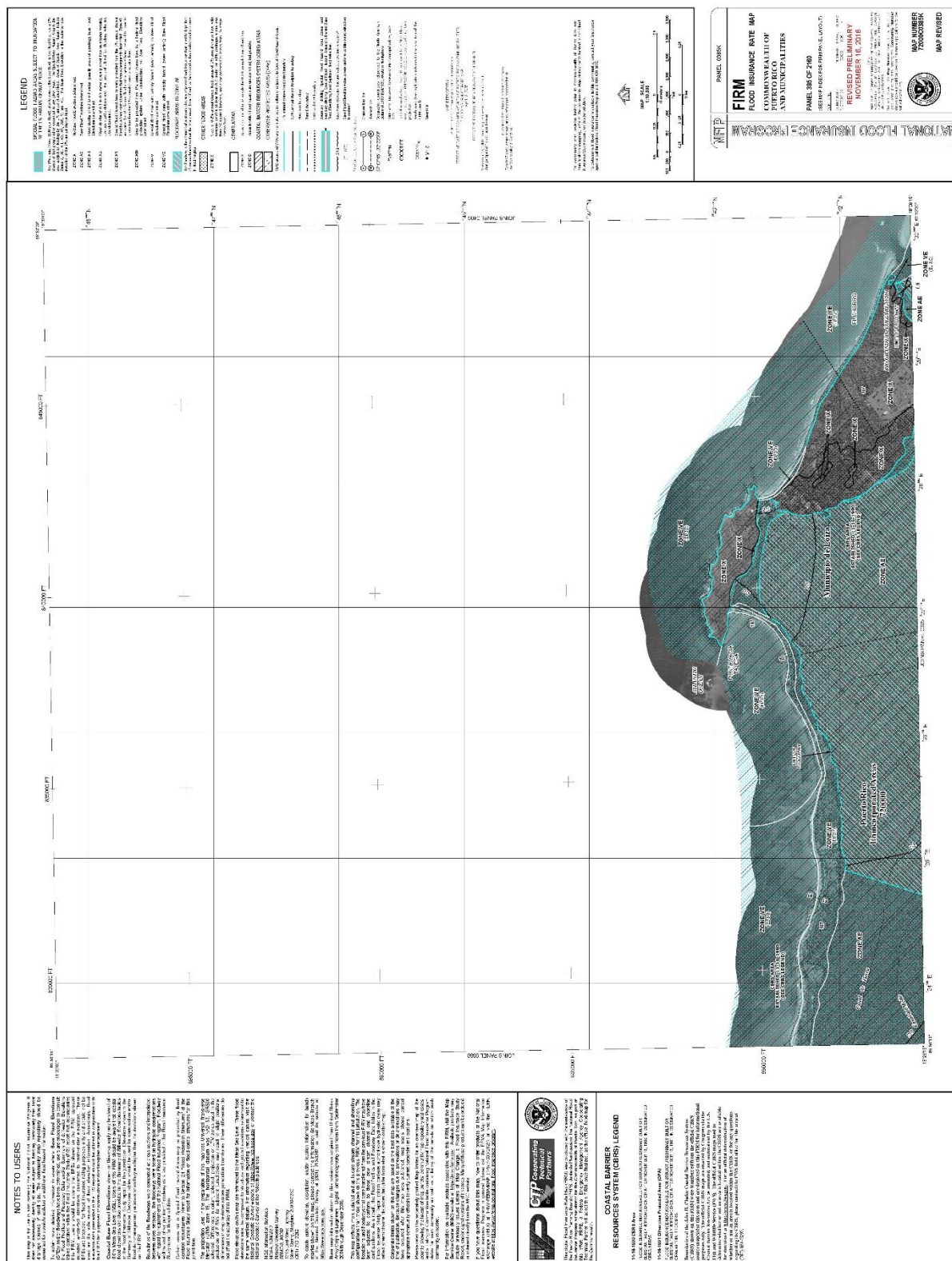
Municipalities that have panels available:

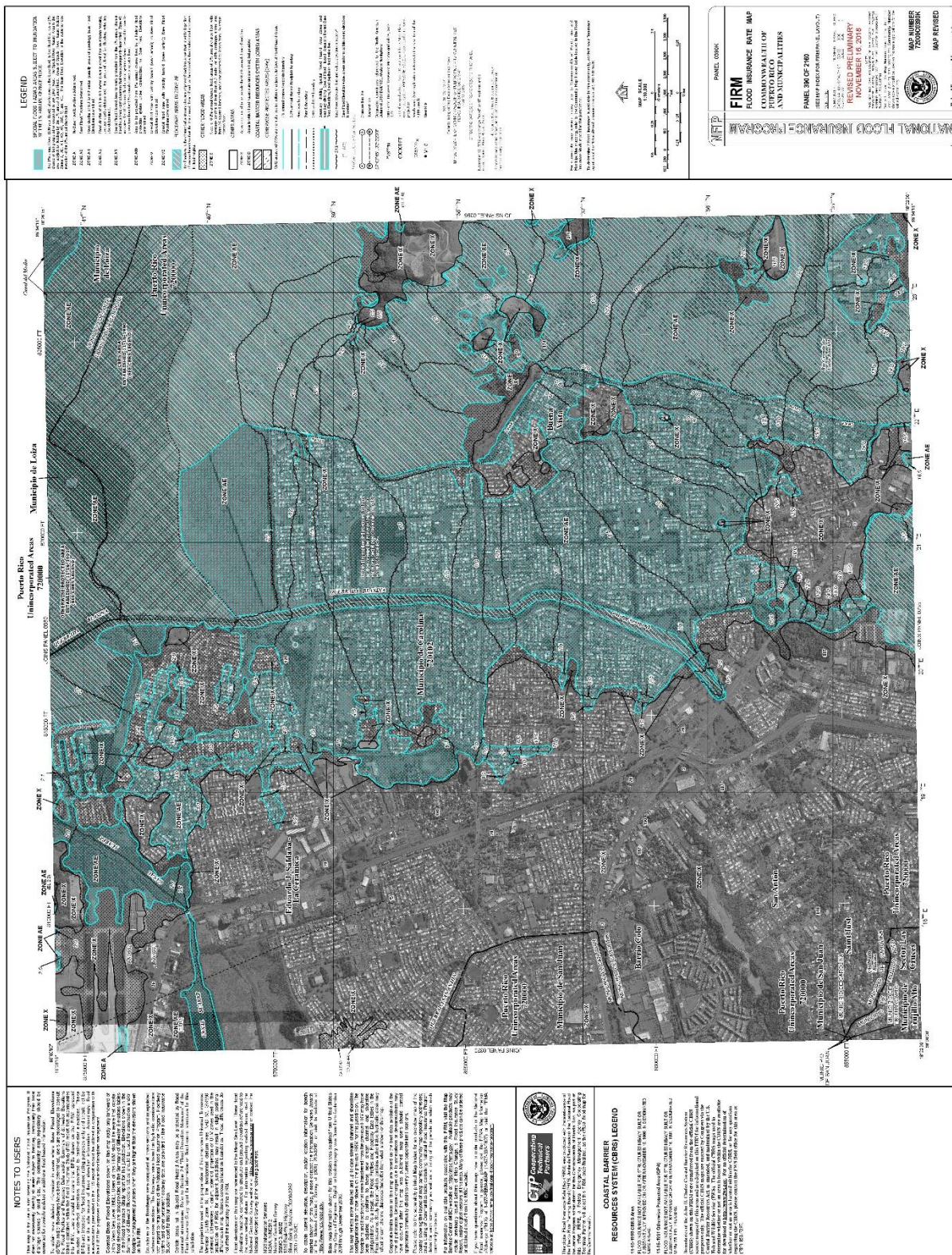
1. San Juan
2. Trujillo Alto
3. Carolina
4. Loíza
5. Canóvanas
6. Río Grande

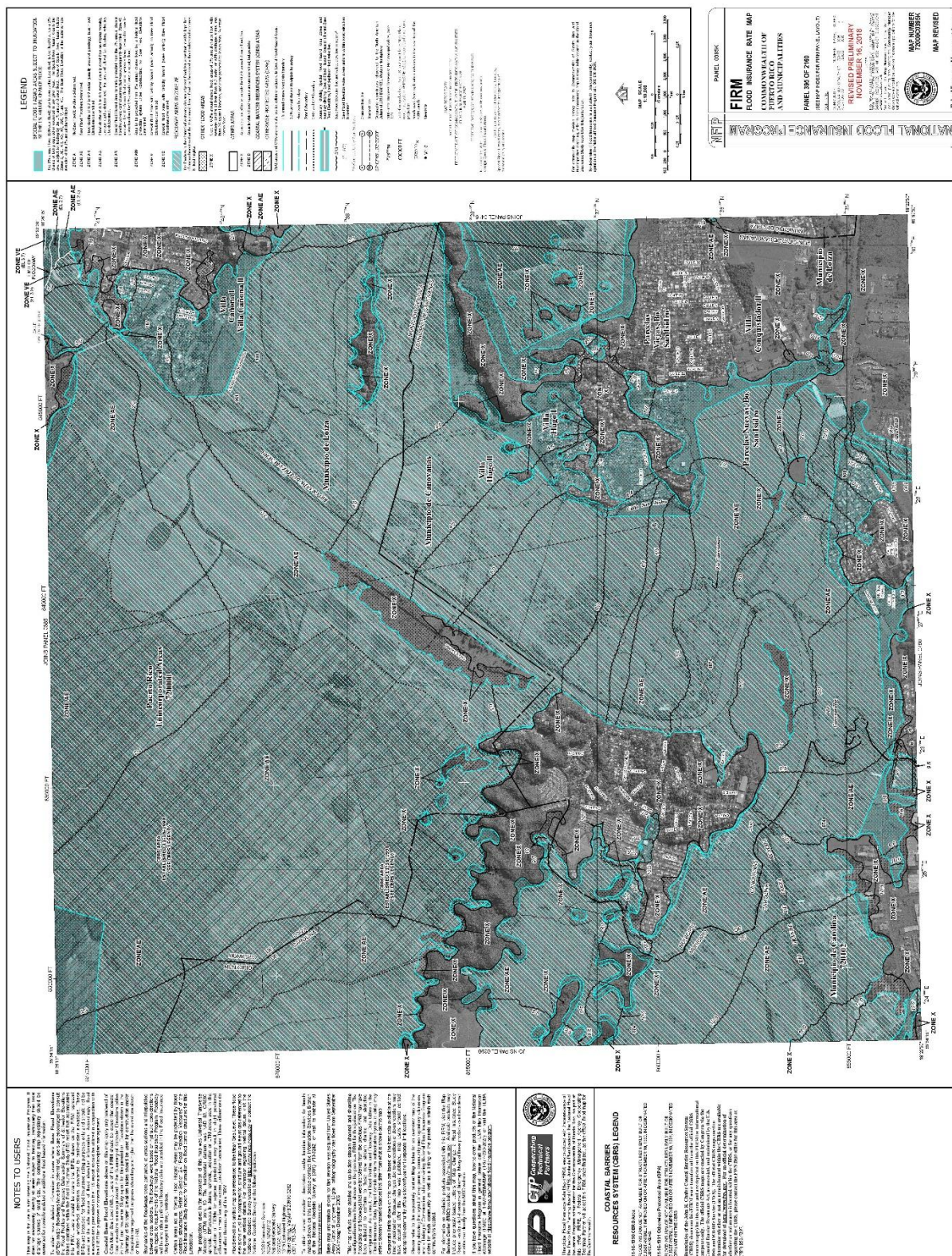
Source: [Flood Map Changes Viewer \(arcgis.com\)](http://Flood Map Changes Viewer (arcgis.com))

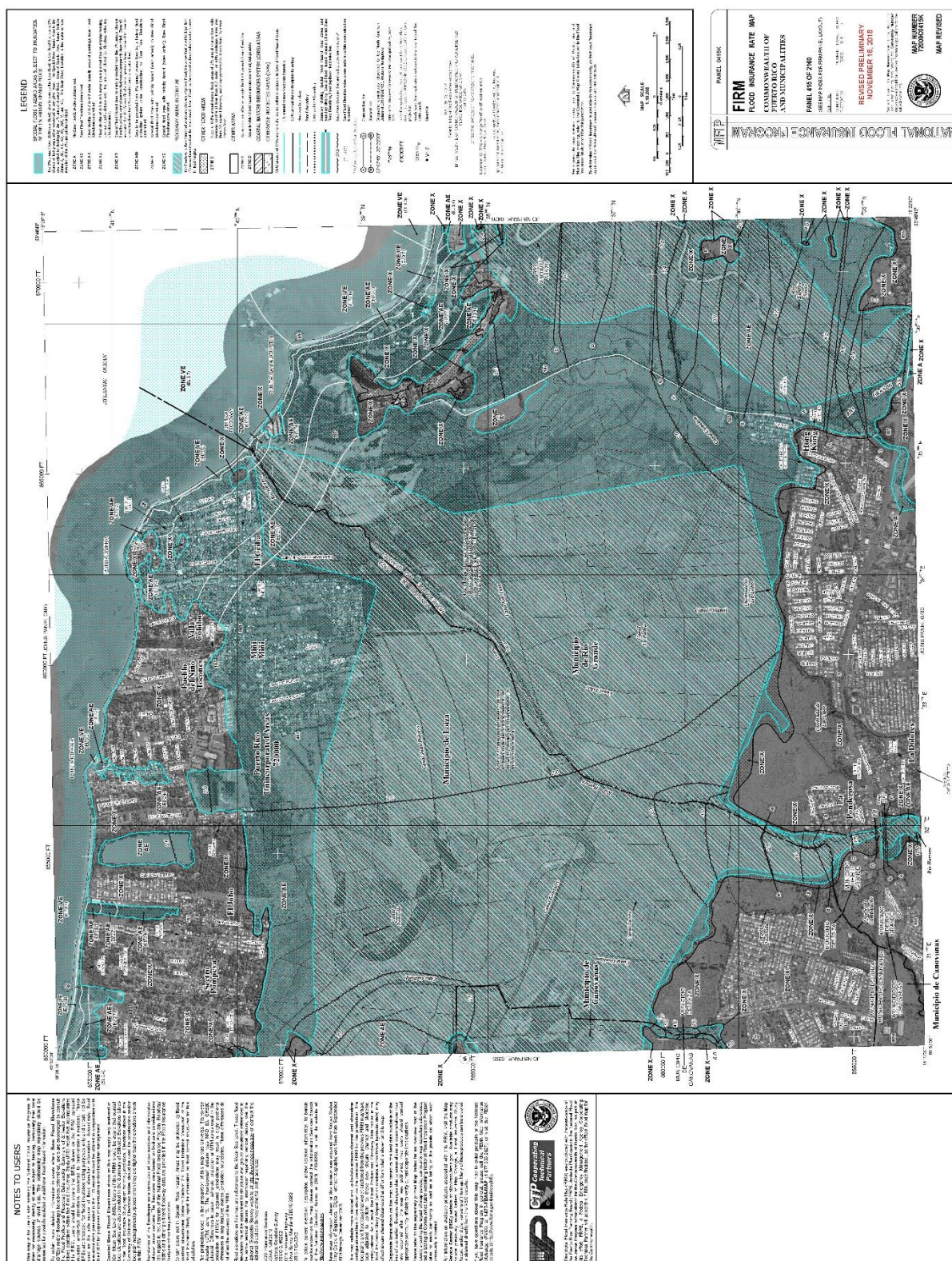


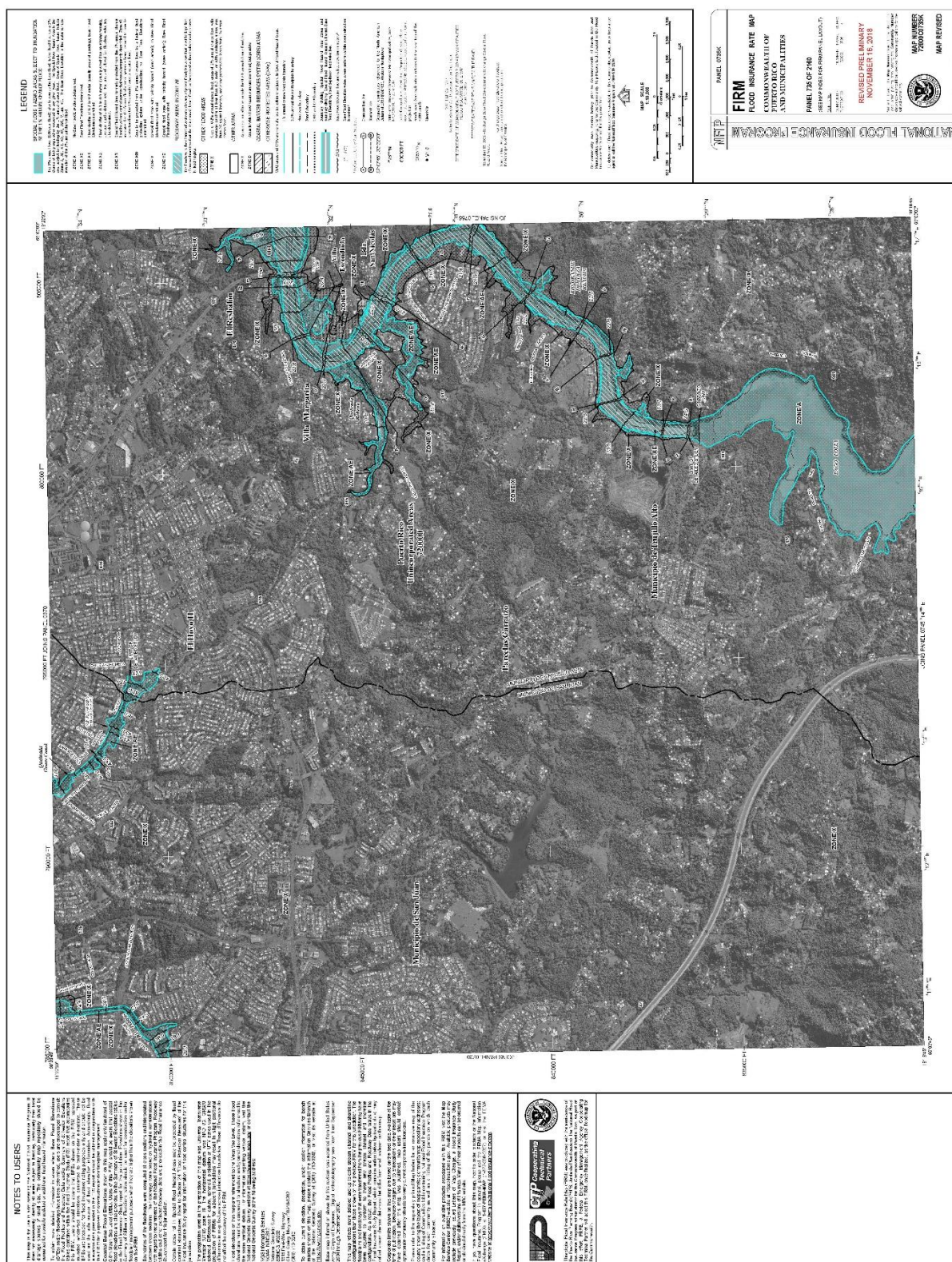


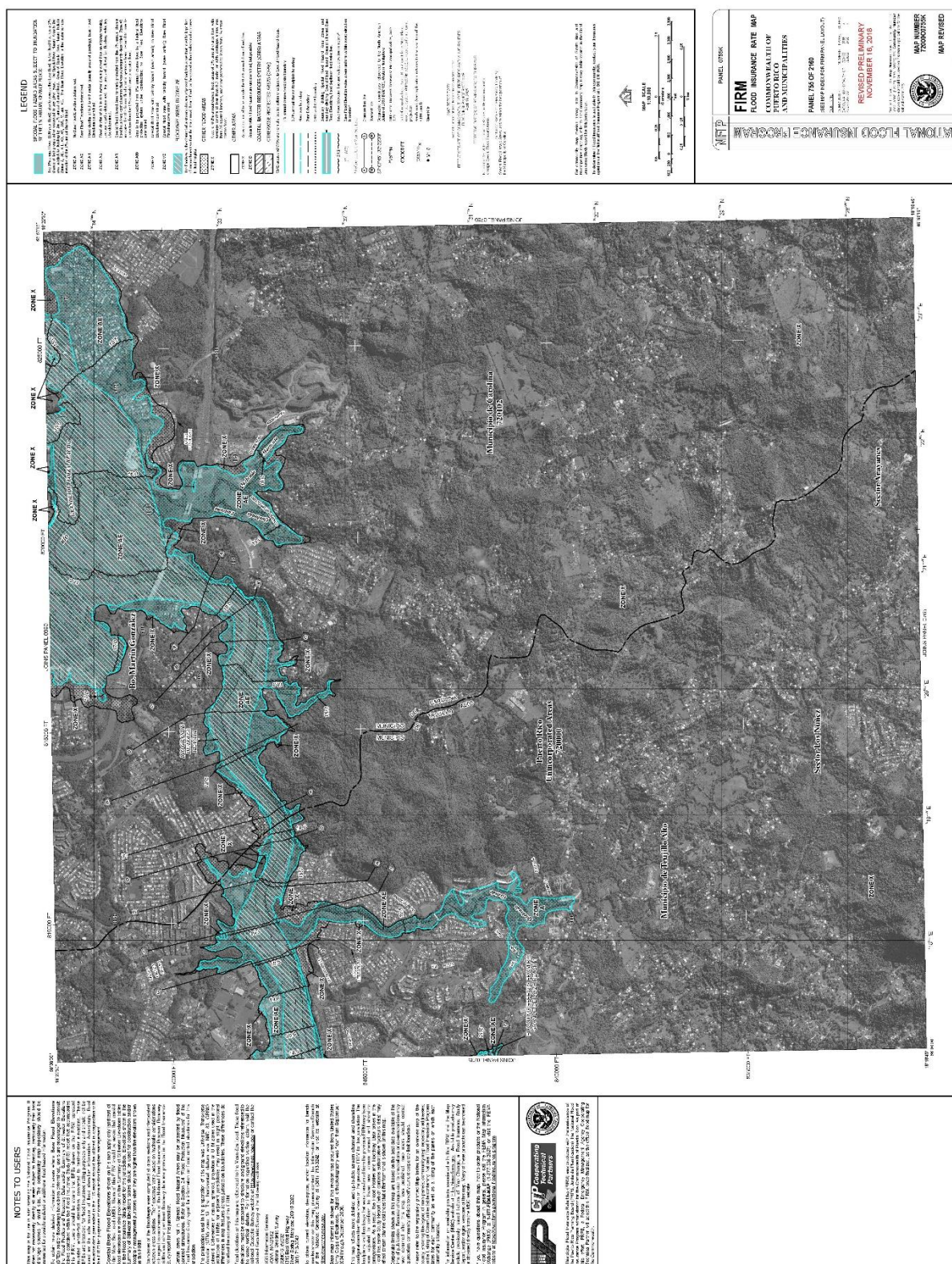


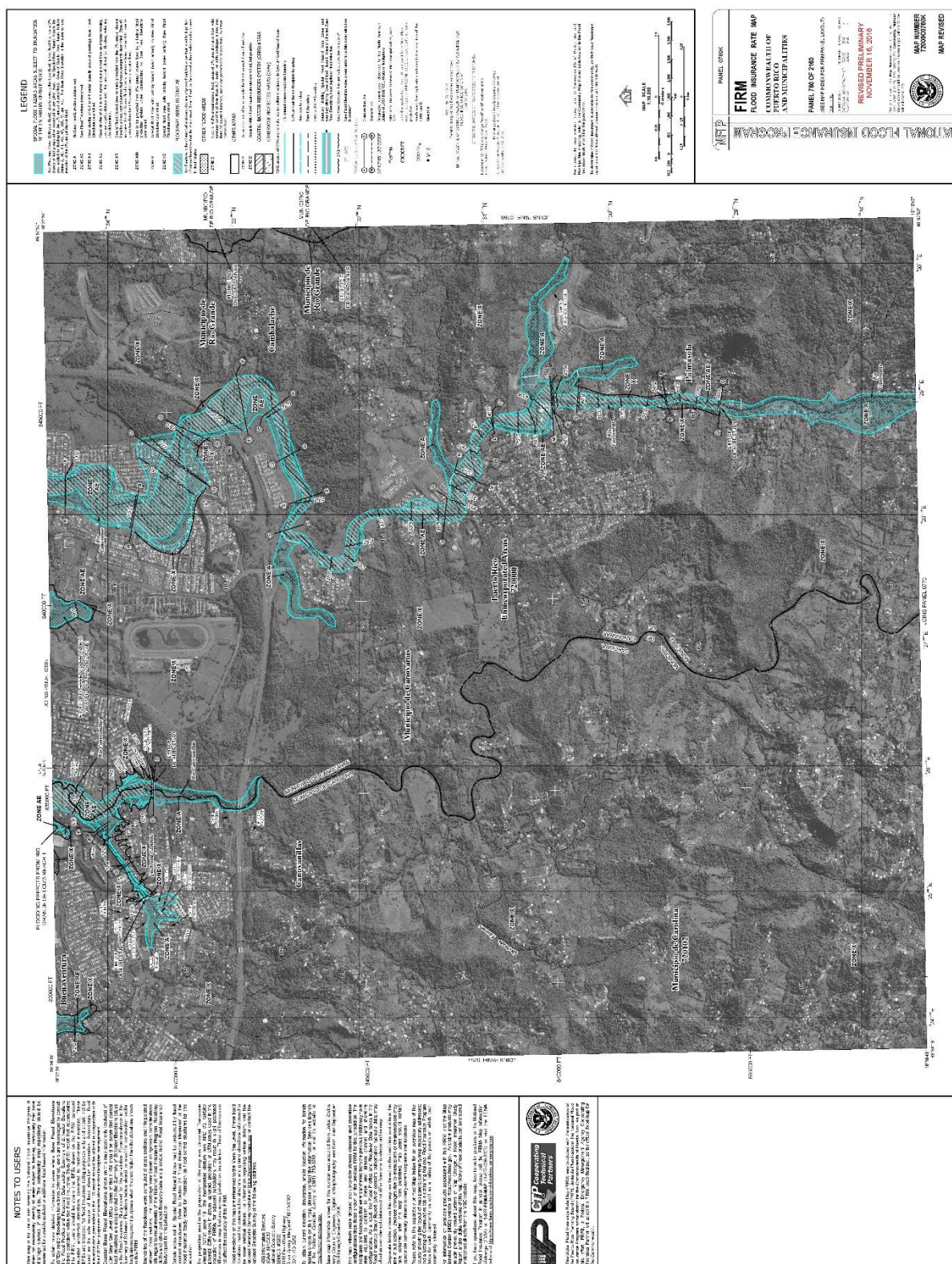














A2-4: Communication with FEMA





From: environmentcdbg
To: FEMA-R2-ExternalAffairs@fema.dhs.gov
Cc: Aldo A. Rivera-Vazquez
Bcc: Alberto Mercado
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Friday, March 21, 2025 2:44:47 PM
Attachments: [AES \(FER\)_FEMA Consultation_PRDOH.pdf](#)
[image002.png](#)

Greetings Mr. D'Amoro,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivero-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienoo.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infoedbg@vivienoo.pr.gov



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A2-5: Communication with PR Planning Board





From: environmentcdbg
To: comentariosjp@jp.pr.gov
Cc: [Aldo A. Rivera-Vazquez](#)
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Wednesday, March 5, 2025 4:38:52 PM
Attachments: [FER\(AES\)_PRPB_Consultation Letter_PRODH.pdf](#)
[image003.png](#)

To whom it may concern,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienno.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: info@cdbg@vivienno.pr.gov



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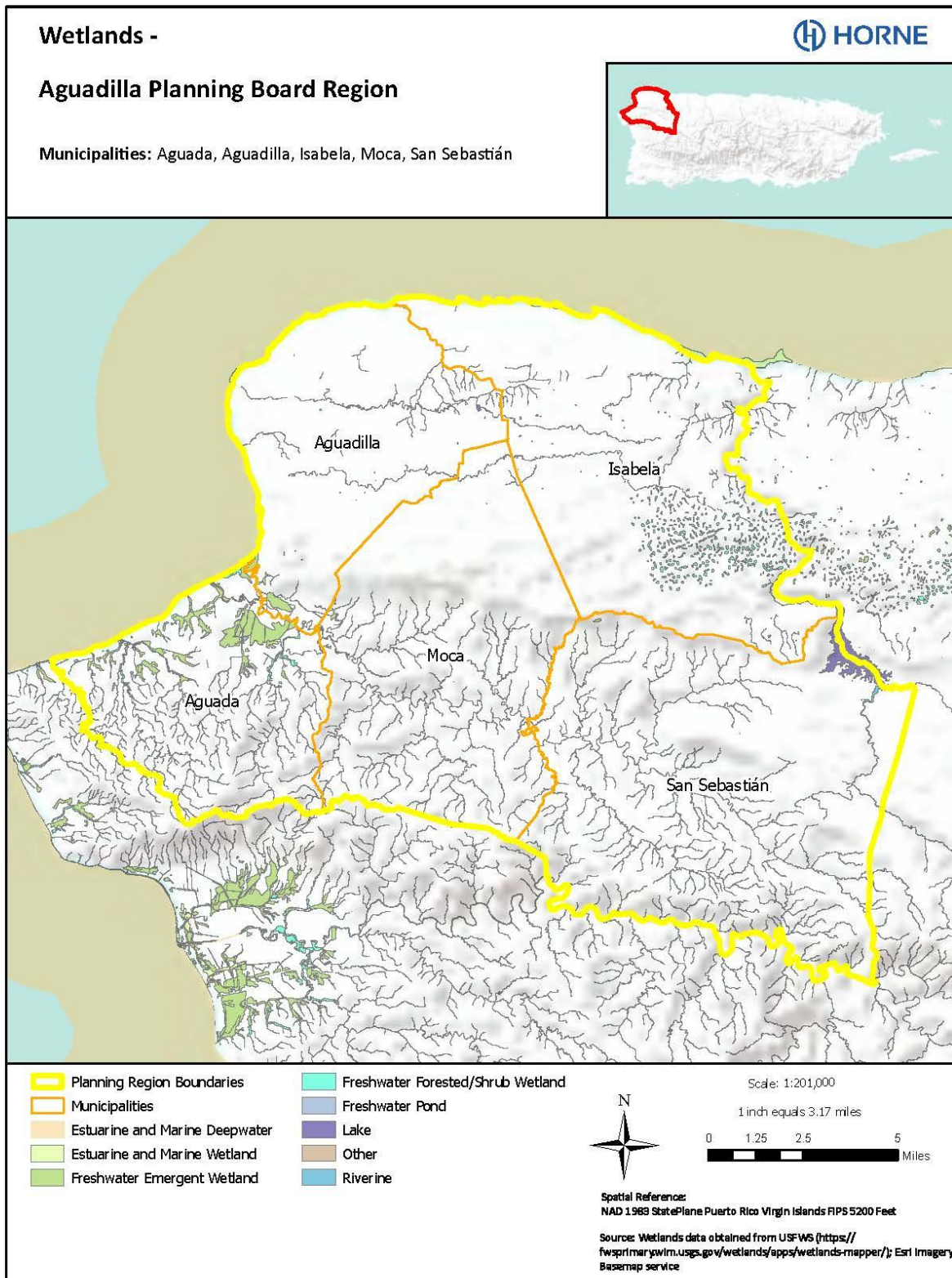
A3: Wetlands





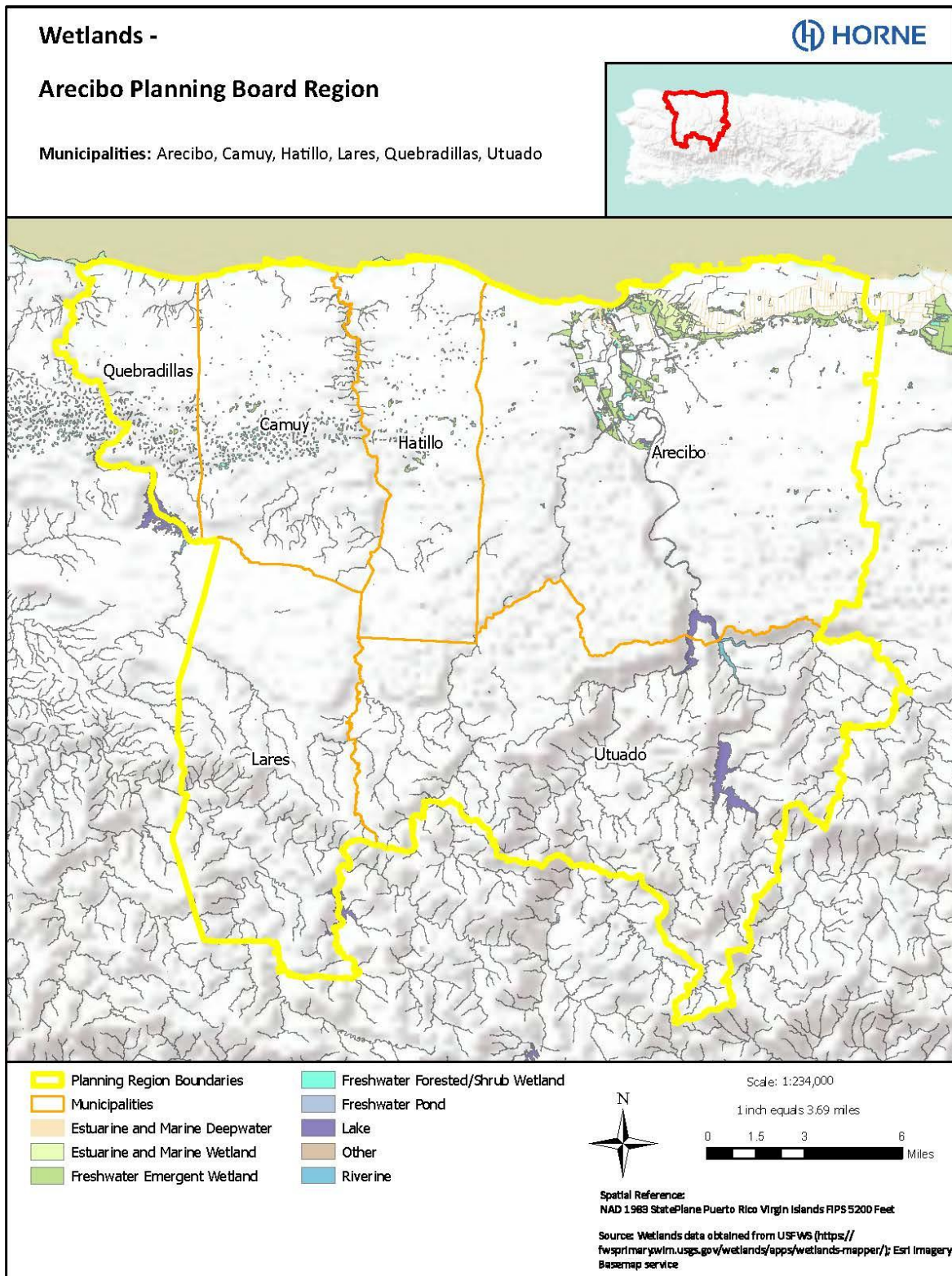
A3-1: National Wetland Inventory Maps





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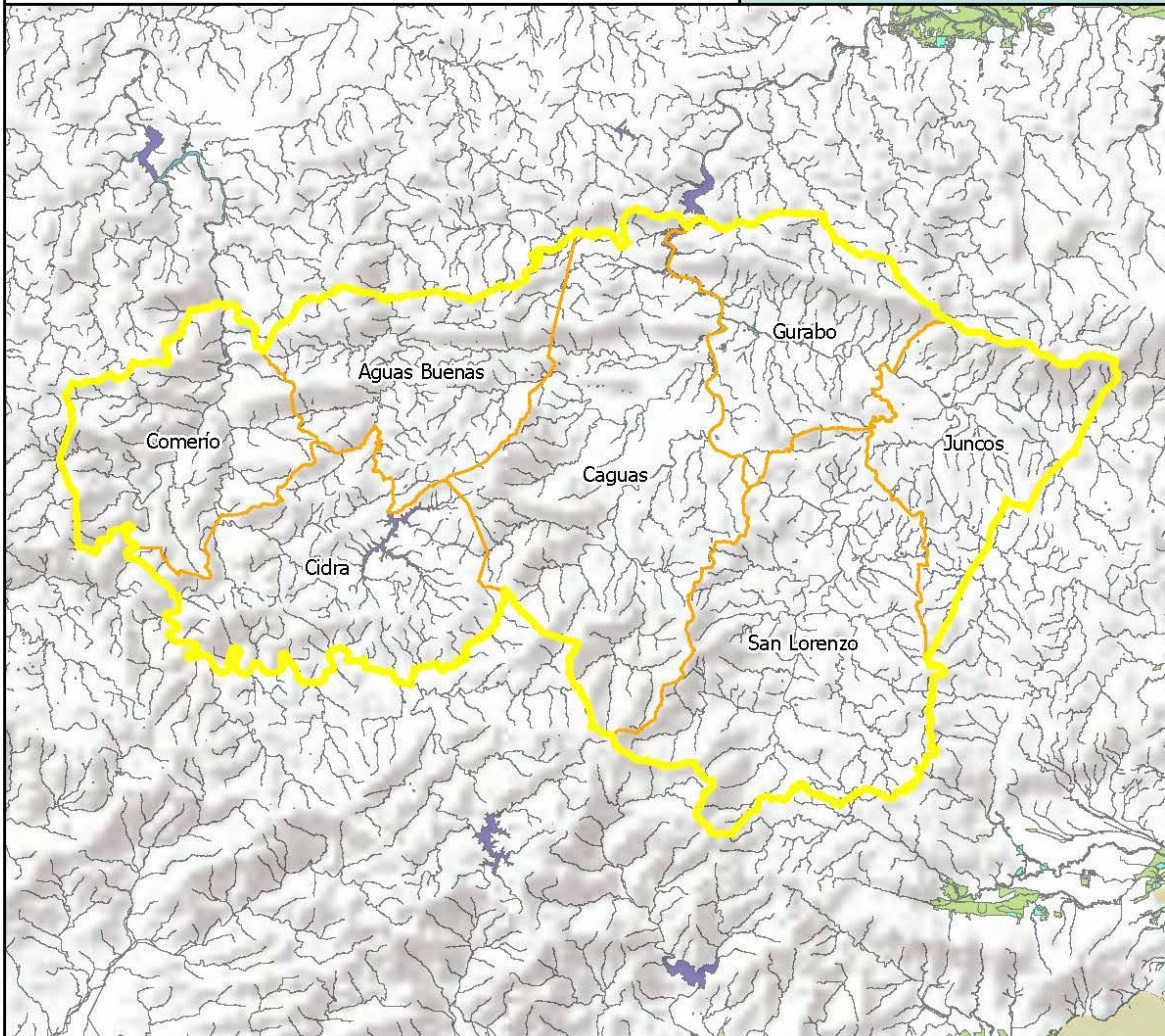
Exported on 6/4/2025 at 10:25 AM

Wetlands -



Caguas Planning Board Region

Municipalities: Aguas Buenas, Caguas, Cidra, Comerío, Gurabo, Juncos, San Lorenzo



- | | |
|--------------------------------|-----------------------------------|
| Planning Region Boundaries | Freshwater Forested/Shrub Wetland |
| Municipalities | Freshwater Pond |
| Estuarine and Marine Deepwater | Lake |
| Estuarine and Marine Wetland | Other |
| Freshwater Emergent Wetland | Riverine |



Scale: 1:242,000

1 inch equals 3.82 miles



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: Wetlands data obtained from USFWS (<https://fwsprismar.ywlm.usgs.gov/wetlands/apps/wetlands-mapper/>); Esri Imagery Basemap service

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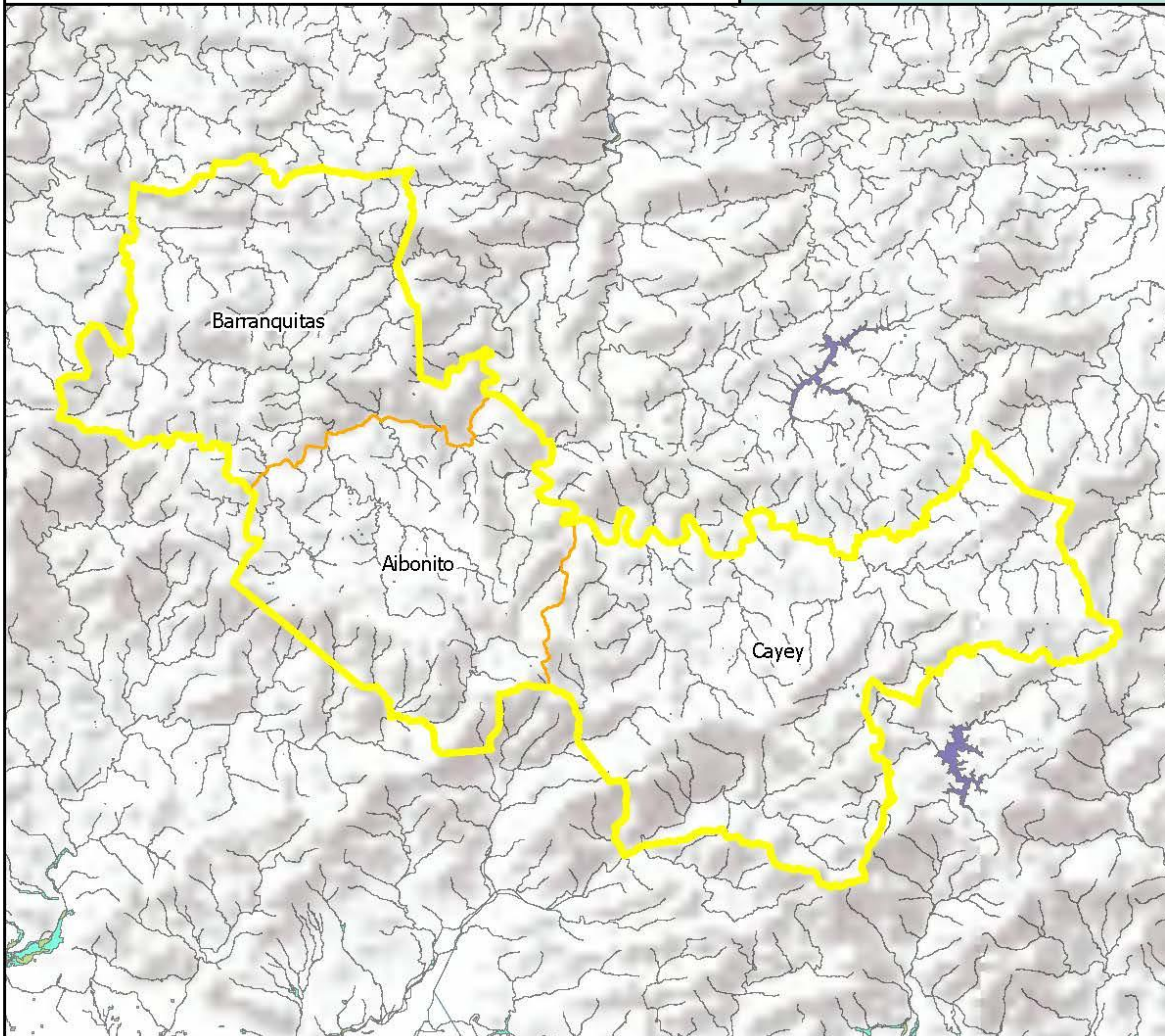


Wetlands -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey

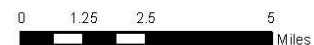


- | | |
|--------------------------------|-----------------------------------|
| Planning Region Boundaries | Freshwater Forested/Shrub Wetland |
| Municipalities | Freshwater Pond |
| Estuarine and Marine Deepwater | Lake |
| Estuarine and Marine Wetland | Other |
| Freshwater Emergent Wetland | Riverine |



Scale: 1:186,000

1 inch equals 2.94 miles



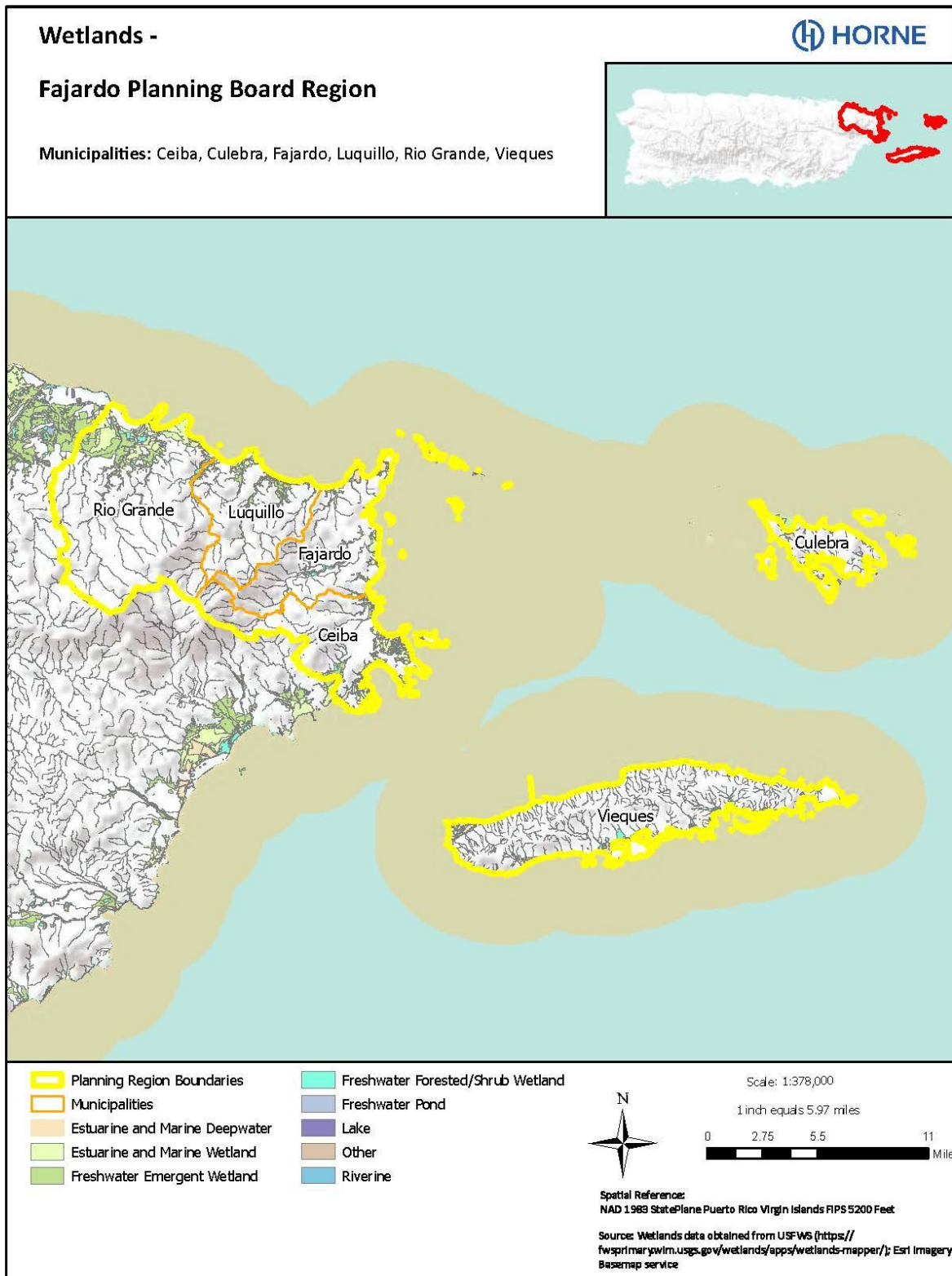
Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: Wetlands data obtained from USFWS (<https://fwsprismar.gov/m.usgs.gov/wetlands/apps/wetlands-mapper/>); Esri Imagery Basemap service

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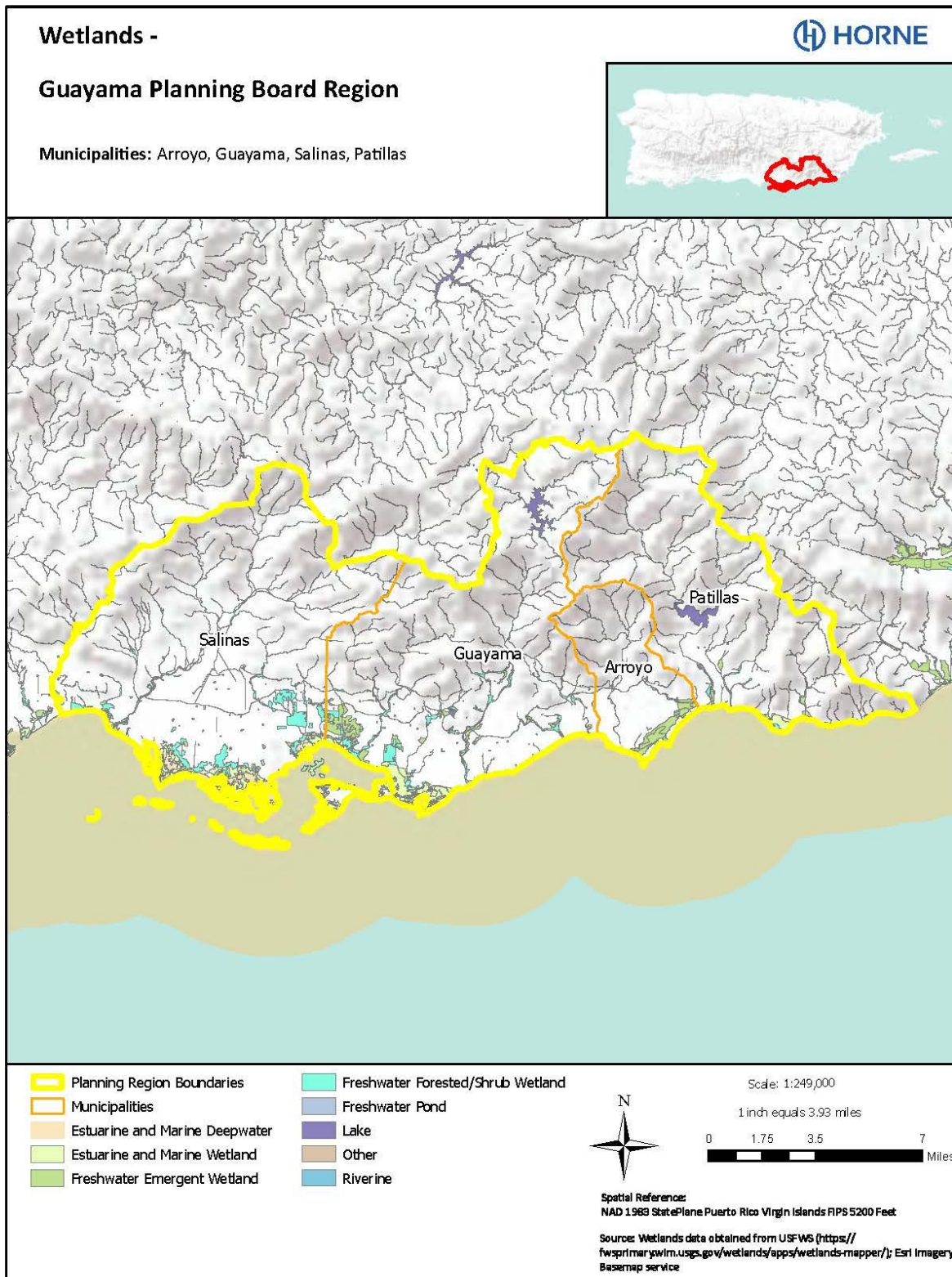
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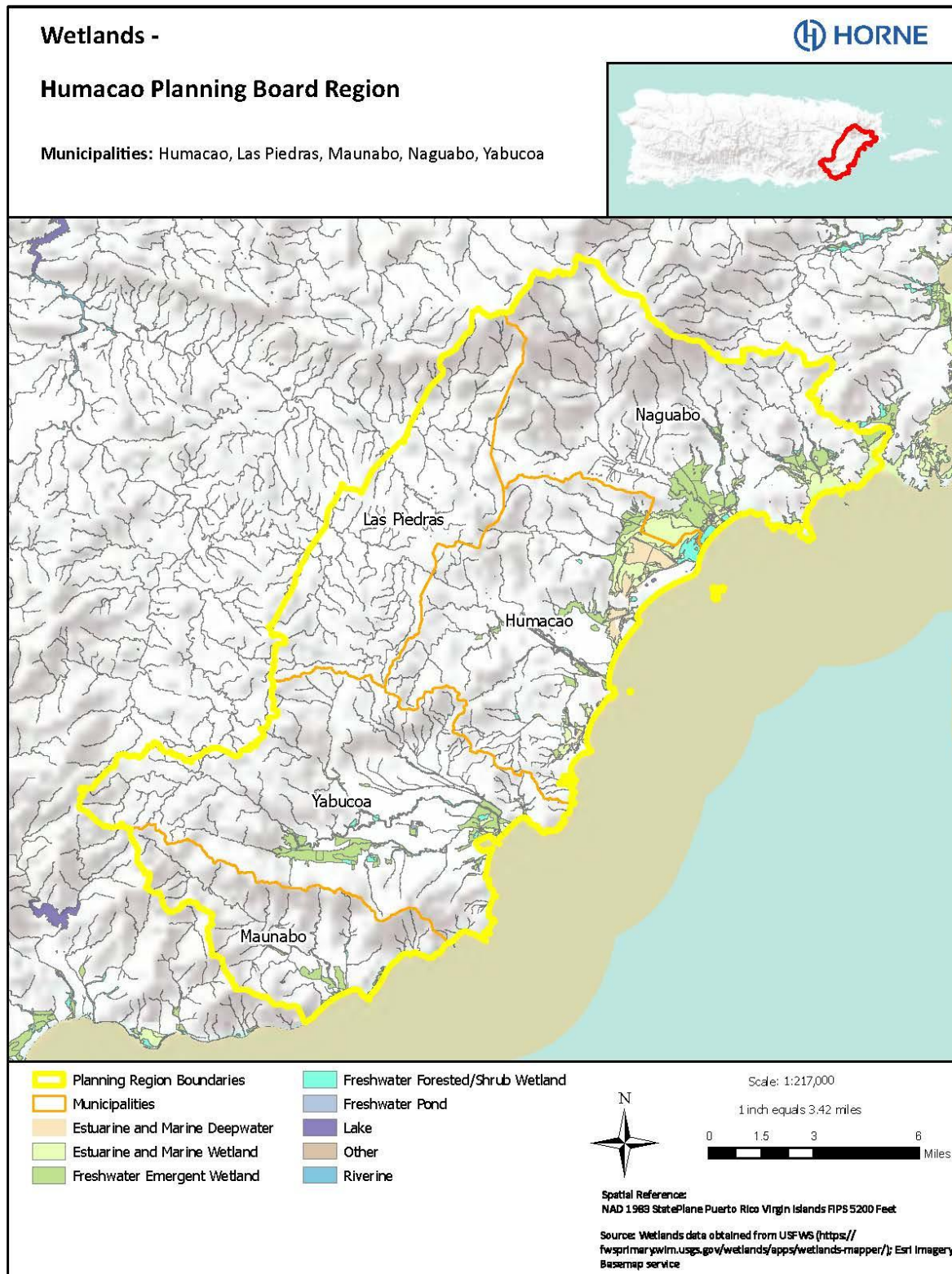
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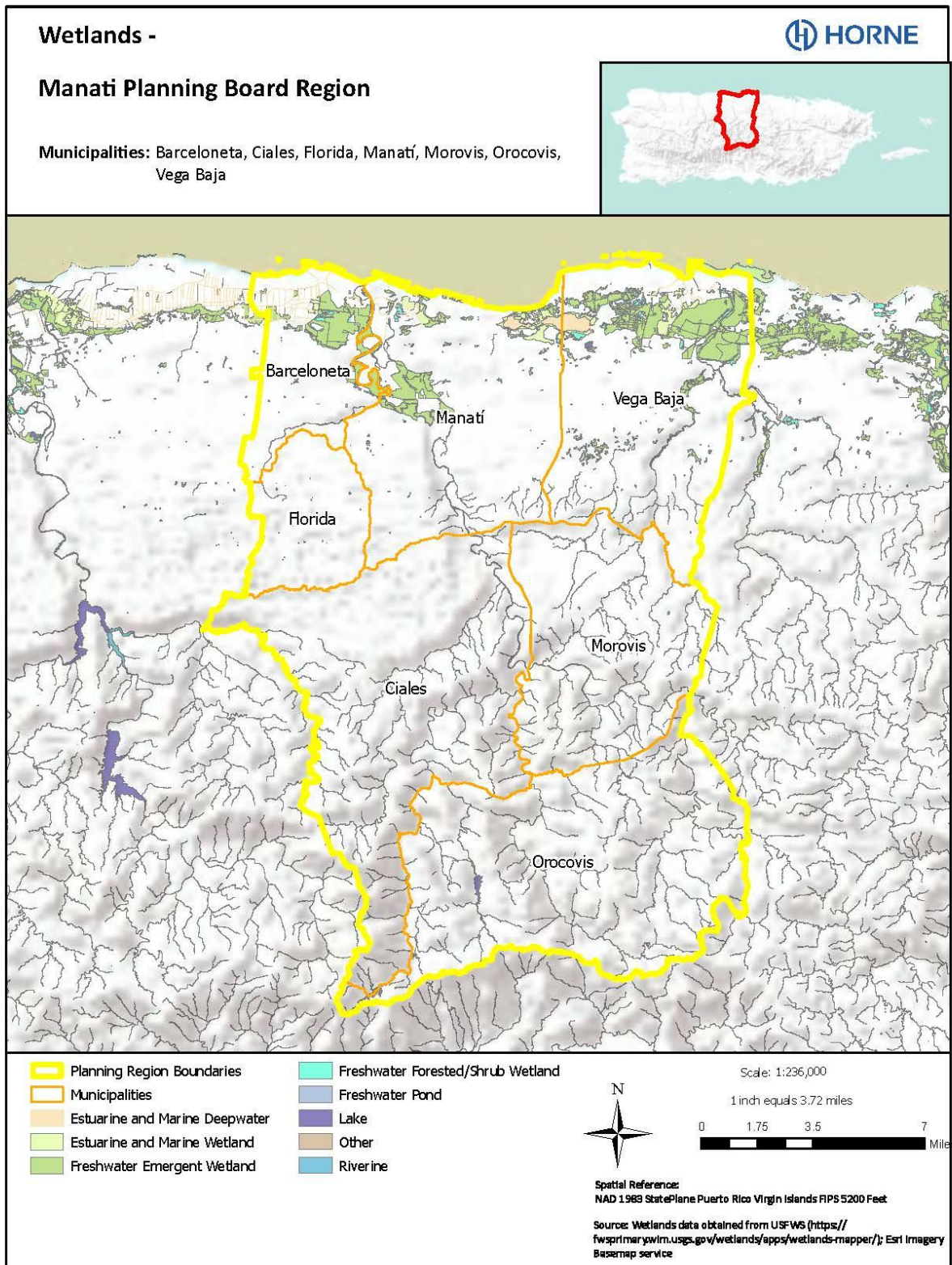
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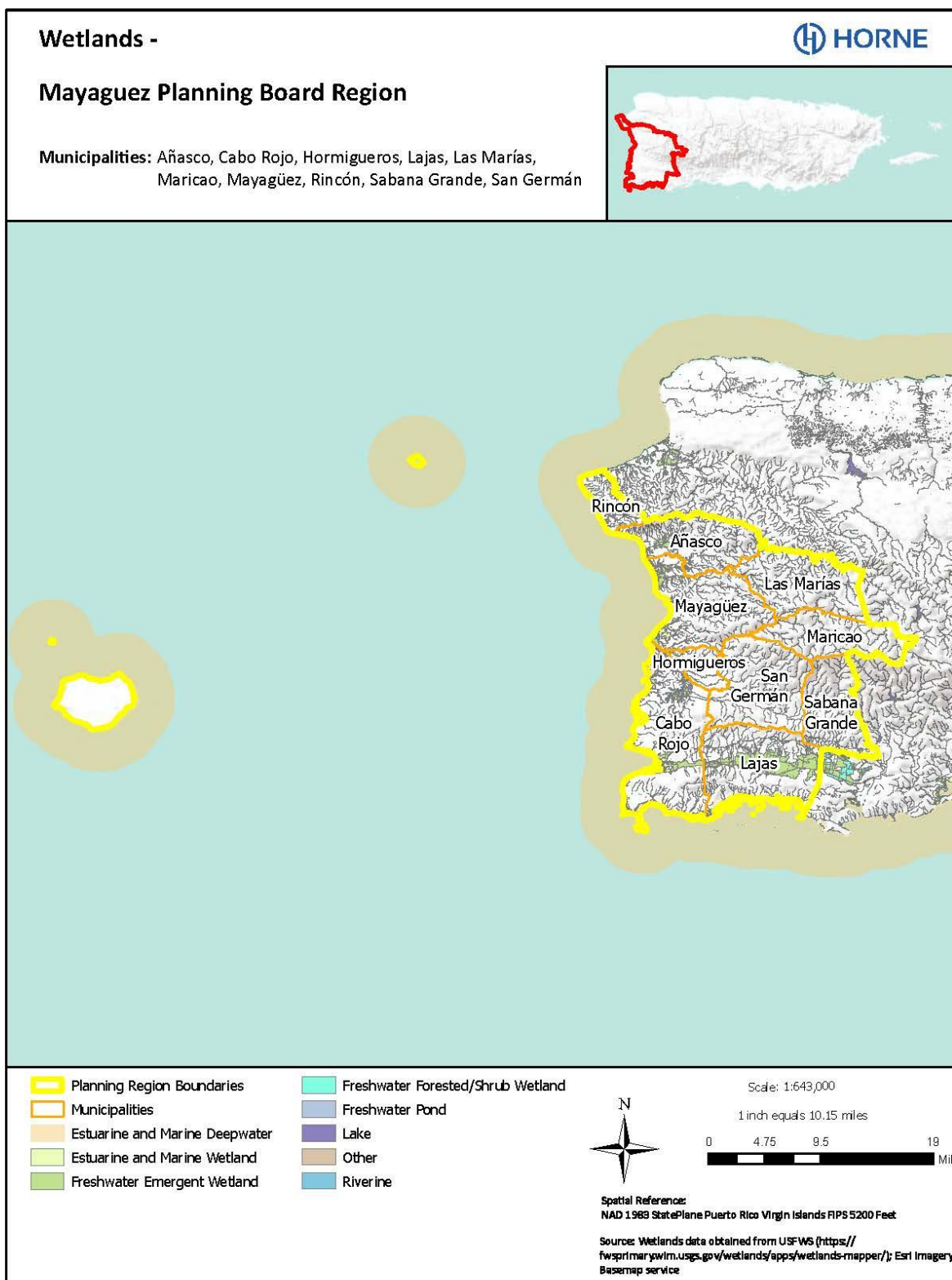
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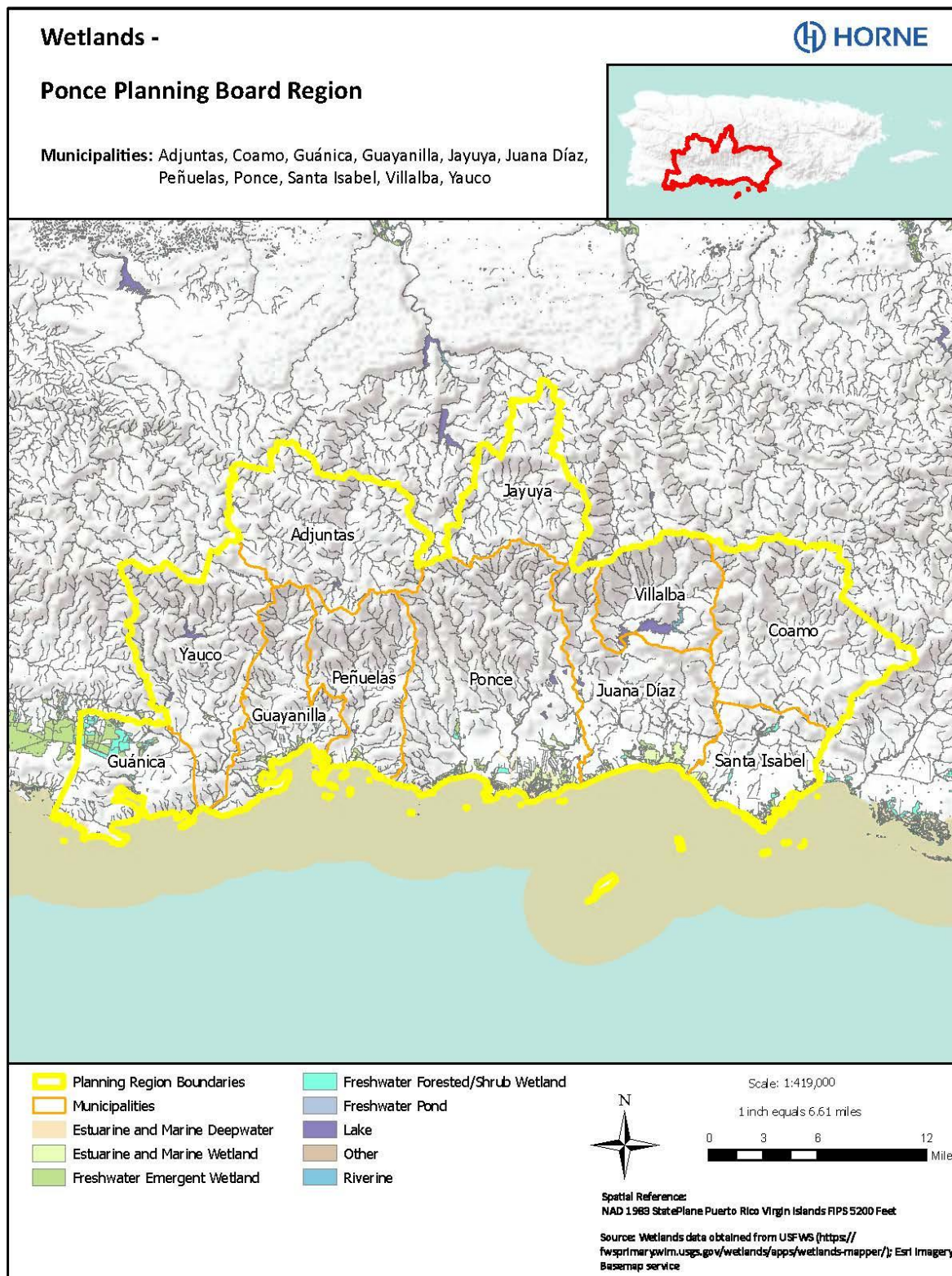
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Wetlands -



San Juan Planning Board Region

Municipalities: Bayamón, Canóvanas, Carolina, Corozal, Dorado, Guaynabo, Loíza, Naranjito, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta

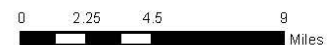


- | | |
|--------------------------------|-----------------------------------|
| Planning Region Boundaries | Freshwater Forested/Shrub Wetland |
| Municipalities | Freshwater Pond |
| Estuarine and Marine Deepwater | Lake |
| Estuarine and Marine Wetland | Other |
| Freshwater Emergent Wetland | Riverine |



Scale: 1:319,000

1 inch equals 5.03 miles



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: Wetlands data obtained from USFWS (<https://fwsprismar.gov/m.usgs.gov/wetlands/apps/wetlands-mapper/>); Esri Imagery Basemap service

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A3-2: Communication with USACE





From: environmentcdbg
To: nelson.r.colon@usace.army.mil; PublicMail.CESAI-CC@usace.army.mil
Cc: Aldo A. Rivera-Vazquez
Bcc: Alberto Mercado
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Thursday, March 20, 2025 3:29:24 PM
Attachments: [AES \(FER\)_USACE_Consultation Letter_PRDOH.pdf](#)
[image003.png](#)

Greetings Mr. Colón,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienoo.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infoedbg@vivienda.pr.gov



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A4: Coastal Zone Management





A4-1: PR Planning Board Resolution



GOVERNMENT OF PUERTO RICO
PUERTO RICO PLANNING BOARD

July 24, 2024

RESOLUTION JP-2024-004

Federal Consistency Certification with the
Puerto Rico Coastal Zone Management Program
Community Development Block Grant – Disaster Recovery (CDBG-DR) and
Community Development Block Grant – Mitigation (CDBG-MIT)

The United States (U.S.) Government, through Major Disaster Declarations (DR-4336 and DR-4339), declared Puerto Rico a disaster area after the devastation caused by Hurricanes Irma and María. Considering this event, the U.S. Congress approved Community Development Block Grant – Disaster Recovery (CDBG-DR) funds for Puerto Rico's unmet disaster recovery needs, and Mitigation (CDBG-MIT) funds for the Commonwealth's long-term planning and risk mitigation activities. Moreover, the Congress approved additional CDBG-DR funds for the Commonwealth in response to Major Disaster Declarations: DR-4336, DR-4339, DR-4473, and DR-4671.

The damage caused by high-speed winds, storm surges, earthquakes, flooding, and landslides attributed to major disasters, had devastating effects on Puerto Rico's coastal areas that need to be addressed in an expeditious manner. While many of the direct emergency needs have been met, disaster recovery and mitigation need of the Commonwealth are on-going and will continue into the near future.

The Law Number 75 of June 24, 1975, as amended (Organic law of the Puerto Rico Planning Board) grants the Puerto Rico Planning Board (PRPB) the responsibility and powers to guide the comprehensive development of Puerto Rico, guaranteeing the general well-being of its current and future inhabitants.

The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq) establishes that federal agency activities including the award of Federal Assistance must be consistent to the maximum extent practicable with the enforceable policies of approved state management programs. The Puerto Rico Planning Board (PRPB) is the designated state agency to review and determine Federal Consistency with the PR Coastal Zone Management Program according to established procedures at 15 CFR Part 930. This sui-generis process at the Puerto Rico Planning Board is under exclusive federal jurisdiction.

The Commonwealth of Puerto Rico is formally the Grantee for the CDBG-DR and CDBG-MIT funds. The Governor of Puerto Rico designated the Puerto Rico Department of Housing (PRDOH) as the grantee for the purposes of administering the program and executing grant agreements with the U.S. Department of Housing and Urban Development (HUD), the federal oversight agency for the CDBG-DR and CDBG-MIT funding.

Taking into consideration the high volume of requests for federal assistance that has been generated as part of the recovery process following the disaster declarations and the current need to expedite this process, the PRPB proceeded to carry out a review of Federal Consistency with the PMZCPR for the following federal assistance programs:

- CDBG-DR eligible activities provided in Section 105(a) of the Housing and Community Development Act of 1974 (HCDA), and outlined in the applicable Federal Register Notices, the CDBG-DR Action Plan and CDBG-DR Program Guidelines.
- CDBG-MIT eligible activities provided in Section 105(a) of the Housing and Community Development Act of 1974 (HCDA), and outlined in the applicable Federal Notices, the CDBG-MIT Action Plan and CDBG-MIT Program Guidelines.



After considering the information provided by PRDOH in relation to the eligible projects and activities to be awarded by the above-mentioned programs, the PR Planning Board (PRPB) in their meeting held on July 24, 2024, agreed the following:

- A. The following activities or projects to be financed under the CDBG-DR and CDBG-MIT programs have no significant impact on Puerto Coastal Resources and do not require Federal Consistency review:
 1. Activities to be financed under the following programs:
 - a. **Community Energy and Water Resilience Installations Program (CEWRI):** The Program provide single-family homeowners energy and water efficiency improvements to promote resilience by installing PV systems with battery backup for critical loads and water storage systems.
 - b. **The Workforce Training Program (WFT):** supports entities throughout the Island to offer training in job skills related to the reconstruction and economic growth of Puerto Rico. Also, those skills necessary to situate the Island in the economy of the future.
 - c. **Small Business Financing Program (SBF):** will provide a Recovery Grants phase (grants awards of up to \$150,000) for working capital and movable equipment for small businesses and microenterprises that suffered physical and/or financial losses due to the Hurricanes. Start-ups created after the Hurricanes are also eligible if they can show their creation was the result of a closure of a previous business of same owner(s), after damages caused by the Hurricanes.
 - d. **Re-grow PR Urban-Rural Agriculture Program:** Develop, Increase and improve agricultural capacity and addresses the needs created by Hurricanes Irma and María with a substantial investment of CDBG-DR funds for a wide variety of viable and sustainable agricultural activities.
 2. Projects or activities that are exempt from construction permits according to Act 161-2009, as amended, known as the "Puerto Rico Permit Process Reform Act" and the "Joint Regulation for Evaluation and Expedition of Permits Related to Development, Land Use and Business Operation" (Regulation Number 9473).
- B. Federal assistance awarded under the CDBG-DR and CDBG-MIT programs for demolition of structures with the purpose of restoring green areas, water retention areas and habitat recovery is consistent with the PRCZMP.
- C. Federal assistance awarded under the CDBG-DR and CDBG-MIT programs for projects that involve demolition for reconstruction, reconstruction or construction of a new structure is consistent with the PRCZMP if the project fulfills the following requirements:
 1. The project must comply with land use regulations established under the PR Land Use Plan, Territorial Plans and special plans that apply according to the location of the project.
 2. The structure to be constructed or reconstructed must comply with applicable regulations and parameters established in the "Joint Regulation for Evaluation and Expedition of Permits Related to Development, Land Use and Business Operation" (Regulation Number 9473).

3. Each project must provide evidence of compliance with the PR Environmental Policy Law (Law number 416 of September 22, 2004) by providing copy of the Environmental Compliance Determination emitted by OGPe.
 4. The structure to be built or rehabilitated must be located outside flood risk zones according to the "Recommended Base Flood Level Maps" (FEMA Advisory Maps) effective on April 13, 2018, or the most recent FEMA map that applies according to the location of the project.
 5. Structures located within a flood hazard zone must evidence compliance with the Special Flood Hazard Zone Regulations (Planning Regulation Number 13) by providing copy of the FEMA Elevation Certificate (form ff-206-fy22-152) completed and signed by an engineer or surveyor.
 6. In the case of projects that are located within Historic Zones designated by the PR Planning Board, or if the structure was designated as a Historic Site, the project must have the endorsement of the Puerto Rican Culture Institute.
- D. Federal assistance awarded under the CDBG-DR and CDBG-MIT programs for infrastructure projects (sidewalks, roads, highways, service lines, public squares) are consistent with the PRCZMP with the condition that the applicant fulfill the following requirements before the construction phase of the project:
1. Evidence compliance with the PR Environmental Policy Law (Law number 416 of September 22, 2004) by providing copy of the Environmental Compliance Determination emitted by the PR Permit Management Office (OGPe).
 2. Evidence compliance with the Special Flood Hazard Zone Regulations (Planning Regulation Number 13) when it is required depending on the nature and location of the project.
 3. In the case of projects that are located within Historic Zones designated by the PR Planning Board, the project must have the endorsement of the Puerto Rican Culture Institute.

The Office of Geology and Hydrogeology of the Puerto Rico Planning Board will provide a conditioned certification letter which will allow the applicant to have access to the funds to complete the design and permitting phase. The applicant must fulfill the above-mentioned requirements 90 days before beginning the construction phase.

- E. Furthermore, The PR Planning Board on February 1, 2023, issued Resolution JP-339 that covers Federal Emergency Management Agency's (FEMA) Public Assistance Program (PA) and Hazard Mitigation Grant Program (HMGP). Therefore, federal assistance awarded through the "Infrastructure Coordination Program" to match the non-federal items that are required for projects under PA and HMGP programs **are covered by Resolution JP-339 and will not require to be submitted to the PRPB for federal consistency review.**
- F. Hence, Projects for the reconstruction, repair, or rehabilitation of structures for water-dependent uses (piers, boat ramps etc.) **are not covered under this Resolution and must be filed at the US Army Corps of Engineers through RSS.**

Resolution JP-2024-004 | 4

This General Federal Consistency Certification will be in effect for five (5) years from the notification date of this resolution. The Certification at reference will be renewed or amended if necessary to extend its validity or address other matters.

The following parties shall be notified: William Rodríguez, Secretary, PR Department of Housing (PRDH); Angel G. López Guzman, Permits and Environmental Compliance Division, PRDH; Juna C. Perez Bofill, PRHD; Aldo A. Rivera, PRHD; Alberto Mercado, José A. Cedeño Maldonado, US Department of Housing and Urban Development (HUD), Donna M. Mahon, HUD and Magaly Massanet Rodríguez, Director, Puerto Rico Coastal Zone Management Program, DNER.

ADOPTED in San Juan, Puerto Rico, July 24, 2024



PLAN. JULIO LASSÚS RUIZ, LLM, MP, PPL
President



PLAN. REBECCA RIVERA TORRES, MRP, PPL
Vice-President



ING. JOSÉ DÍAZ DÍAZ, MEM, BSIE
Associate Member



LEMUEL RIVERA RIVERA, BSEE, CAPM
Associate Member

Certify: That this Resolution is copy of the agreement adopted by Puerto Rico Planning Board in its meeting of July 24, 2024. I expedite and notify this copy to the parties under my sign and official stamp of the Puerto Rico Planning Board stamp, for general use and knowledge.

In San Juan, Puerto Rico, today, **AUG 16 2024**

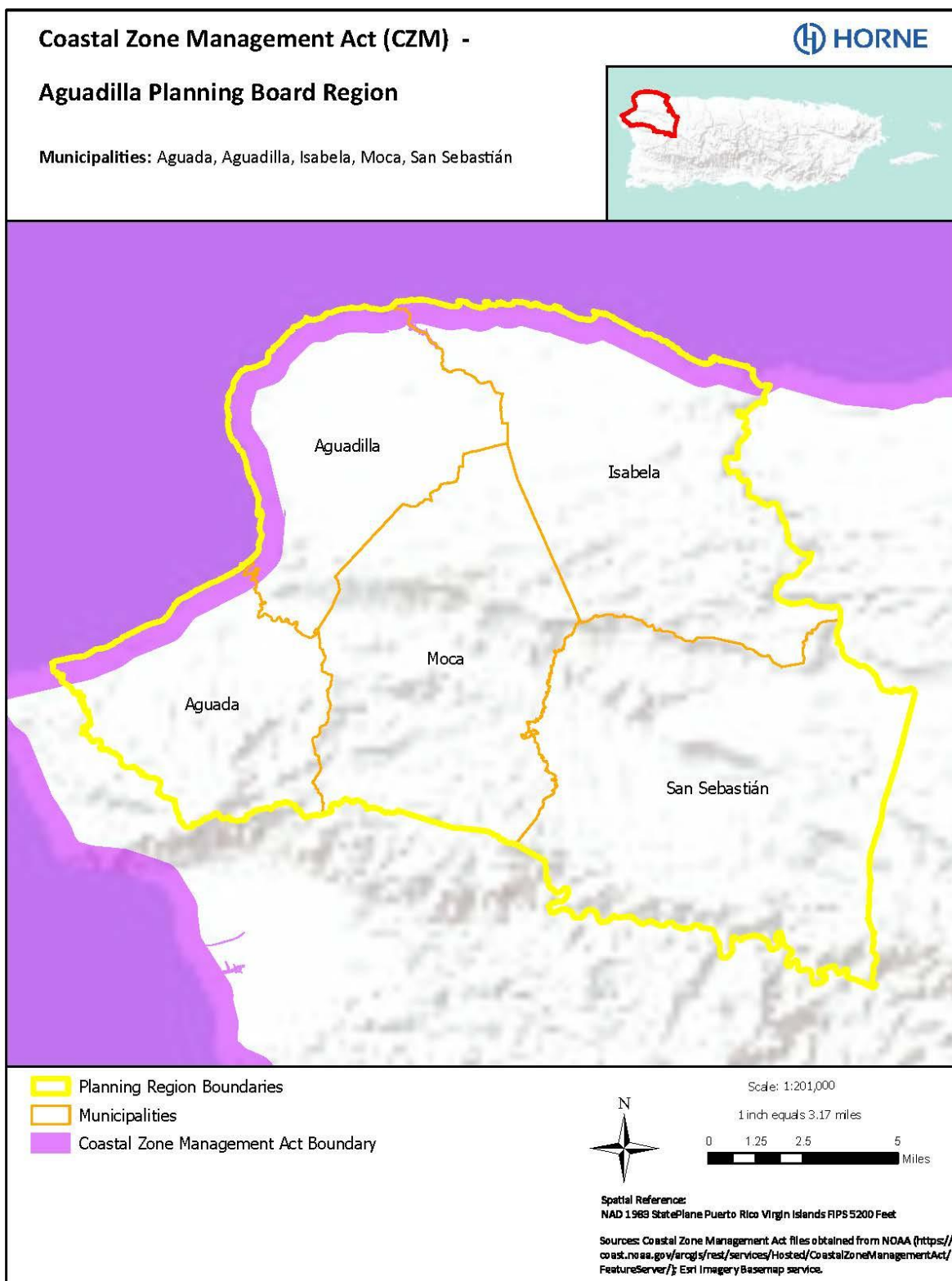


Edgardo Vázquez Rivera
Secretary



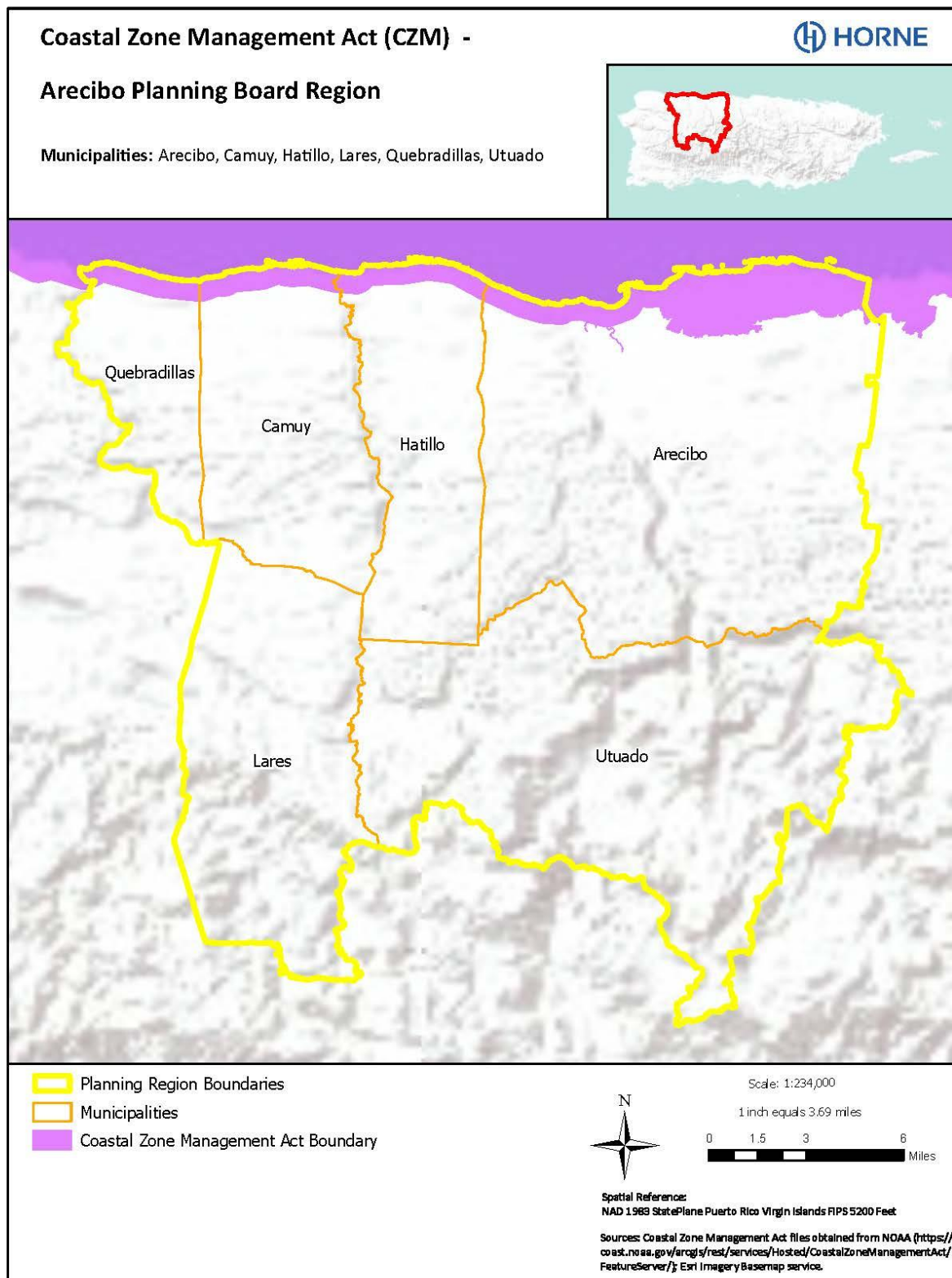
A4-2: Coastal Zone Management Maps





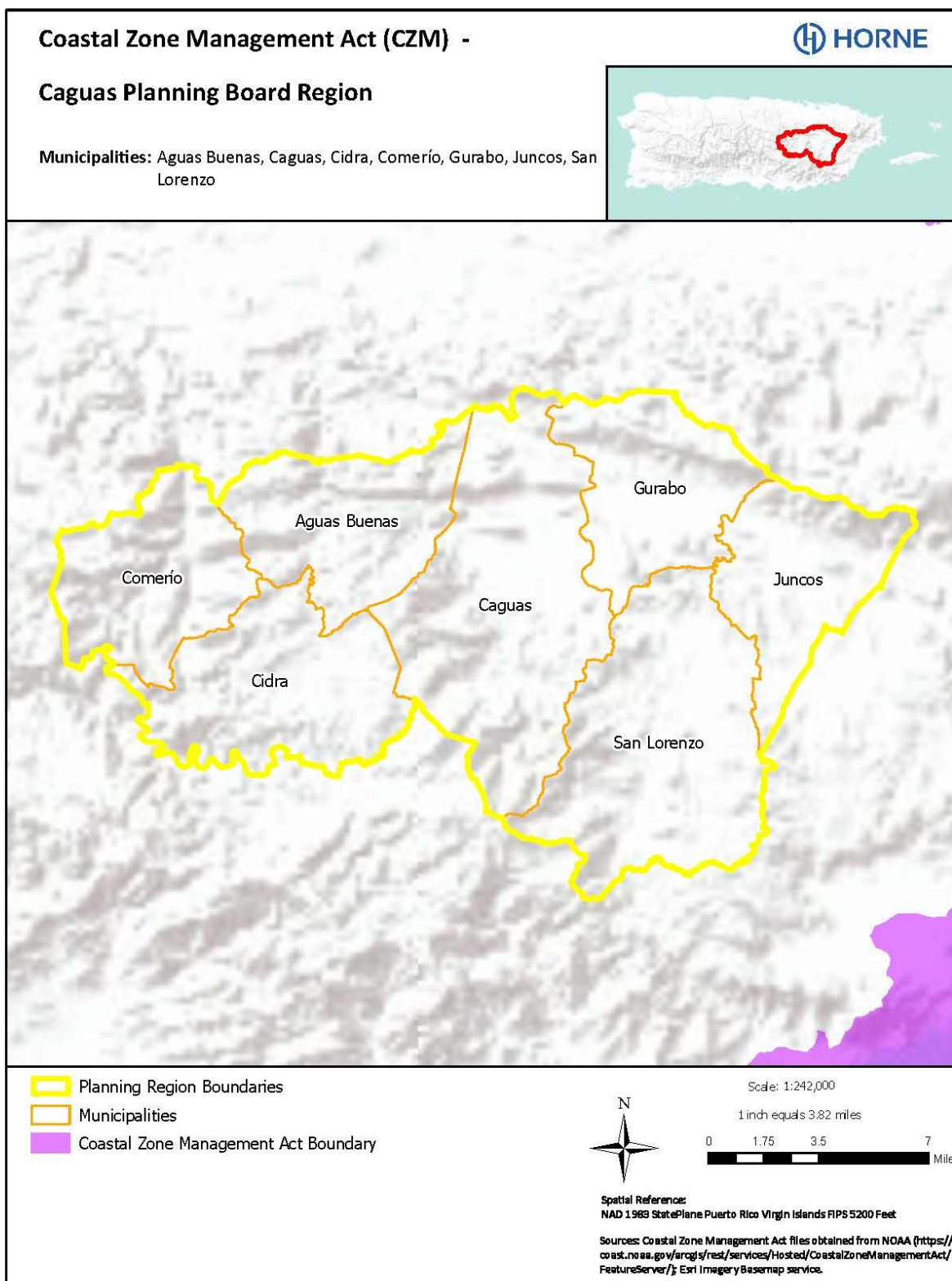
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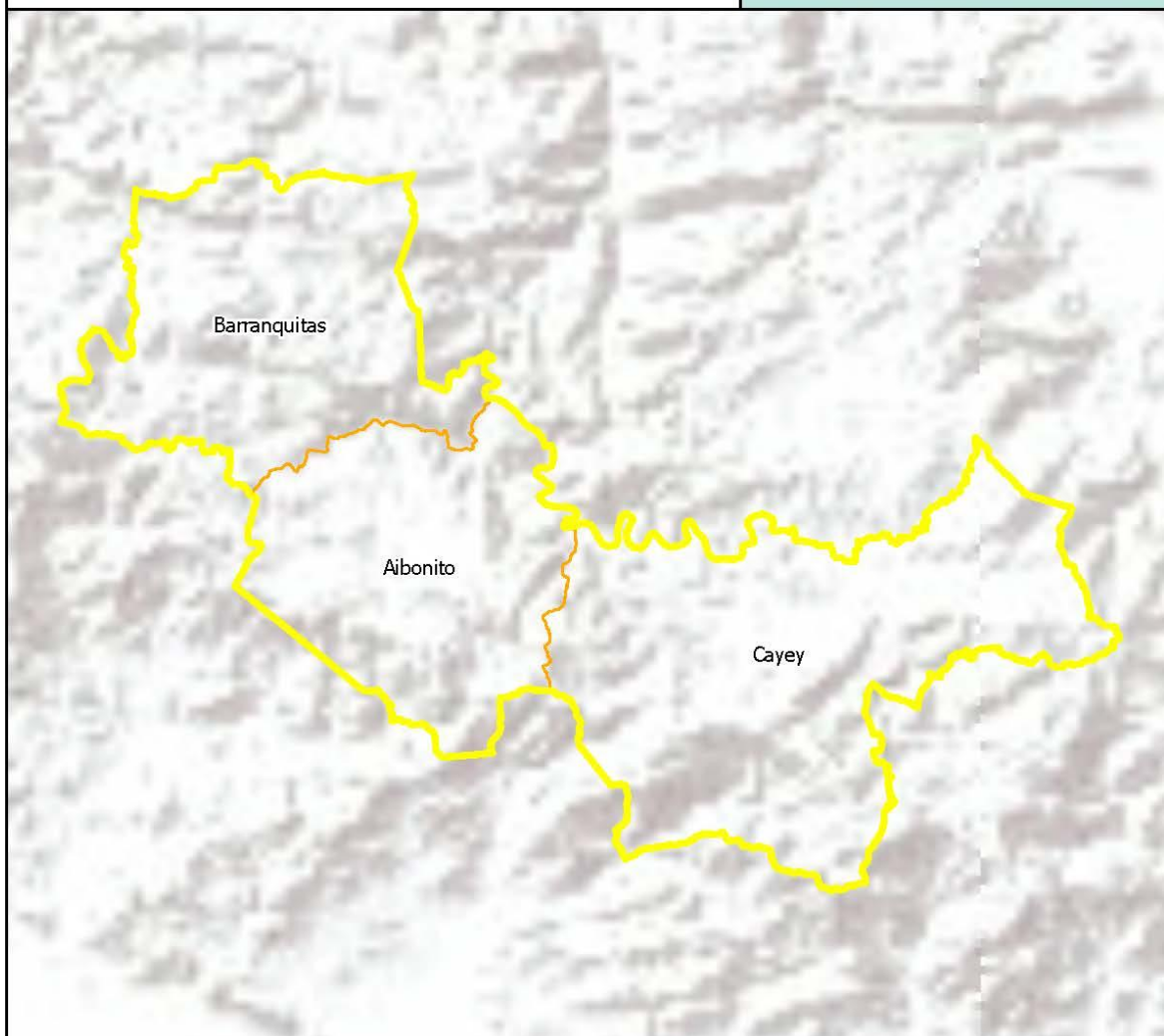
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Coastal Zone Management Act (CZM) -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey

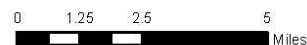


- Planning Region Boundaries
- Municipalities
- Coastal Zone Management Act Boundary



Scale: 1:186,000

1 inch equals 2.94 miles



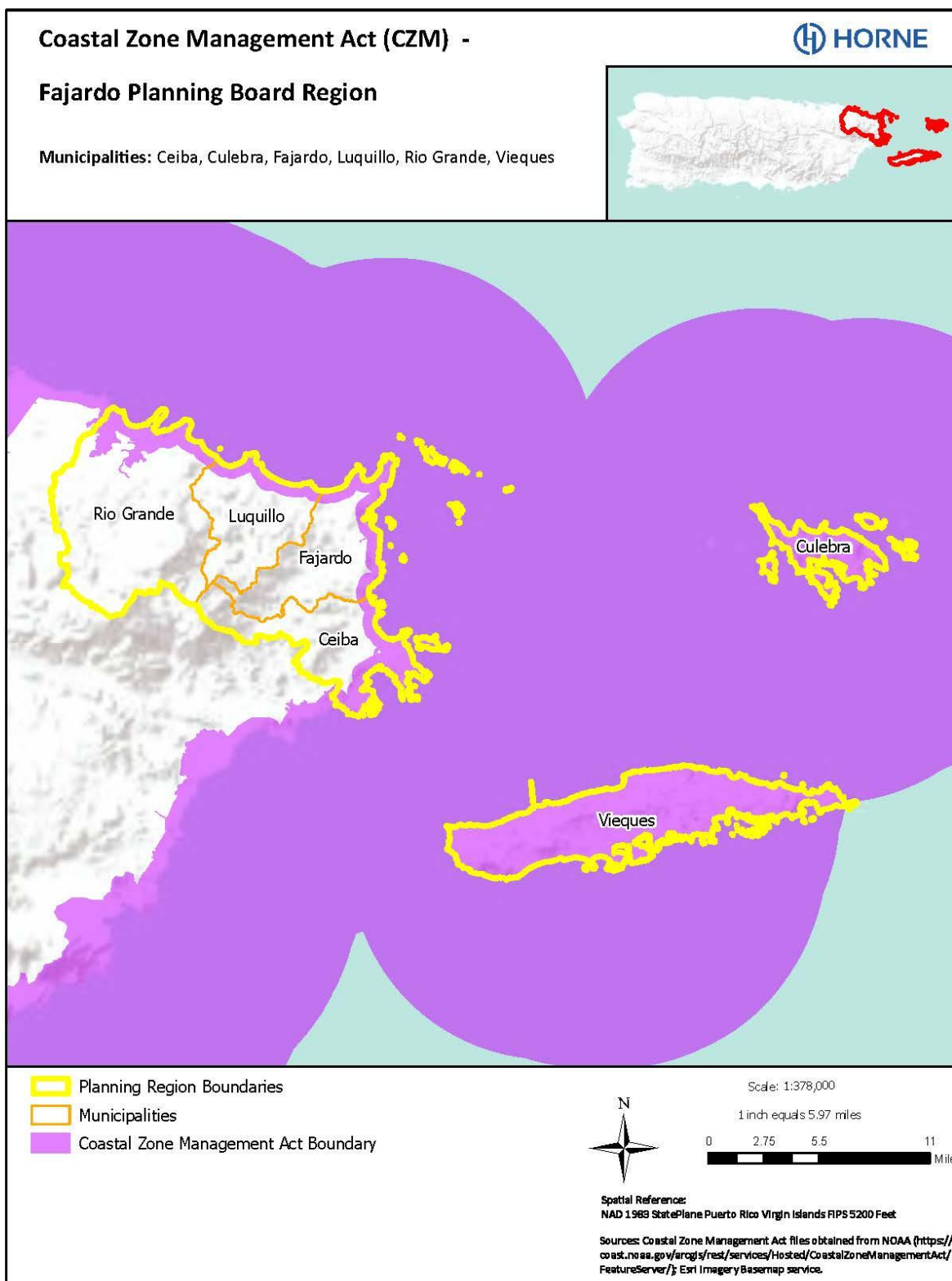
Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: Coastal Zone Management Act files obtained from NOAA (<https://coast.noaa.gov/arcgis/rest/services/Hosted/CoastalZoneManagementAct/FeatureServer/>); Esri Imagery Basemap service.

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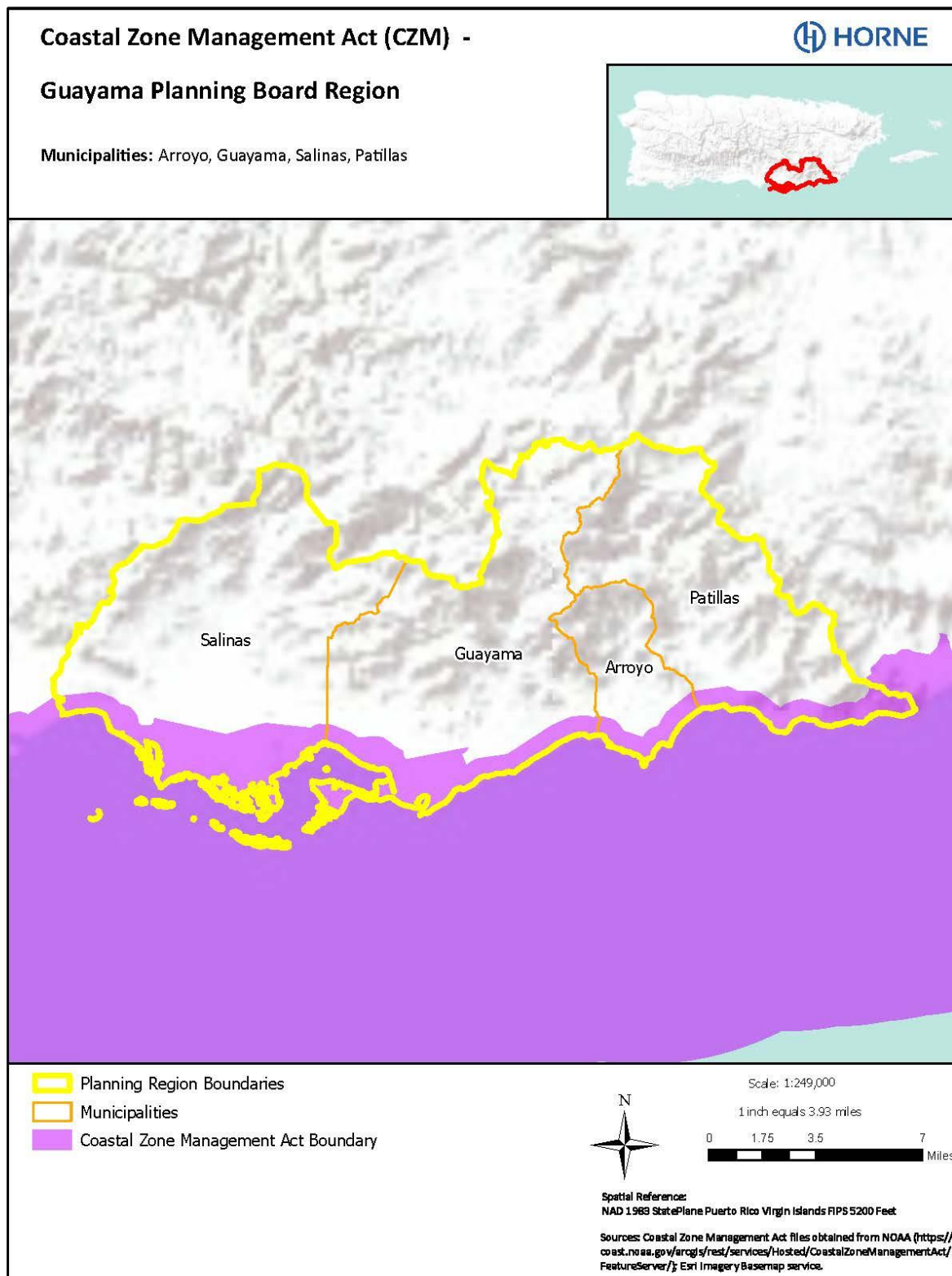
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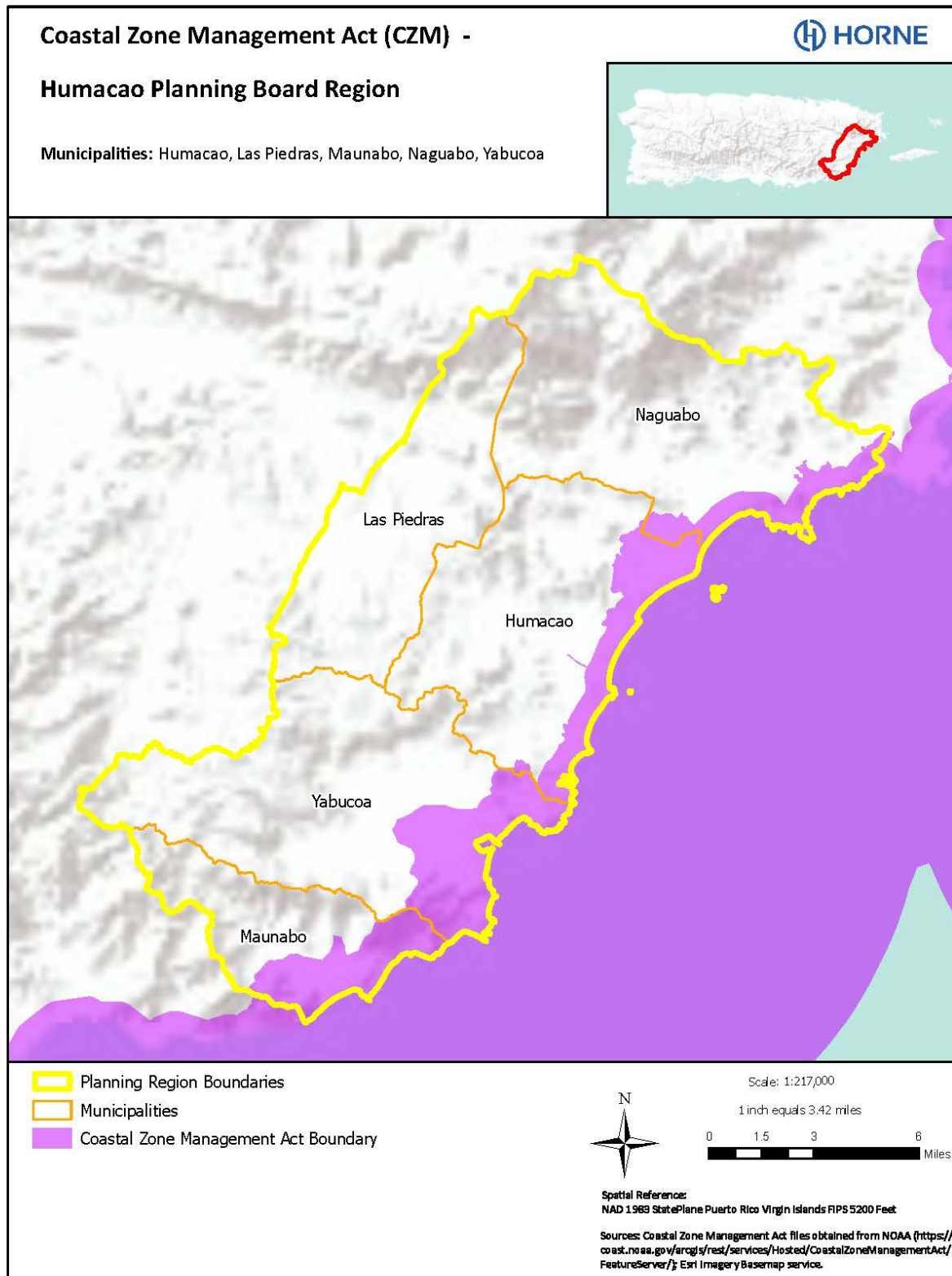
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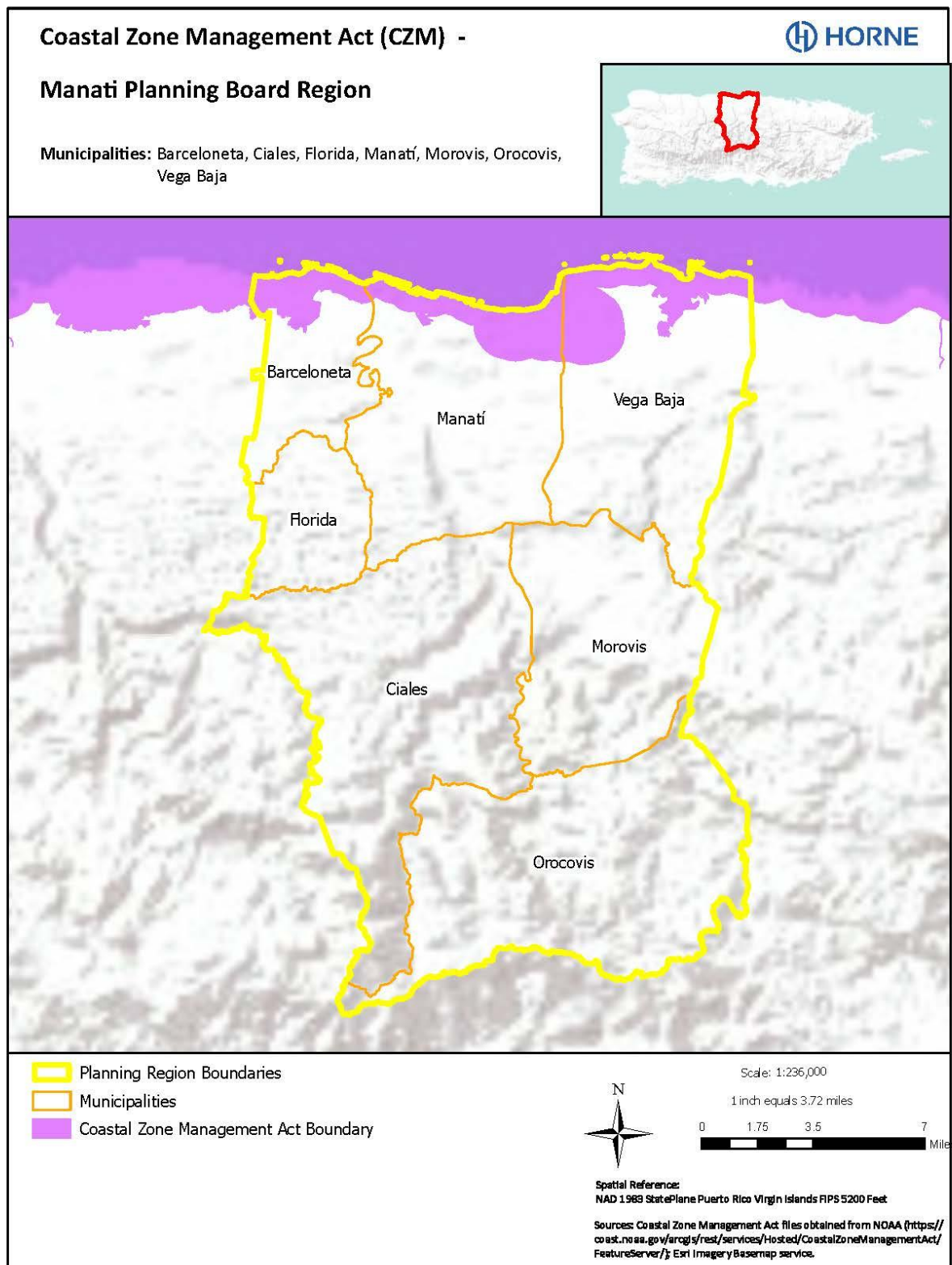


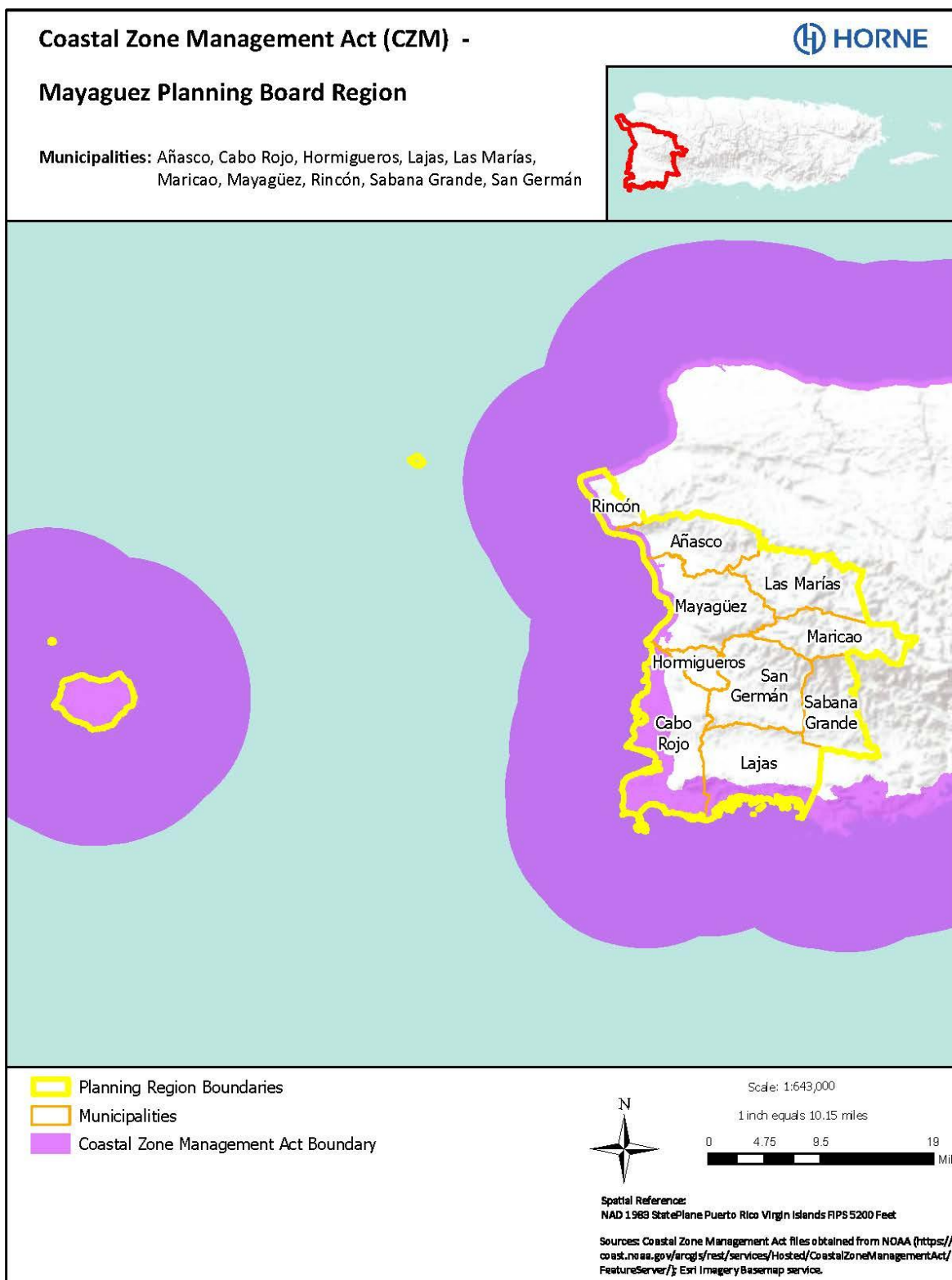
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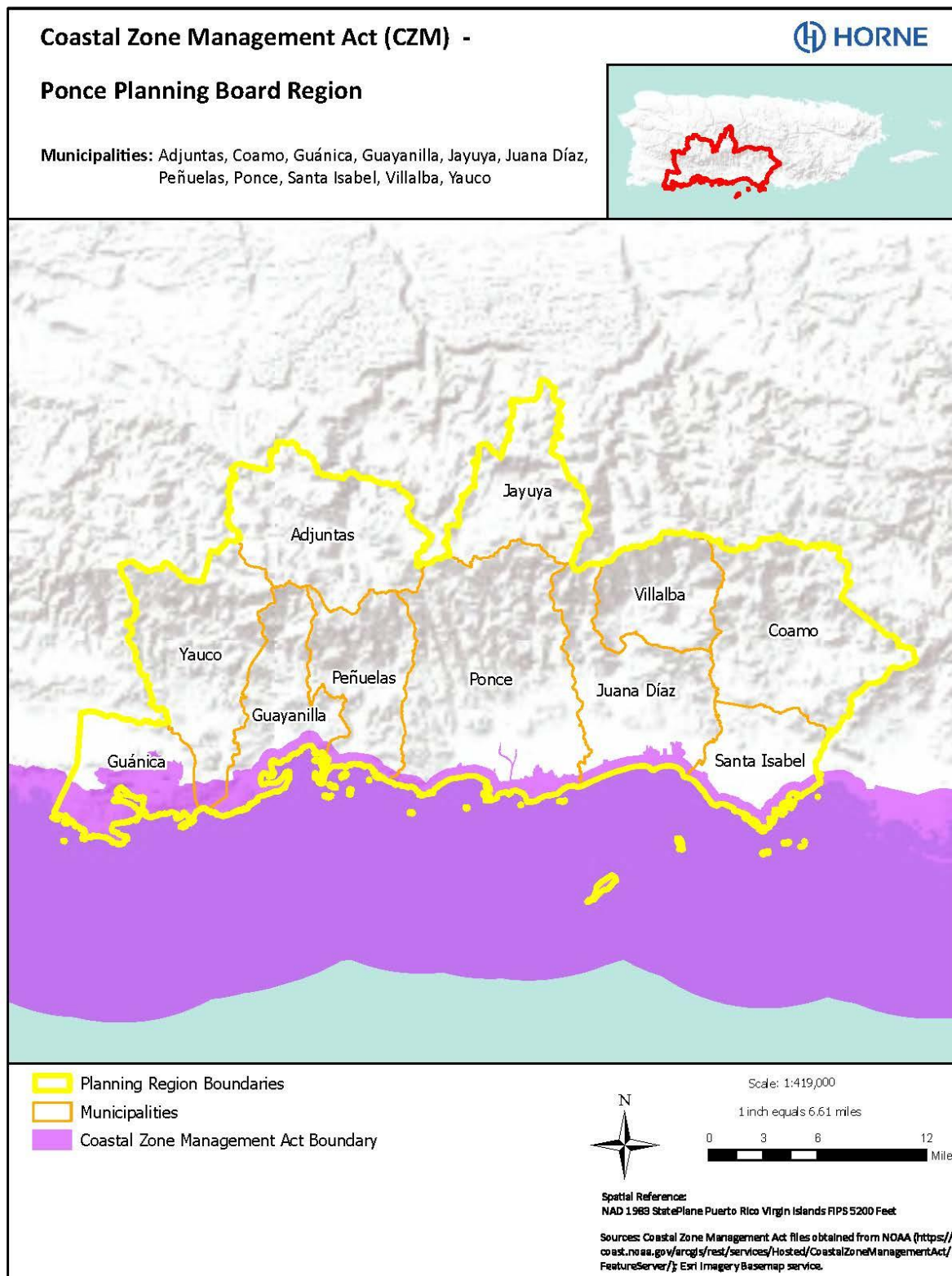
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A4-3: Communication with the PR Planning Board





From: environmentcdbg
To: comentariosjp@jp.pr.gov
Cc: [Aldo A. Rivera-Vazquez](#)
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Wednesday, March 5, 2025 4:38:52 PM
Attachments: [FER\(AES\)_PRPB_Consultation Letter_PRODH.pdf](#)
[image003.png](#)

To whom it may concern,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienno.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: info@cdbg@vivienno.pr.gov



DEPARTAMENTO DE LA

VIVIENDA

GOBIERNO DE PUERTO RICO

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A5: Sole Source Aquifers



A5-1: Sole Source Aquifers Map

Sole Source Aquifers



Distance
Sole Source Aquifers



1:10,501,714

Source: https://services.arcgis.com/cj9YHowT8TU7DUyn/ArcGIS/rest/services/Sole_Source_Aquifers_August_2019/FeatureServer

Spatial Reference:
Name: NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet





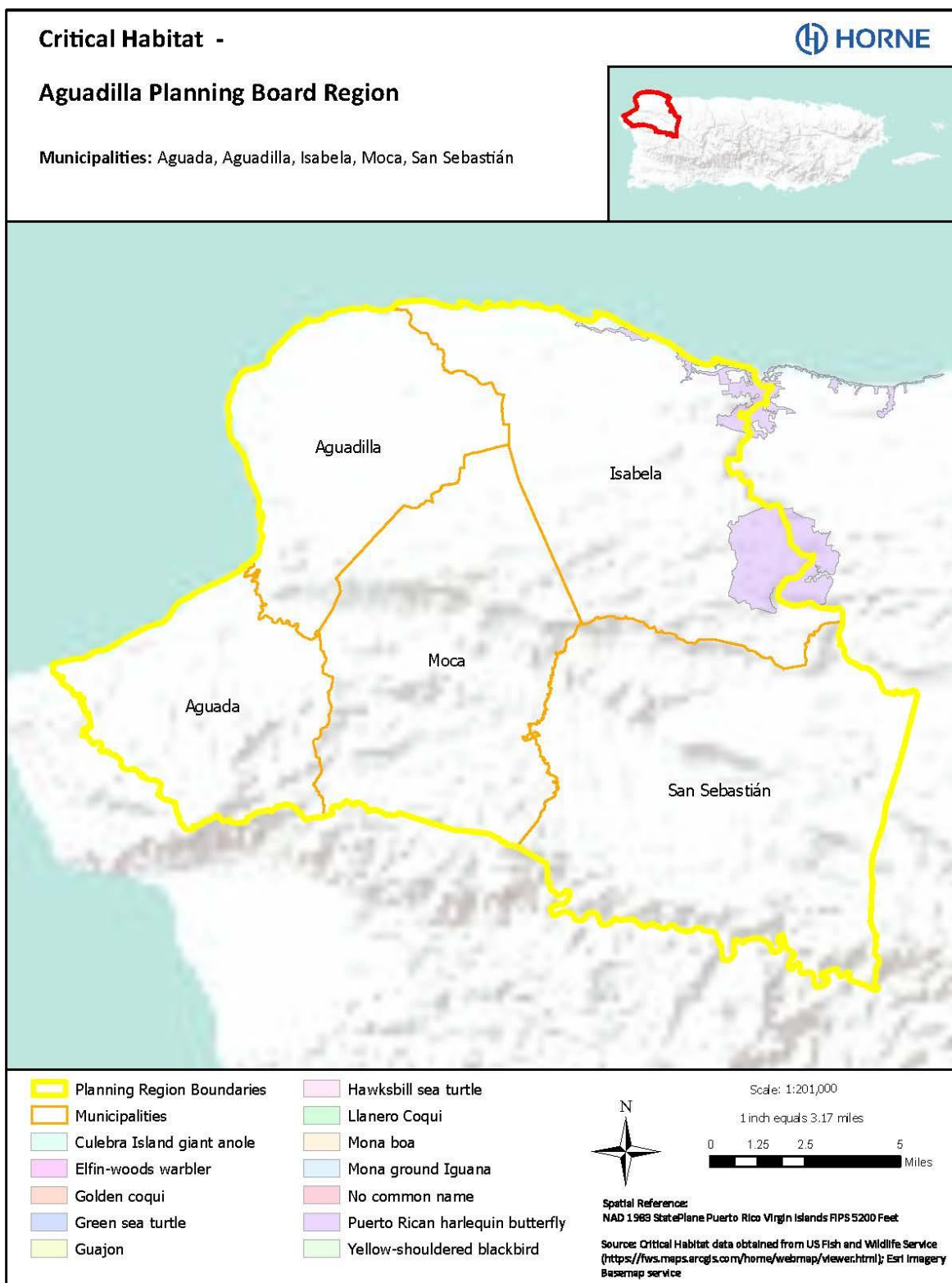
A6: Endangered Species Act





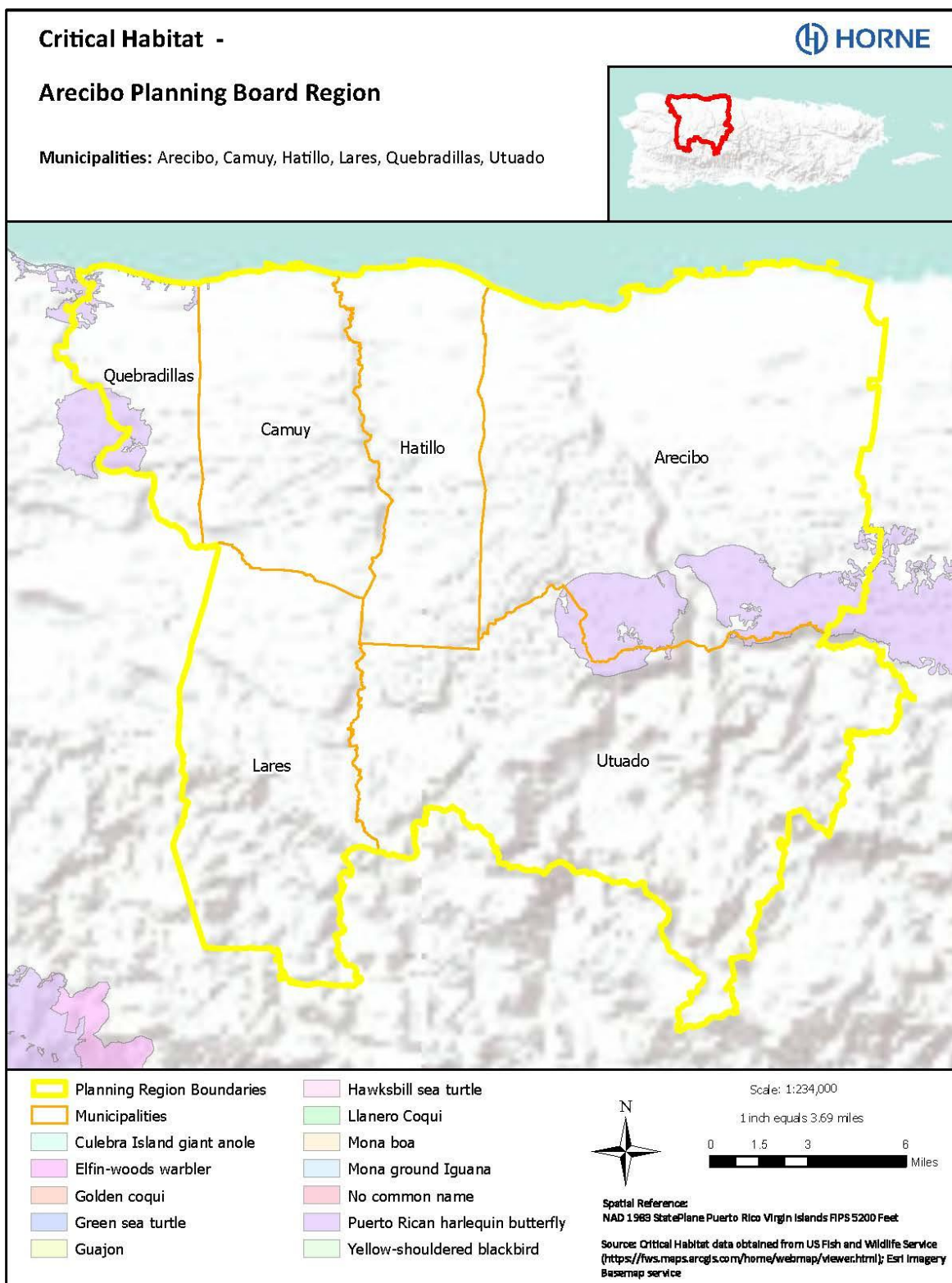
A6-1: Critical Habitats Maps





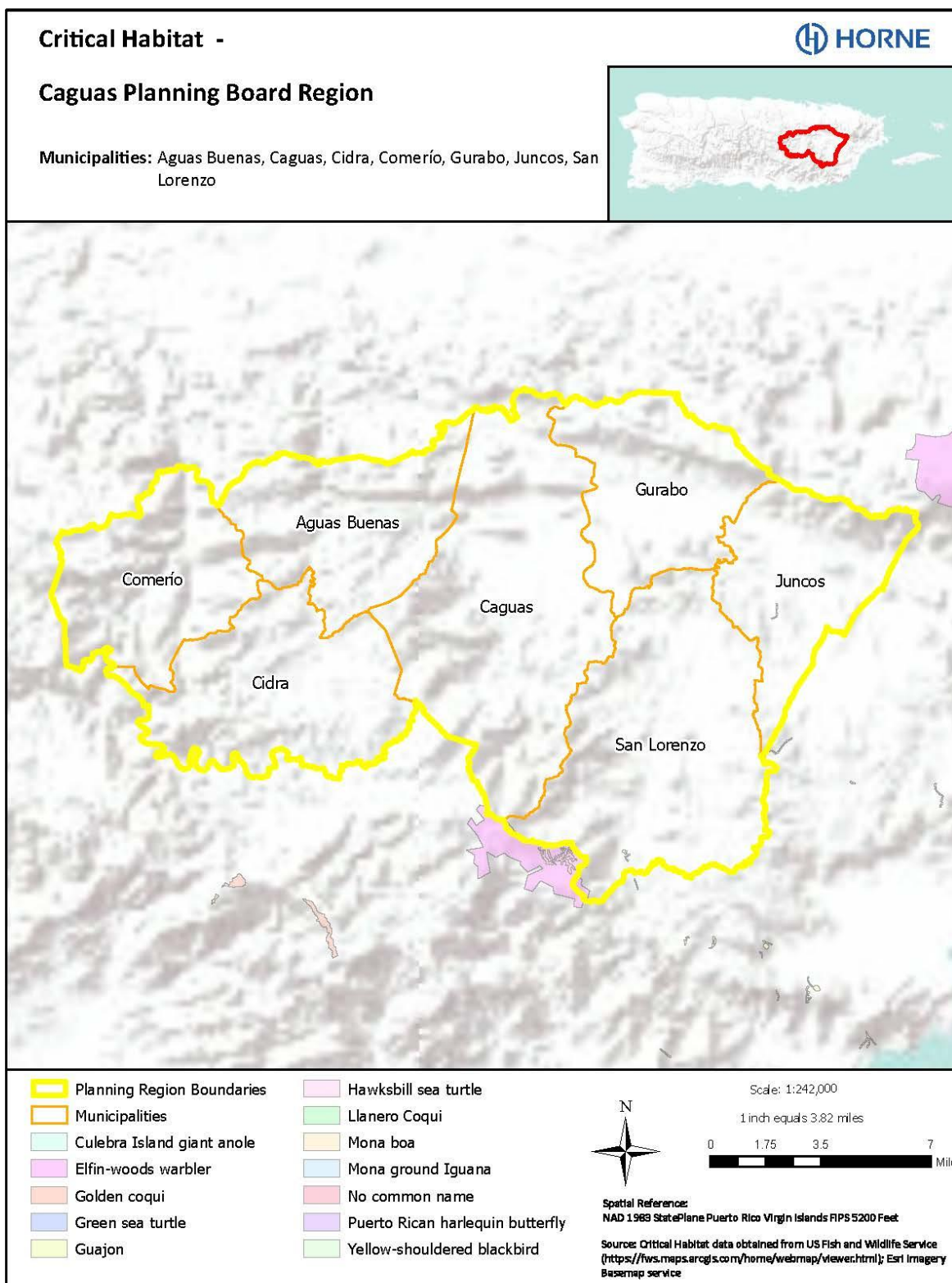
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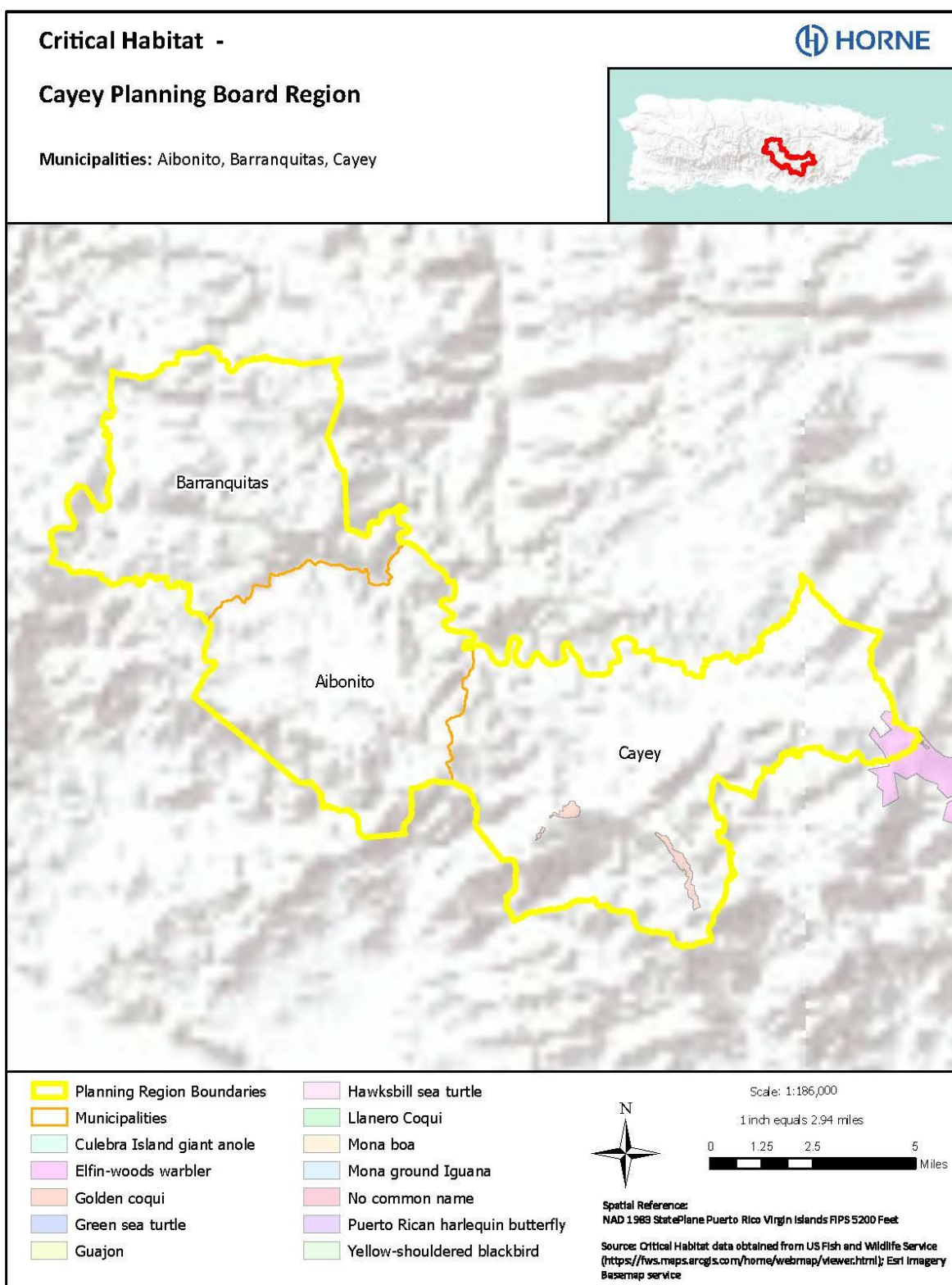
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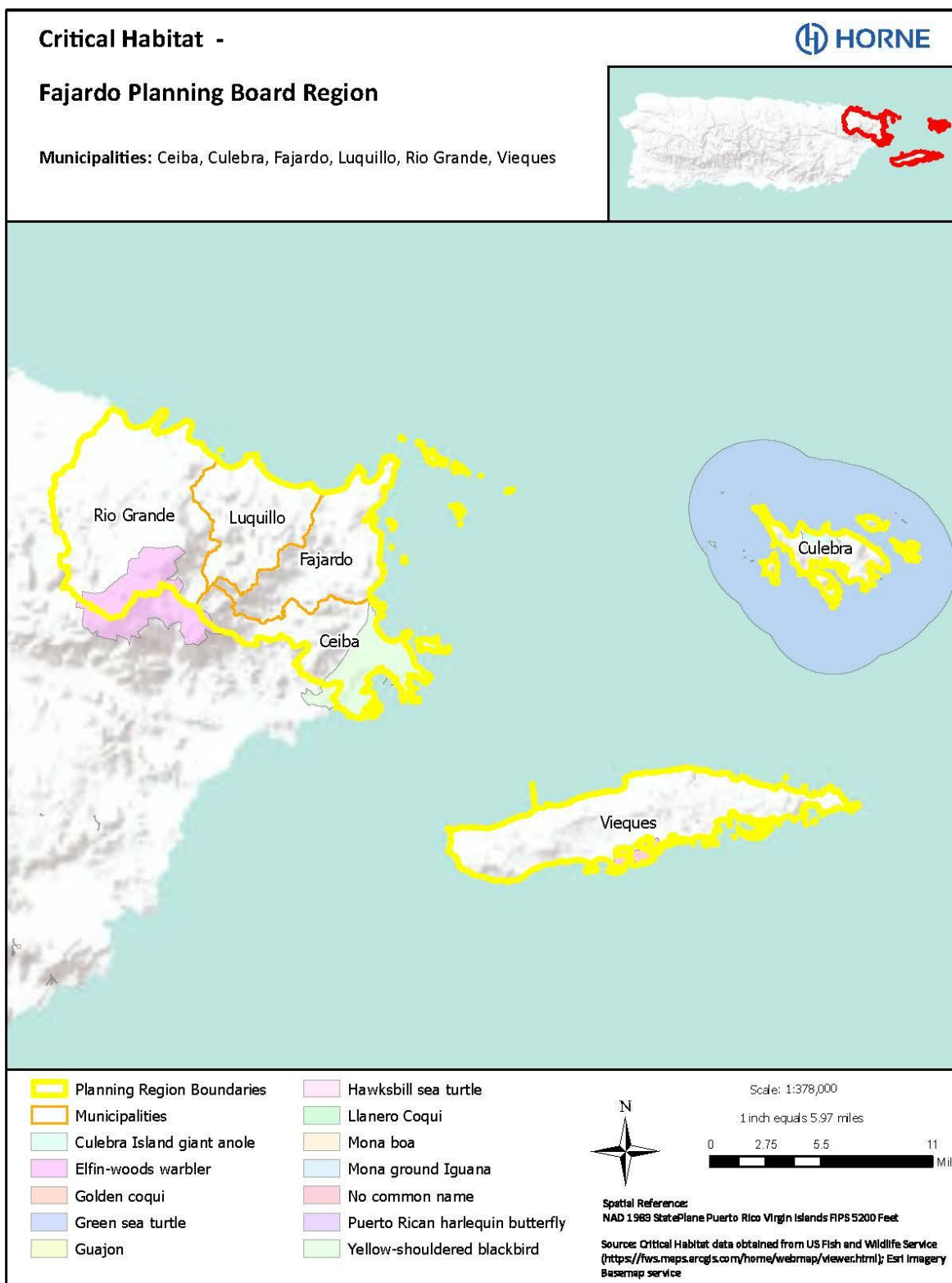
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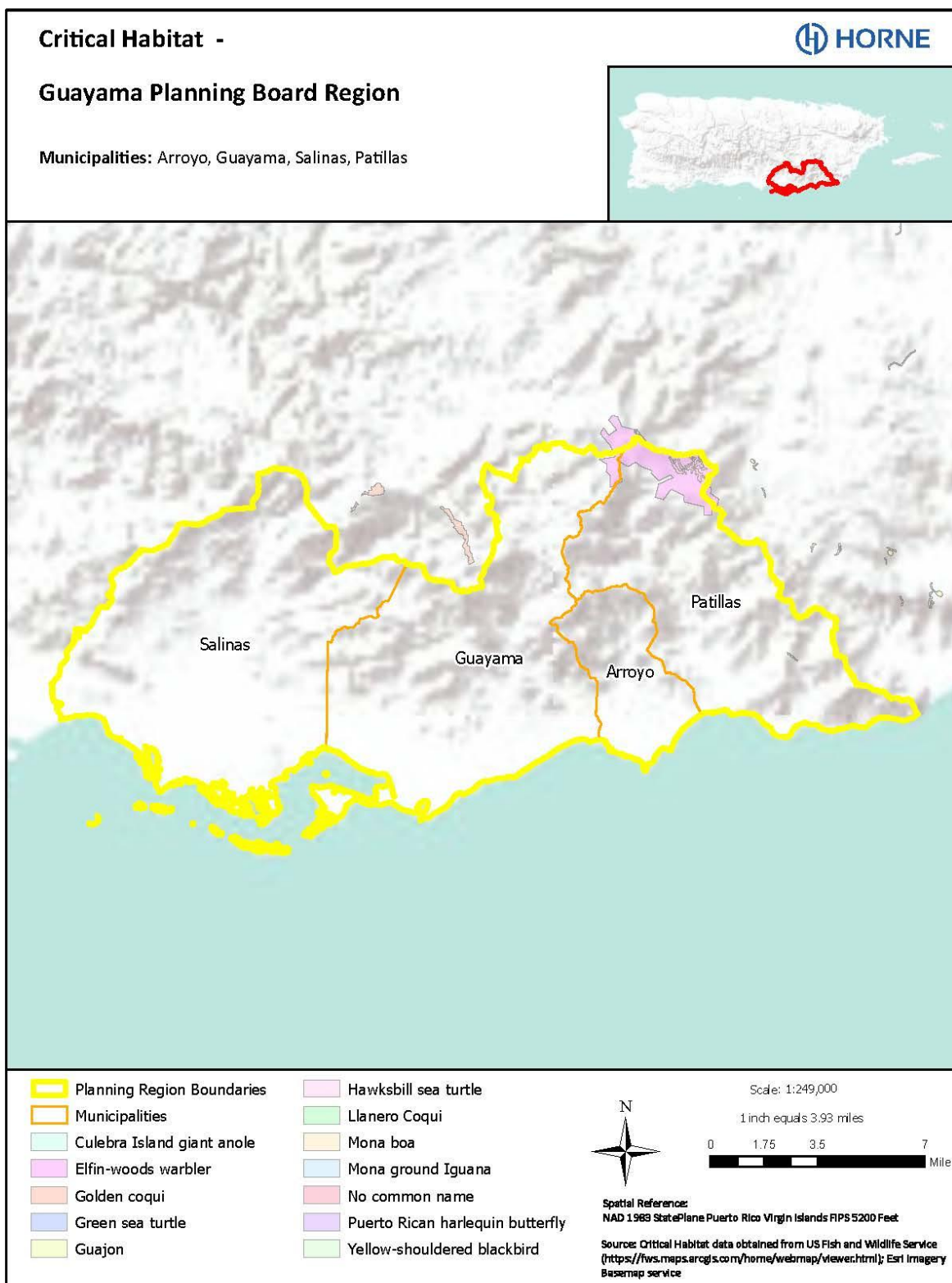
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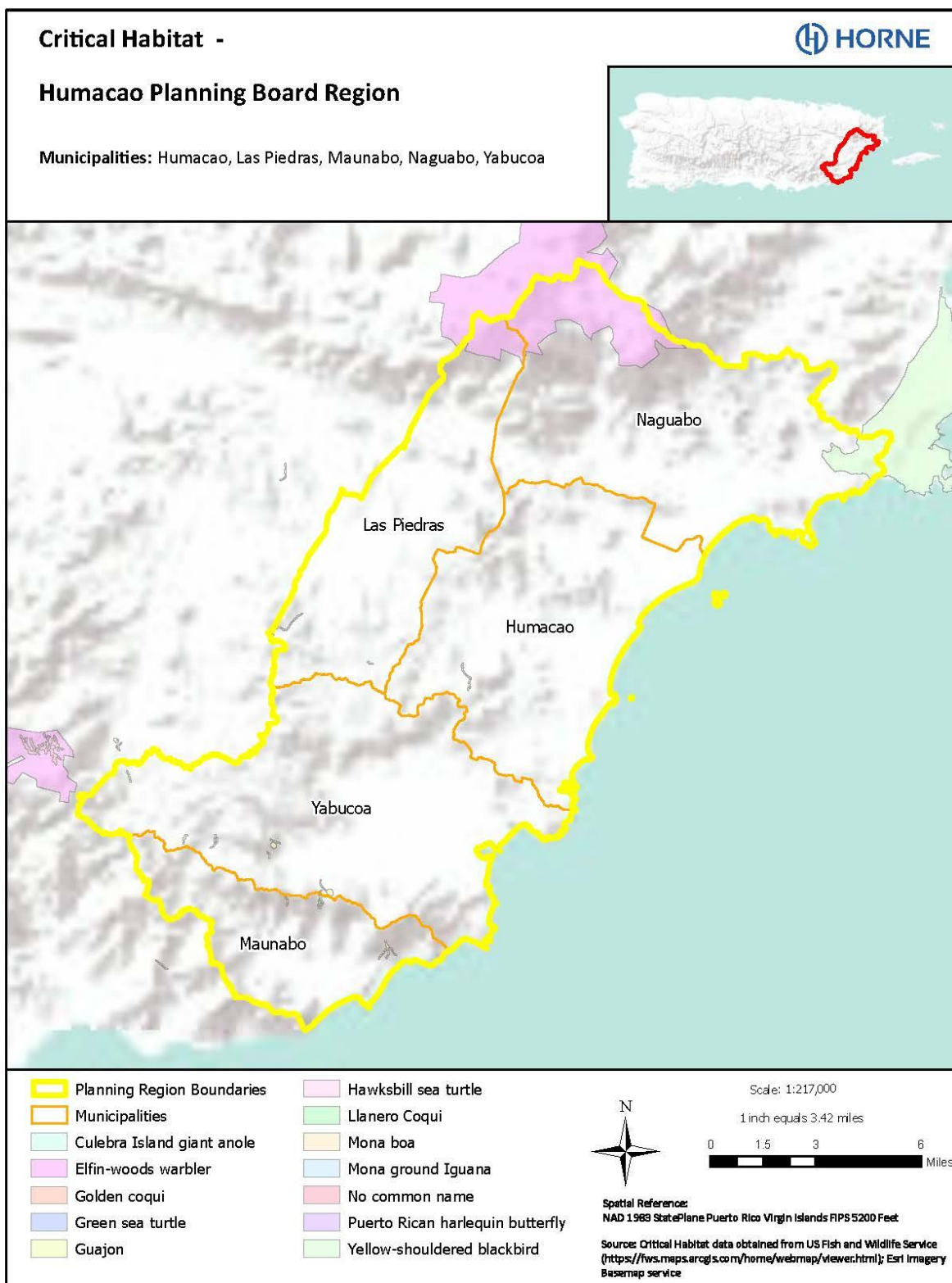
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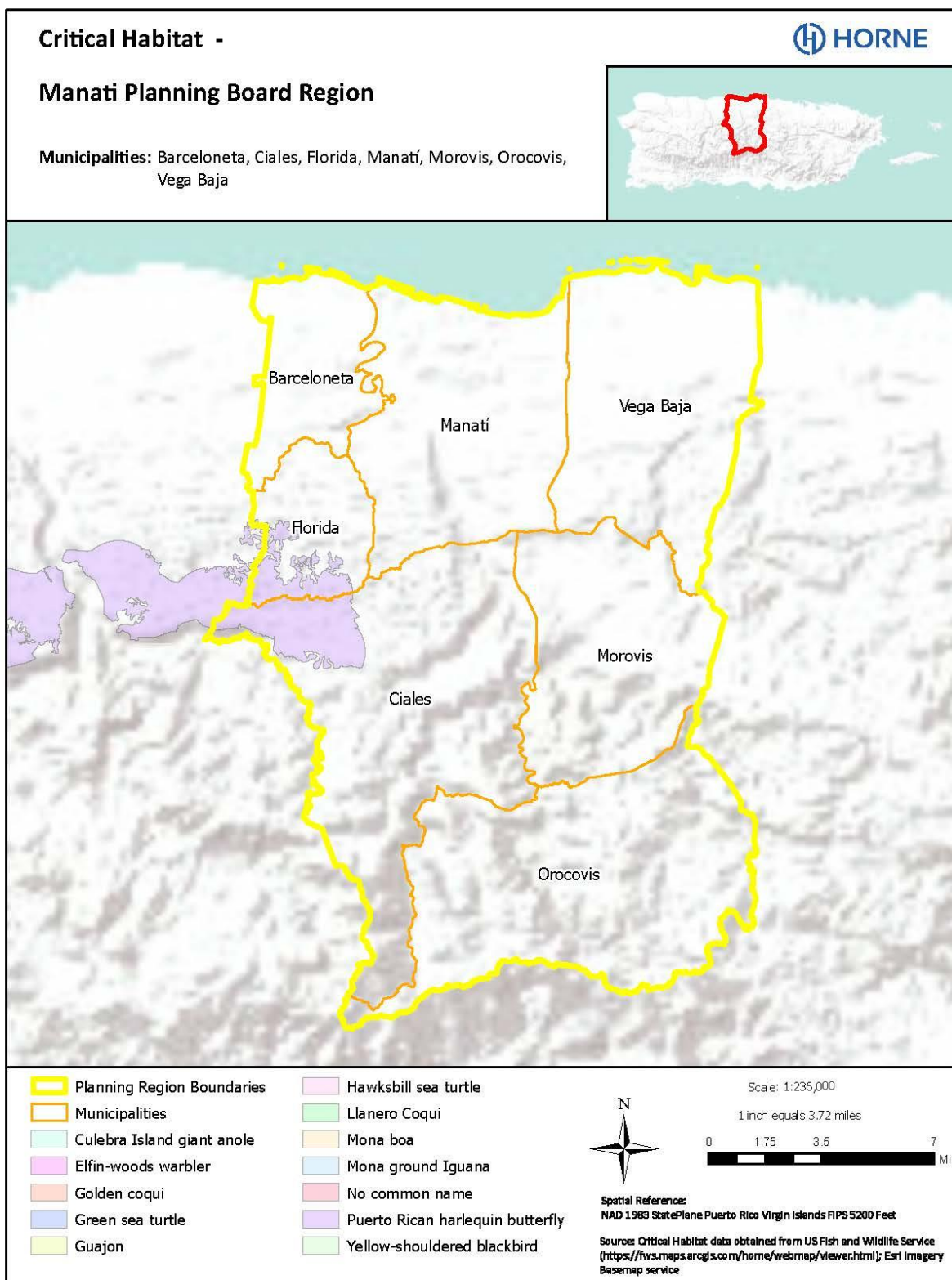
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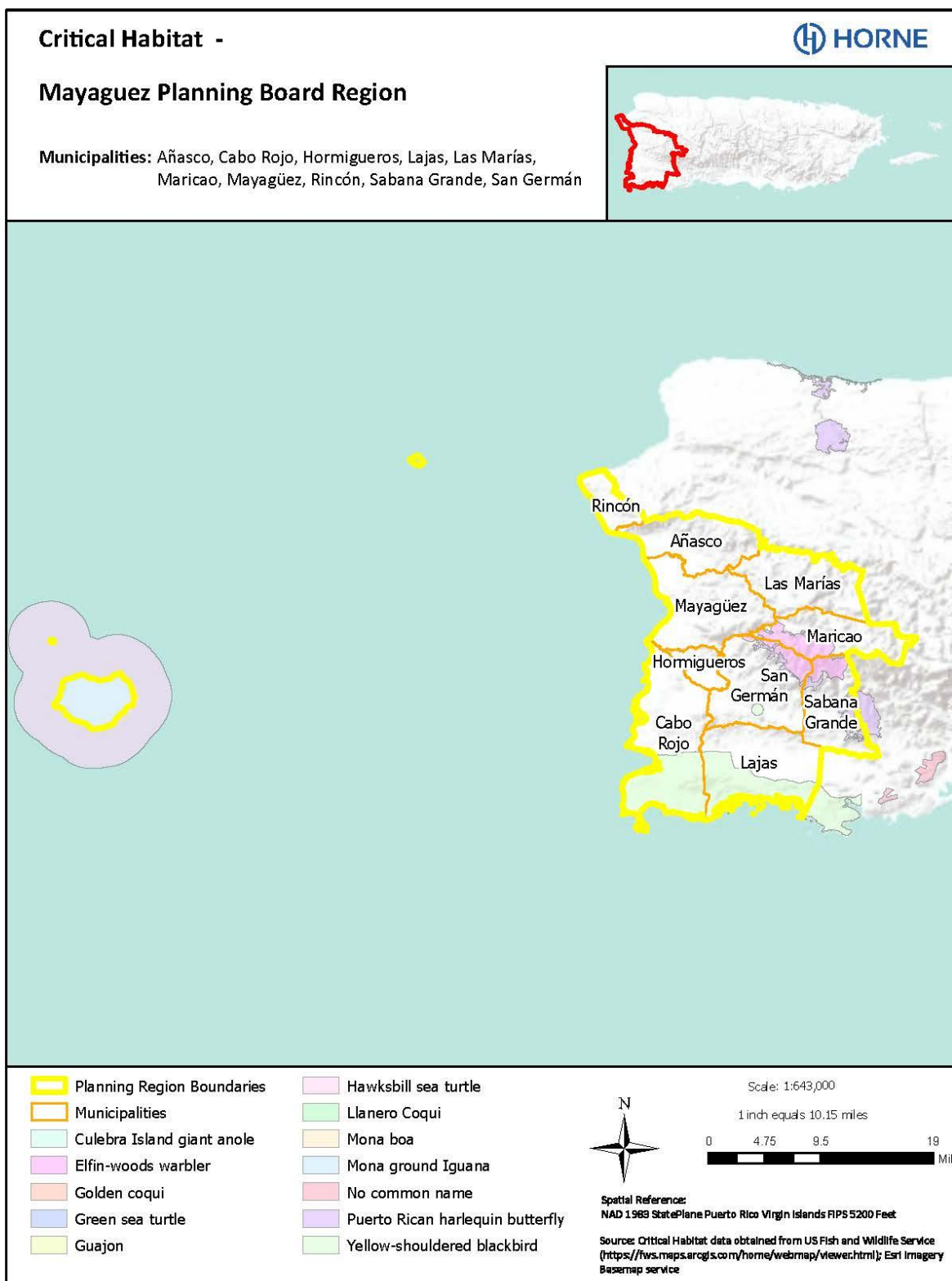
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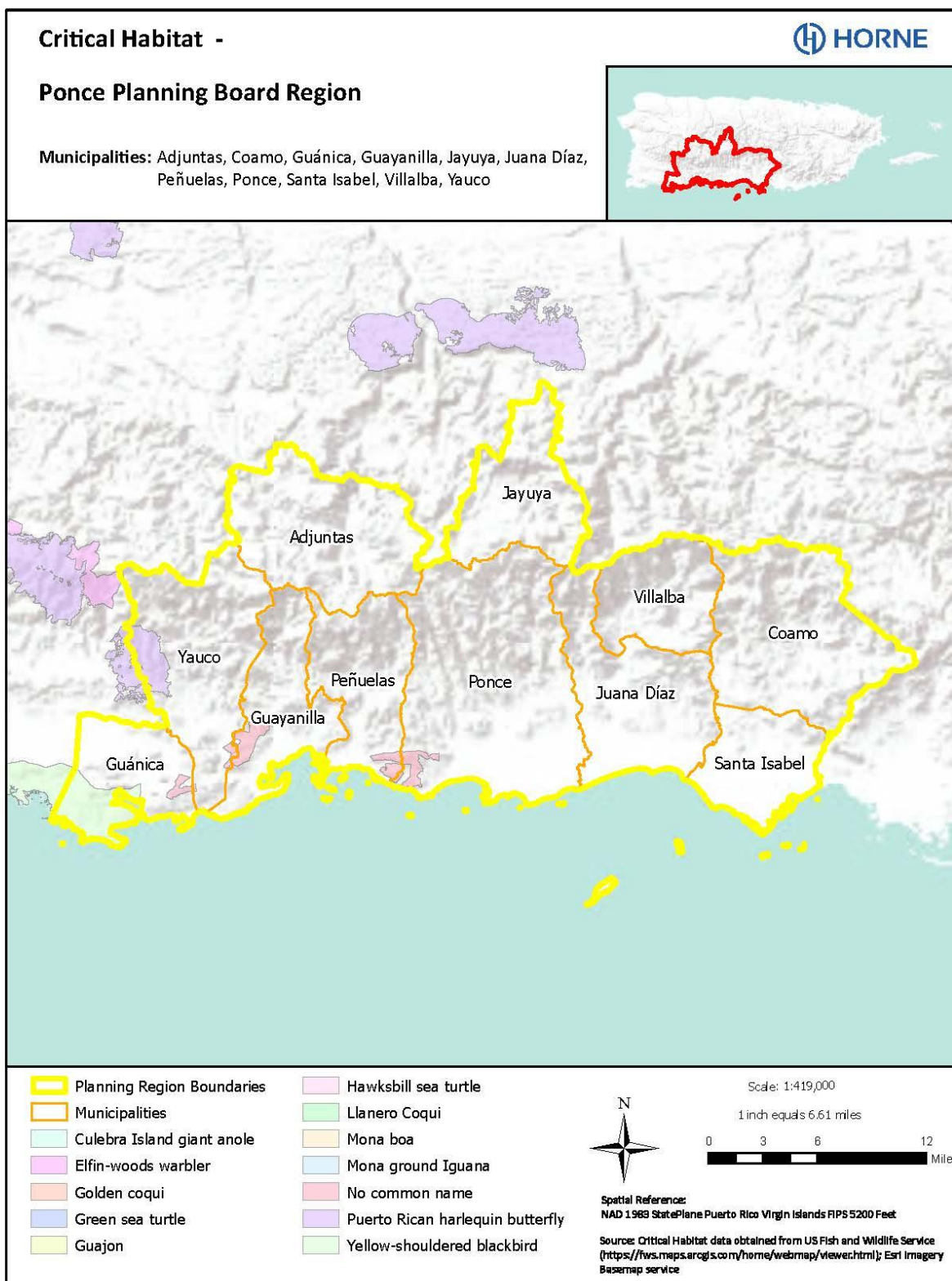
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A6-2: Threatened and Endangered Species List





United States Department of the Interior

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



In Reply Refer To:

01/30/2025 16:05:11 UTC

Project Code: 2025-0049488

Project Name: Agro Energy Stability Program

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



Project code: 2025-0049488

01/30/2025 16:05:11 UTC

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

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

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

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

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

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

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

This species list is provided by:

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Project code: 2025-0049488

01/30/2025 16:05:11 UTC

Caribbean Ecological Services Field Office

caribbean_es@fws.gov

Post Office Box 491

Boqueron, PR 00622-0491

(786) 244-0081

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

Caribbean Ecological Services Field Office

Post Office Box 491

Boqueron, PR 00622-0491

(939) 320-3135

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Project code: 2025-0049488

01/30/2025 16:05:11 UTC

PROJECT SUMMARY

Project Code: 2025-0049488

Project Name: Agro Energy Stability Program

Project Type: Disaster-related Grants

Project Description: The proposed projects and actions under the Tiered Environmental Review Record for Agro-Energy Stability Program will encompass the entire region of Puerto Rico, including all municipalities and covering both urban and rural areas. The Agro-Energy Stability Program aims to foster economic development by enhancing agro-industrial capacity and infrastructure to support more resilient operations. By implementing renewable energy solutions for agribusinesses and farmers.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.2213699,-66.40309598678374,14z>



Counties: Puerto Rico

Project code: 2025-0049488

01/30/2025 16:05:11 UTC

ENDANGERED SPECIES ACT SPECIES

There is a total of 68 threatened, endangered, or candidate species on this species list.

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

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

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

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

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Project code: 2025-0049488

01/30/2025 16:05:11 UTC

MAMMALS

NAME	STATUS
<p>West Indian Manatee <i>Trichechus manatus</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p><i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i></p> <p>Species profile: https://ecos.fws.gov/ecp/species/4469</p> <p>General project design guidelines: https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFYG44/documents/generated/7138.pdf</p>	Threatened

BIRDS

NAME	STATUS
<p>Black-capped Petrel <i>Pterodroma hasitata</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/4748</p>	Endangered
<p>Elfin-woods Warbler <i>Setophaga angelae</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/2972</p>	Threatened
<p>Puerto Rican Broad-winged Hawk <i>Buteo platypterus brunescens</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/5512</p>	Endangered
<p>Puerto Rican Nightjar <i>Antrostomus noctitherus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6972</p>	Endangered
<p>Puerto Rican Parrot <i>Amazona vittata</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3067</p>	Endangered
<p>Puerto Rican Plain Pigeon <i>Patagioenas inornata wetmorei</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/7955</p>	Endangered
<p>Puerto Rican Sharp-shinned Hawk <i>Accipiter striatus venator</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/604</p>	Endangered
<p>Roseate Tern <i>Sterna dougallii dougallii</i></p> <p>Population: Western Hemisphere except NE U.S.</p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/2083</p>	Threatened
<p>Yellow-shouldered Blackbird <i>Agelaius xanthomus</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/7383</p>	Endangered

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Project code: 2025-0049488

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REPTILES

NAME	STATUS
<p>Culebra Island Giant Anole <i>Anolis roosevelti</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/7966</p>	Endangered
<p>Green Sea Turtle <i>Chelonia mydas</i></p> <p>Population: North Atlantic DPS</p> <p>There is proposed critical habitat for this species. Your location overlaps the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6199</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFY44/documents/generated/7133.pdf</p>	Threatened
<p>Hawksbill Sea Turtle <i>Eretmochelys imbricata</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3656</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFY44/documents/generated/7131.pdf</p>	Endangered
<p>Leatherback Sea Turtle <i>Dermochelys coriacea</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/1493</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFY44/documents/generated/7132.pdf</p>	Endangered
<p>Puerto Rican Boa <i>Chilabothrus inornatus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6628</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFY44/documents/generated/7159.pdf</p>	Endangered
<p>Virgin Islands Tree Boa <i>Chilabothrus granti</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3247</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFY44/documents/generated/7141.pdf</p>	Endangered

AMPHIBIANS

NAME	STATUS
<p>Golden Coqui <i>Eleutherodactylus jasper</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/28</p>	Threatened
<p>Guañon <i>Eleutherodactylus cooki</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6963</p>	Threatened

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Project code: 2025-0049488

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NAME	STATUS
General project design guidelines: https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFG44/documents/generated/7136.pdf	
Llanero Coqui <i>Eleutherodactylus juanariveroi</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8681	Endangered
Puerto Rican Crested Toad <i>Peltophryne lemur</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3958 General project design guidelines: https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFG44/documents/generated/7139.pdf	Threatened

INSECTS

NAME	STATUS
Puerto Rican Harlequin Butterfly <i>Atlantea tulita</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9005 General project design guidelines: https://ipac.ecosphere.fws.gov/project/PI7QWSQWH5GZVEQBKU7TGFG44/documents/generated/7168.pdf	Threatened

FLOWERING PLANTS

NAME	STATUS
Aristida chaseae No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5253	Endangered
Auerodendron pauciflorum No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3618	Endangered
Bariaco <i>Trichilia triacantha</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1576	Endangered
Beautiful Goetzea <i>Goetzea elegans</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6453	Endangered
Capa Rosa <i>Callicarpa ampla</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/596	Endangered
Catesbaea melanocarpa There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/722	Endangered

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Project code: 2025-0049488

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NAME	STATUS
Chamaecrista glandulosa var. mirabilis No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2864	Endangered
Chupacallos <i>Pleodendron macranthum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2749	Endangered
Cobana Negra <i>Stahlia monosperma</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2282	Threatened
Cook's Holly <i>Ilex cookii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3475	Endangered
Cordia bellonis No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7228	Endangered
Cranichis ricartii No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3622	Endangered
Daphnopsis helleriana No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6802	Endangered
Erubia <i>Solanum dryophilum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/817	Endangered
Eugenia woodburyana No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8346	Threatened
Gesneria pauciflora No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7349	Threatened
Gonocalyx concolor There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4195	Endangered
Higuero De Sierra <i>Crescentia portoricensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6800	Endangered
Ilex sintenisii No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6280	Endangered
Leptocereus grantianus	Endangered

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Project code: 2025-0049488

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NAME	STATUS
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4198	
Lyonia truncata var. proctorii No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4348	Endangered
Mitracarpus maxwelliae No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/268	Endangered
Mitracarpus polycladus No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/206	Threatened
Myrcia paganii No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2527	Endangered
Palma De Manaca <i>Calyptrotrichia rivalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1272	Threatened
Palo Colorado <i>Ternstroemia luquillensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7742	Endangered
Palo De Jazmin <i>Styrax portoricensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7496	Endangered
Palo De Nigua <i>Cornutia obovata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4918	Endangered
Palo De Ramon <i>Banara vanderbiltii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8113	Endangered
Palo De Rosa <i>Ottoschulzia rhodoxylon</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5741	Threatened
Pelos Del Diablo <i>Aristida portoricensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6396	Endangered
Schoepfia arenaria No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5250	Threatened
St. Thomas Prickly-ash <i>Zanthoxylum thomsonianum</i> No critical habitat has been designated for this species.	Endangered

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NAME	STATUS
Species profile: https://ecos.fws.gov/ecp/species/102	
Ternstroemia subsessilis No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2283	Endangered
Uvillo <i>Eugenia haematocarpa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4279	Endangered
Vahl's Boxwood <i>Buxus vahlii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4454	Endangered
Varronia rupicola There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6258	Threatened
Vernonia proctorii No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3621	Endangered
West Indian Walnut (=nogal) <i>Juglans jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/745	Endangered
Wheeler's Peperomia <i>Peperomia wheeleri</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1463	Endangered

FERNS AND ALLIES

NAME	STATUS
Elaphoglossum serpens No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5393	Endangered
Elfin Tree Fern <i>Cyathea dryopteroides</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4895	Endangered
Polystichum calderonense No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/427	Endangered
Tectaria estremerana No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3630	Endangered
Thelypteris inabonensis No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6740	Endangered

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NAME	STATUS
Thelypteris verecunda No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8005	Endangered
Thelypteris yaucoensis No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4609	Endangered

CRITICAL HABITATS

There are 10 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Culebra Island Giant Anole <i>Anolis roosevelti</i> https://ecos.fws.gov/ecp/species/7966#crithab	Final
Elfin-woods Warbler <i>Setophaga angelae</i> https://ecos.fws.gov/ecp/species/2972#crithab	Final
Golden Coqui <i>Eleutherodactylus jasperi</i> https://ecos.fws.gov/ecp/species/28#crithab	Final
Gonocalyx concolor https://ecos.fws.gov/ecp/species/4195#crithab	Final
Green Sea Turtle <i>Chelonia mydas</i> https://ecos.fws.gov/ecp/species/6199#crithab	Proposed
Guajon <i>Eleutherodactylus cooki</i> https://ecos.fws.gov/ecp/species/6963#crithab	Final
Llanero Coqui <i>Eleutherodactylus juanariveroi</i> https://ecos.fws.gov/ecp/species/8681#crithab	Final
Puerto Rican Harlequin Butterfly <i>Atlantea tulita</i> https://ecos.fws.gov/ecp/species/9005#crithab	Final
Varronia rupicola https://ecos.fws.gov/ecp/species/6258#crithab	Final
Yellow-shouldered Blackbird <i>Agelaius xanthomus</i> https://ecos.fws.gov/ecp/species/7383#crithab	Final

You should contact the local field office to determine whether critical habitat for the following species should be considered:

NAME	STATUS
West Indian Manatee <i>Trichechus manatus</i> https://ecos.fws.gov/ecp/species/4469#crithab	Final

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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.

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

BALD & GOLDEN EAGLES

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

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

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

MIGRATORY BIRDS

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

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

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

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COASTAL BARRIERS

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

SYSTEM UNIT (SU)

*Most new Federal expenditures and financial assistance, including Federal flood insurance, are prohibited within System Units. **Federally-funded projects within System Units require consultation with the Service.** Consultation is not required for projects using private, state, or local funds.*

OTHERWISE PROTECTED AREA (OPA)

*OPAs are denoted with a "P" at the end of the unit number. The only prohibition within OPAs is on Federal flood insurance. **CBRA consultation is not required for projects within OPAs.** However, agencies providing disaster assistance that is contingent upon a requirement to purchase flood insurance after the fact are advised to disclose the OPA designation and information on the restrictions on Federal flood insurance to the recipient prior to the commitments of funds.*

UNIT	NAME	TYPE	SYSTEM UNIT ESTABLISHMENT DATE	FLOOD INSURANCE PROHIBITION DATE
PR-02	Ensenada Comezon	SU	11/16/1990	11/16/1990
PR-03	Rio Mameyes	SU	11/16/1990	11/16/1990
PR-05	Luquillo Spit	SU	11/16/1990	11/16/1990
PR-06	Juan Martin Spit	SU	11/16/1990	11/16/1990
PR-07	Laguna Aquas Prietas	SU	11/16/1990	11/16/1990
PR-10	Punta Barrancas	SU	11/16/1990	11/16/1990
PR-39	Puerto Yabucoa	SU	11/16/1990	11/16/1990
PR-40	Punta Tuna	SU	11/16/1990	11/16/1990
PR-41	Rio Maunabo	SU	11/16/1990	11/16/1990
PR-42	Punta Viento	SU	11/16/1990	11/16/1990
PR-43	Punta Guilarte	SU	11/16/1990	11/16/1990
PR-44	Las Mareas	SU	11/16/1990	11/16/1990

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UNIT	NAME	TYPE	SYSTEM UNIT ESTABLISHMENT DATE	FLOOD INSURANCE PROHIBITION DATE
PR-45	Bahia de Jobos	SU	11/16/1990	11/16/1990
PR-46	Cayos de Barca/Ratones	SU	11/16/1990	11/16/1990
PR-47	Arenal	SU	11/16/1990	11/16/1990
PR-50	Chardon	SU	11/16/1990	11/16/1990
PR-51	Rio Descalabrado	SU	11/16/1990	11/16/1990
PR-52	Punta Pastillo	SU	11/16/1990	11/16/1990
PR-53	Bajio de Marea	SU	11/16/1990	11/16/1990
PR-54	Rio Jacaguas	SU	11/16/1990	11/16/1990
PR-55	Isla del Frio	SU	11/16/1990	11/16/1990
PR-56	Punta Cabullones	SU	11/16/1990	11/16/1990
PR-57	Punta Cucharas	SU	11/16/1990	11/16/1990
PR-59	Punta Ballena	SU	11/16/1990	11/16/1990
PR-61	Ensenada las Pargas	SU	11/16/1990	11/16/1990
PR-66	Cabo Rojo	SU	11/16/1990	11/16/1990
PR-68	Boca Prieta	SU	11/16/1990	11/16/1990
PR-69	Punta Carenero	SU	11/16/1990	11/16/1990
PR-70	Belvedere	SU	11/16/1990	11/16/1990
PR-72	Rio Guanajibo	SU	11/16/1990	11/16/1990
PR-75	Espinar	SU	11/16/1990	11/16/1990
PR-76	Punta Agujereada	SU	11/16/1990	11/16/1990
PR-77	Bajura	SU	11/16/1990	11/16/1990
PR-78	Coto	SU	11/16/1990	11/16/1990
PR-79	Penon Brusi	SU	11/16/1990	11/16/1990
PR-80	Punta Maracayo	SU	11/16/1990	11/16/1990
PR-81	Puerto de Arecibo	SU	11/16/1990	11/16/1990
PR-83	Tortuguero	SU	11/16/1990	11/16/1990
PR-84	Punta Garza	SU	11/16/1990	11/16/1990
PR-87	Punta Vacia Talega	SU	11/16/1990	11/16/1990

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UNIT	NAME	TYPE	SYSTEM UNIT ESTABLISHMENT DATE	FLOOD INSURANCE PROHIBITION DATE
PR-04P	Punta la Bandera	OPA	N/A	11/16/1991
PR-08P	Cabo San Juan	OPA	N/A	11/16/1991
PR-09P	Rio Fajardo	OPA	N/A	11/16/1991
PR-12P	Playa Flamenco	OPA	N/A	11/16/1991
PR-13P	Playa Brava	OPA	N/A	11/16/1991
PR-14P	Playa Larga	OPA	N/A	11/16/1991
PR-16P	Puerto del Manglar	OPA	N/A	11/16/1991
PR-17P	Ensenada Sombe	OPA	N/A	11/16/1991
PR-18P	Cayo Algodones	OPA	N/A	11/16/1991
PR-43P	Punta Guilarte	OPA	N/A	11/16/1991
PR-45P	Bahia de Jobos	OPA	N/A	11/16/1991
PR-49P	Punta Aguila	OPA	N/A	11/16/1991
PR-57P	Punta Cucharas	OPA	N/A	11/16/1991
PR-58P	Bahia de Tallaboa	OPA	N/A	11/16/1991
PR-60P	Punta Jacinto	OPA	N/A	11/16/1991
PR-62P	Punta Manglillo	OPA	N/A	11/16/1991
PR-63P	Cayo don Luis	OPA	N/A	11/16/1991
PR-64P	Bahia Montalva	OPA	N/A	11/16/1991
PR-65P	Isla Cueva/Guayacan	OPA	N/A	11/16/1991
PR-66P	Cabo Rojo	OPA	N/A	11/16/1991
PR-67P	Bahia de Boqueron	OPA	N/A	11/16/1991
PR-75P	Espinar	OPA	N/A	11/16/1991
PR-82P	Punta Manati	OPA	N/A	11/16/1991
PR-86P	Punta Salinas	OPA	N/A	11/16/1991
PR-87P	Punta Vacia Talega	OPA	N/A	11/16/1991

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MARINE MAMMALS

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act¹ and the Convention on International Trade in Endangered Species of Wild Fauna and Flora².

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walrus, polar bears, manatees, and dugongs] and NOAA Fisheries³ [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The [Endangered Species Act](#) (ESA) of 1973.
2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. [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.

NAME

West Indian Manatee *Trichechus manatus*

Species profile: <https://ecos.fws.gov/ecp/species/4469>

WETLANDS

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

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

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

Due to your project's size, the list below may be incomplete, or the acreages reported may be inaccurate. For a full list, please contact the local U.S. Fish and Wildlife office or visit <https://www.fws.gov/wetlands/data/mapper.HTML>

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ESTUARINE AND MARINE WETLAND

- E2EM1/FO3P
- E2SS3N
- E2SS3/EM1P
- E2RS1P
- E2FO3N
- E2EM1/US2P
- E2EM1Ns
- E2FO3/EM1N
- E2EM1/SS3N
- E2EM1N5
- E2FO3/EM1P
- E2FO3/US2N
- E2EM1/US3P
- E2FO5/EM1N
- E2SS3/EM1N
- E2FO3/US3N
- E2EM1/SS3P
- E2FO3/US3P
- E2FO3N6
- E2EM1Ps
- E2EM1N
- E2EM1/FO3N
- E2EM1P
- E2FO5M
- E2AB4M
- E2FO3/US2P
- E2SS3/US3P
- E2AB3M
- E2FO3N2
- E2AB3/USM
- E2AB4N
- E2FO3P
- E2SS3P

ESTUARINE AND MARINE DEEPWATER

- E1RF/AB3L

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- E1AB3/UBL
- E1UB3L
- E1AB4/UBL
- E1ABL
- E1UBL
- E1UBLh
- E1AB1L6
- E1AB3/UB2L
- E1AB/UBL
- E1ABLh
- E1AB3L
- E1UBLx
- E1AB4L
- E1UB2L

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IPAC USER CONTACT INFORMATION

Agency: Puerto Rico Department of Housing
Name: Javier Mercado
Address: Ave. Barbosa #606 Edif. Juan C. Cordero
Address Line 2: Ave. Barbosa #606 Edif. Juan C. Cordero
City: San Juan
State: PR
Zip: 00918
Email: j.mercado@vivienda.pr.gov
Phone: 7872742527

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A6-3: Communication with USFWS





From: [environmentcdbq](mailto:environmentcdbq@fws.gov)
To: Lourdes_Mena@fws.gov
Cc: Caribbean_es@fws.gov; [Lopez, Felix](#); [Aldo A. Rivera-Vazquez](#)
Bcc: [Javier Mercado-Barrera](#)
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Thursday, January 30, 2025 4:20:14 PM
Attachments: [image003.png](#)

Greetings Ms. Mena,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Farm and Energy Resilience (FER) Program.

[FER\(AES\)_USFWS_Consultation Letter_Tier 1_ESA_PRDOH.pdf](#)

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

Permits and Environmental Compliance Division

Disaster Recovery Office

environmentcdbq@vivienda.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infocdbq@vivienda.pr.gov

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VIVIENDA



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From: [Caribbean ES, FW4](#)
To: [environmentcdbg](#)
Cc: [Lopez, Felix](#); [Aldo A. Rivera-Vazquez](#); [Mena, Lourdes](#)
Subject: Re: [EXTERNAL] Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Tuesday, March 11, 2025 12:35:51 PM
Attachments: [image003.png](#)

Mr. Rivera

The Service has reviewed the methodology provided by PRDOH for the CDBG-MIT Agro-Energy Stability Program CDBG-MIT Agro-Energy Stability Program projects. The methodology seems adequate and at this time we have not identified anything in the process we have concerns with. Thank you for providing this information in advanced.

Caribbean Ecological Services Field Office
(786) 244-0081
caribbean_es@fws.gov

For project evaluations, please visit our [Consultation Guidelines](#) website.

From: environmentcdbg <environmentcdbg@vivienda.pr.gov>
Sent: Thursday, January 30, 2025 4:20 PM
To: Mena, Lourdes <Lourdes_Mena@fws.gov>
Cc: Caribbean ES, FW4 <Caribbean_ES@fws.gov>; Lopez, Felix <felix_lopez@fws.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>
Subject: [EXTERNAL] Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Greetings Ms. Mena,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Farm and Energy Resilience (FER) Program.

[FER\(AES\)_USFWS_Consultation Letter_Tier 1_ESA_PRDOH.pdf](#)

Should you have any questions or concerns, please do not hesitate to contact us.





A6-4: Communication with NOAA





From: environmentcdbg
To: Noah.Silverman@noaa.gov; nmfs.ser.esa.consultations@noaa.gov
Cc: [Aldo A. Rivera-Vazquez](mailto:Aldo.A.Rivera-Vazquez)
Bcc: [Alberto Mercado](mailto:Alberto.Mercado)
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Tuesday, April 8, 2025 4:06:41 PM
Attachments: [AES \(FER\)_NOAA_Consultation_Letter_PRDOH.pdf](#)
[image003.png](#)

Greetings Mr. Silverman,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivera-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienoo.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infoedbg@vivionda.pr.gov



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A6-5: Communication with PR DNER





From: environmentcdbg
To: waldemar.quiles@drma.pr.gov; pmzc@drma.pr.gov; sorteaga@drma.pr.gov; ayudaciudadano@drma.pr.gov
Cc: Aldo A. Rivera-Vazquez
Bcc: Alberto Mercado
Subject: Tiered Environmental Assessment | CDBG-MIT | Agro-Energy Stability Program
Date: Tuesday, April 8, 2025 4:04:26 PM
Attachments: [AES \(FER\)_DNER_Consultation Letter_PRDOH.pdf](#)
[image003.png](#)

Greetings Mr. Quiles,

Please refer to the attached consultation letter from our Permits and Environmental Compliance Director, Aldo Rivero-Vázquez, regarding the proposed Tiered Environmental Assessment for the CDBG-MIT Agro-Energy Stability Program, also known as Form and Energy Resilience (FER) Program.

Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

environmentcdbg@vivienoo.pr.gov | 787.274.2527

Visit us: recuperacion.pr.gov

Contact us: infoedbg@vivienoo.pr.gov



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A6-6 Blanket Clearance Letter





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/BKT/HUD

Mr. Efrain Maldonado
Field Office Director
U.S. Department of Housing and Urban Development
235 Federico Costa Street, Suite 200
San Juan, Puerto Rico 00918

Re: Blanket Clearance Letter for Federally
sponsored projects, Housing and Urban
Development

Dear Mr. Maldonado:

On January 14, 2013, the U.S. Fish and Wildlife Service (USFWS) in coordination with the U.S. Department of Housing and Urban Development (HUD), signed the Blanket Clearance Letter (BCL) to expedite the consultation process, for federally sponsored projects. On March 20, 2025, the USFWS and the Puerto Rico Department of Housing (PRDOH) acting as the responsible entity designated by HUD decided to review and update the BCL to ensure that new available information regarding the consultation process is included. This letter replaces the January 14, 2013, Blanket Clearance Letter for HUD sponsored projects.

The U.S. Fish and Wildlife Service (USFWS) is one of two lead Federal Agencies responsible for the protection and conservation of Federal Trust Resources, including threatened or endangered species listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (ESA). In the U.S. Caribbean, the USFWS has jurisdiction over terrestrial plants and animals, the Antillean manatee and sea turtles when nesting. The National Marine Fisheries Service has jurisdiction over marine species, except for the manatee. The ESA directs all Federal agencies to participate in conserving these species. Section 7 of the ESA requires Federal agencies to consult with the USFWS to ensure that actions they fund authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitat.

The USFWS issued regulations in 1986 detailing the consultation process. As part of this consultation process, the USFWS reviews development projects to assist Federal agencies on the compliance of the ESA. Since HUD typically allocate grant funds for rural and urban development projects, obligations under the ESA, as well as the National Environmental Policy Act (NEPA), require HUD to perform consultation and an environmental impact review prior to the project's



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authorization. Primarily, these projects involve repair or reconstruction of existing facilities associated with developed land.

In order to expedite the consultation process, the Caribbean Ecological Services Field Office (CESFO) has developed this BCL to cover for activities and projects that typically result in no adverse effects to federally-listed species under our jurisdiction. The proposed project criteria discussed below are subject to the following conditions:

1. The project is located within an urban or developed area.
 - An urban or developed area is defined as an area that 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 neighborhood 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 applicant¹.
2. If the project is located in a rural area, and the project is located within a disturbed area that does not require additional clearing of forested (trees) areas.
3. The project is not located within (or adjacent to) drainages, rivers, streams, wetlands, aquatic systems, or coastal areas.
4. If the project is located in a rural area, and the project is not located immediately adjacent to forested areas (e.g., 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 trees²).
5. The lighting associated to the facilities is not visible directly or indirectly from the shoreline or beach area.

Proposed projects that **do not** meet the above conditions **Do Not Qualify** for review under the Blanket Clearance Letter developed for compliance with Section 7 of the Endangered Species Act.

¹ This is the definition used by the USFWS in IPaC.

¹ *Ibid.*

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Project Criteria:

1. Activities related to the resurfacing existing streets or roads; maintenance of existing upland gabion or reinforced concrete retention walls; construction, reconstruction or repair of gutters and sidewalks along existing roads.
2. Repair, replace, improve, reconstruct and/or rehabilitate facilities in already established public transportation systems (Signs, sidewalks and ramps, bus stops and existing routes).
3. Repair, replace, improve, reconstruct, rehabilitate and/or expanding existing public transportation facilities located in urban or developed areas.
4. Construction of new facilities for public transportation systems (e.g. School bus stops, city buses, trolleybuses, public car stops, Public car terminal) in urban or developed areas.
5. Repair, replace, improve, reconstruct, or rehabilitate existing bridges or rip-rap. (follow FWS rip-rap guidance for design).
6. Reconstruction, or emergency repairs, of existing structures, including but not limited to buildings, facilities and homes.
7. Demolition of dilapidated single-family homes or buildings.
8. Rebuilding of demolished single-family homes or buildings.
9. Retrofitting existing buildings.
10. Construction of residential and/or commercial facilities.
11. Construction, repair, replace, improve, reconstruct, and/or rehabilitate recreational facilities.
12. Addition of concrete pads to the existing footprint of a residential and/or commercial structure, provided that the resulting addition is less than 20% of the size of the existing structure.
13. Improvement or renovations to existing structures (exterior and interior) renovations resulting in an exterior increase greater than 20%.
14. Improvements or renovations to existing structures (exterior and interior renovations) resulting in an exterior increase of less than 20%.
15. Acquisition of residential and/or commercial properties in urban or developed areas for the relocation of families and/or activities.
16. Construction, reconstruction, rehabilitation and/or expansion of cemeteries.

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17. Installation/drilling of new water well and associated utility infrastructure, either above ground or underground.
18. Establishment of power facilities, including but not limited to associated aboveground and/or underground infrastructure.
19. Construction of electrical system infrastructure and associated components, including but not limited to associated aboveground and/or underground infrastructure.
20. Construction of land based small electric generating facilities, including those fueled with wind, sun, or biomass, capable of producing no more than 10 MW. *
21. Activities within existing Right of Ways (ROWS) related to water and sanitary infrastructure; communication infrastructure; roads, bridges and highways without the removal of native vegetation and/or major earth movement.
22. Construction of rooftop or urban telecommunications systems and associated components, including but not limited to associated aboveground and/or underground infrastructure.
23. Establishment of temporary debris storage (TDS) facilities.
24. Establishment and/or closure of solid waste management facilities. But not new landfills.
25. Installation of water storage systems (cisterns) and associated infrastructure, either above ground or underground, including but not limited to installations on existing or new concrete pads, or existing or new roofs.
26. Installation of solar panels, battery storage systems and/or associated utility infrastructure, either above ground or underground, on existing or new concrete pads, existing or new roofs, ground or pole mounted.
27. Installation of generators on existing or new concrete slabs, and associated utility infrastructure, either above ground or underground.
28. Repair of existing agricultural structures including but not limited to greenhouses, warehouses, canopies, fences, corrals, and shade structures with less than 20% expansion of footprint.
29. New construction of agricultural structures in established farms including but not limited to greenhouses, warehouses, canopies, fences, corrals, and shade structures with or without underground and/or aboveground infrastructure utility connections.
30. Construction of fences, cattle corrals, concrete slabs.
31. Installation of storage containers on new concrete slab.

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32. New construction or work which expands the footprint of an existing structure and occurs entirely on disturbed, regularly maintained, upland property, including the staging of equipment.

*Comply with USFWS wind energy guidelines if more than one wind turbine, consider painting one blade black to help birds see the blades. <https://www.fws.gov/media/land-based-wind-energy-guidelines>

Determination:

Based on the nature of the projects described above and habitat characteristics described on project criteria, we have determined that the actions and type of projects described above may be conducted within this BCL without adversely affecting federally-listed species under our jurisdiction. Thus, consultation under Section 7 of the Endangered Species Act is not required.

For all projects, HUD and its funded partners (municipalities) are expected to implement Best Management Practices to enhance the conservation of our trust resources (i.e.; listed species, wetlands, aquatic habitats, migratory birds and marine mammals) and avoid impacts from project development to aquatic habitat such as erosion and stream sedimentation. The Service provides the following recommendations that have proven to help achieve this effort.

Water Crossing Structures:

1. Use of bottomless culverts or single span bridges instead of traditional box or RCP culverts or any other water crossing structure that impacts the stream bottom, particularly in streams which support native fish. The use of bottomless culverts or a short span bridge would provide a more stable crossing and would not alter the stream habitat. However, if bottomless structures or bridges are not feasible due to cost or engineering constraints, we recommend the following criteria be used to maintain good habitat in the streams:
 - a. The stream should not be widened to fit the bridge since this can lead to sedimentation during low flows and possible bank erosion during high flows. Rather, the bridge should be designed to fit the stream channel at the point of crossing. Culverts should be sized to carry natural bank full flow. Additional flow can be capture by culverts placed at a higher elevation so as not to impact bank full flows.
 - b. Bridge abutments, wing walls or any other structures should not intrude into the active stream channel.
 - c. All culvert footings must be countersunk into the stream channel at both the invert and outlet ends at a minimum of 10% of the culvert height. This will align the water crossing structure with the slope of the stream.
 - d. Waterways must not be blocked as to impede the free movement of water and fish. Materials moved during construction, such as grubbing, earth fills, and earth cut

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materials must not be piled where they can fall back into the stream and block the drainage courses.

- e. Appropriate erosion and/or sedimentation controls measures are to be undertaken to protect water quality until riverbanks are re-vegetated. It has been our experience that appropriate erosion and/or sedimentation control measures are not implemented properly by project contractors. In order to function properly, silt fences need to be buried 6" (proper depth is marked by a line on the silt fence) and supported at regular intervals by wood stakes. For that reason we are recommending that the enclosed drawing of proper silt fence installation is included in all final project construction plans.
- f. Upon completion of a water crossing construction, any temporary fill, must be removed from the construction area and disposed in a landfill.

For a detailed guide to water crossing structures, the Service developed a detailed guide to water crossing structures for regulatory review by permitting agencies, protect damaged structures, reduce future damages, and prevent or minimize damage to natural resources. The document is titled "Guidance for Repair, Replacement, and Clean-up Projects in Streams and Waterways of Puerto Rico and U.S. Virgin Islands" and is available at:

<https://www.fws.gov/media/guidance-repair-replacement-and-clean-structures-streams-and-waterways-puerto-rico-and-us>

Limitations:

Actions that do not meet the above project criteria, such as actions requiring placement of fill, disturbance, or modification to land outside of an existing access road or ROW; actions that occur on vacant property harboring a wetland and/or forest vegetation; actions requiring excavation, clearing of native vegetation, or alteration of storm water drainage patterns; or actions that require lighting which can be directly or indirectly seen from a beach, must be individually coordinated through the Caribbean Ecological Services Field Office and will be evaluated on a case by case basis.

The Service reserves the right to revoke or modify this BCL if:

1. New information reveals that the categories of work covered in this BCL may affect listed or designated critical habitat in a manner, or to an extent, not previously considered.
2. The categories of work included in this BCL are subsequently modified to include activities not considered in this review.
3. New species are listed, or designated critical habitat may be affected.
4. Lack of compliance with criteria in this BCL.

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To obtain additional information on threatened and endangered species, you may visit our website <https://www.fws.gov/office/caribbean-ecological-services> where you will also find the Map of the Species by Municipality and the Map of Critical Habitat. These maps provide information on the species/habitat relations within a municipality and could provide the applicants an insight if the proposed action is covered under this BCL or may affect a species, thus requiring individual review

The USFWS has also developed a web based tool called the Information for Planning and Consultation (IPaC). Please visit <https://ipac.ecosphere.fws.gov/> and familiarize yourself with the features we offer. We encourage you to begin your project planning process by requesting an Official Species List for your individual project that will include all species that may occur in the vicinity of the action area and includes a map of the action area. The site will also identify designated critical habitat, or other natural resources of concern that may be affected by your proposed project. Best management practices or conservation measures are available at the site for some species, but we expect the site to continue growing in its offering.

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. It is our 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 additional questions regarding this BCL, please do not hesitate to contact us at (786) 244-0081 or via email at caribbean_es@fws.gov.

Sincerely,

**LOURDES
MENA**

Digitally signed by
LOURDES MENA
Date: 2025.04.24
09:11:24 -04'00'

Lourdes Mena
Field Supervisor

Last Revised: April 2025



A6-7: Programmatic Biological Opinion



Programmatic Biological Opinion

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), and/or USDA Natural Resources Conservation (NRCS) 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: 2022.06.23 11:06:59 -04'00'

Edwin E. Muñoz, Field Supervisor

Date

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EXECUTIVE SUMMARY

This Endangered Species Act (ESA) Programmatic Biological Opinion (PBO) of the U.S. Fish and Wildlife Service (Service) addresses the following activities in Puerto Rico and the U.S. Virgin Islands (USVI): land clearing and debris removal on previously disturbed lands, construction or repair of infrastructure within non forested lands, and construction, repair and maintenance of projects within urban areas or previously disturbed lands. 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. 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. 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) that requires the Federal Agency and the Recipient to implement reasonable and prudent measures 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 of this statement is exempted from the prohibitions against taking under the ESA.

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.

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 draft Species Status Assessment (SSA) for the PR boa, and the final SSA for the VI boa (Service 2018).

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 expansions or extension beyond existing footprints on already disturbed areas or within existing rights of ways (ROWs). 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. 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 boia and VI boia, 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 boia and VI boia, 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 of 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-boas 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-boia 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 boia and VI boia 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 boia individuals out of harm's way.

4.4. Cumulative Effects on the VI and PR boia

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 PBO.

4.5. Conclusion for VI and PR boia

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 boia and PR boia, 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, PR boia estimates are between 37,903 – 189,515 individuals. 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 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 estimate ranging from 37,903 – 189,515 individuals for the entire island of Puerto Rico (Puerto Rico Boa SSA). 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 prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), biologist or personnel with experience on this species will survey the areas to be cleared to verify the presence of any PR boa within the work area.
4. The species will be searched during the night(s) prior to any vegetation clearing starts according to the action plan. Boas will be searched beginning not earlier than 7:30 PM and ending not earlier than 9:30 PM within the AA and proceed according to the T&C if

- a PR and VI boa is found it can be relocated accordingly (see #7).. Nocturnal searches do not replace diurnal searches per the T&C.
5. Once the area has been searched for PR boas, 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 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, PR boas found will be relocated accordingly (see #7).
 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 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.
 7. 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 (#6). If a PR or VI boa is located within harm's way, all attempts will be made to immediately safely capture (refer to T&C 2) any live or injured individual. 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. Contact Puerto Rico Department of Natural and Environmental Resources (PRDNER) immediately if in Puerto Rico or contact the USVI Department of Planning and Natural Resources (DPNR) immediately if in St. Thomas (refer to #8). The Action may continue at other work sites within the AA where no PR and VI boas have been found.
 8. If immediate relocation of PR boa 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 (phone #s: 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.
 9. Measures will be taken to avoid and minimize PR boa and VI boa casualties by heavy machinery or motor vehicles being left on site. Any heavy machinery left on site (staging areas) or near potential PR or VI boa habitat (within 50 meters of potential 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.
 10. 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.

11. 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.
12. Should the forms of take reach the amount or extent of 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.
13. 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.
14. The contact information for the Service must be followed: Lead Biologist: Jan Paul Zegarra at Jan_zegarra@fws.gov, Endangered Species Program Coordinator: Jose Cruz at Jose_Cruz-Burgos@fws.gov, 305-304-1386; Deputy Field Supervisor: Marelisa Rivera: Marelisa_rivera@fws.gov, 305-304-1814. All reporting must be submitted at caribbean_es@fws.gov.

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

- A. The Federal Agency and the Recipient shall identify who will capture PR or VI boas and assess and determine if a boa has been injured as a result of project activities, and if it is in need of veterinary care or rehabilitation. If an injured PR or VI boa is in need of veterinary care or rehabilitation, the Federal Agency and the Recipient shall inform the Service immediately.
- 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 or 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 specified in the ITS (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 occur 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 require some dead specimens of PR boa and VI boa. If requested, 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 contact the Service immediately to coordinate for veterinary care, if needed.

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

8. REINITIATION NOTICE

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

- a. the amount or extent of incidental take is exceeded;
- b. new information reveals that the Action may affect listed species or designated critical habitat in a manner or to an extent not considered in this PBO;
- c. the Action is modified in a manner that causes effects to listed species or designated critical habitat not considered in this PBO; or
- d. a new species is listed or critical habitat designated that the Action may affect.

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

9. LITERATURE CITED

- Barandiaran, M. 2014. Puerto Rican boa report. Email dated February 20, 2014. Service, Caribbean Ecological Services Field Office. 2 p.
- Huff, T. A. 1978. Breeding the Puerto Rican boa at the Reptile Breeding Foundation. International Zoo Yearbook 16:81–82.

- Joglar, R.L. 2005. Reptiles, p. 99 – 190. In: Joglar, R.L. (Ed.) Biodiversidad de Puerto Rico: Vertebrados Terrestres y Ecosistemas. Serie de Historia Natural. Editorial Instituto de Cultura Puertorriqueña, San Juan, P.R. 563 p.
- Mulero-Oliveras, E. S. 2019. Population and habitat utilization of the Puerto Rican boa (*Chilabothrus inornatus*) in an urban fragmented habitat. University of Puerto Rico.
- Puente-Rolón, A.R. 2012. Reproductive ecology, fitness, and management of the Puerto Rican Boa (*Epicrates inornatus*, Boidae). P.h.D. thesis. University of Puerto Rico, Río Piedras, PR. 151 p.
- Reynolds, R.G., D.C. Collar, S.A. Pasachnik, M.L. Niemiller, A.R. Puente-Rolón, and L.J. Revell. 2016. Ecological specialization and morphological diversification in Greater Antillean boas. *Evolution* 70: 1882-1895. <https://onlinelibrary.wiley.com/doi/abs/10.1111/evo.12987>
- Reynolds, R.G. and A.R. Puente-Rolón. 2014. Conservation Genetics of the Puerto Rican boa (*Chilabothrus inornatus*). Final Report, Cooperative Agreement #F12AP01103. Service, Caribbean Ecological Services Field Office, Boquerón, PR. 18 p.
- Reynolds R.G. and R.W. Henderson. 2018. Boas of the World (Superfamily Booidae): A Checklist with Systematic, Taxonomic, and Conservation Assessments. *Bulletin of the Museum of Comparative Zoology* 162 (1). 1-58. <https://doi.org/10.3099/MCZ48.1>
- Ríos-López, N. and T.M. Aide. 2007. Herpetofaunal dynamics during secondary succession. *Herpetologica* 63(1): 35-50.
- Rivero, J.A. 1998. Los anfibios y reptiles de Puerto Rico. University of Puerto Rico Press, Río Piedras, Puerto Rico. 510 pp.
- Tolson, P. 1989. Breeding the Virgin Islands boa (*Epicrates monensis granti*) at the Toledo Zoological Gardens. *International Zoo Yearbook* 28:163-167.
- Tolson, P. J. 1991. *Epicrates* (West Indian Boa) reproductive longevity. *Herpetological Review* 22:100.
- Tolson, P.J. 1994. The reproductive management of the insular species of *Epicrates* (Serpentes: Boidae) in captivity, p. 353-357. In J.B. Murphy, K. Adler, and J.T. Collins (eds.). *Captive Management and Conservation of Amphibians and Reptiles*. Society for the Study of Amphibians and Reptiles, Ithaca, New York. Contributions to Herpetology, Vol. 11.
- Tolson, P.J. 1997. Population Census and Habitat Assessment for the Puerto Rican boa, *Epicrates inornatus*, at the U.S. Naval Security Group Activity, Sabana Seca, Puerto Rico. Final Report submitted to the DNER. San Juan, PR. 11 p.

- Tolson, P.J. and R.W. Henderson. 1993. The natural history of West Indian boas. R. & A. Publ. Limited. 125 p.
- Tucker, A. M., C.P. McGowan, E.S. Mulero Oliveras, N. F. Angeli and J. P. Zagarra. 2020. A demographic projection model to support conservation decision making for an endangered snake with limited monitoring data. *Animal Conservation* 24 (2), 291-301
- US Fish and Wildlife Service (Service). 2009. Virgin Islands tree boa (*Epicrates monensis granti*) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Boquerón, Puerto Rico. 25 pp.
- US Fish and Wildlife Service (Service). 2018. Virgin Islands Tree Boa (*Chilabothrus granti*) Species Status Assessment. Atlanta, GA. Version 1.0. 62 pp.
- US Fish and Wildlife Service (Service). 2020. Biological Opinion: Housing and Urban Development and VI Housing Authority, Construction of 84 Housing Units, Estate Donoe, St. Thomas, USVI. 17pp.



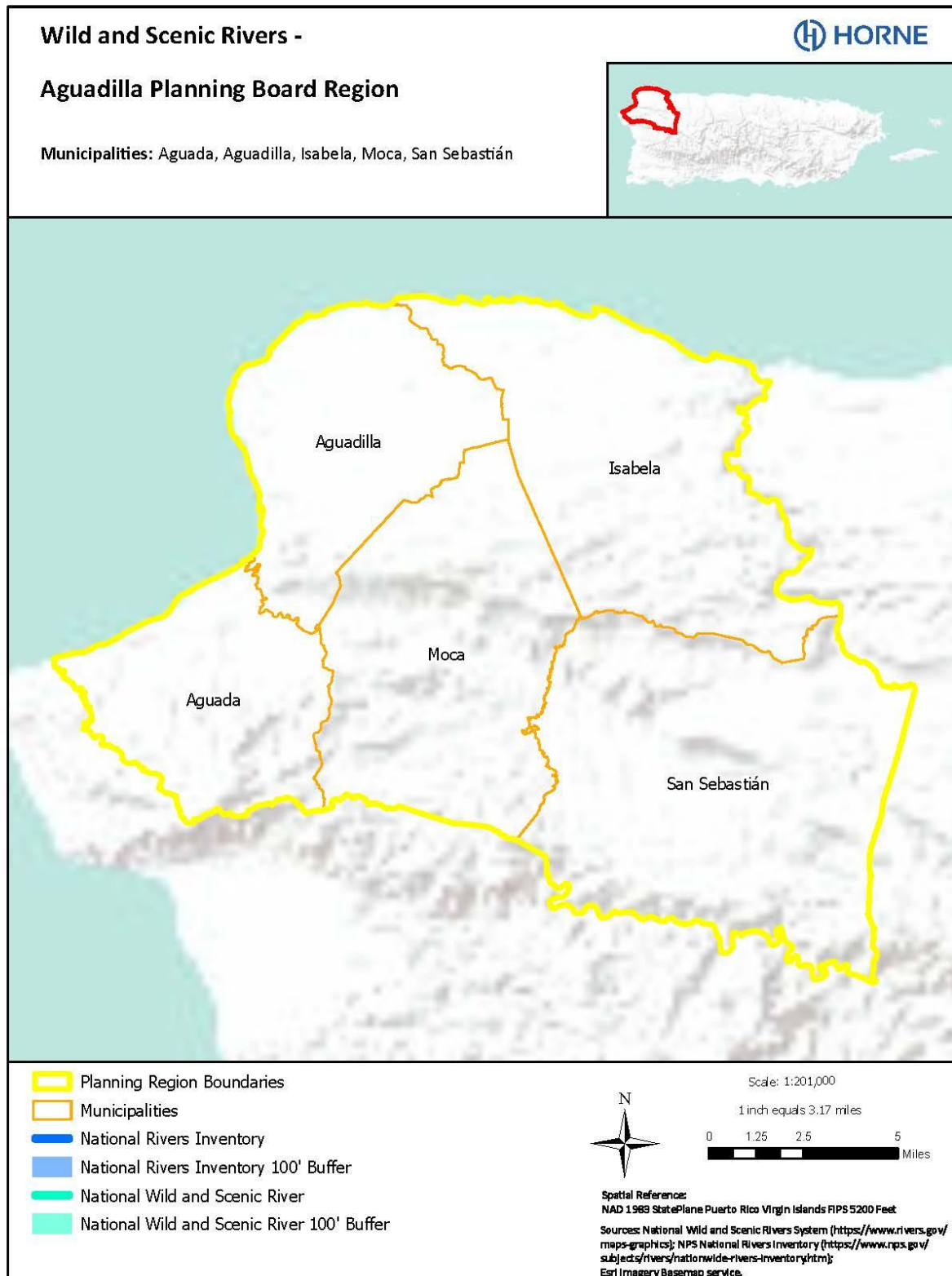
A7: Wild and Scenic Rivers





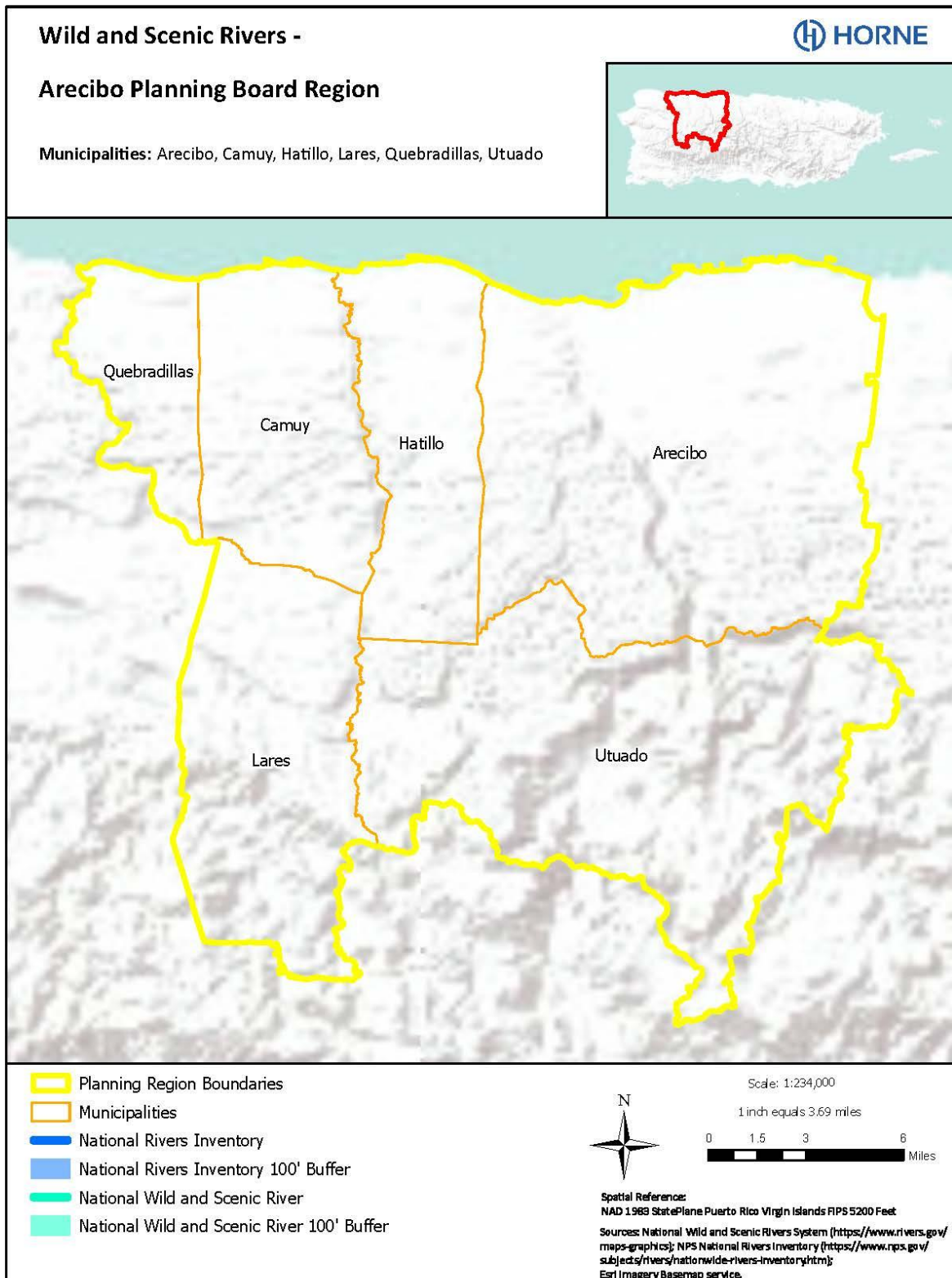
A7-1: Wild and Scenic Rivers Maps





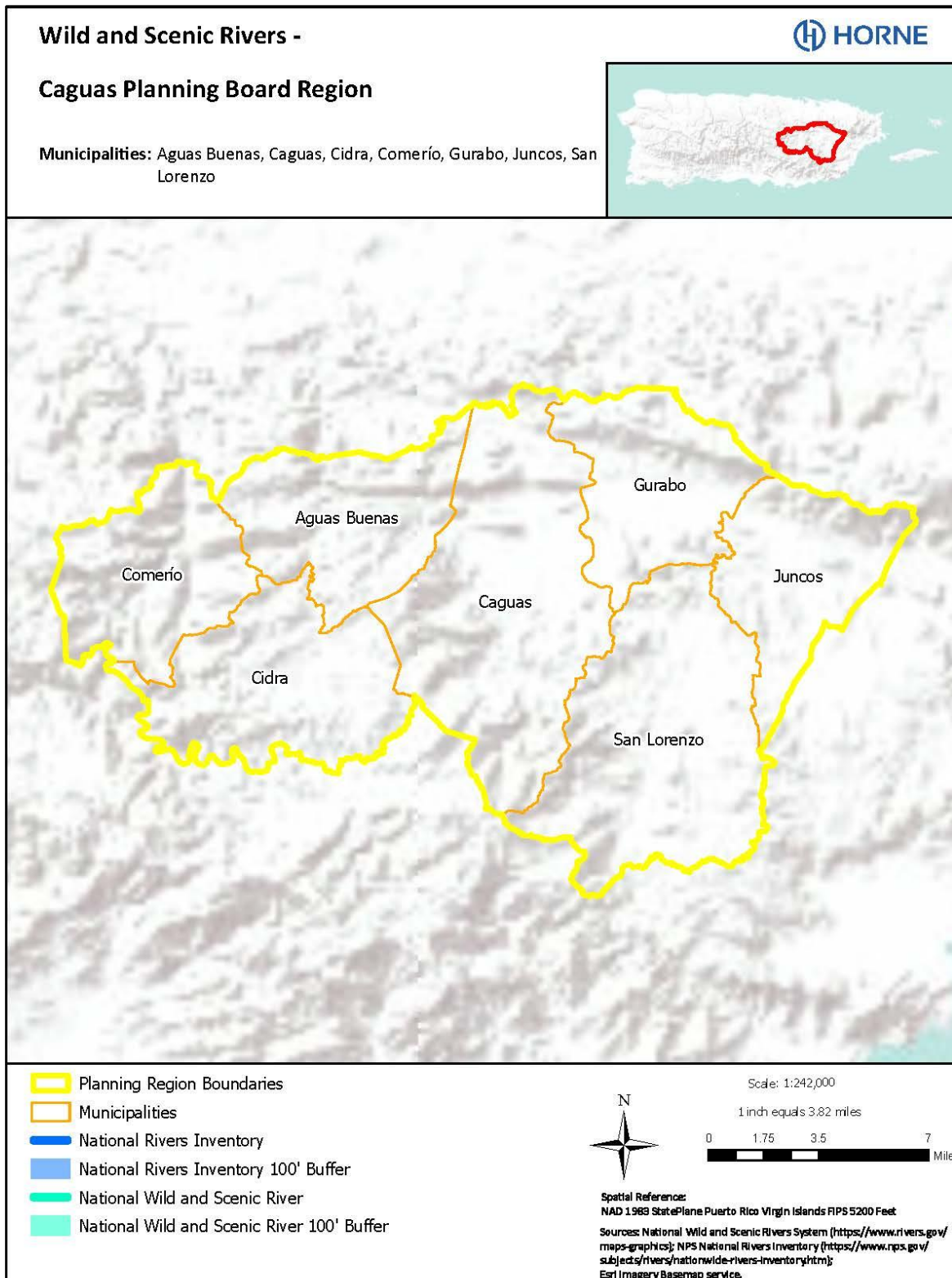
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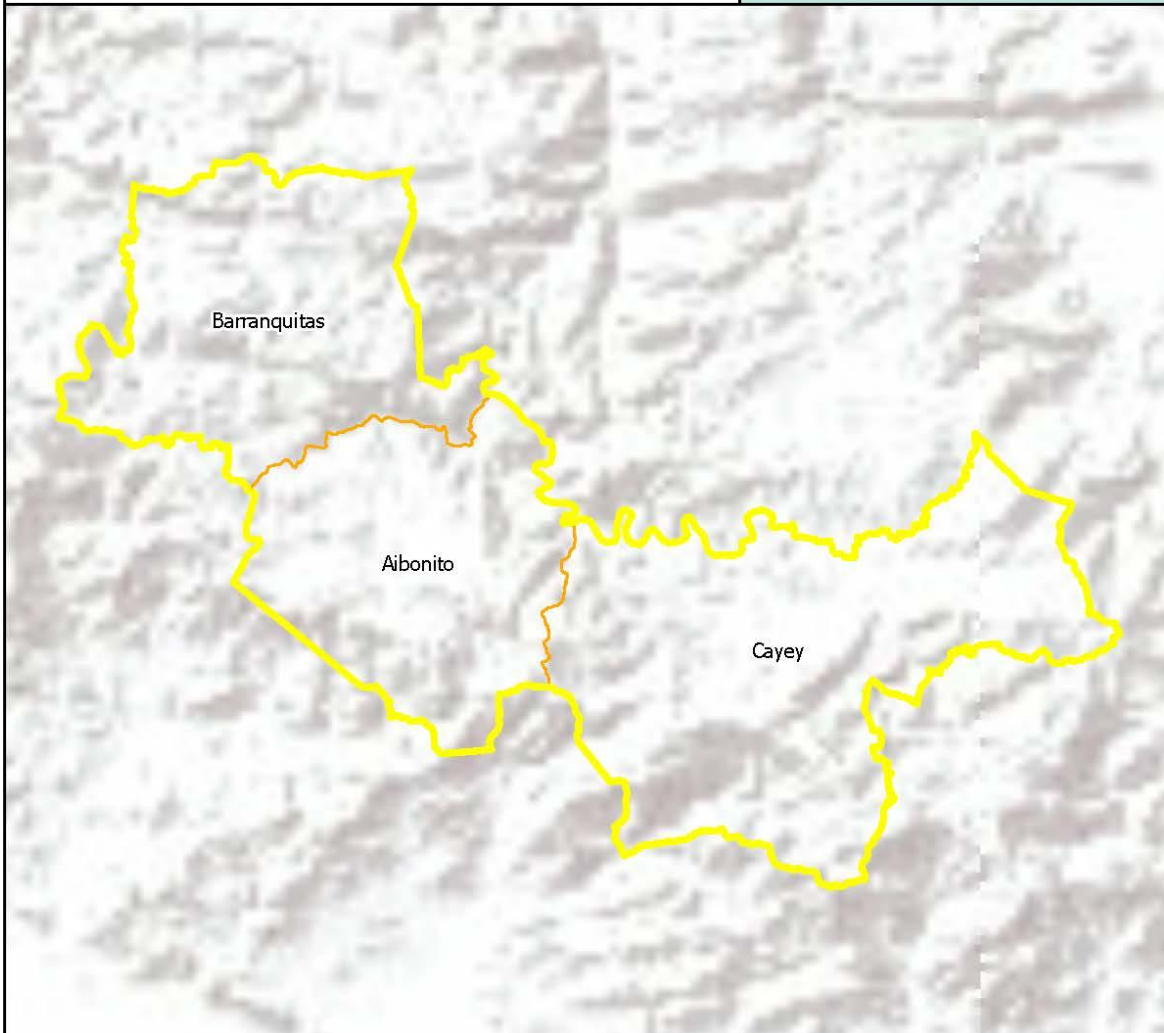
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Wild and Scenic Rivers -

Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey

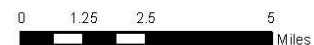


- Planning Region Boundaries
- Municipalities
- National Rivers Inventory
- National Rivers Inventory 100' Buffer
- National Wild and Scenic River
- National Wild and Scenic River 100' Buffer



Scale: 1:186,000

1 inch equals 2.94 miles



Spatial Reference:

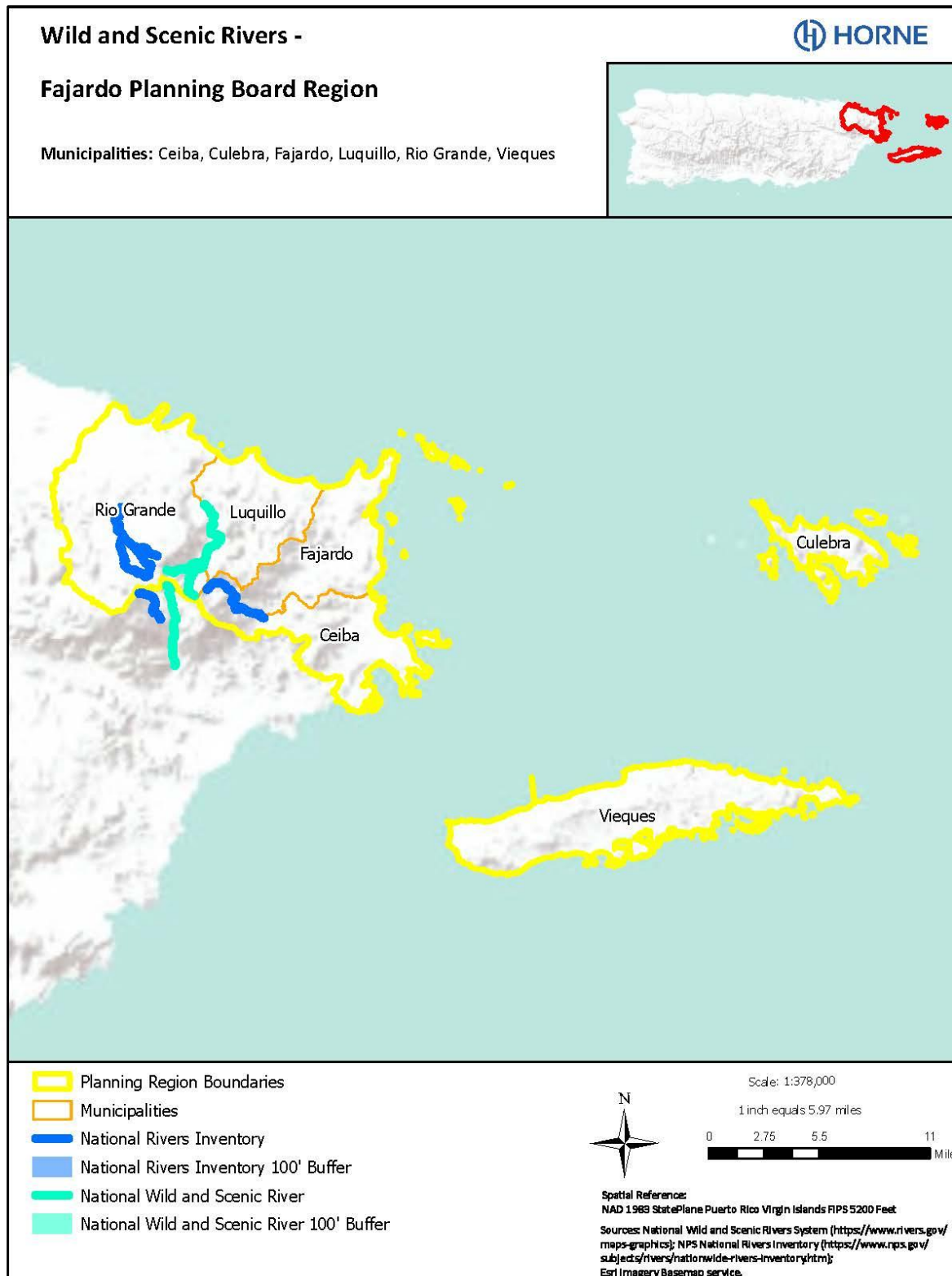
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: National Wild and Scenic Rivers System (<https://www.rivers.gov/maps-graphics>); NPS National Rivers Inventory (<https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm>); Esri Imagery Basemap service.

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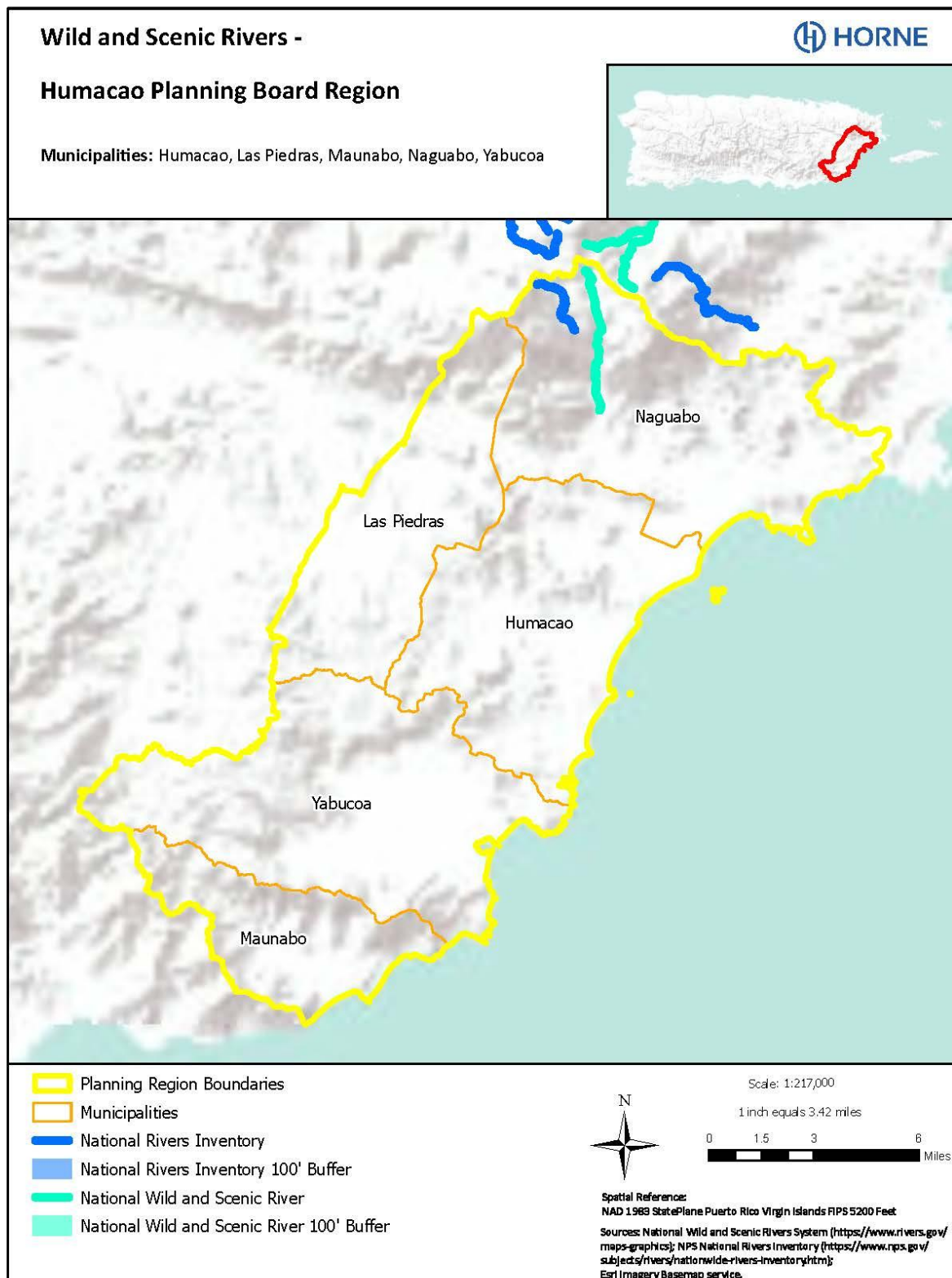
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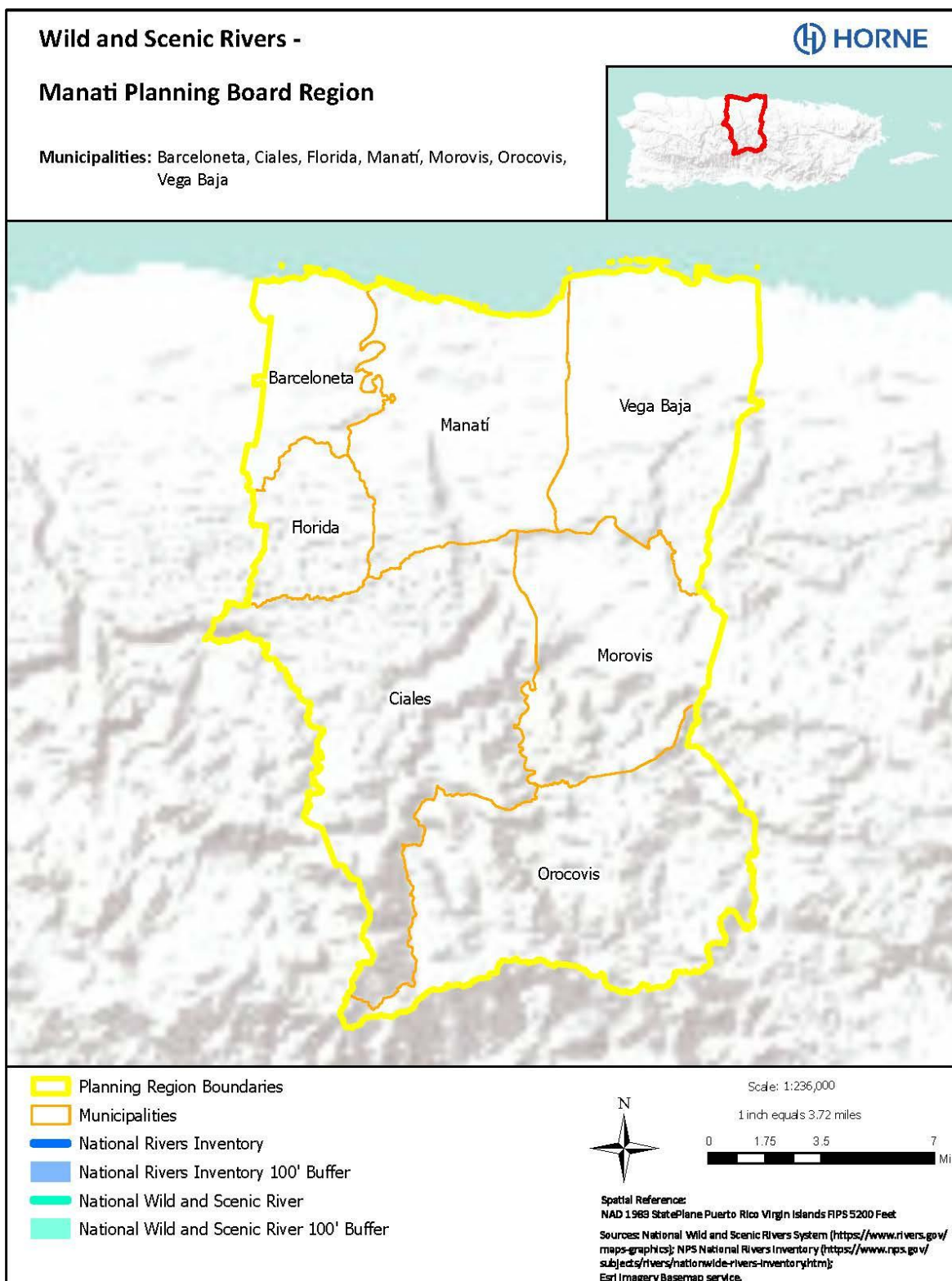
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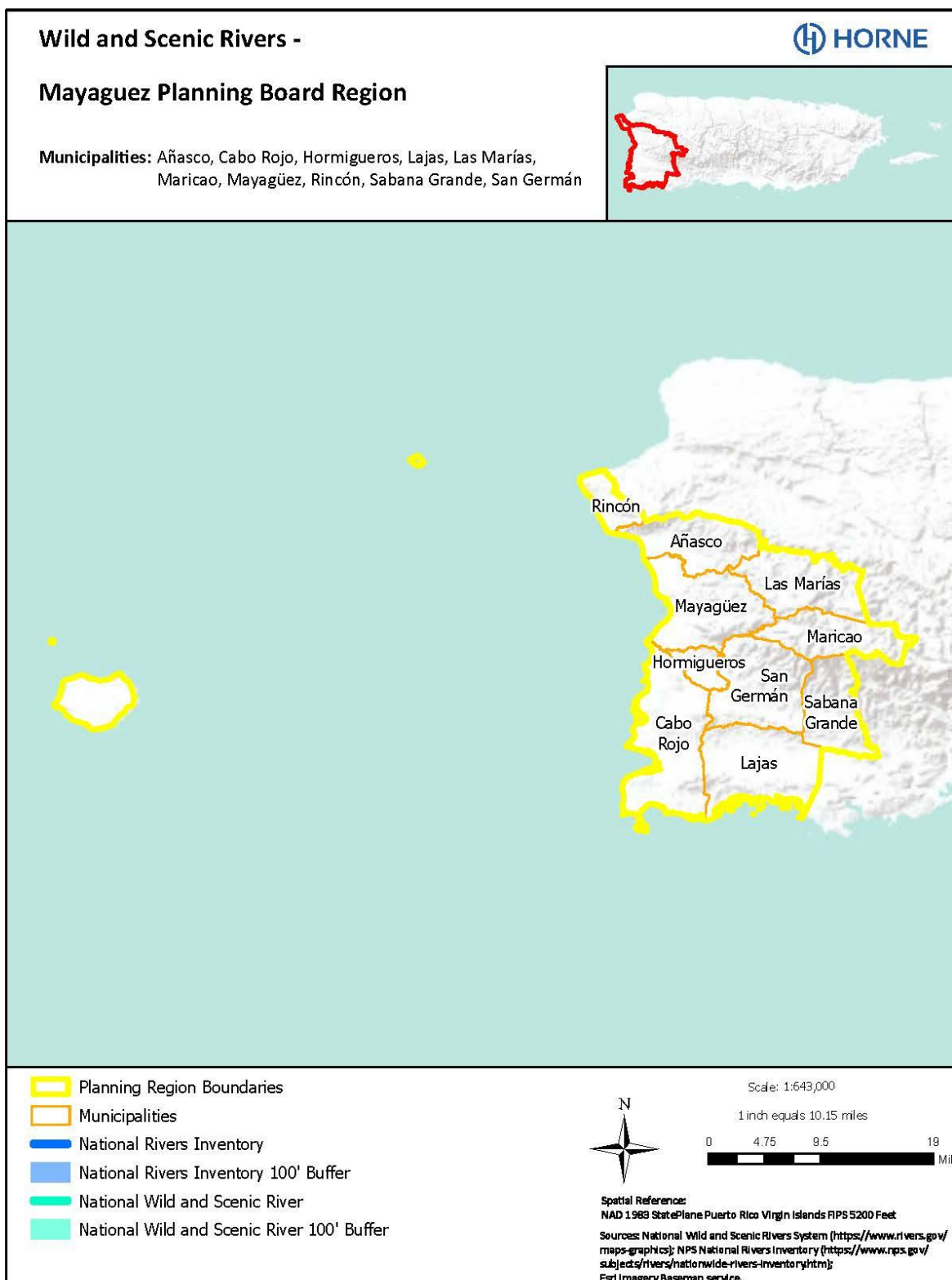
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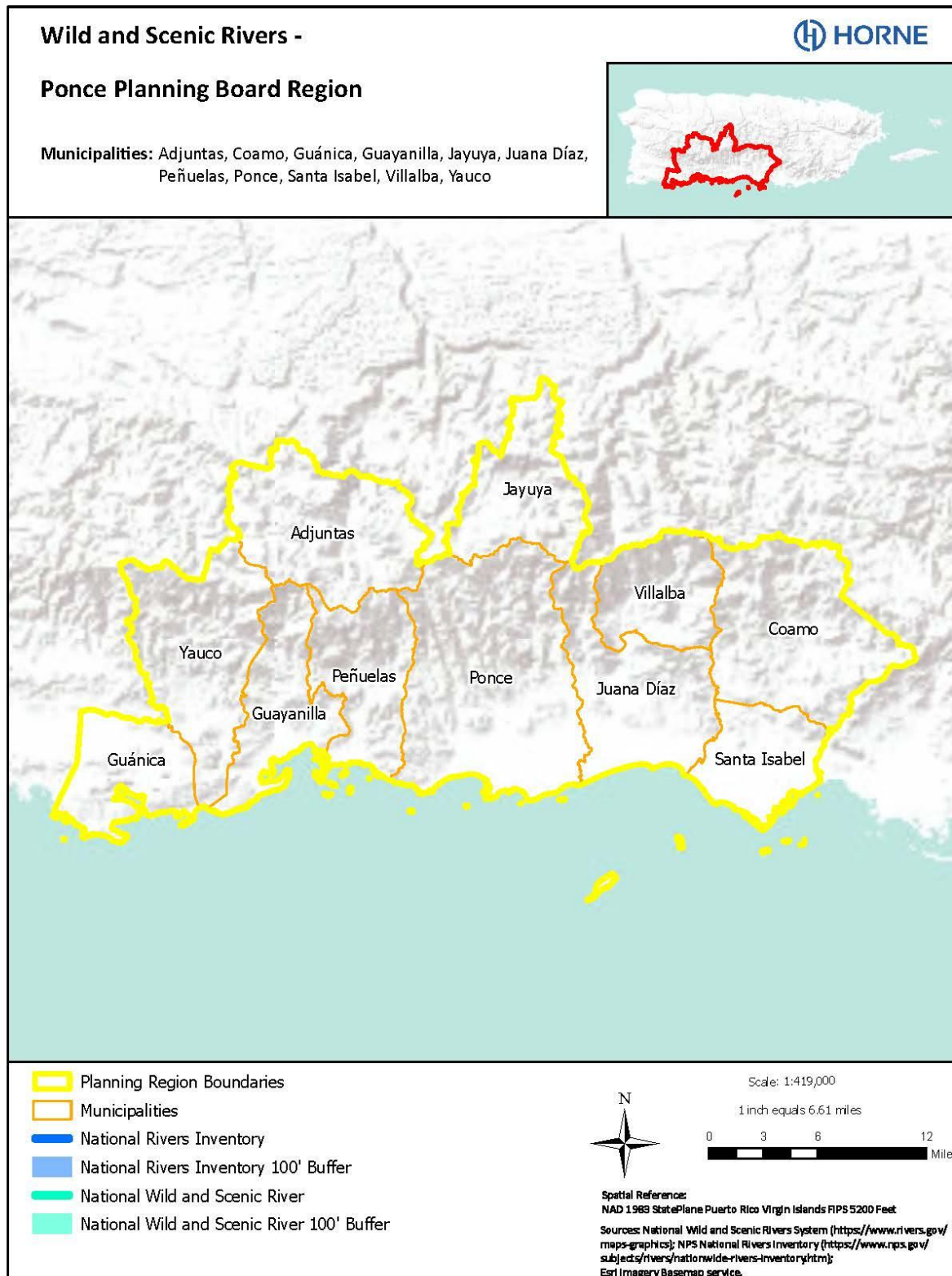
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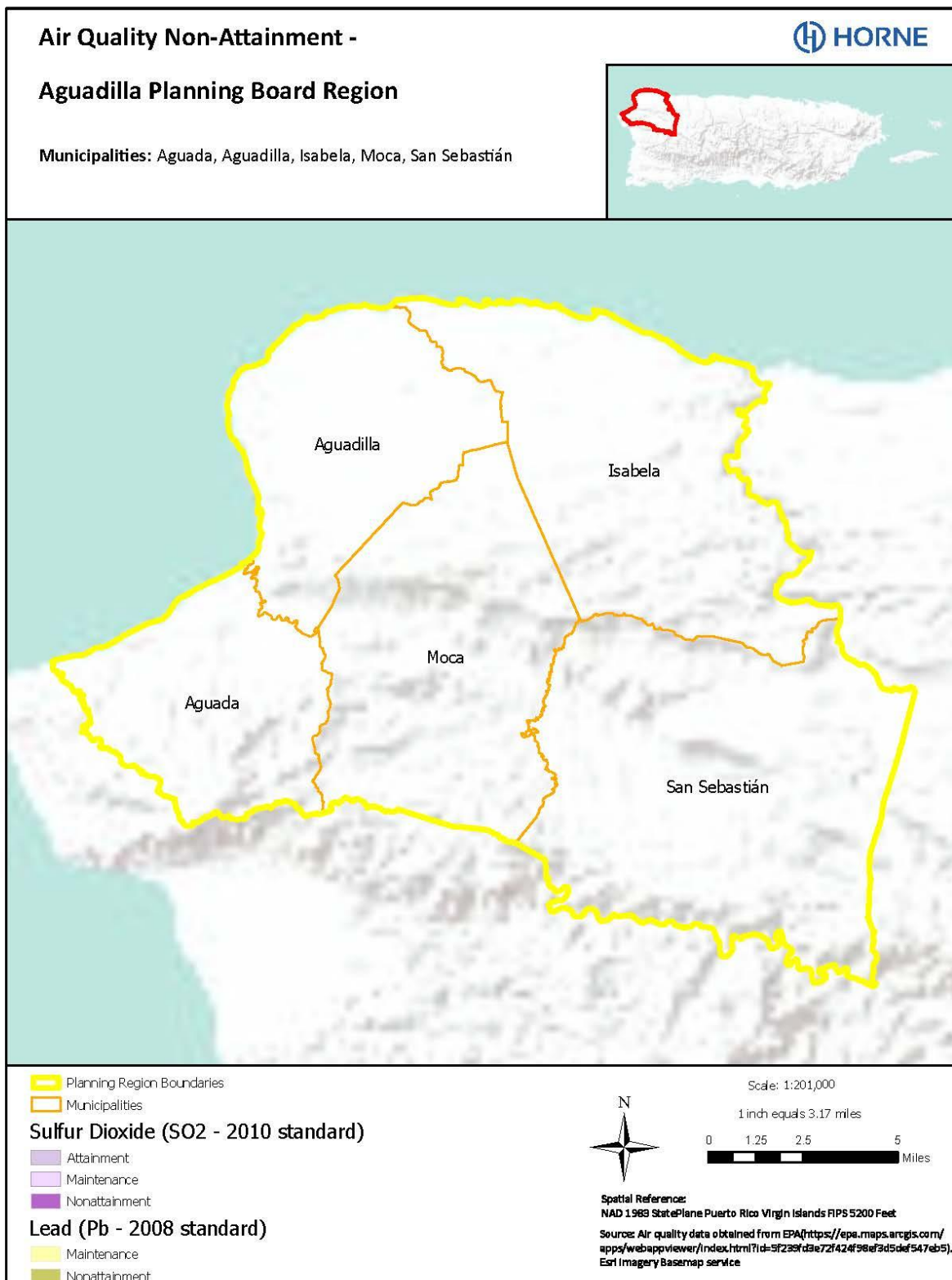
A8: Air Quality



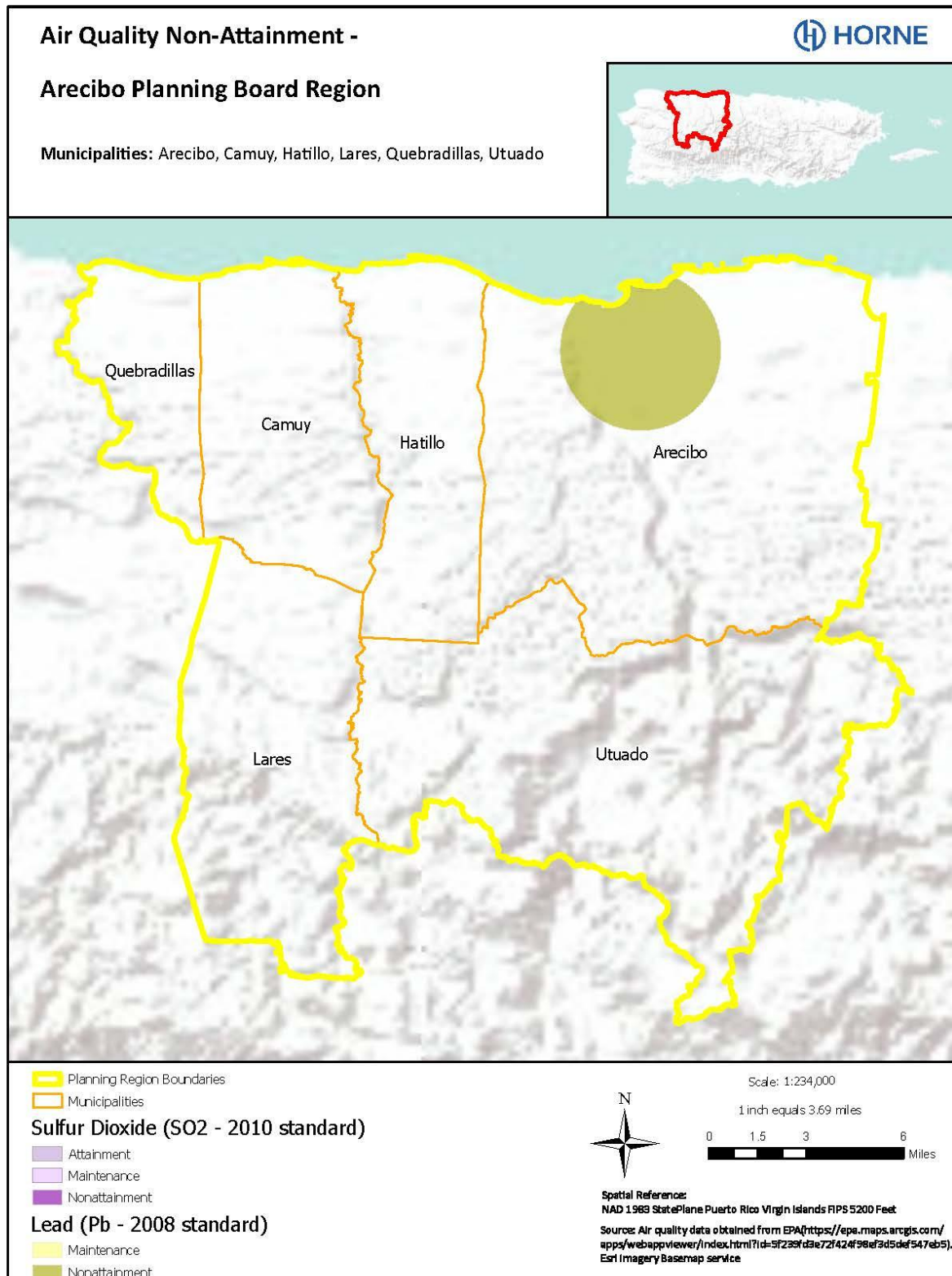


A8-1: Non-Attainment Maps



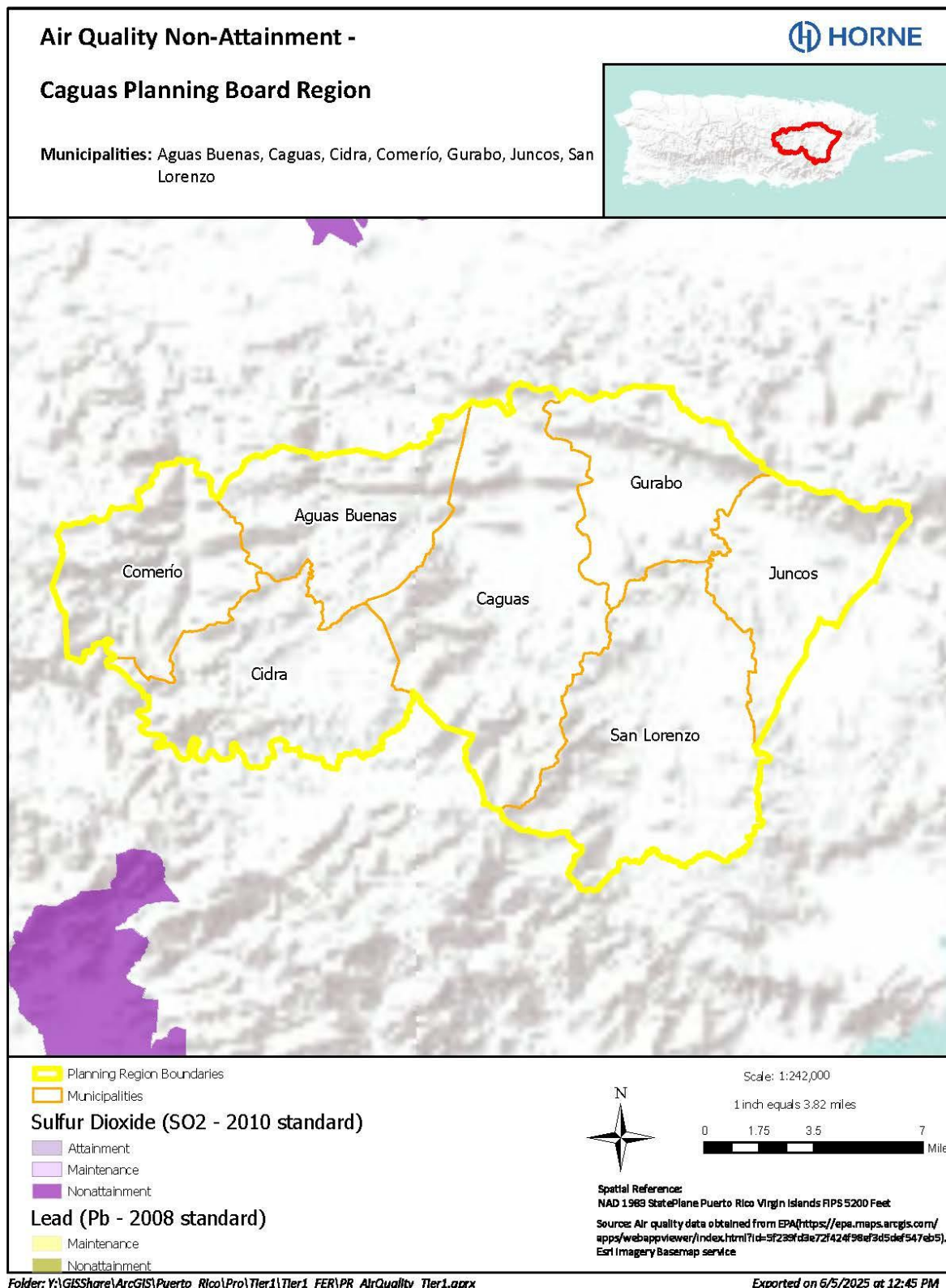


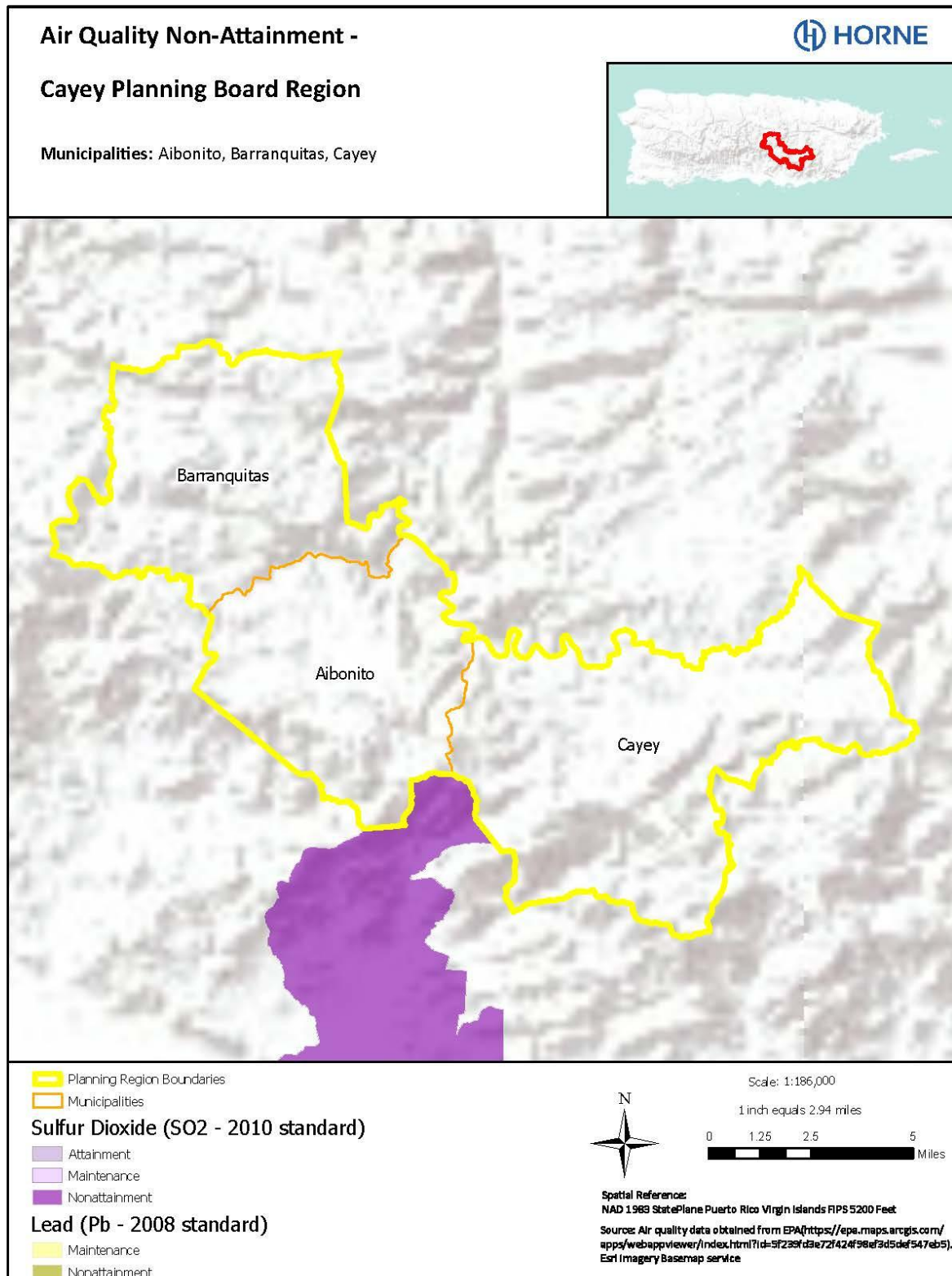
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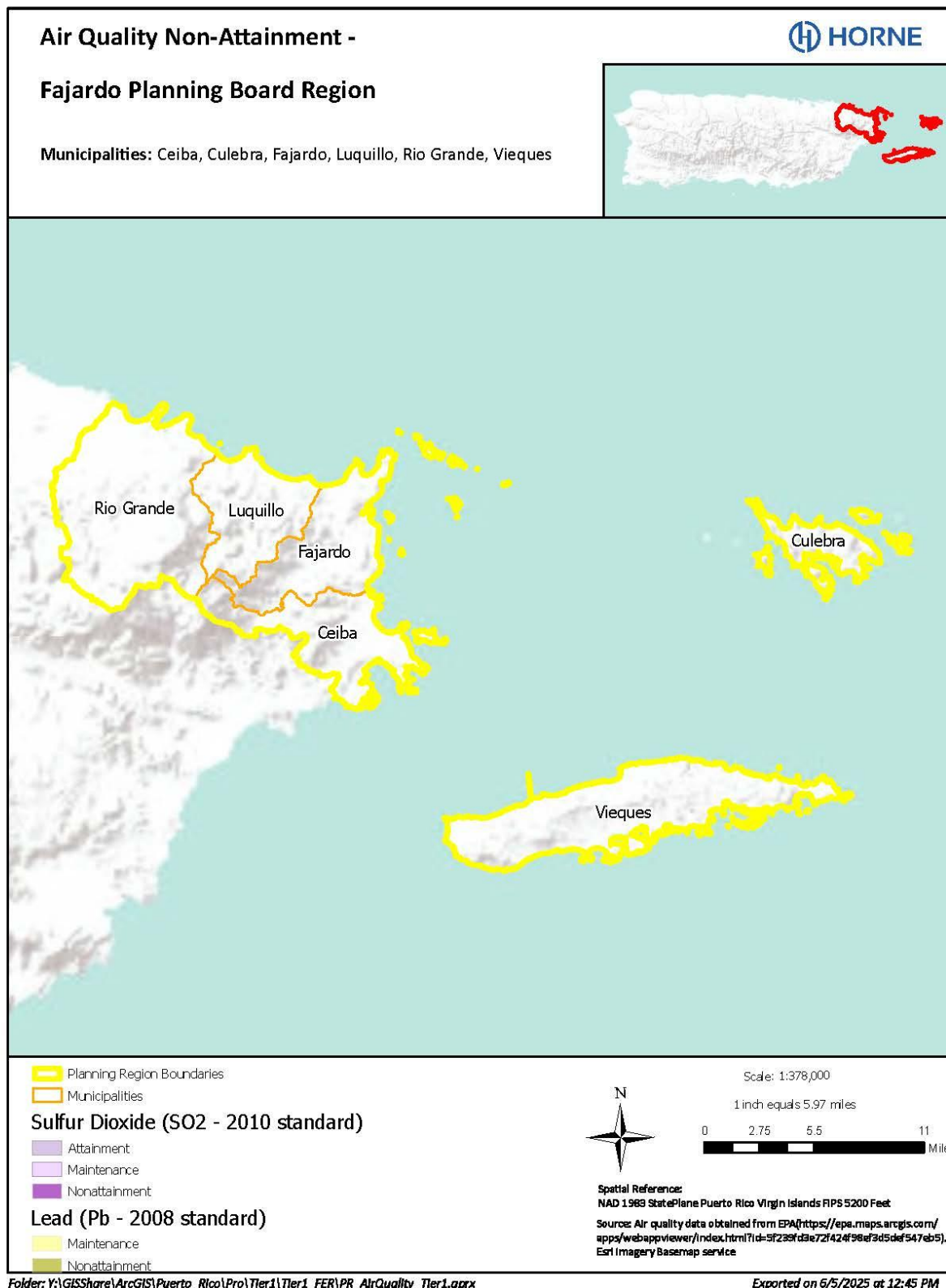
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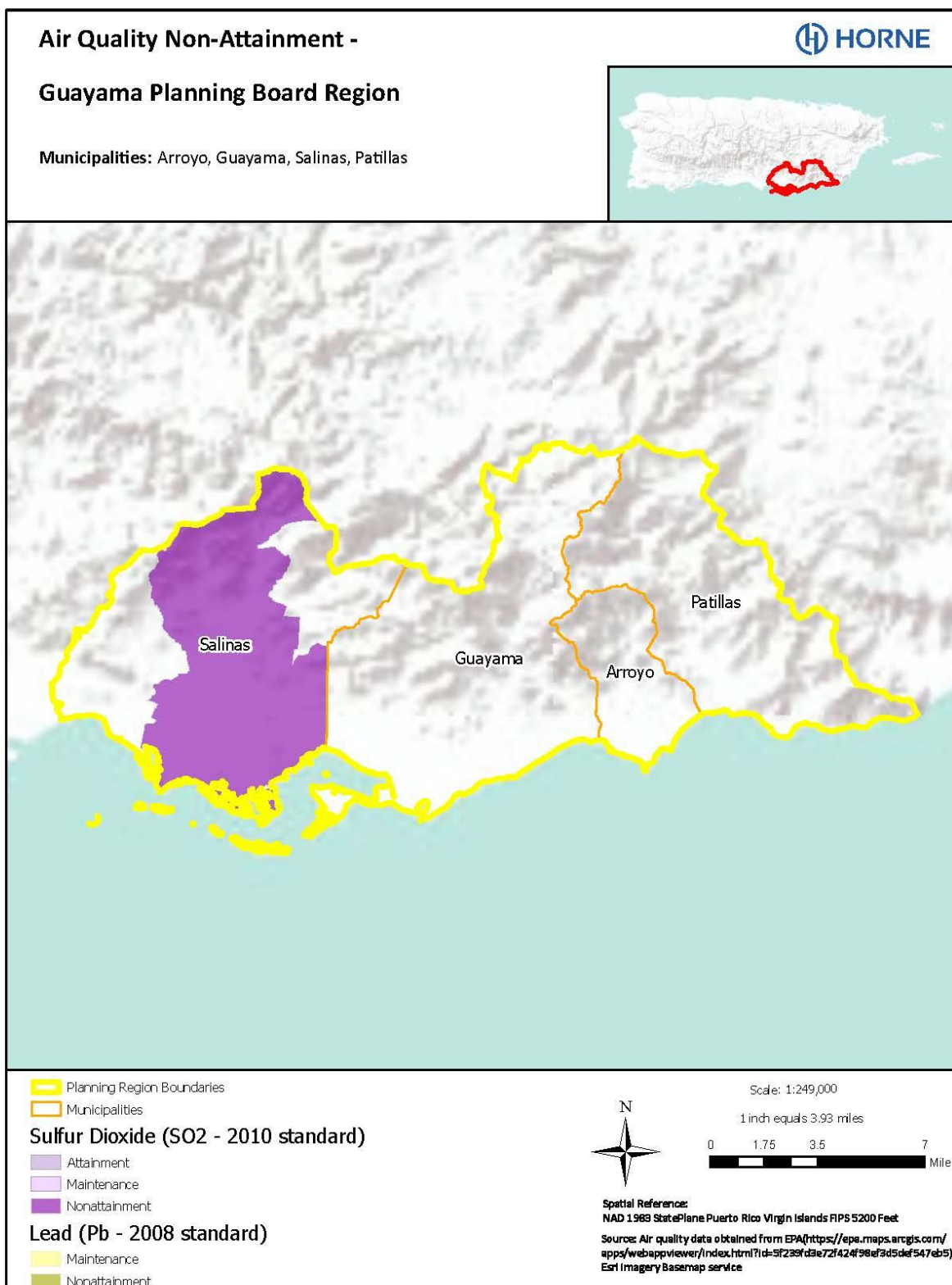




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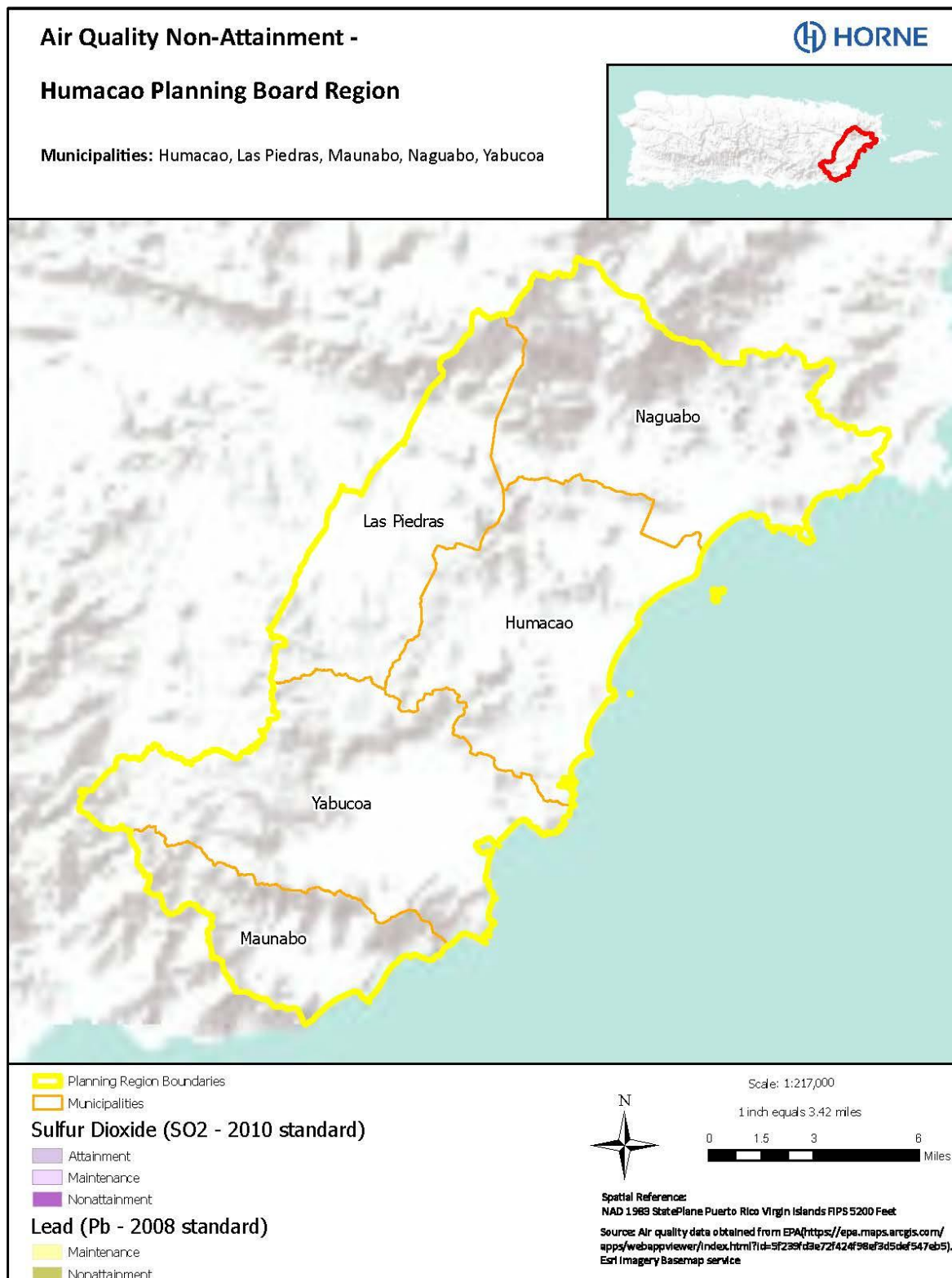
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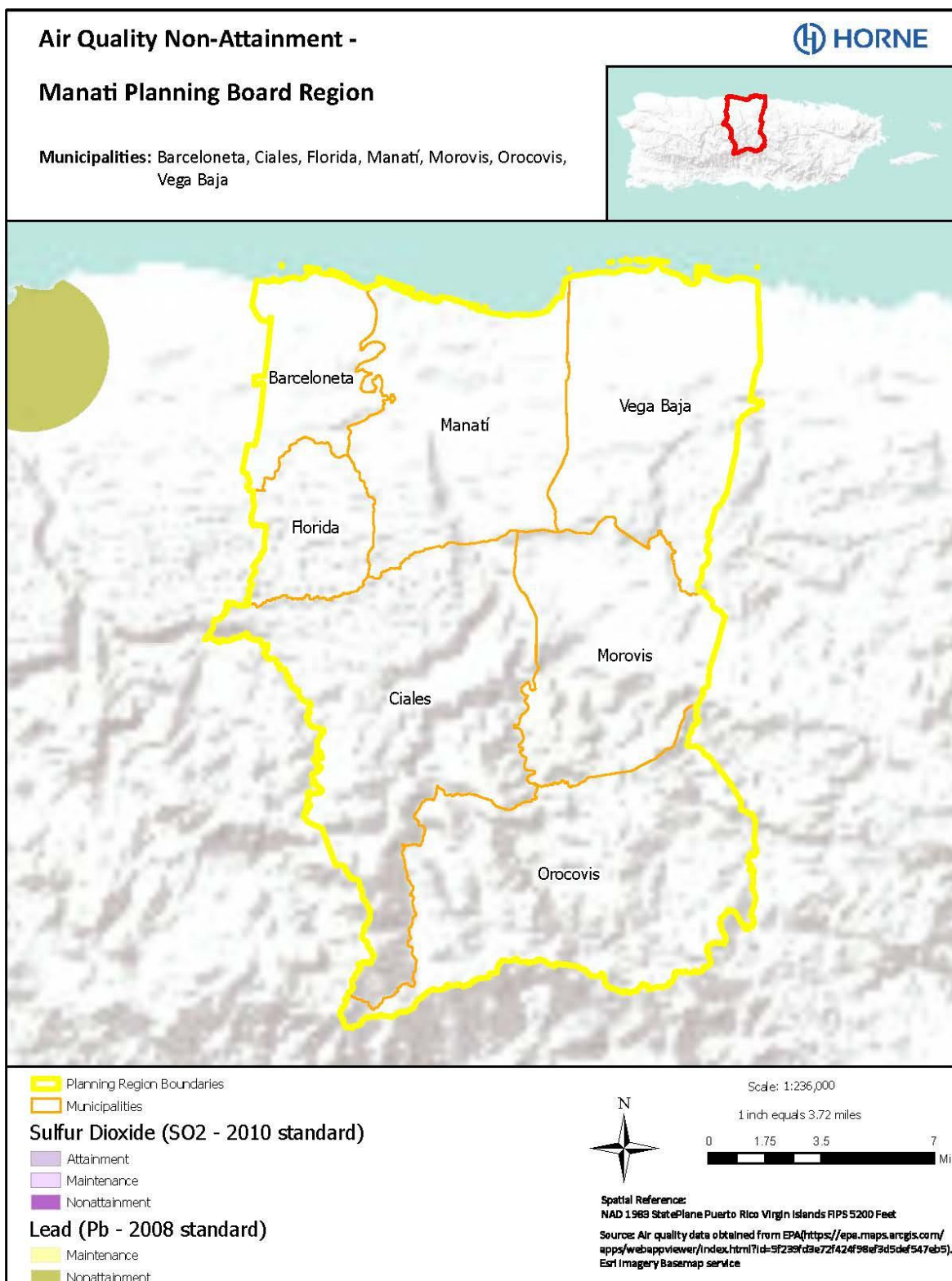
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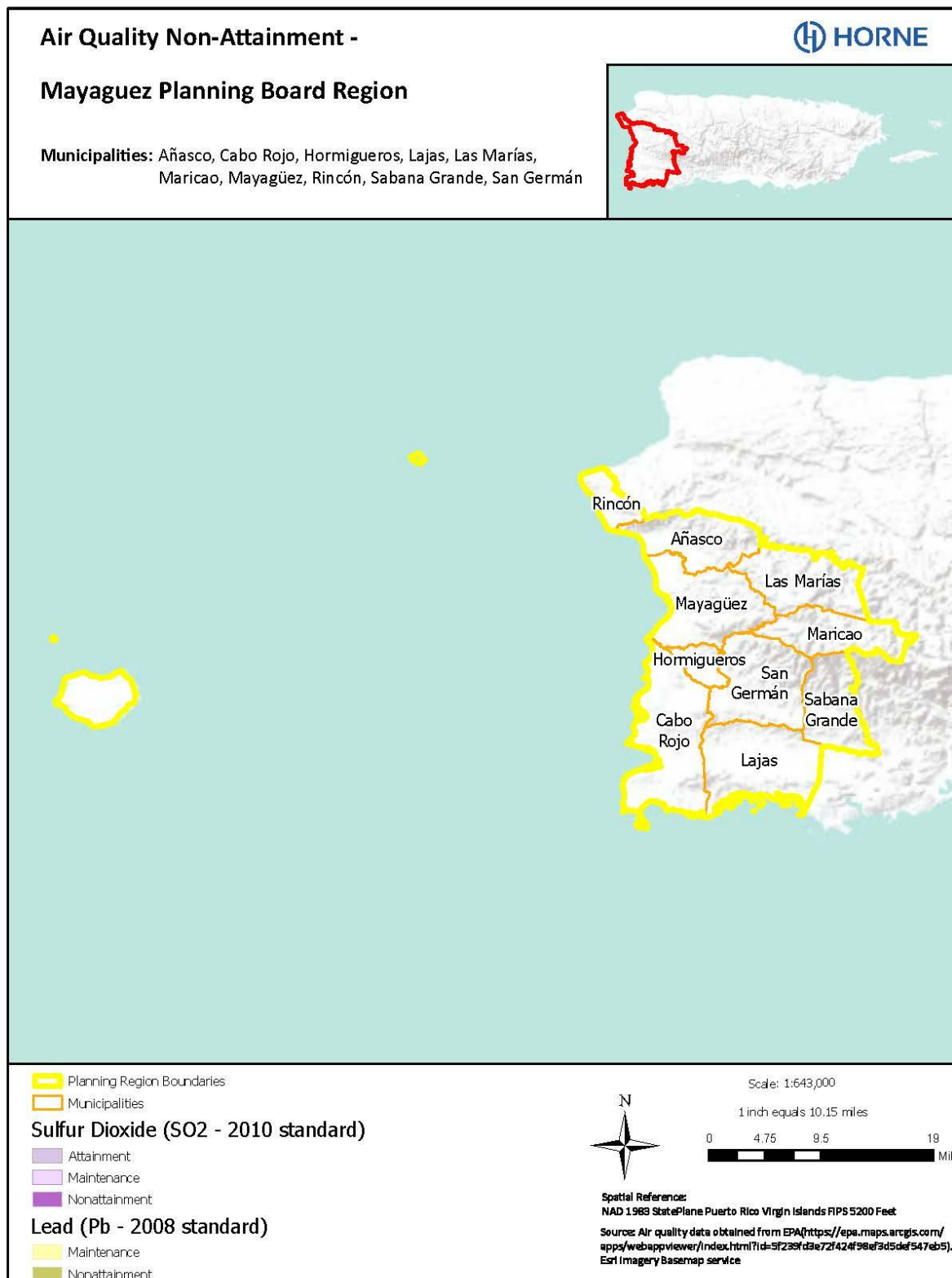
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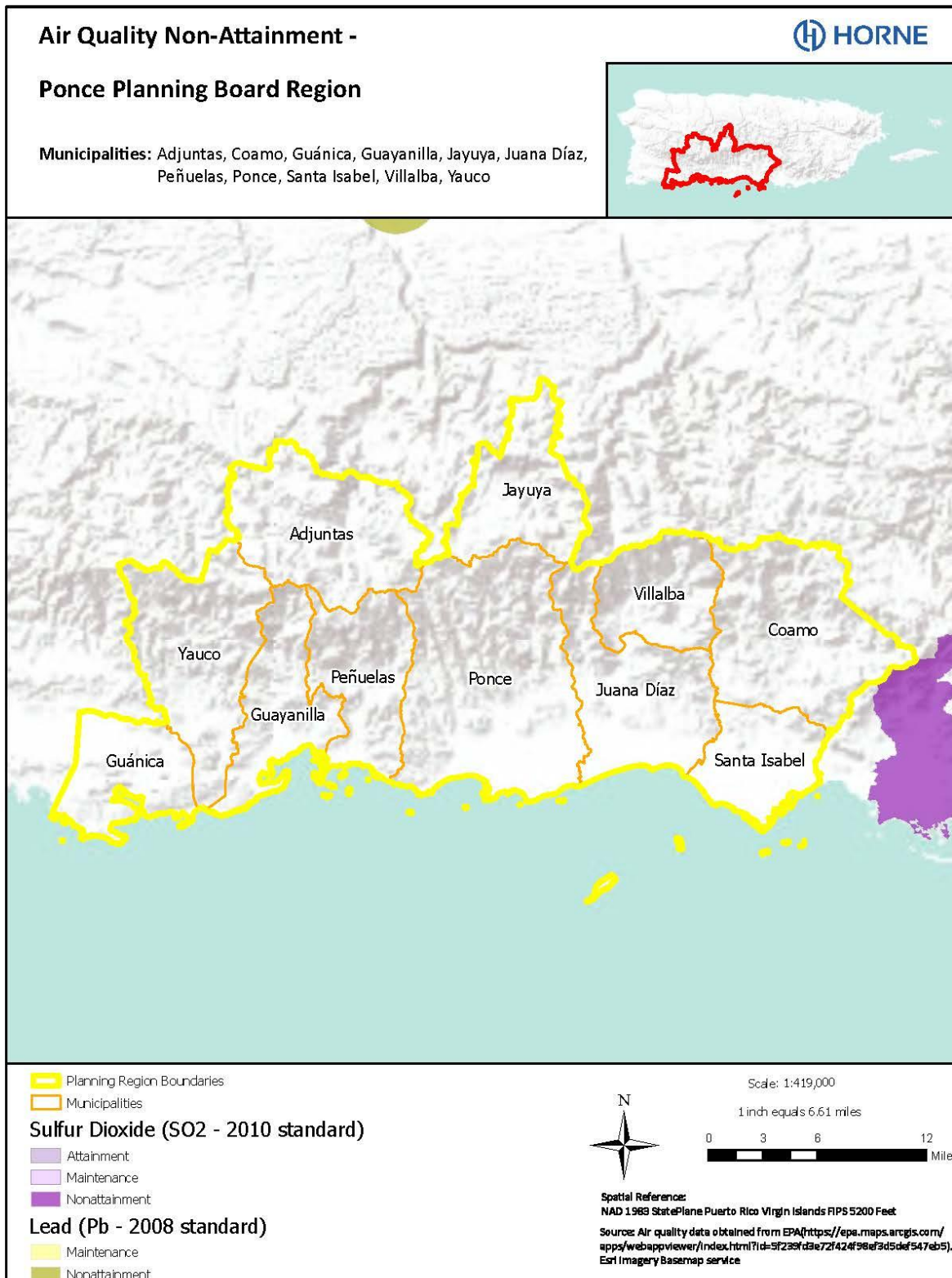
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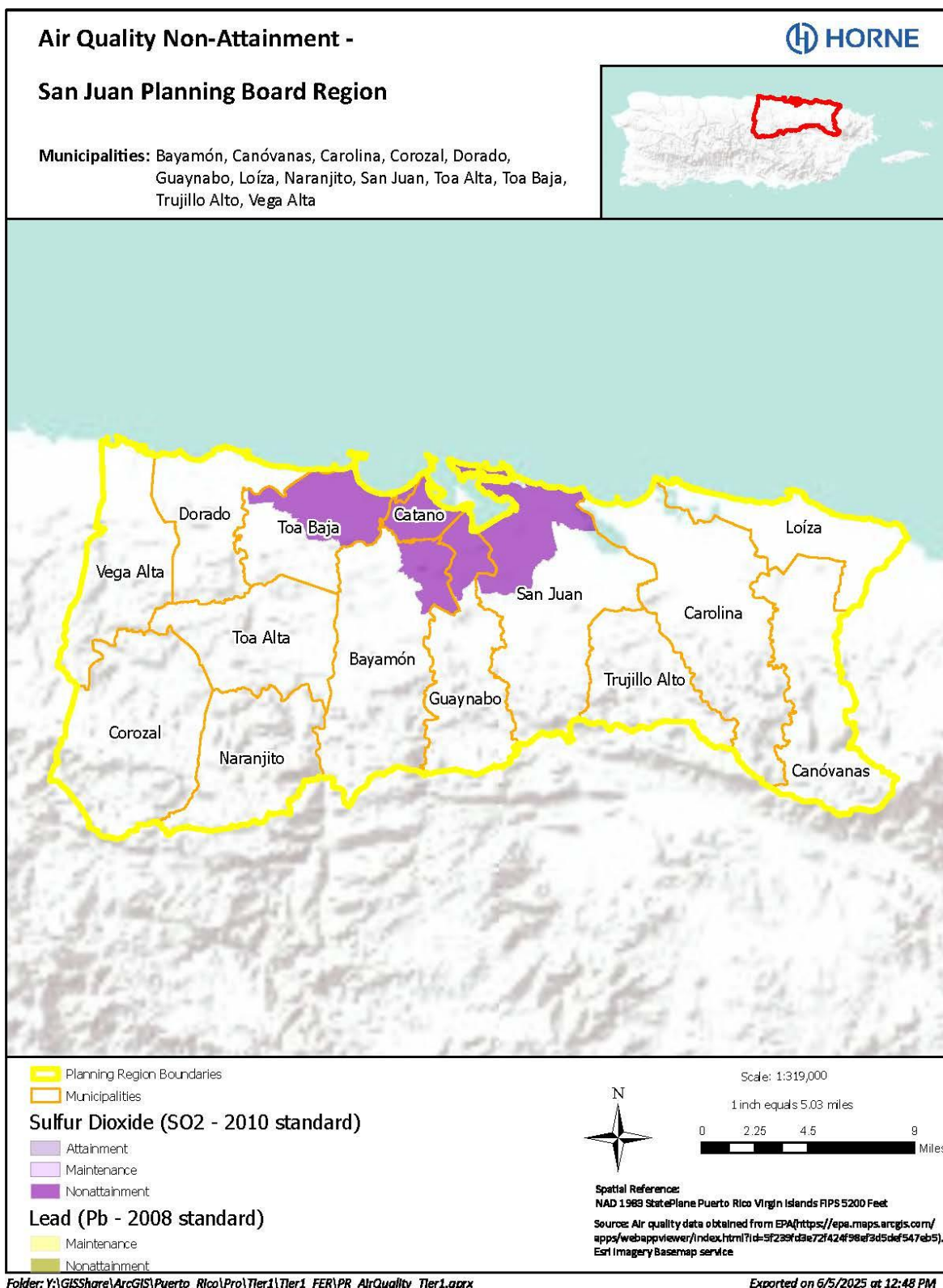
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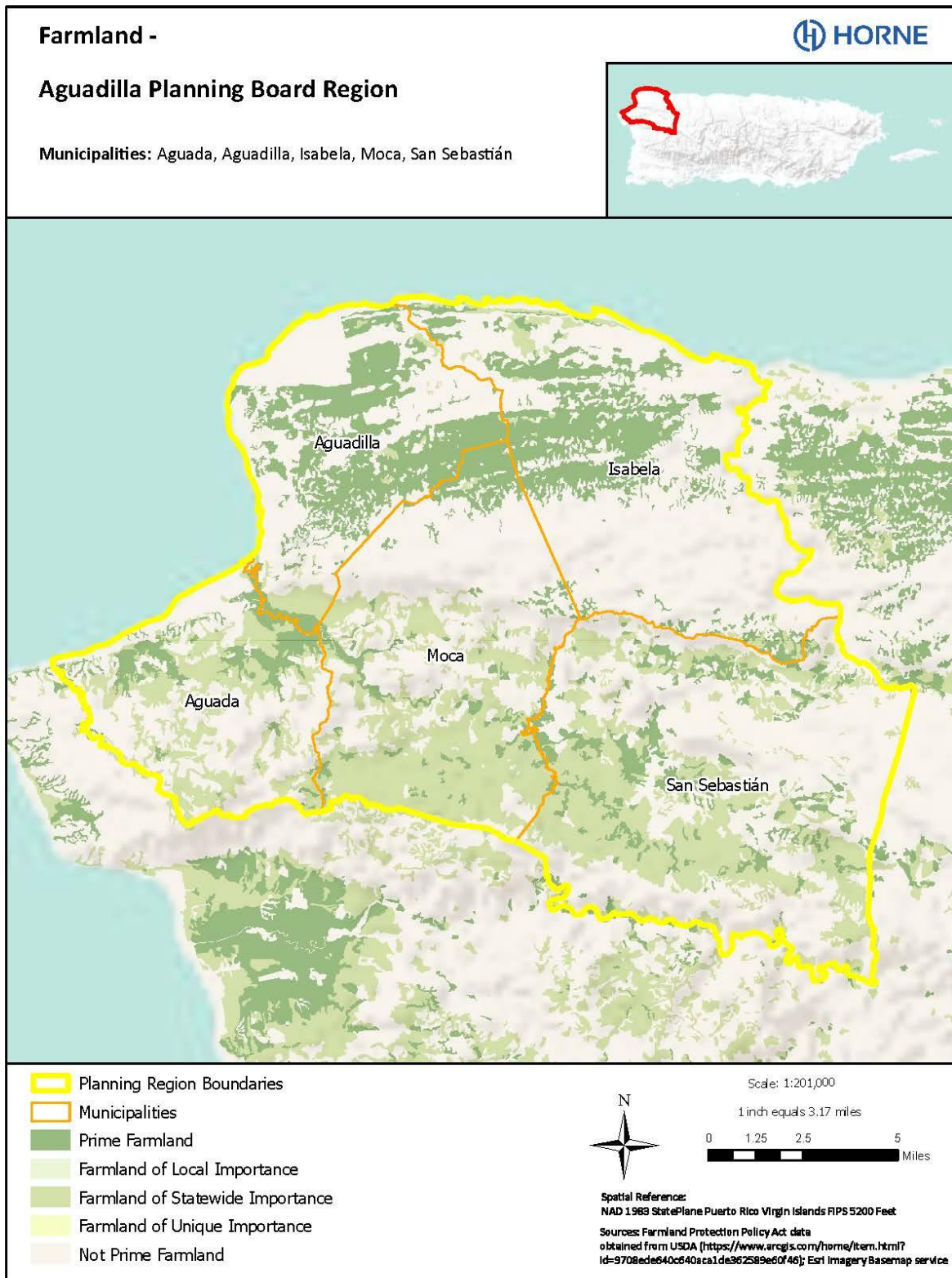
A9: Farmlands





A9-1: Prime Farmlands Maps

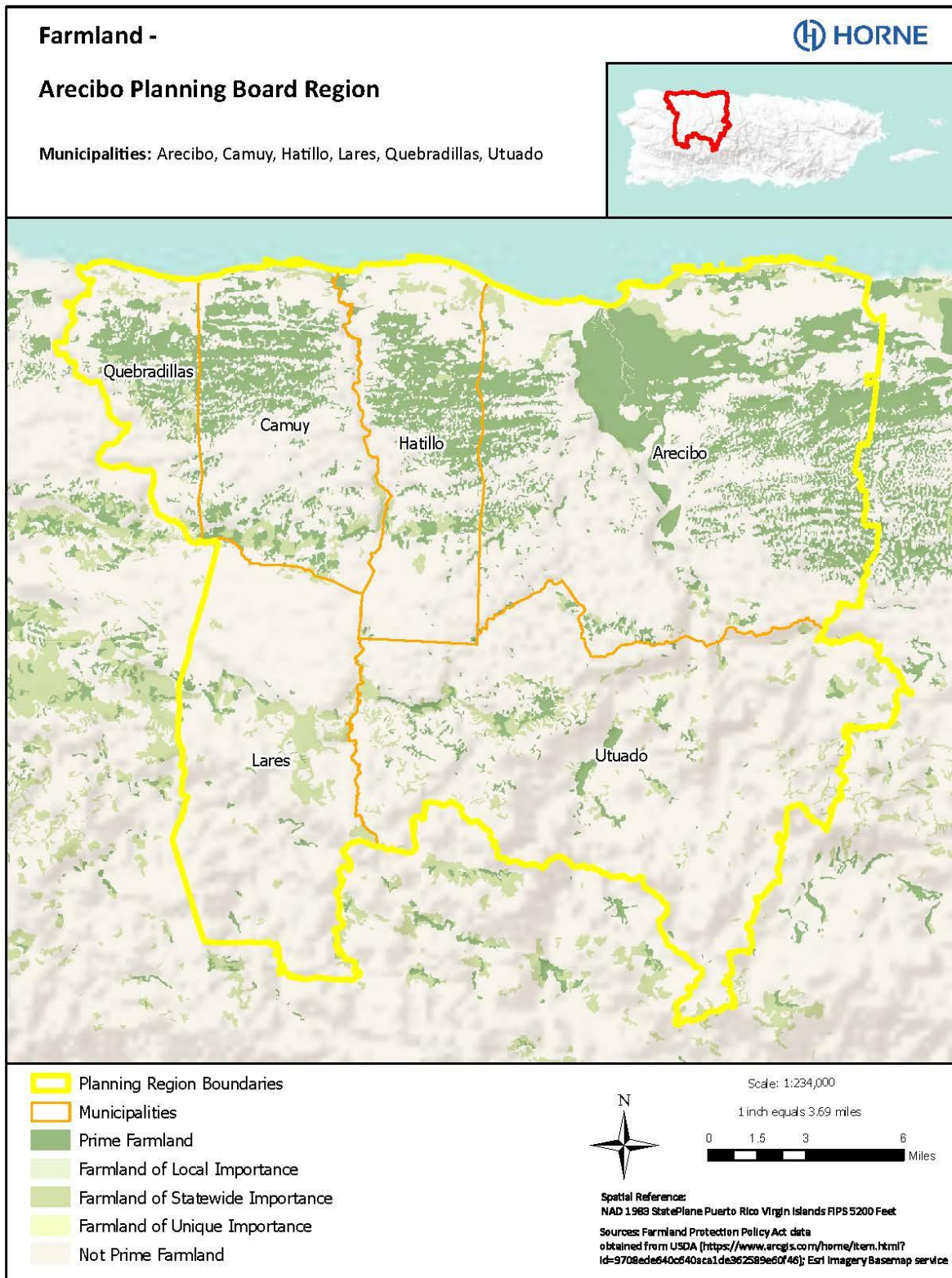




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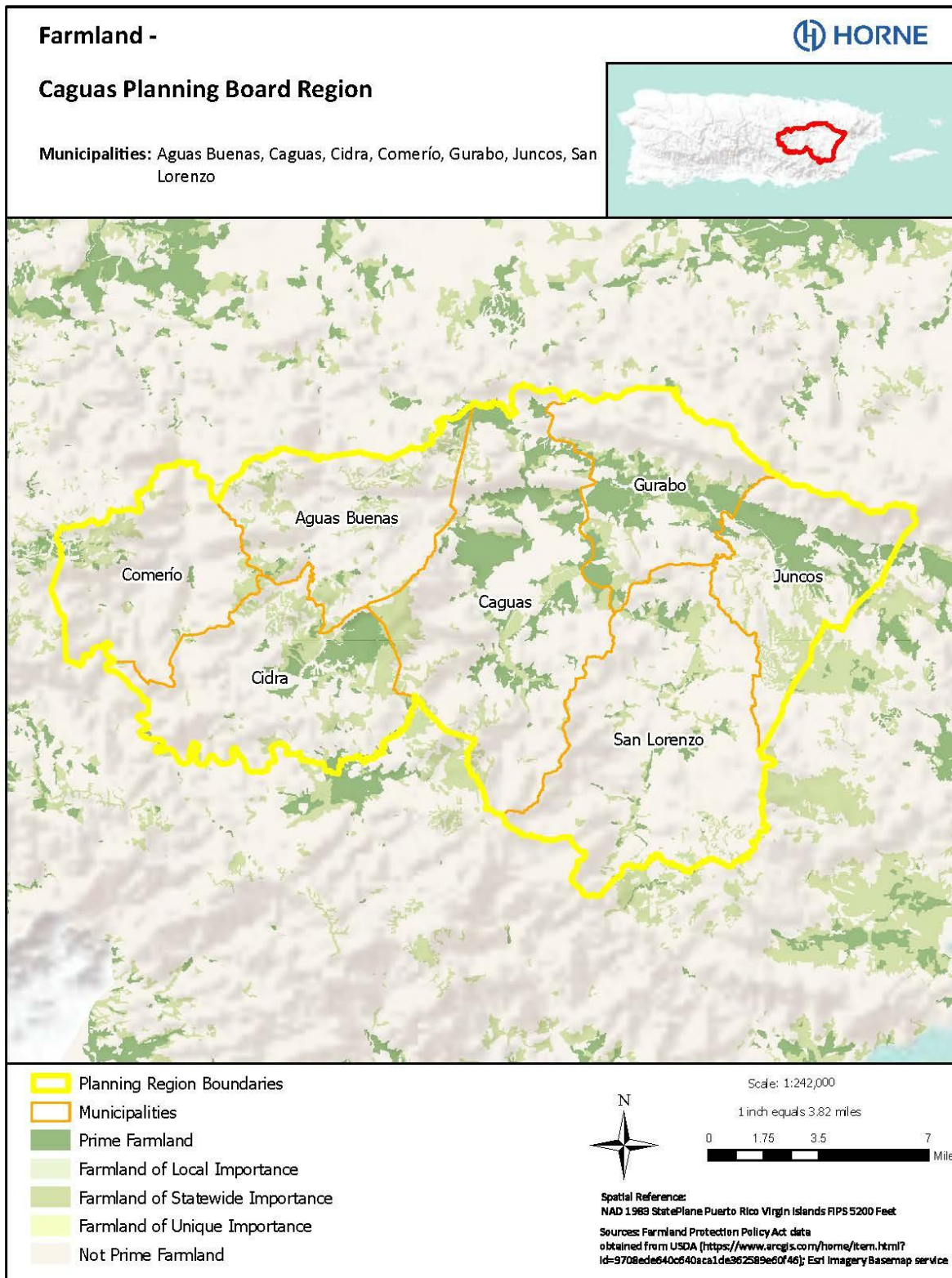
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Exported on 6/5/2025 at 11:00 AM



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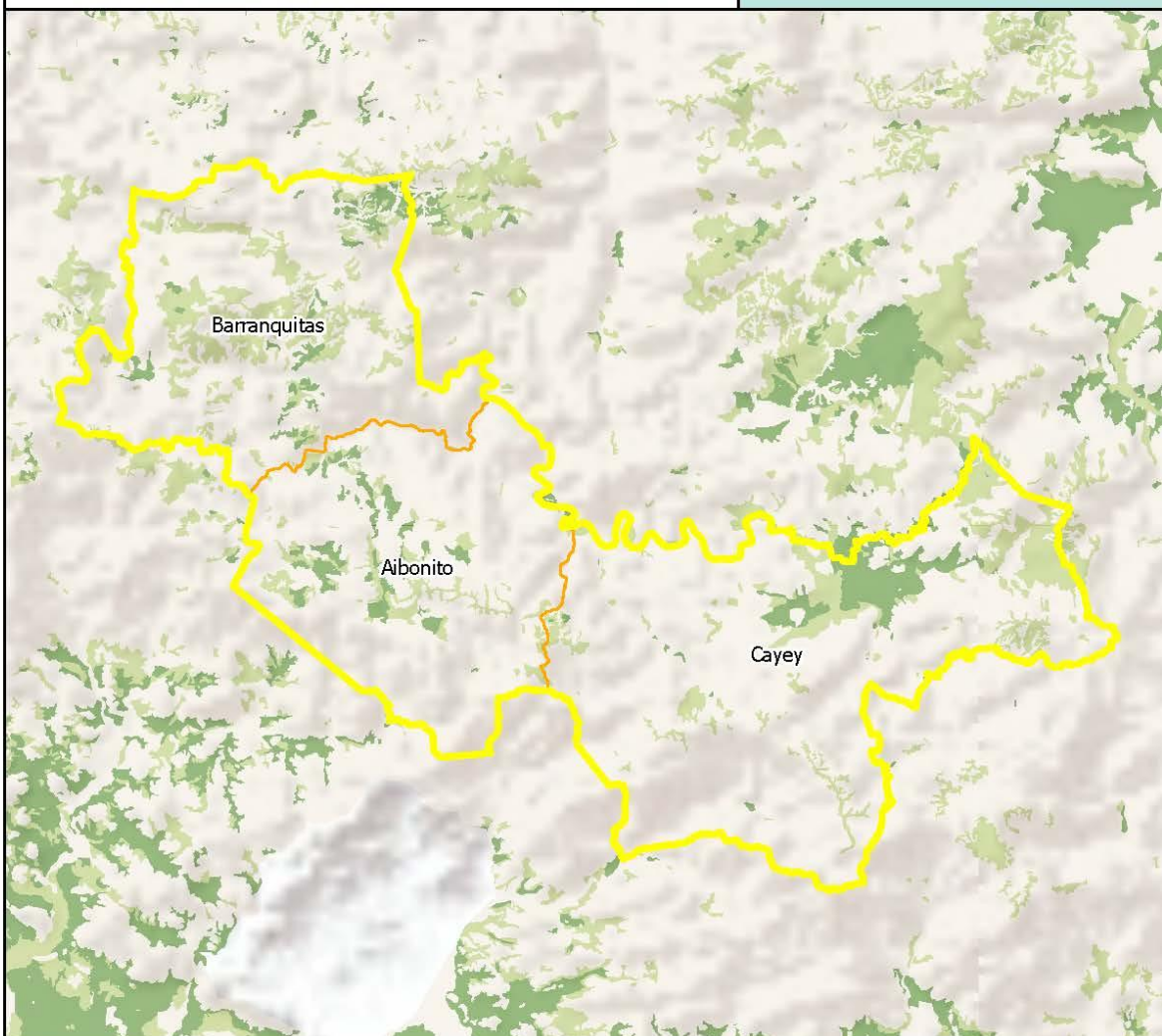
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Farmland -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey



- Planning Region Boundaries
- Municipalities
- Prime Farmland
- Farmland of Local Importance
- Farmland of Statewide Importance
- Farmland of Unique Importance
- Not Prime Farmland



Scale: 1:186,000

1 inch equals 2.94 miles



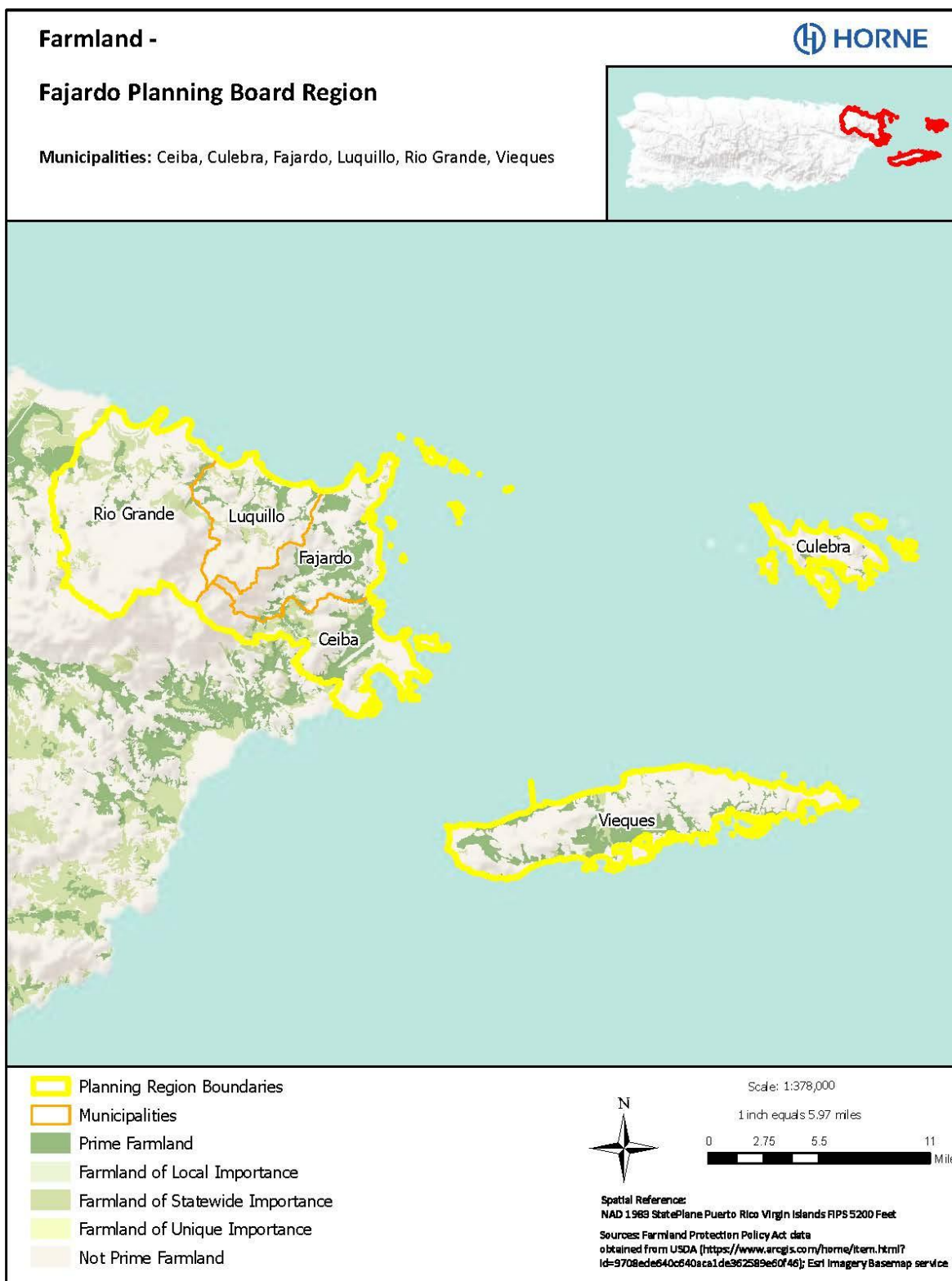
Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: Farmland Protection Policy Act; data
obtained from USDA (<https://www.arcgis.com/home/item.html?id=9708ede640c640aca1de362589e60f46>); Esri Imagery Basemap service

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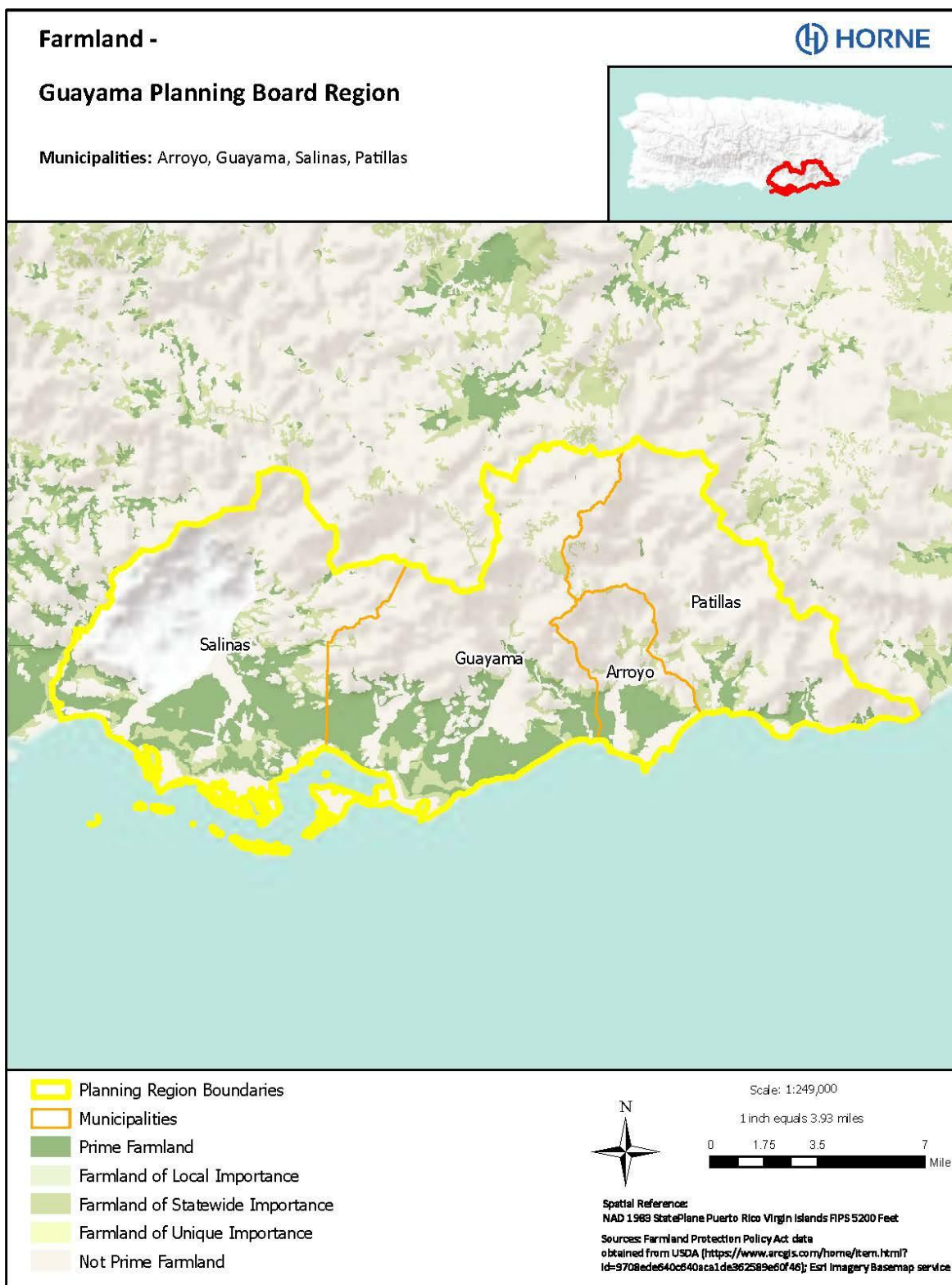
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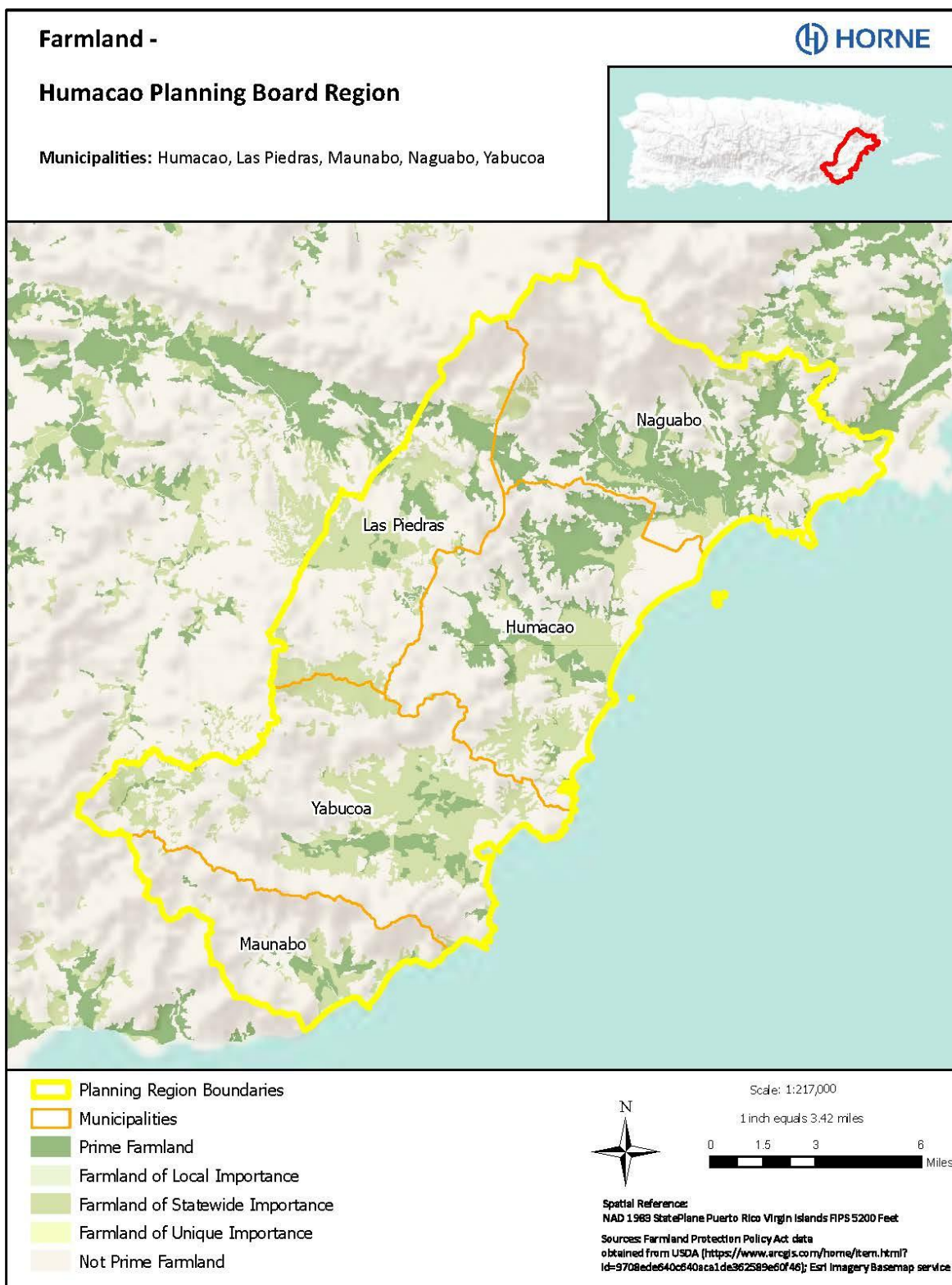
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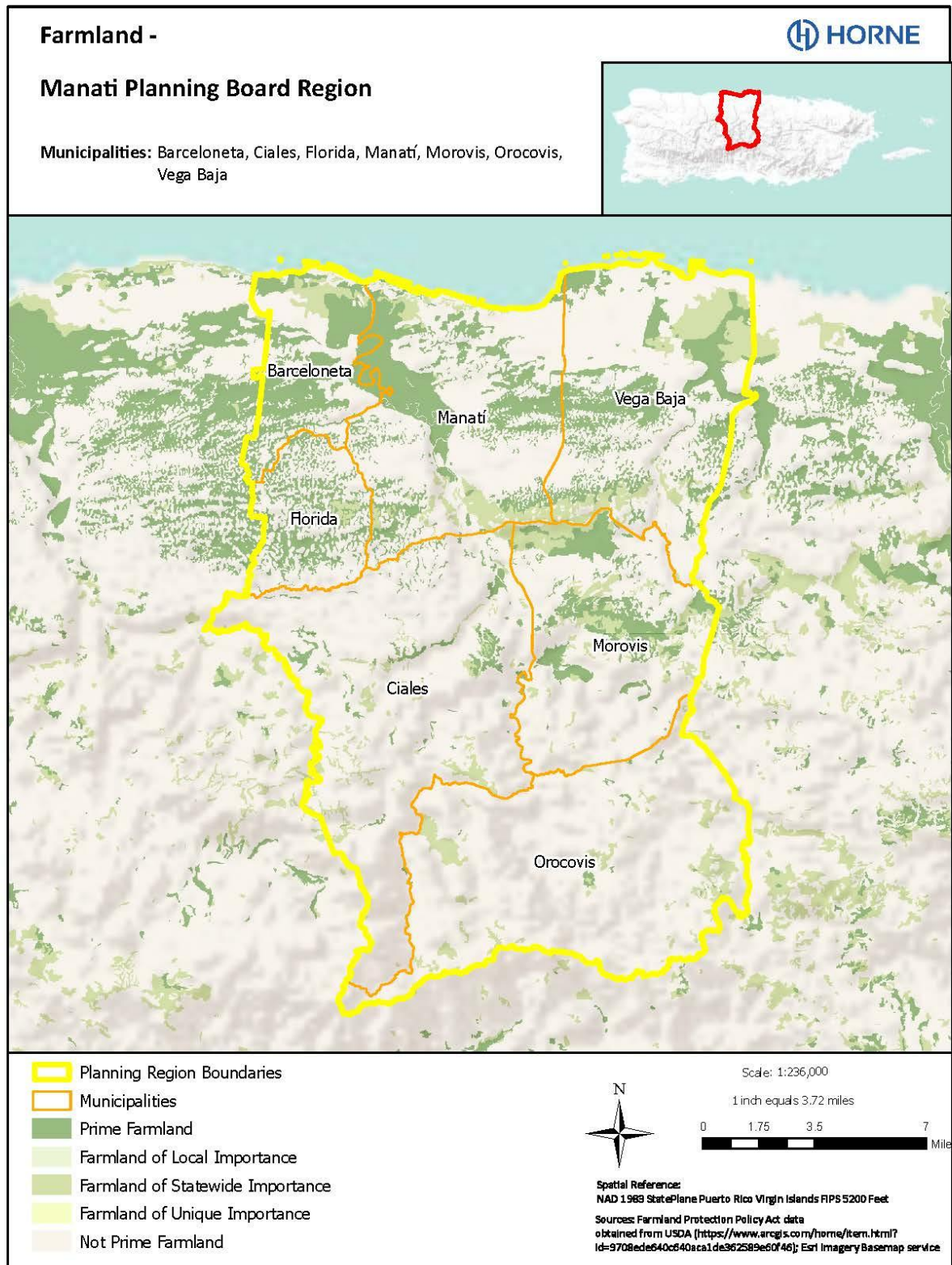




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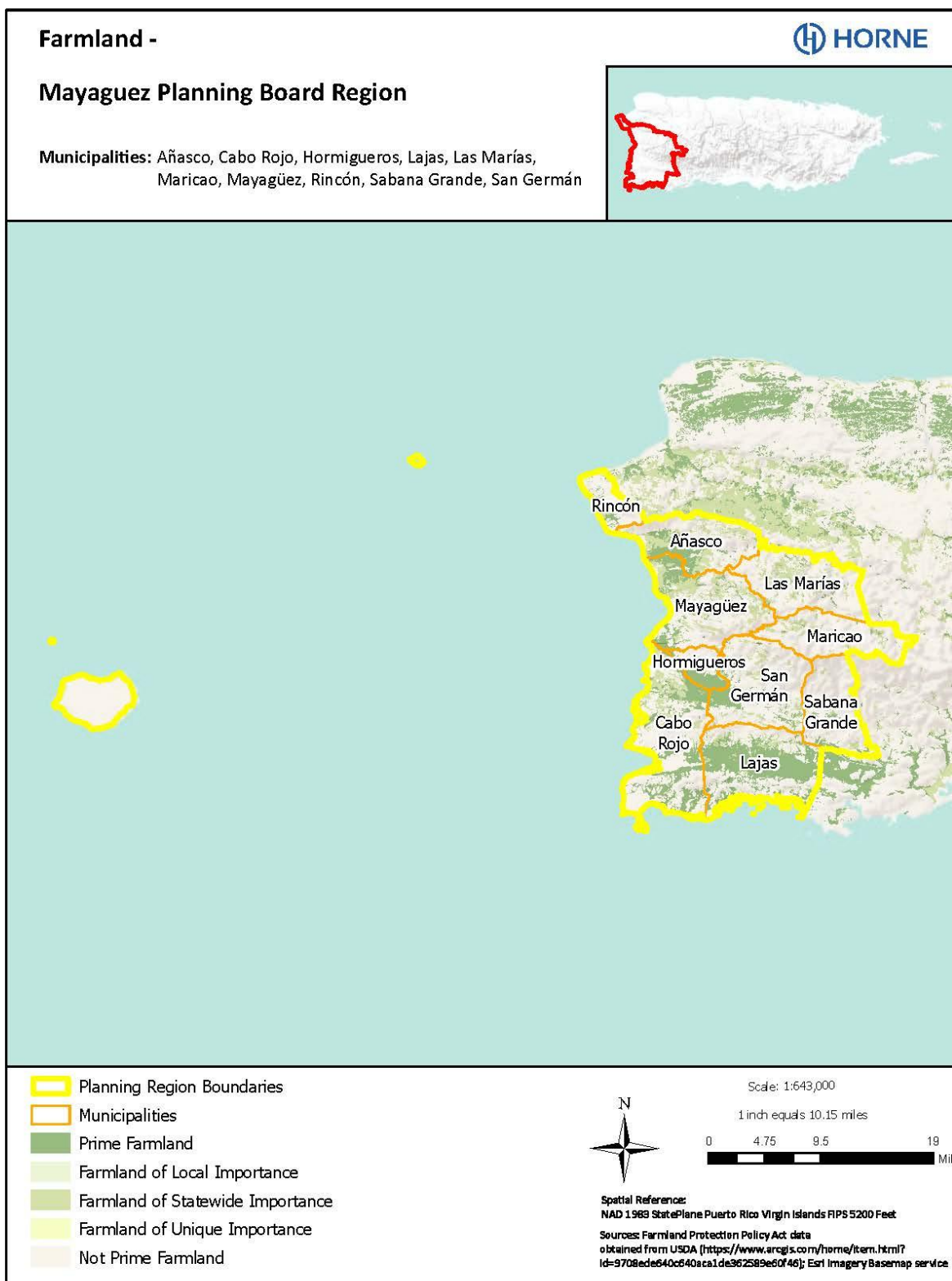
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Exported on 6/5/2025 at 11:02 AM





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Exported on 6/5/2025 at 11:03 AM





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Exported on 6/5/2025 at 11:03 AM



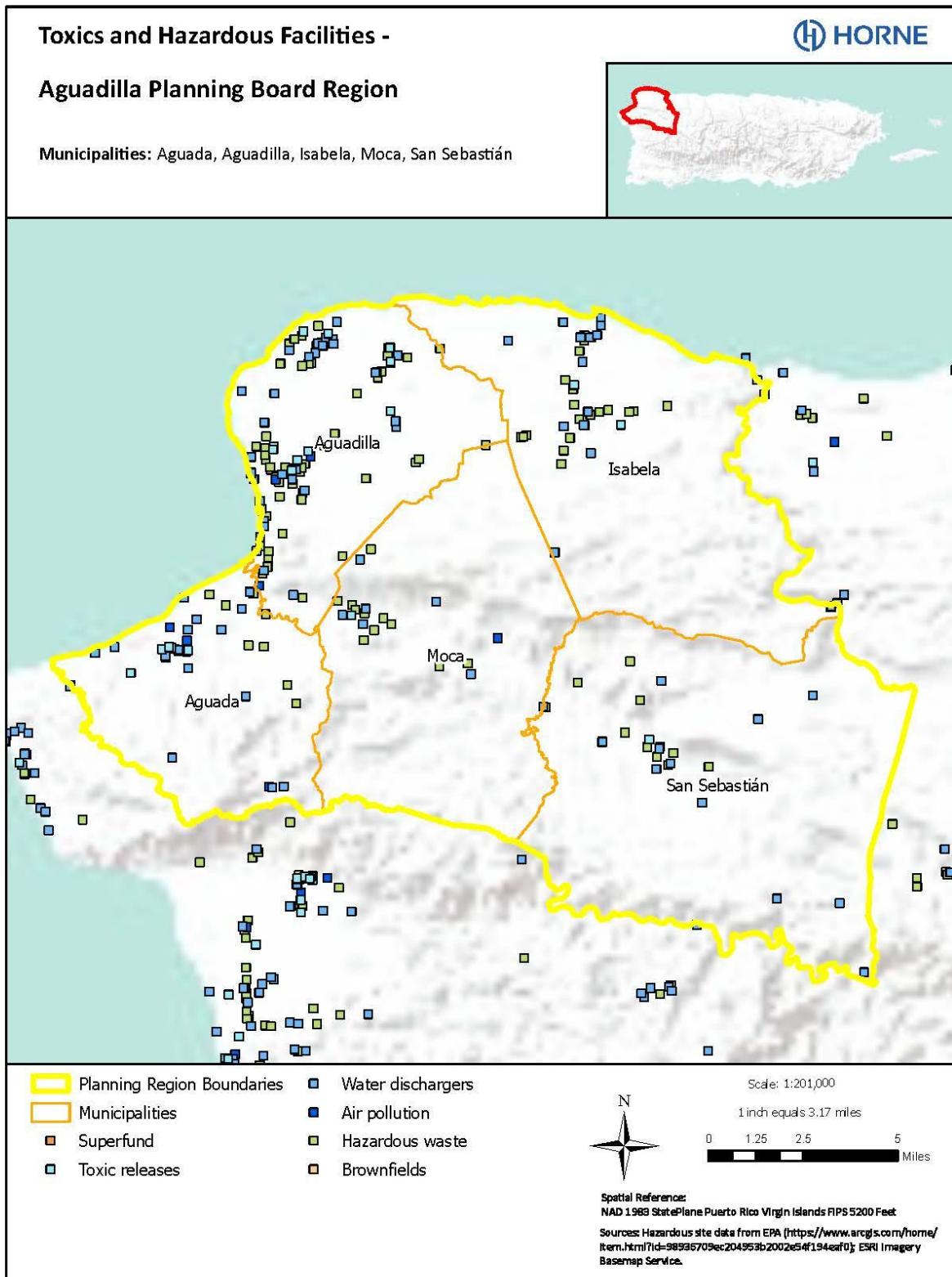
A10: Toxics/Hazardous





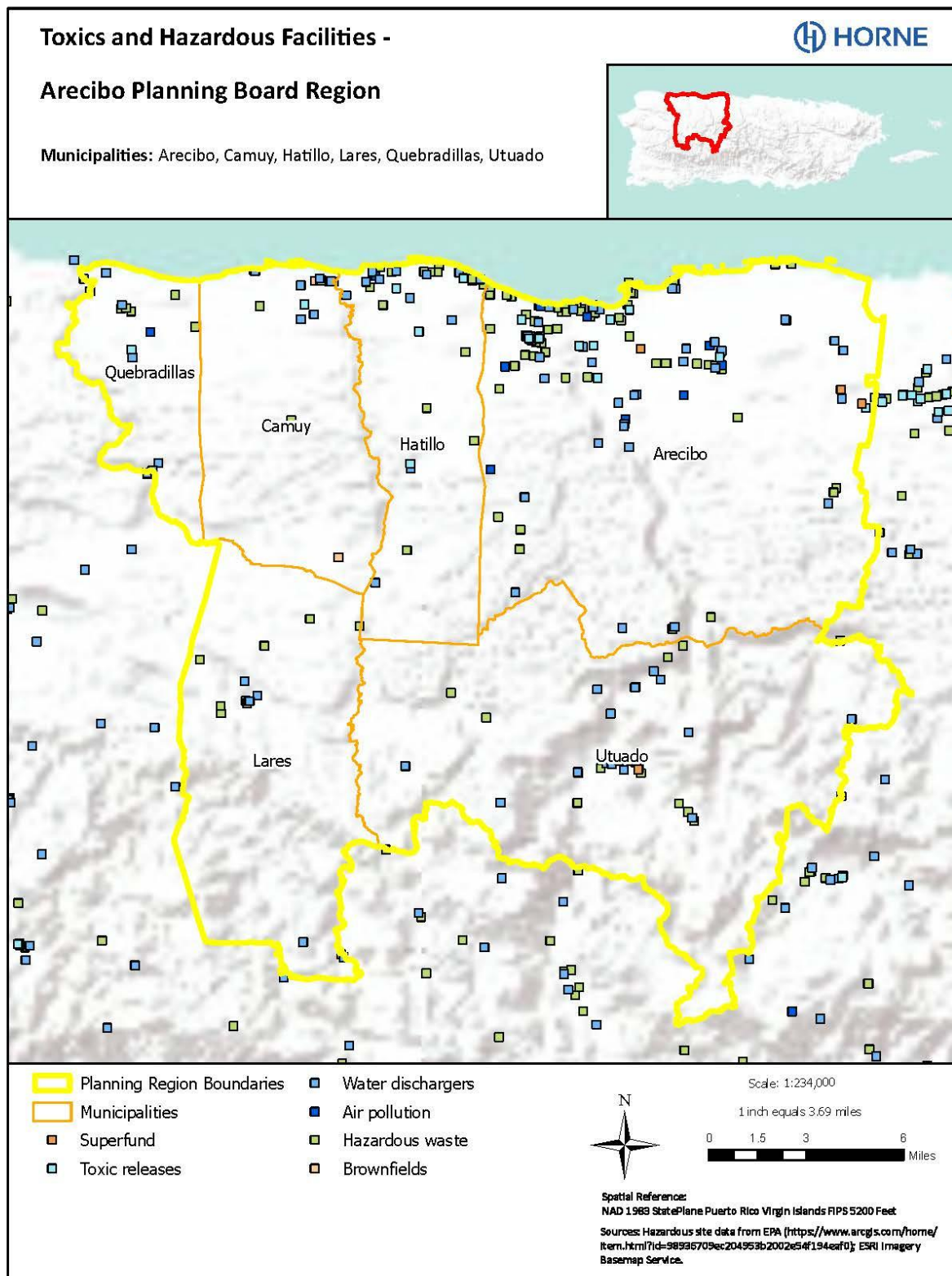
A10-1: Toxics and Hazardous Facilities Maps





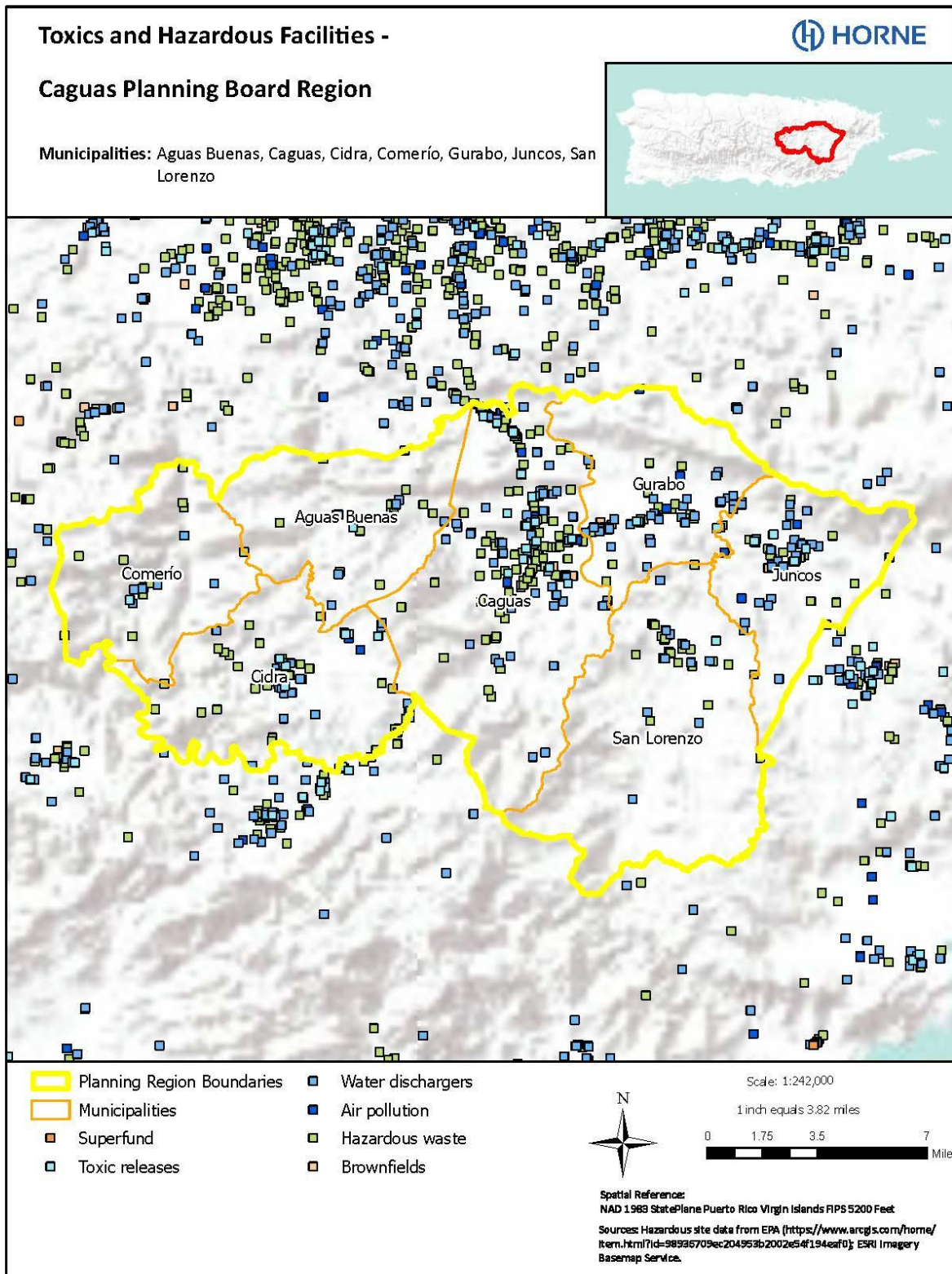
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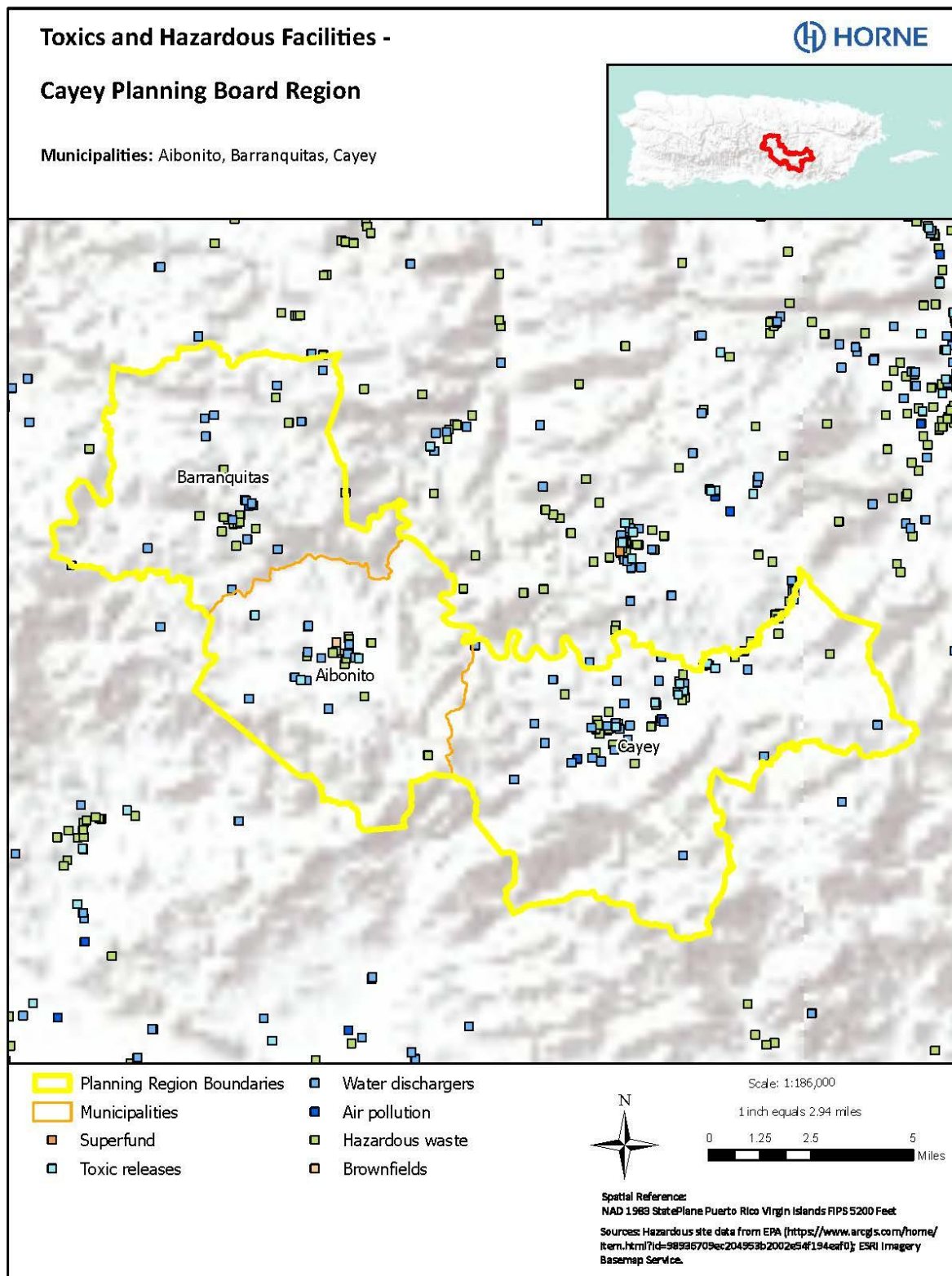
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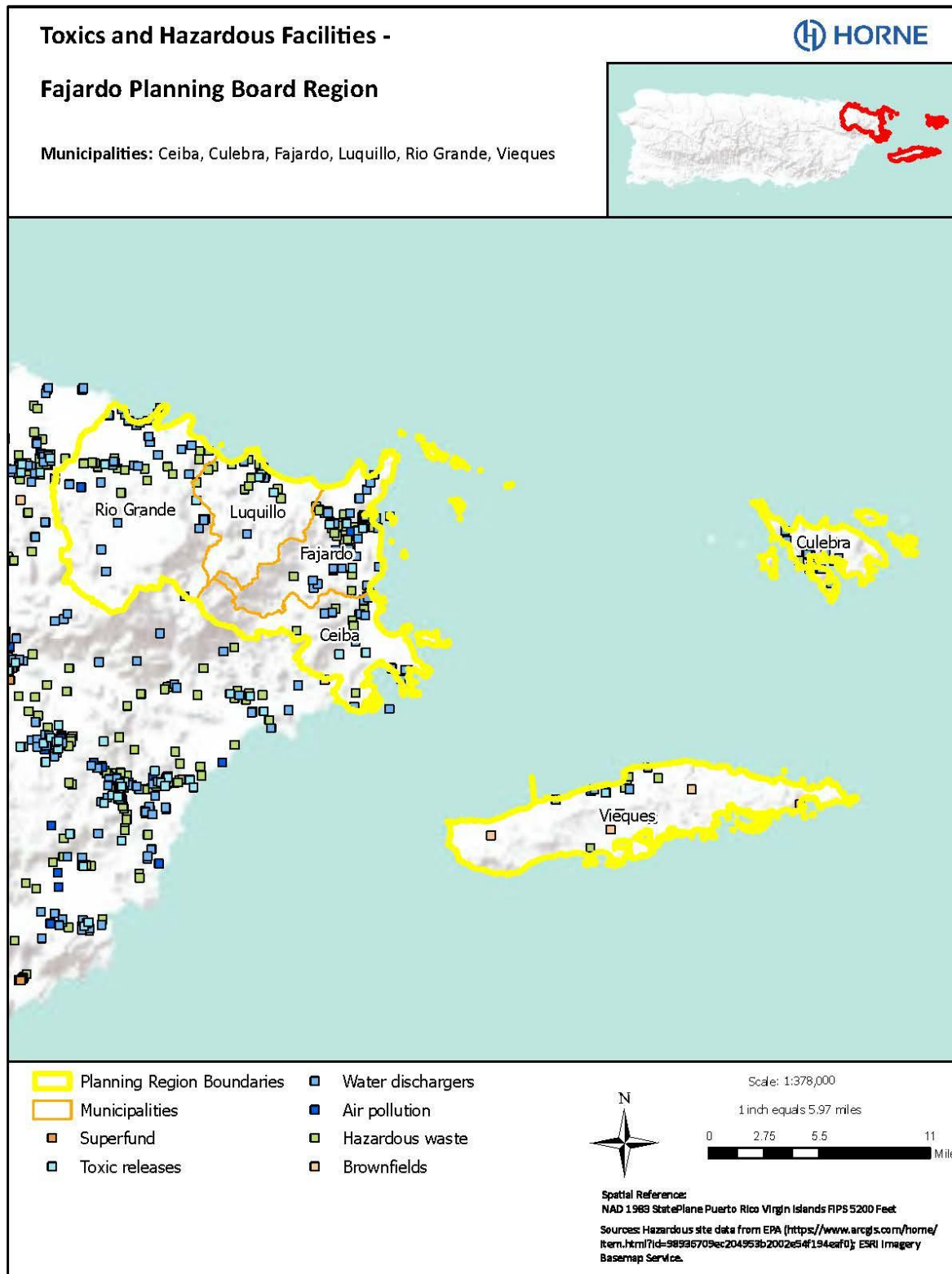
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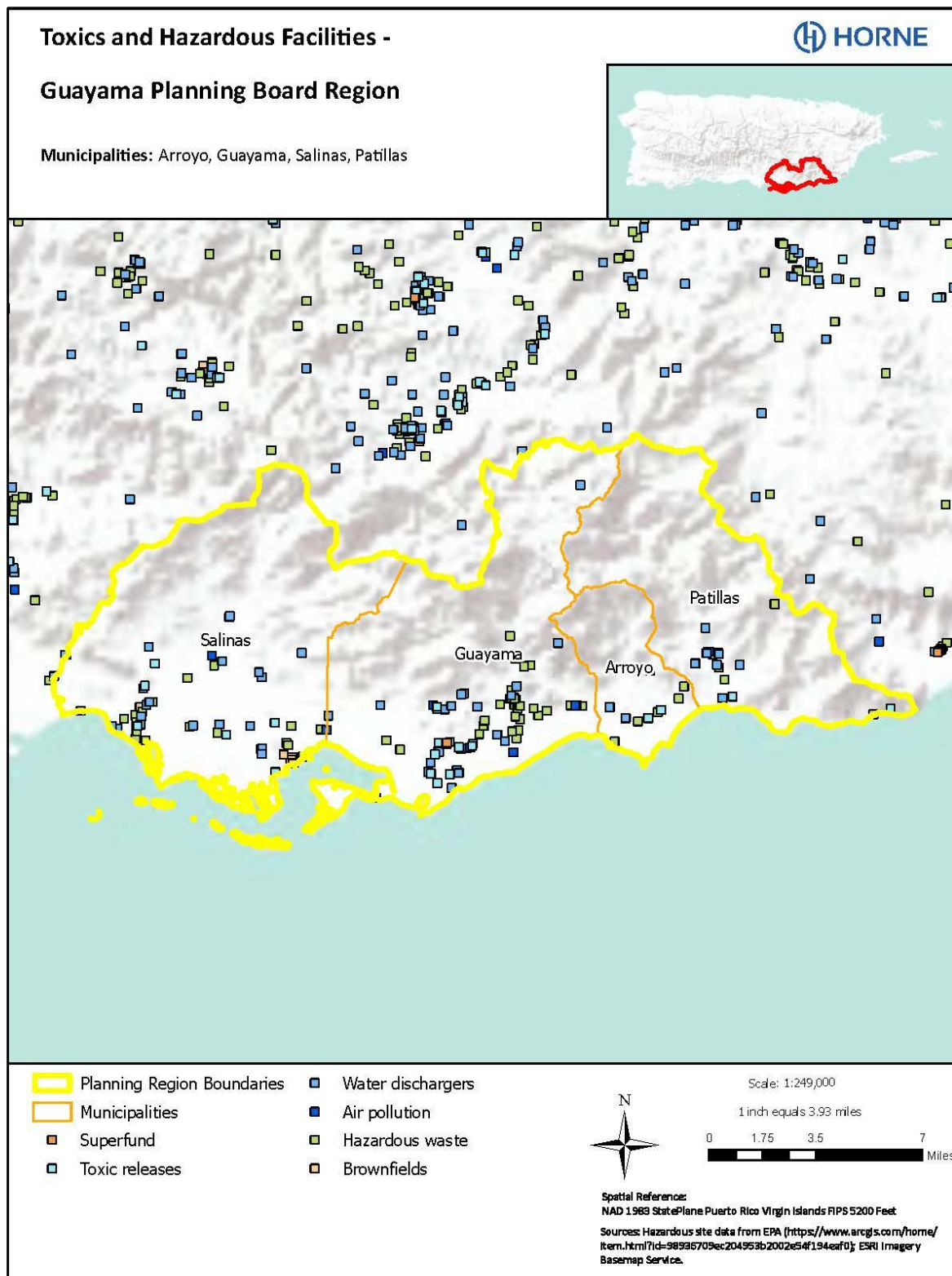




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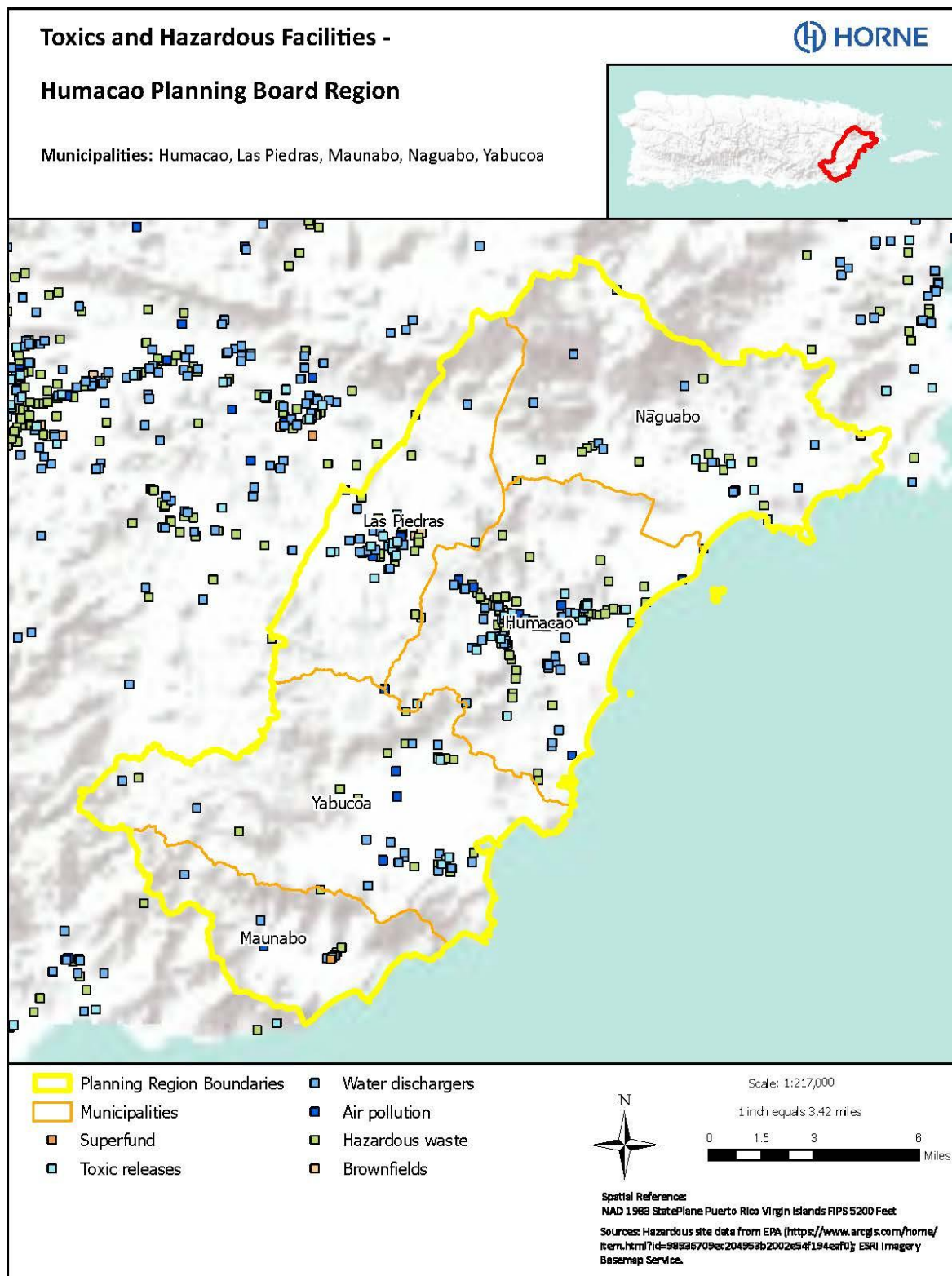




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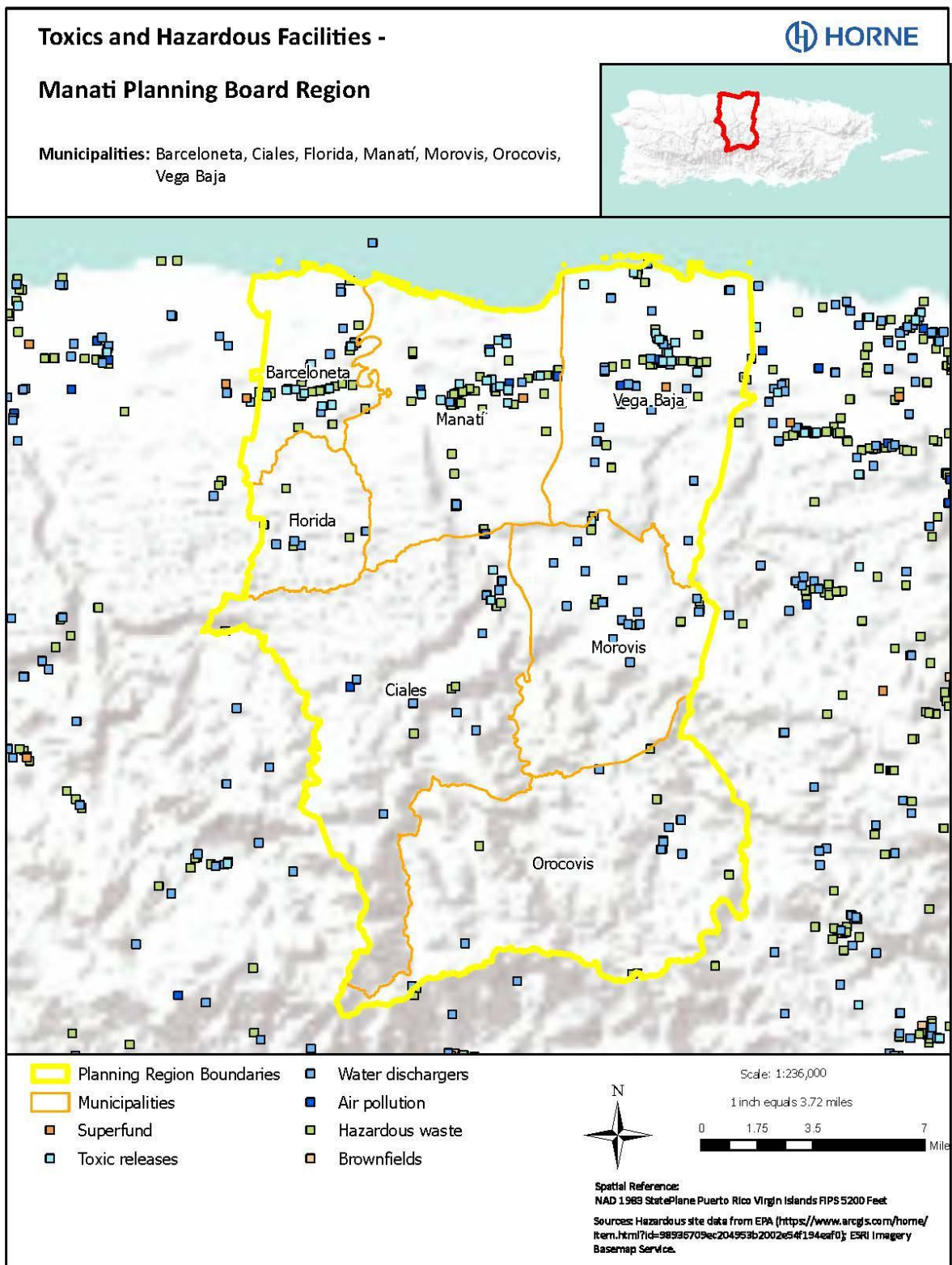




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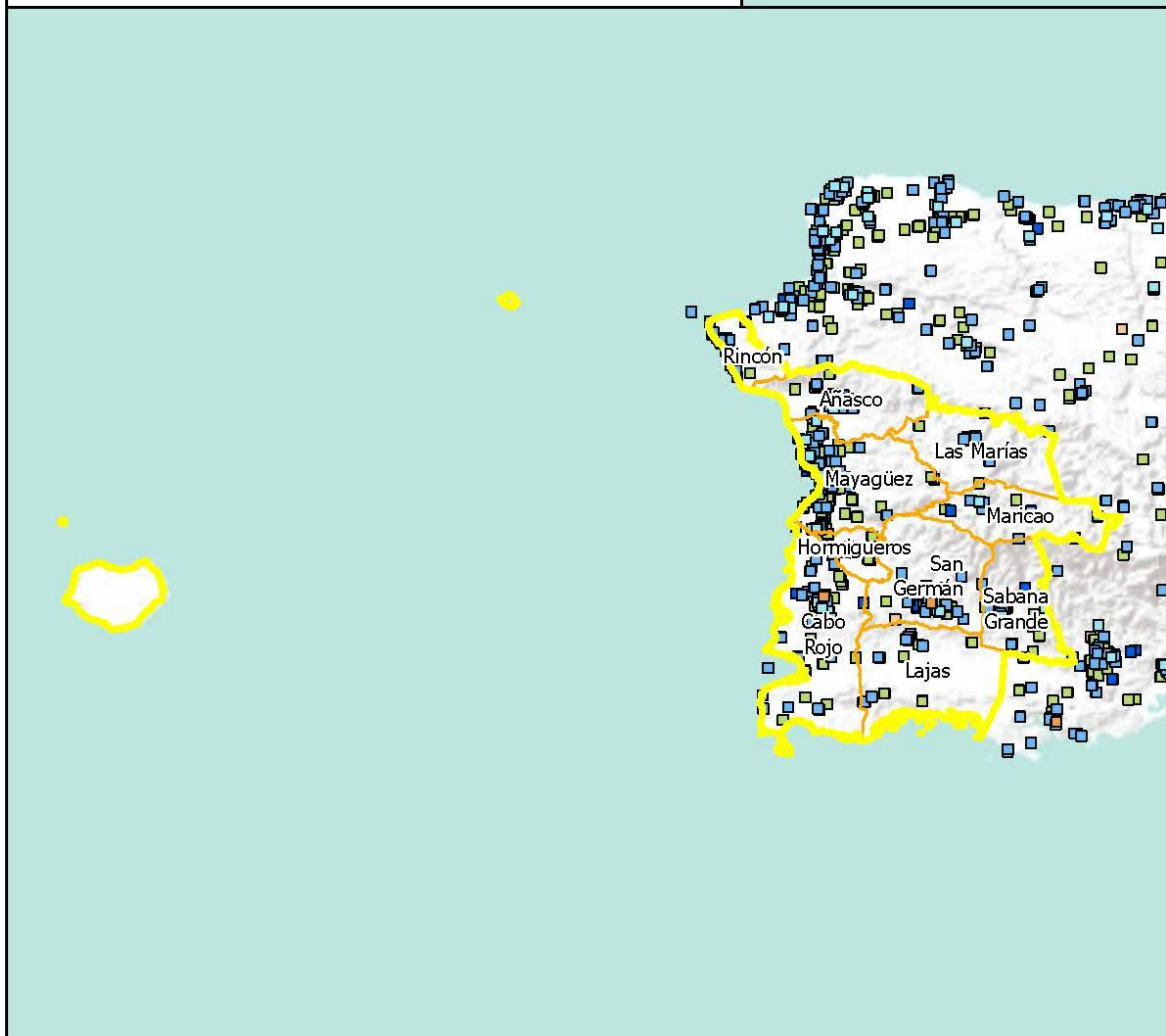
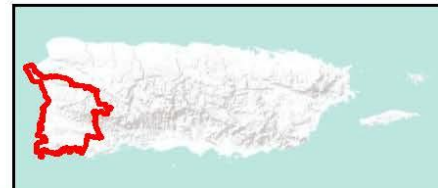
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Toxics and Hazardous Facilities -

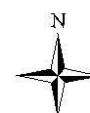


Mayaguez Planning Board Region

Municipalities: Añasco, Cabo Rojo, Hormigueros, Lajas, Las Marías, Maricao, Mayagüez, Rincón, Sabana Grande, San Germán



- Planning Region Boundaries
- Municipalities
- Superfund
- Toxic releases
- Water dischargers
- Air pollution
- Hazardous waste
- Brownfields



Scale: 1:643,000

1 inch equals 10.15 miles

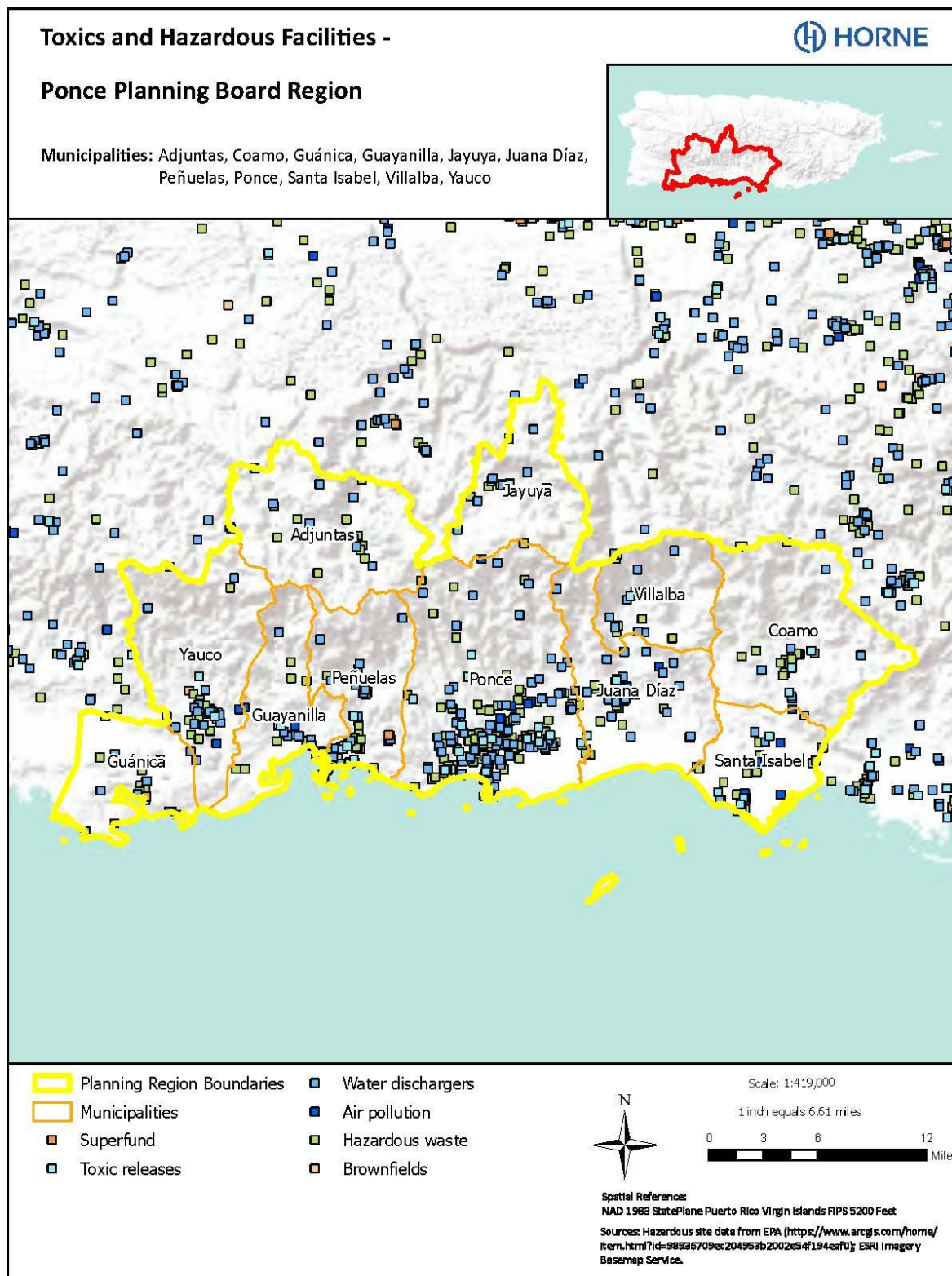


Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet
Sources: Hazardous site data from EPA (<https://www.arcgis.com/home/item.html?id=98935709ec204953b2002e54f194ea10>); ESRI Imagery Basemap Service.

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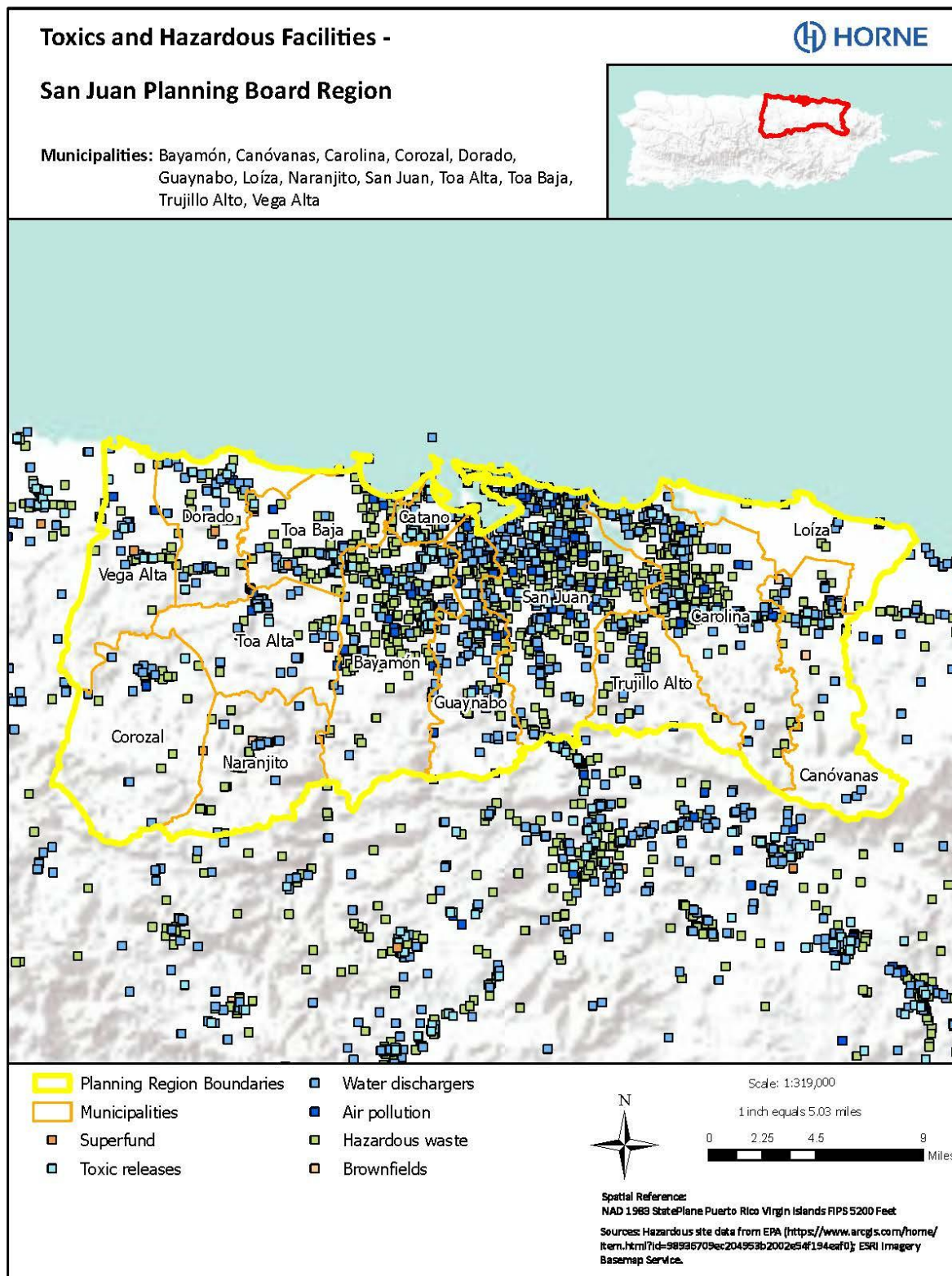
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Exported on 6/5/2025 at 1:25 PM



A10-2: Radon





August 20, 2024

Mrs. Carmen R. Quintero Pérez
Director
City Vector Transformation Protection Division
City View Plaza II - Suite 7000
#45 Rd. 145 km 1.2
Guaynabo, PR 00968-8069

Via email: quintero@puerto.gobierno.pr

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 (CDBG) Notice CDP-20-102.

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 Zero C Carmen Davis, Bo. Piedras, PR 00988 | PO Box 2365 San Juan, PR 00928-2365
Tel: (787) 274-2627 | info@cdoh.prdoh.gobierno.pr



August 20, 2024

Dr. Sylvia Concelos
Professor
College of Engineering
University of Puerto Rico – Mayaguez Campus
25W Norte Blvd. Alfonso Valdes Cobian
Mayaguez, Puerto Rico

Via email: sylvia.concelos@upr.edu

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CDBG) Notice CDP-20-102.

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

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Barbosa Ave. #606, Building Zero C Carmen Davis, Bo. Piedras, PR 00988 | PO Box 2365 San Juan, PR 00928-2365
Tel: (787) 274-2627 | info@cdoh.prdoh.gobierno.pr

CDDB-DR/MIT Program
Request for information in relation with HUD CDP-20-102 for Puerto Rico
Page 2 of 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 on 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,

Wilfredo O. Rodríguez Rodríguez, Esq.
Secretary

CC:
Dr. Olga Perdomo, Perdomo.Olga@puerto.gobierno.pr
Mr. Wilfredo J. Ruiz, ruizw@puerto.gobierno.pr

CDDB-DR/MIT Program
Request for information in relation with HUD CDP-20-102 for Puerto Rico
Page 2 of 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 on any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

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

Sincerely,

Wilfredo O. Rodríguez Rodríguez, Esq.
Secretary

CC:
Dr. Carlos Melis, melisc@puerto.gobierno.pr





GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Dr. Jessica Ibarry
Director
Office of Island Affairs
U.S. Census for Disaster Control and Prevention
1325 Old Canby, San Juan, 00926
Guaynabo, PR 00988-8039

Via email: CDBC@cdp.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 the information is critical 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 (CDRG/DM), is responsible for ensuring compliance with environmental requirements under CDRC-DM/MI 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 Island 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.

Enviado por correo electrónico a: CDBC@cdp.gov el 20/08/2024 a las 10:00 AM. El correo electrónico puede contener información confidencial o de propiedad intelectual. Si usted no es el destinatario, se le pide que no divulgue esta información.

CDRC-DM/MI Program
Request for Information in relation with HUD CDP-23-103 for Puerto Rico
Page 2 of 2

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

Policy 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.

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Sincerely,


Wilfredo Rodríguez Rodríguez, Esq.
Secretary



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF NATURAL RESOURCES

August 20, 2024

Mrs. Anelis Rodríguez
Secretary
Puerto Rico Department of Natural Resources
Calle Arce 5030, 6th & 3, Sector 2 C-160,
Mahecha San Juan, PR 00926

Via email: anclisrodriguez@dnr.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 the information is critical for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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

Enviado por correo electrónico a: anclisrodriguez@dnr.gov el 20/08/2024 a las 10:00 AM. El correo electrónico puede contener información confidencial o de propiedad intelectual. Si usted no es el destinatario, se le pide que no divulgue esta información.

CDRC-DM/MI Program
Request for Information in relation with HUD CDP-23-103 for Puerto Rico
Page 2 of 2

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Sincerely,


Wilfredo Rodríguez Rodríguez, Esq.
Secretary

CC:
M. LUIS MACQUEO BARRERO, macqueob@dnr.gov
E.g. Anelis Rodríguez, anclisrodriguez@dnr.gov
M. ERIQ OJEDA, eriqojeda@dnr.gov





GOVERNMENT OF PUERTO RICO
GOVERNMENT OF PUERTO RICO

August 30, 2024

Dr. Carlos R. Meliádo López
Secretary
Puerto Rico Department of Health
PO Box 20384
San Juan, PR 00936-5184

via email: dr.carlos.meliado@salud.pr.gov

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

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

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

85 Texas Ave #100, Building Juan C. Cardona Dávila, Río Piedras, PR 00986 | PO Box 20385 San Juan, PR 00936-1085
Tel: (787) 274-2527 | info@prdoh.gov



GOVERNMENT OF PUERTO RICO
GOVERNMENT OF PUERTO RICO

August 30, 2024

Mr. Holly Winters
Regional Director, Southwest – Puerto Rico
US Geological Survey
3916 Sunset Ridge Blvd
Raleigh, NC 27607

via email: hwinters@usgs.gov

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

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

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85 Texas Ave #100, Building Juan C. Cardona Dávila, Río Piedras, PR 00986 | PO Box 20385 San Juan, PR 00936-1085
Tel: (787) 274-2527 | info@prdoh.gov

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

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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 C. Rodríguez Rodríguez, Esq.
Secretary

cc: Mr.Rafael.Hernandez.Duarte@prdoh.gov

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

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

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Sincerely,


William C. Rodríguez Rodríguez, Esq.
Secretary

cc: Mr.F.Rafael.Schomann@prdoh.gov



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

Good morning, Sandra and others,

In response to the request from Mr. William Rodríguez 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. Rodríguez in your response to his requests

If you have any additional questions, please contact me.

Thank you and best regards,

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



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

Dear Ms. Medina Smaine,

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

Best regards,

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

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

Good afternoon. Ms. Medina

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

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

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

Saludos.

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

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

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

Estimada Melanie Medina

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

Atentamente

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



Bubble Dynamics Lab
 University of Puerto Rico - Mayaguez





September 23, 2024

VIA EMAIL

William O. Rodríguez Rodríguez, Esq.
Secretary
Puerto Rico Department of Housing
Harbord Ave. 15th Building, Suite C, Corrientes
San Juan, PR 00927
Email: W.Rodriguez@vivienda.pr.gov

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

Dear Honorable Secretary Rodríguez Rodríguez:

This communication is in response to your letter of August 20, 2024 addressed to the Puerto Rico Department of Natural and Environmental Resources (DNRE) 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 Database (NRD) 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 1989-1995 multi-radon screening study referred to by the U.S. Geological Survey report (USGS, 1996) 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), although locally reaching very high levels above 50 pCi/L. Following construction and

ventilation allow for soil gas radon to enter and concentrate within the structure.¹ According to the USGS report, most of these areas are located in the southwest part of the island. Please note that the 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 2021. Initially, EPA sampled indoor radon air in over 157 single-family residences in the municipalities of San Juan, San José, Caguas, Arecibo, Moravia, Camuy, and Maunabo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadilla, Isabela, Ombraja, Barceloneta and Vega Baja. The quality assurance protocols were seconded in America's National Standards Institute/American Association of Radon Scientists and Technologists (ANS/AARST) standards of practice (ANS/AARST, 2015). The sampling was designed in two stages: scoping and confirmatory sampling. The scoping sampling was conducted using 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 testing provisions for new construction, remodeling, leasing or buying homes. Given this obstacle and aiming to answer your request, the EPA can provide information on Best Management Practices for managing indoor radon in Puerto Rico.

¹Reference: USGS. Geological Radon: Potential of Gas and Human Health. Report 95-212-E, Washington, DC: USGS. Retrieved 8/14/2024, from <https://pubs.usgs.gov/of/1993/of1993/report.pdf>.

CITY NEW PLAZA BUILDING, 15TH FLOOR
RUE DE BELLEVUE, SAN JUAN, PR 00906

If you have any questions or need any additional information, please contact me at 787-977-5865 or guerrero.carmin@epa.gov or have your staff contact Reyes Brinda at reya.brinda@epa.gov or (787) 977-5869.

Sincerely,
CARMEN GUERRERO PEREZ
Registry Officer
CARMEN GUERRERO PEREZ
Date: 2024.09.23 09:41:39
3100
Carmen R. Guerrero Pérez
Director

cc: Roberto Méndez, Esq. (Acting Secretary, PR Department of Natural and Env. Resources)
Melany Medina: mmcmedina@vivienda.pr.gov
Elsine Dume Moyle: Edume@vivienda.pr.gov
Luis S. Colon Ortiz: LColon@vivienda.pr.gov
Aldo A. Rivera-Vazquez: arivera@vivienda.pr.gov
Cesar O. Rodríguez: cesarrodri@vivienda.pr.gov
Marita Rosa Olivares: maritarsa@vivienda.pr.gov





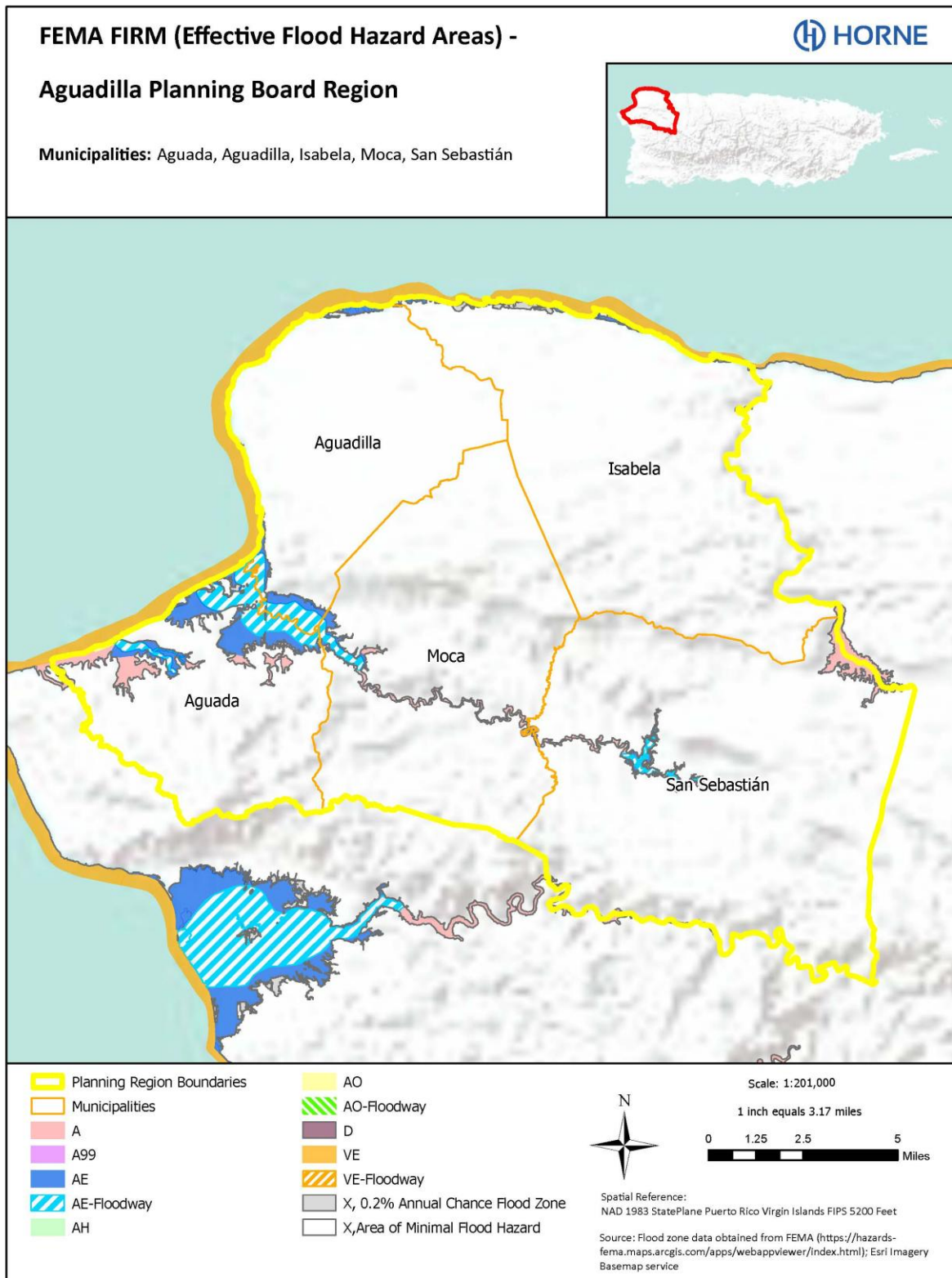
A11: Flood Insurance





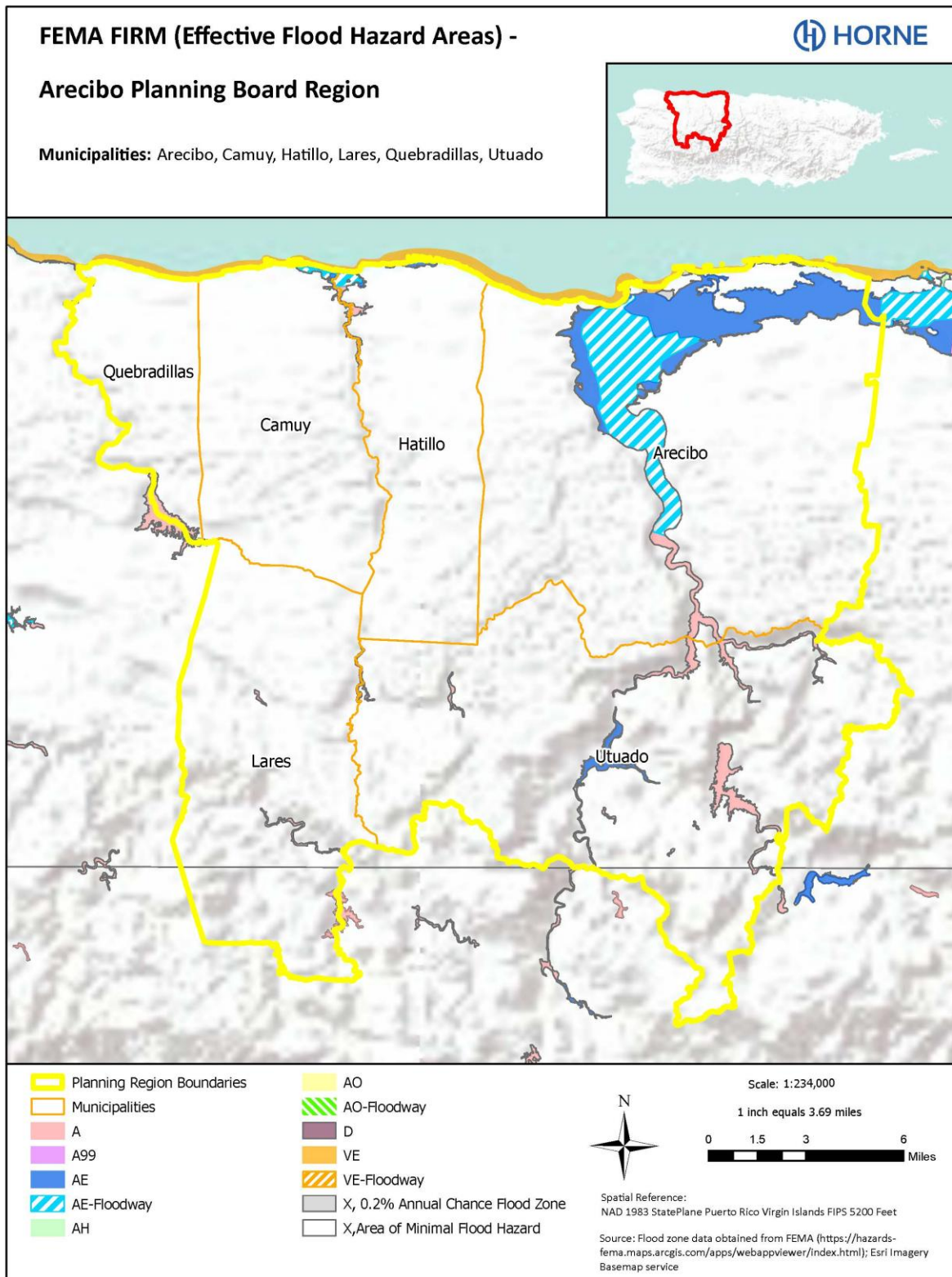
A11-1: Flood Insurance Rate Maps





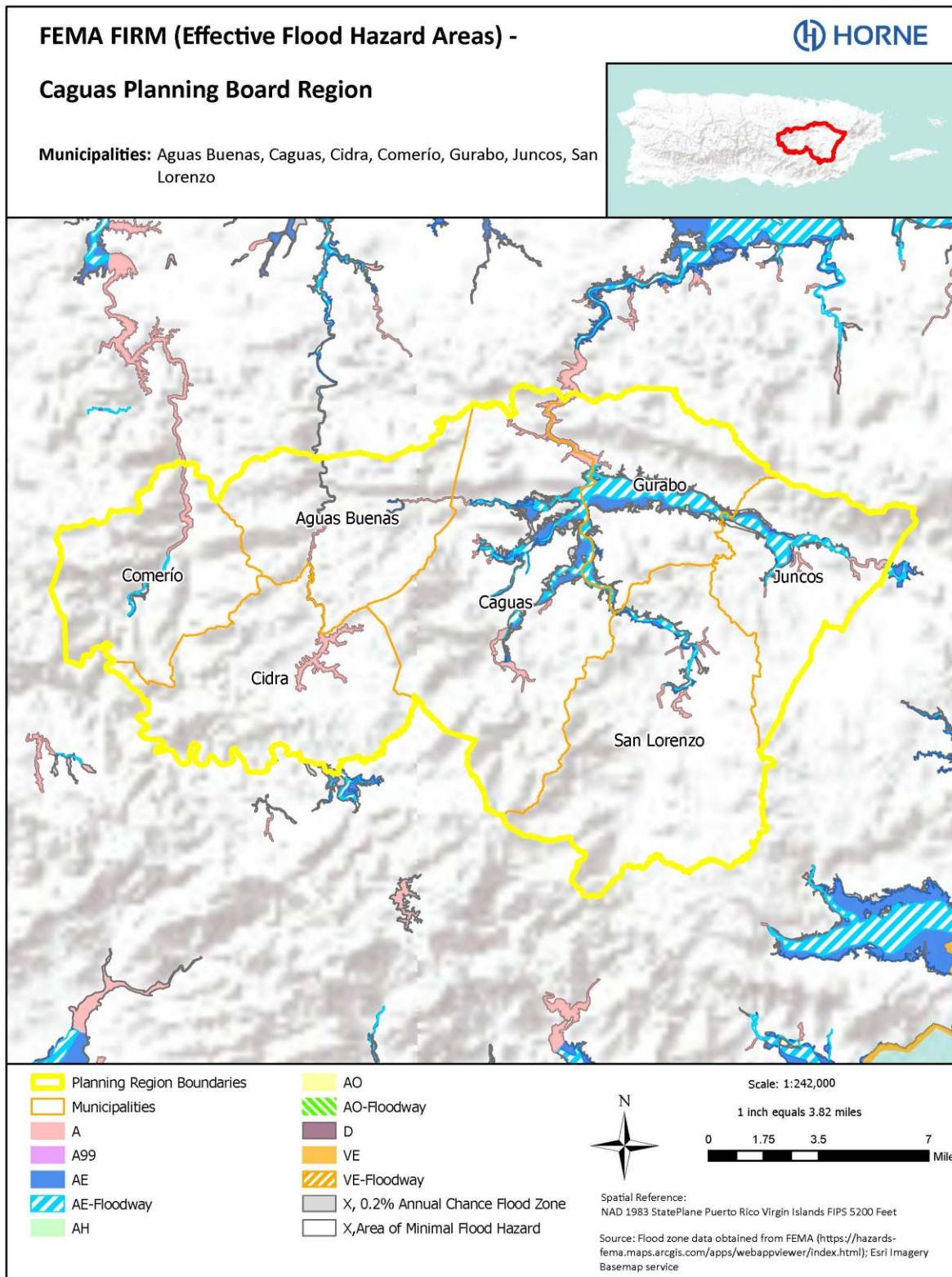
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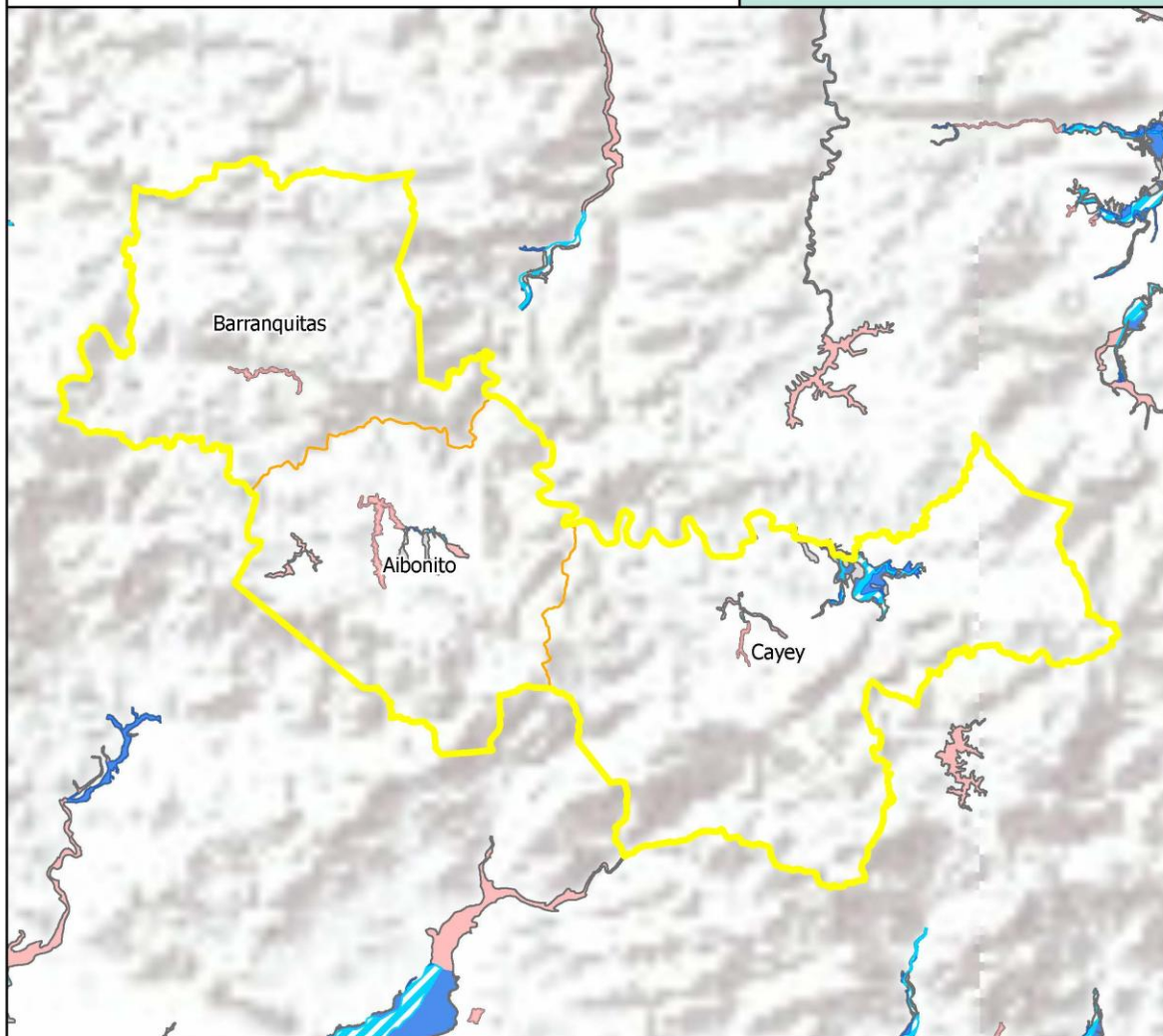
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FEMA FIRM (Effective Flood Hazard Areas) -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |

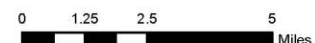


Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

Scale: 1:186,000

1 inch equals 2.94 miles



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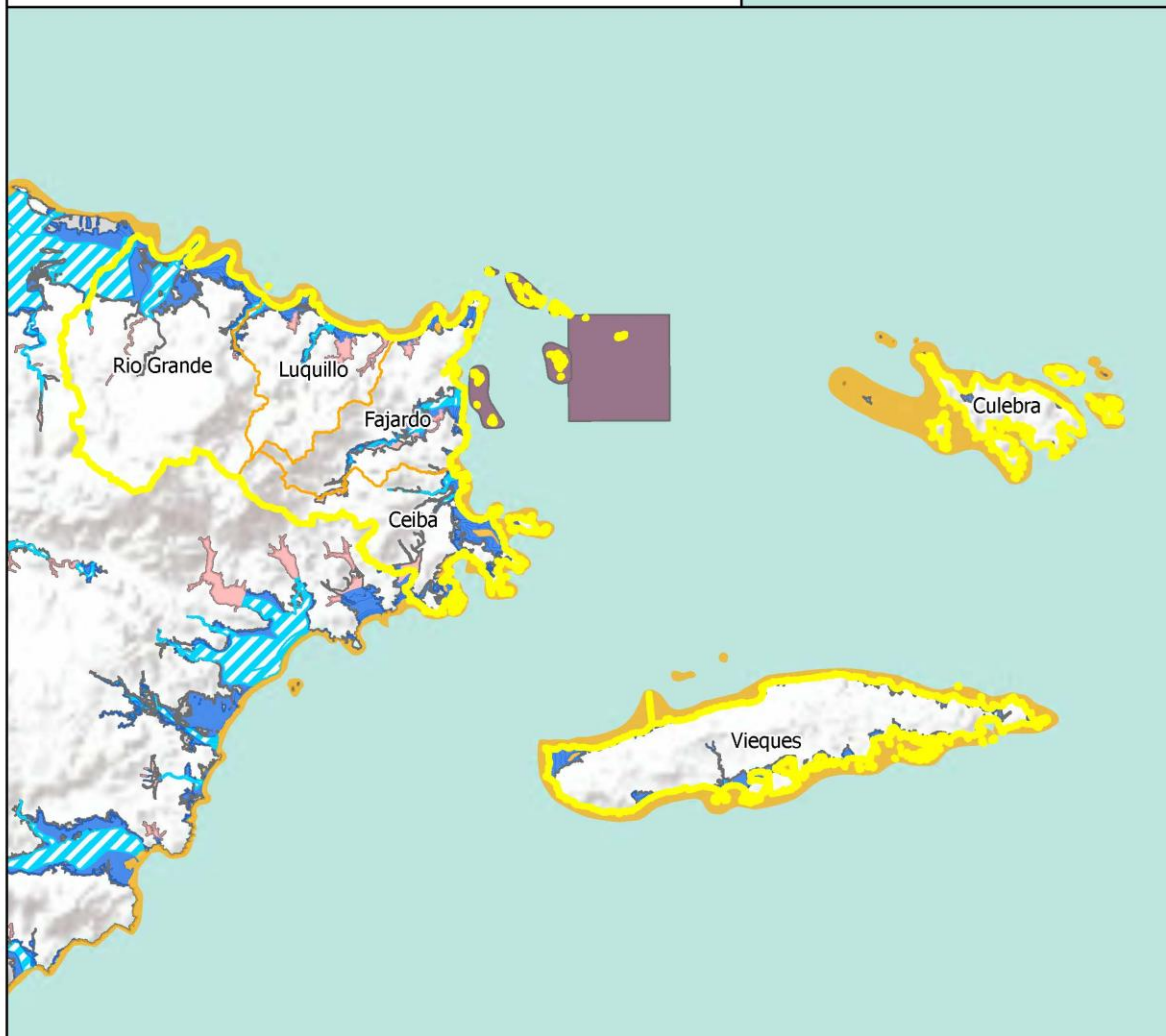


FEMA FIRM (Effective Flood Hazard Areas) -



Fajardo Planning Board Region

Municipalities: Ceiba, Culebra, Fajardo, Luquillo, Rio Grande, Vieques



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

Scale: 1:378,000

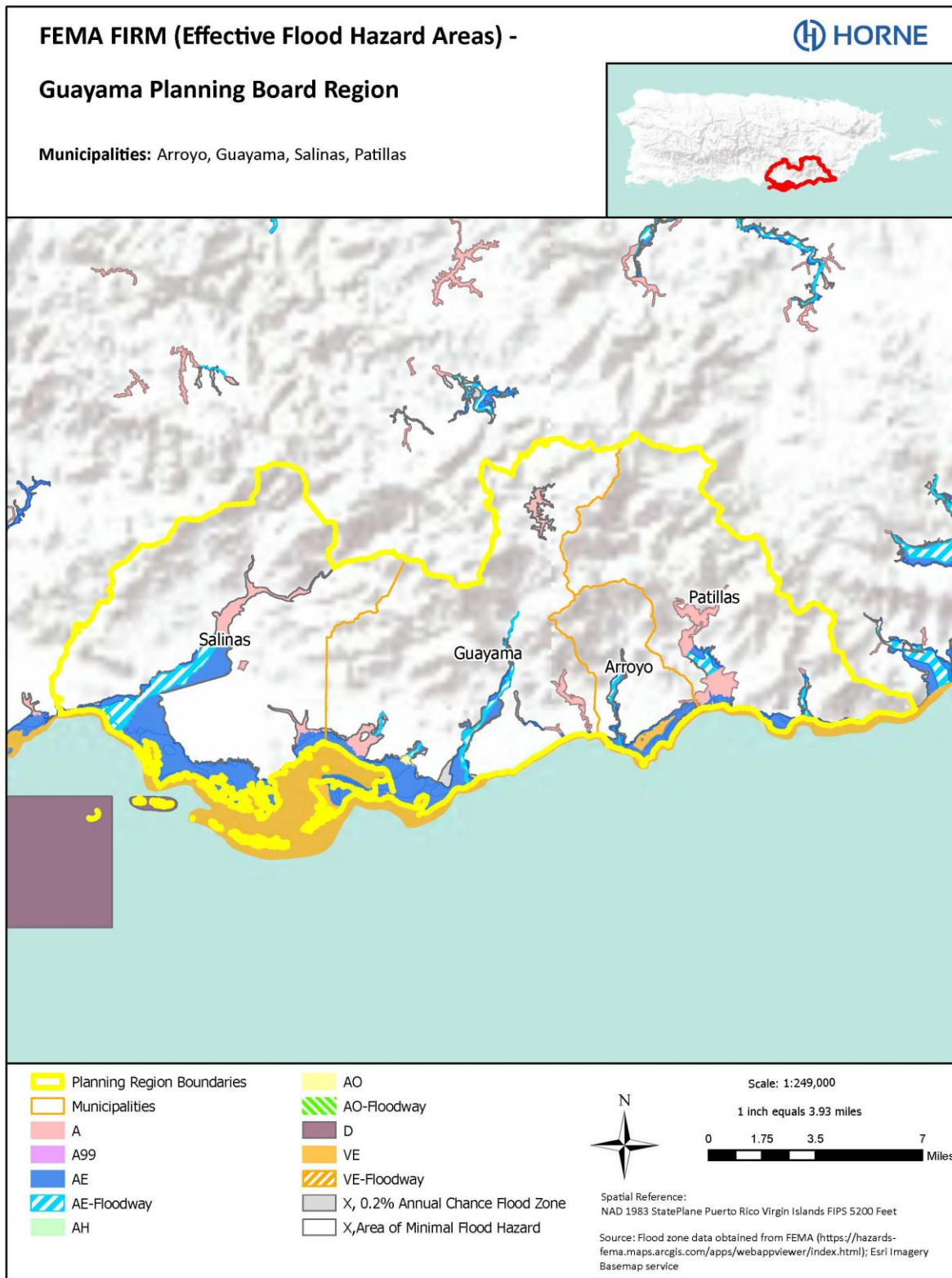
1 inch equals 5.97 miles



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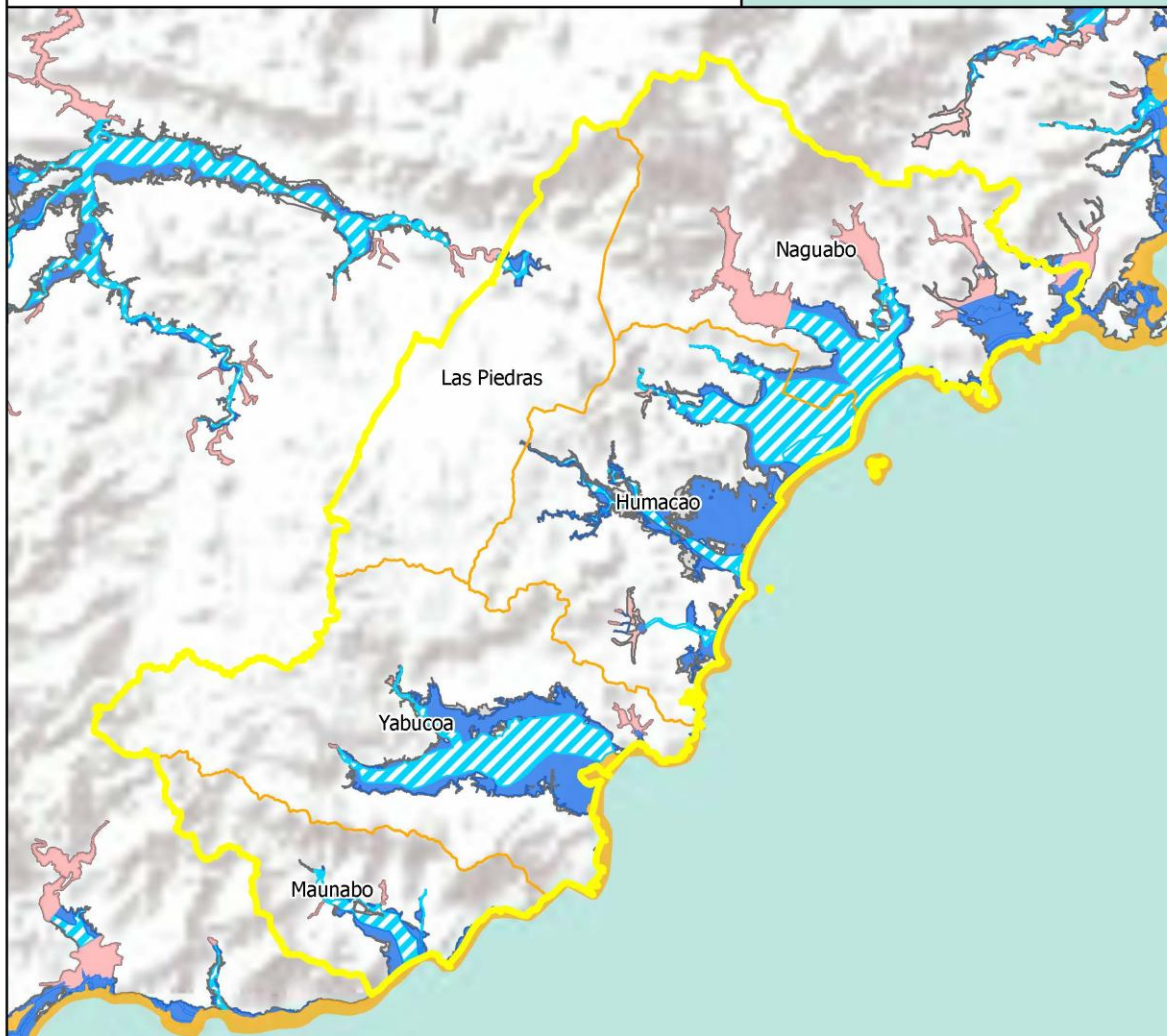
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FEMA FIRM (Effective Flood Hazard Areas) -



Humacao Planning Board Region

Municipalities: Humacao, Las Piedras, Maunabo, Naguabo, Yabucoa



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

Scale: 1:217,000

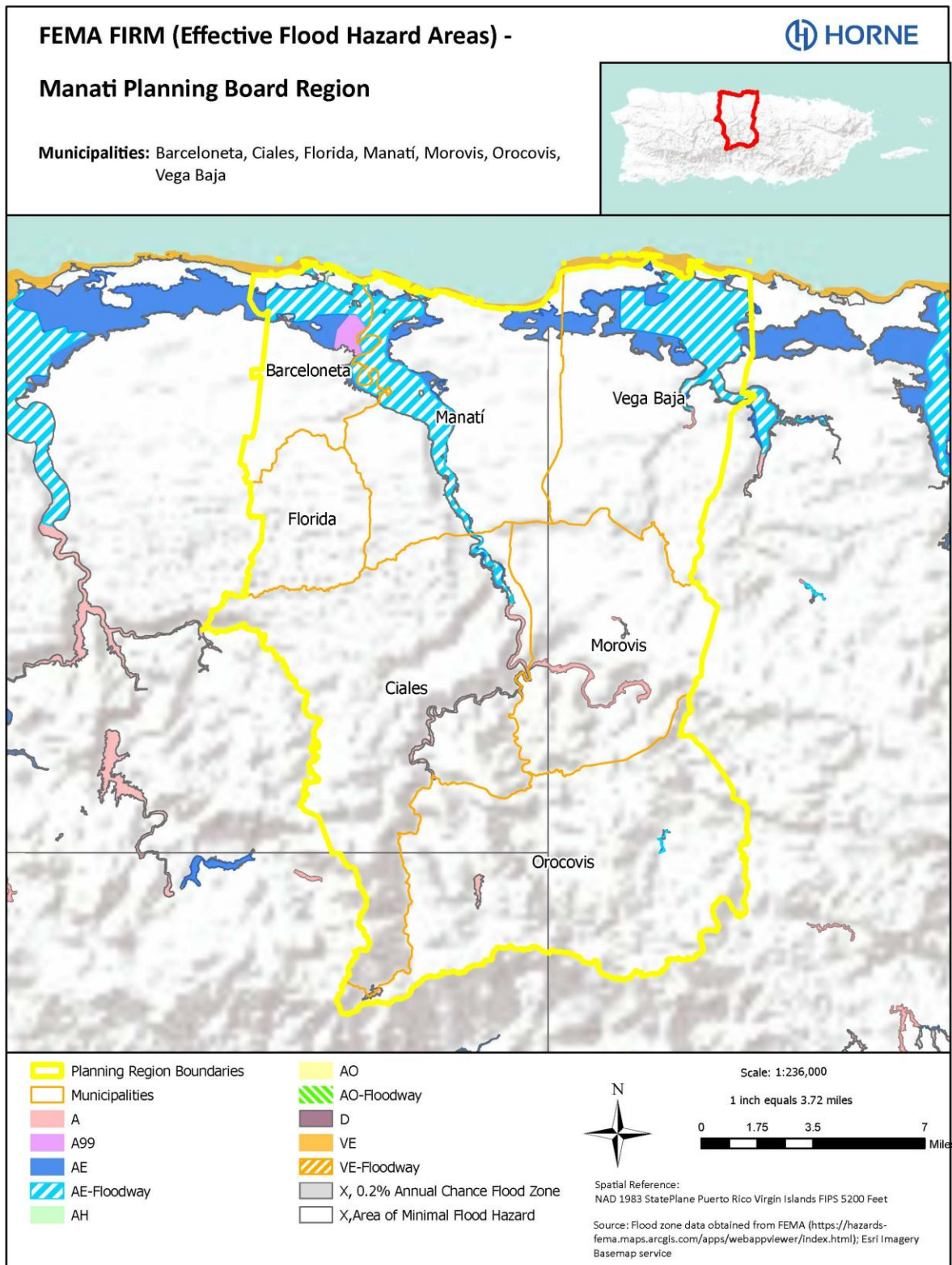
1 inch equals 3.42 miles



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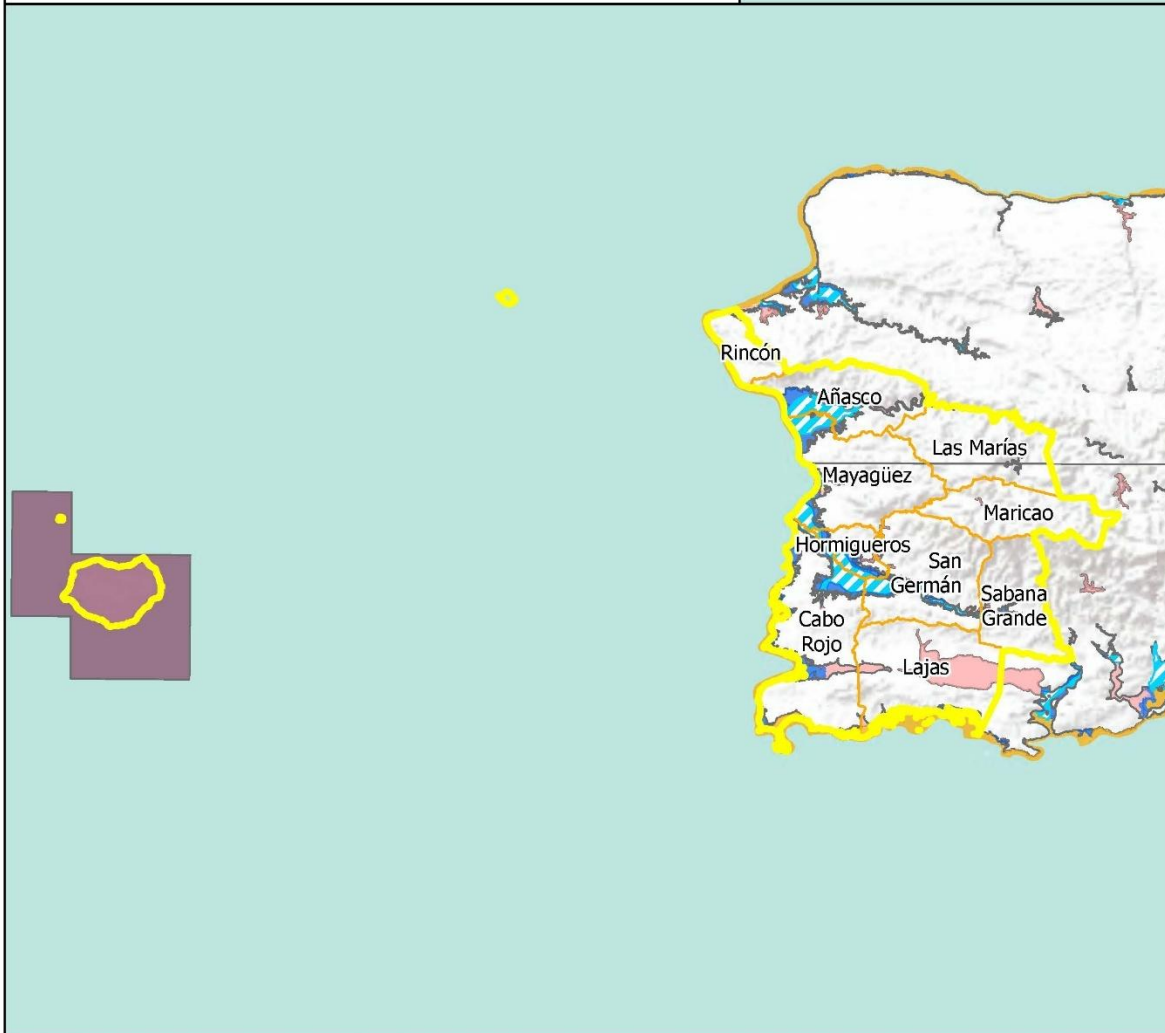
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FEMA FIRM (Effective Flood Hazard Areas) -



Mayaguez Planning Board Region

Municipalities: Añasco, Cabo Rojo, Hormigueros, Lajas, Las Marías, Maricao, Mayagüez, Rincón, Sabana Grande, San Germán

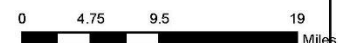


- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |



Scale: 1:643,000

1 inch equals 10.15 miles



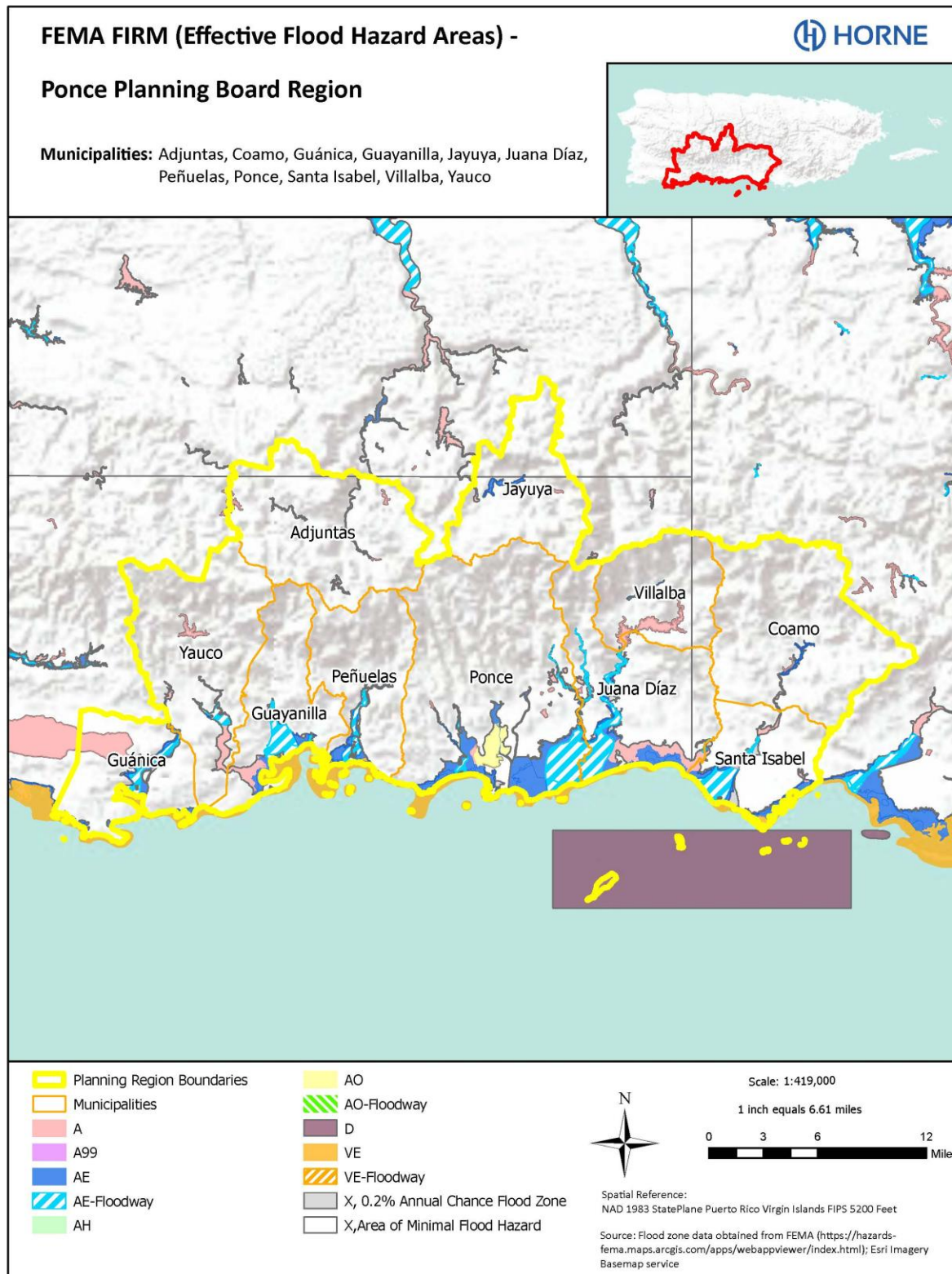
Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

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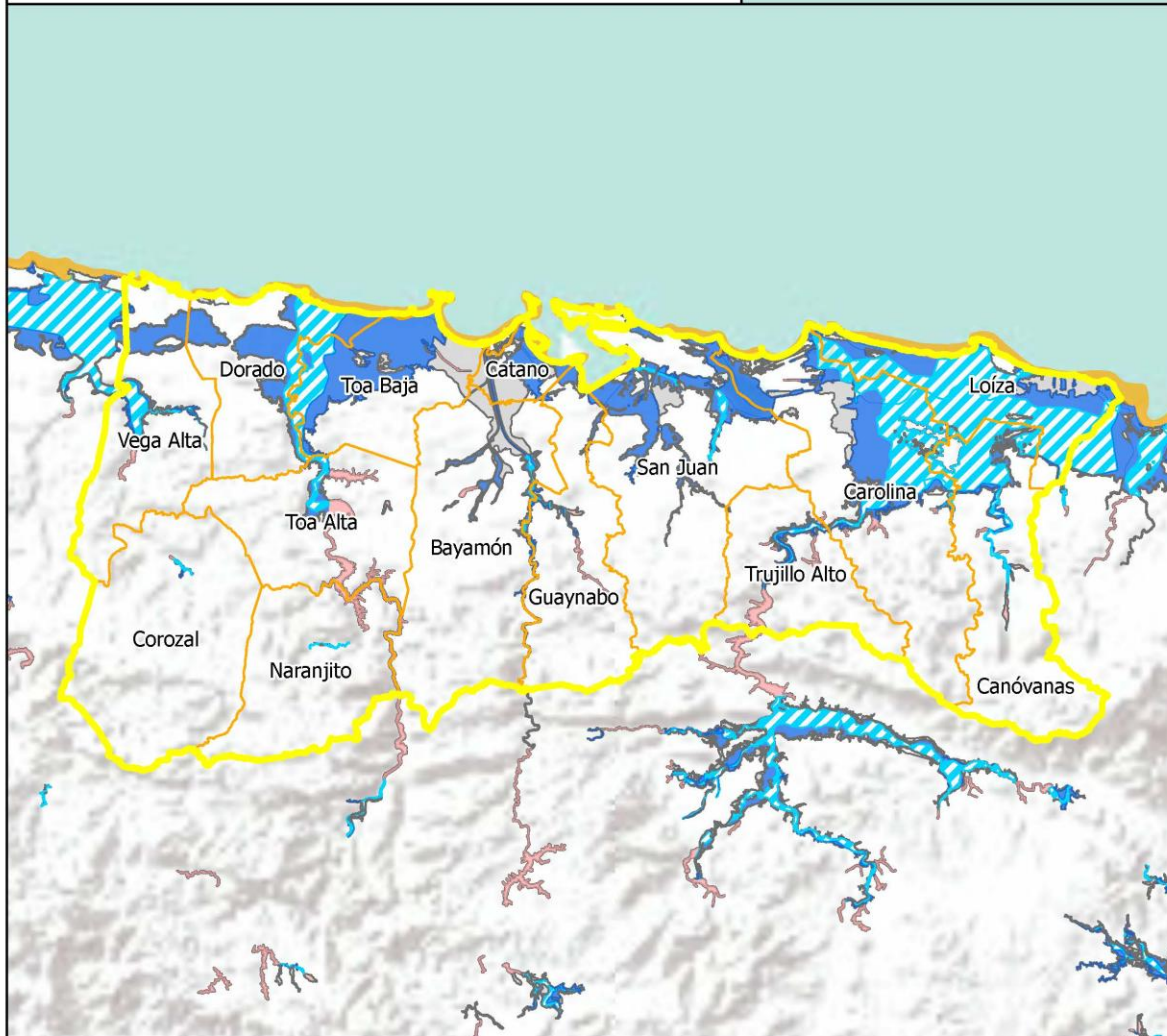
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FEMA FIRM (Effective Flood Hazard Areas) -



San Juan Planning Board Region

Municipalities: Bayamón, Canóvanas, Carolina, Corozal, Dorado, Guaynabo, Loíza, Naranjito, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta



- | | |
|----------------------------|----------------------------------|
| Planning Region Boundaries | AO |
| Municipalities | AO-Floodway |
| A | D |
| A99 | VE |
| AE | VE-Floodway |
| AE-Floodway | X, 0.2% Annual Chance Flood Zone |
| AH | X, Area of Minimal Flood Hazard |

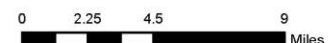


Spatial Reference:
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Source: Flood zone data obtained from FEMA (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html>); Esri Imagery Basemap service

Scale: 1:319,000

1 inch equals 5.03 miles



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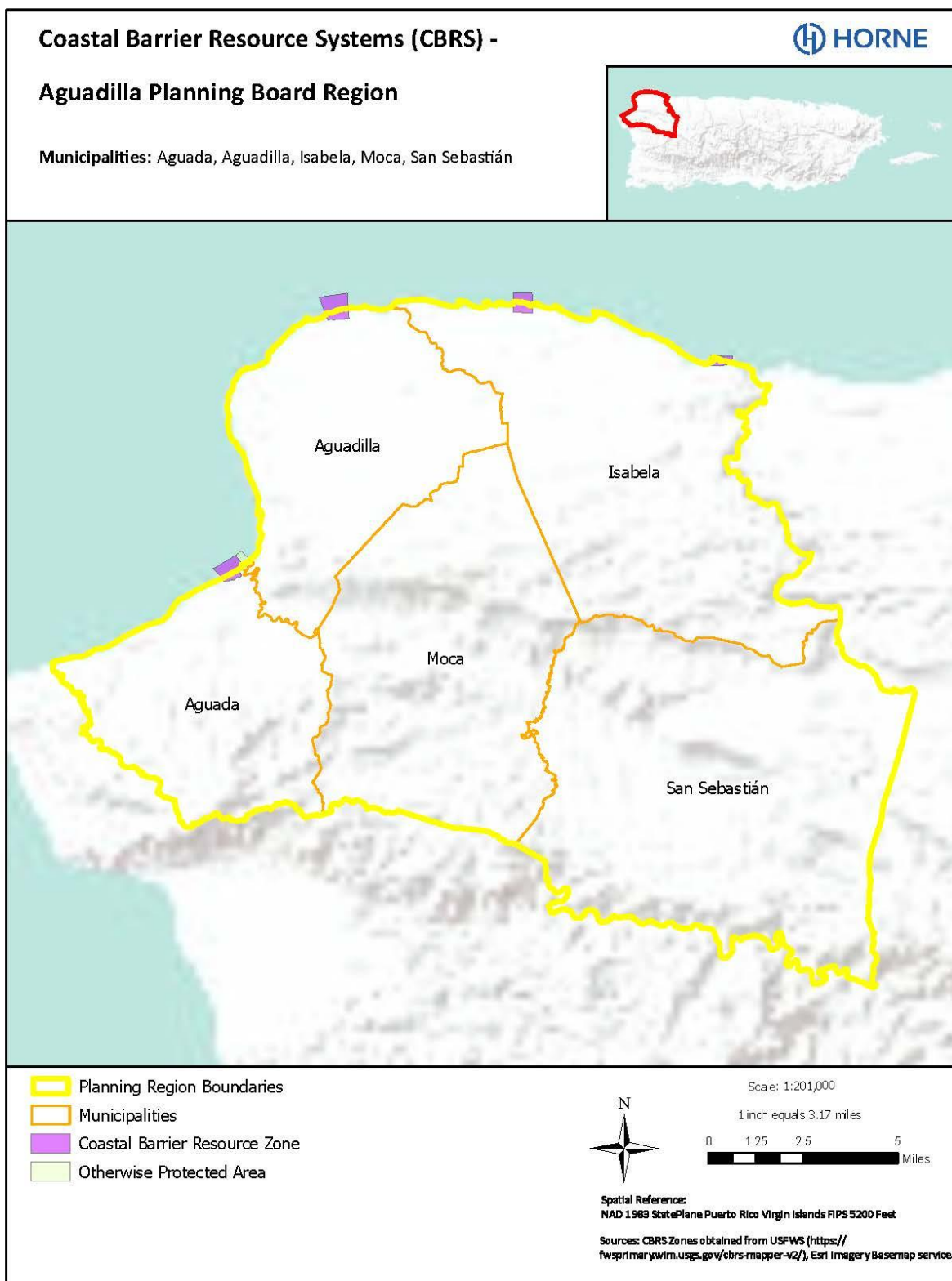
A12: Coastal Barrier Systems





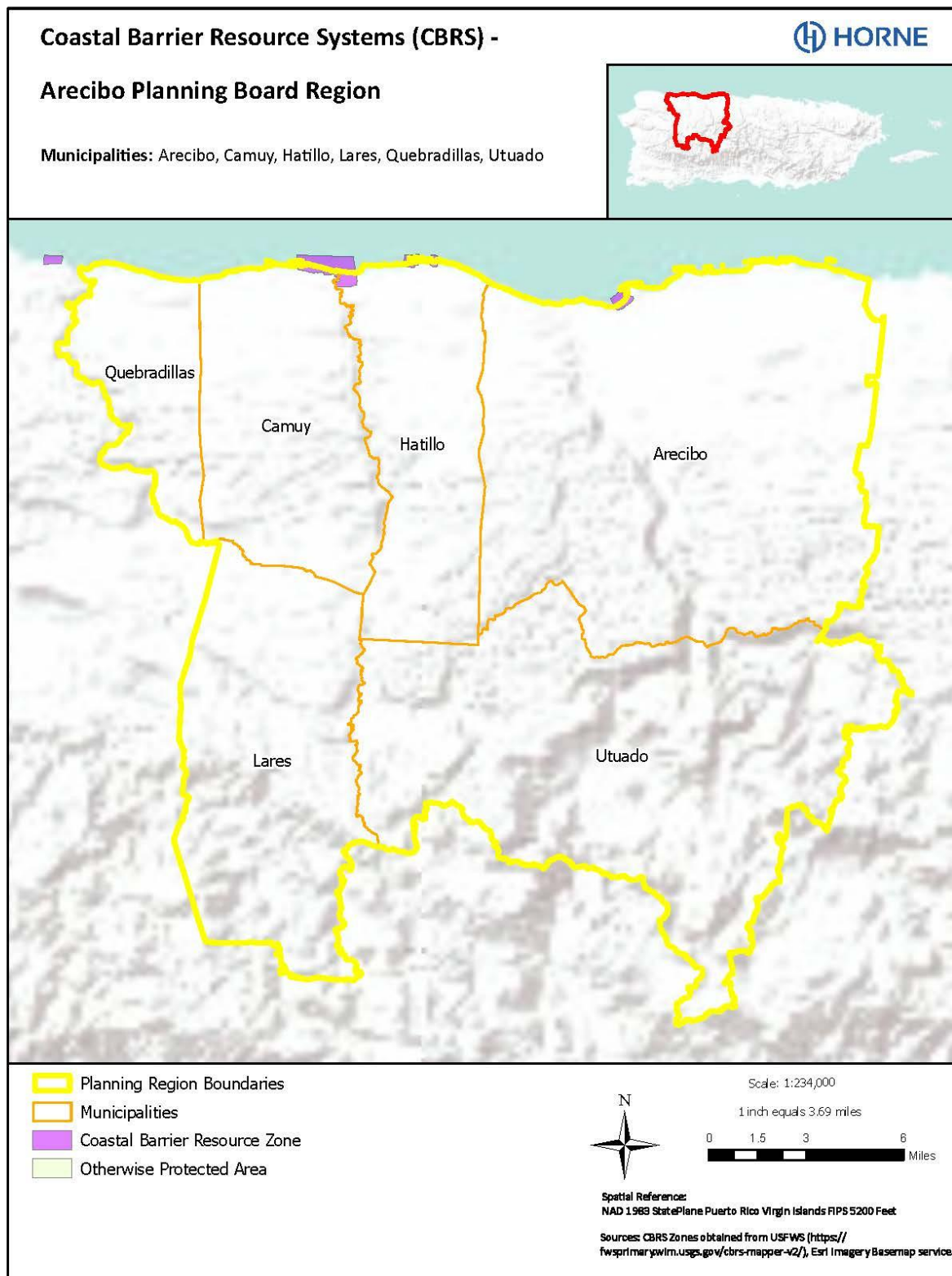
A12-1: Coastal Barrier Systems Maps





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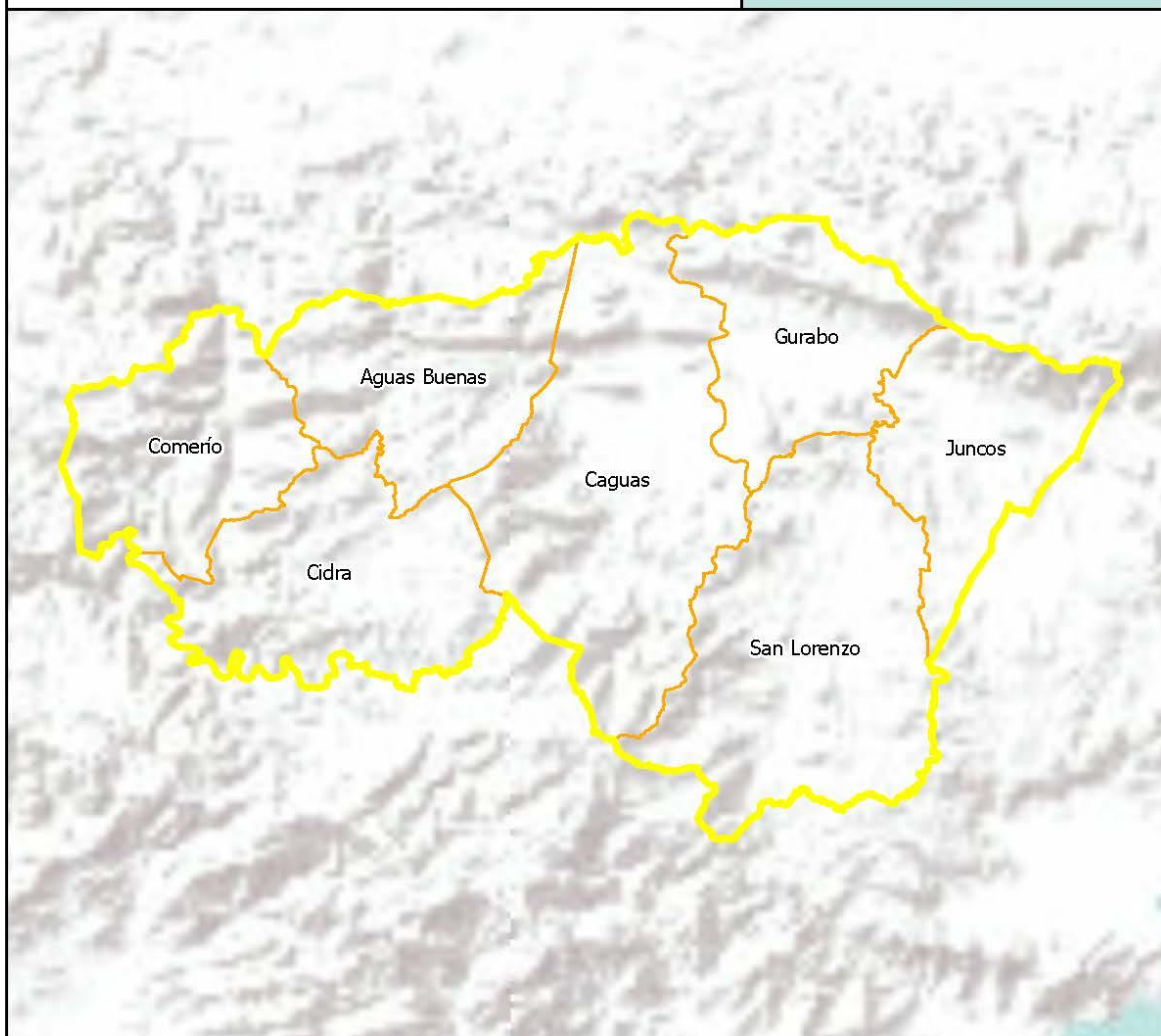


Coastal Barrier Resource Systems (CBRS) -



Caguas Planning Board Region

Municipalities: Aguas Buenas, Caguas, Cidra, Comerío, Gurabo, Juncos, San Lorenzo



- Planning Region Boundaries
- Municipalities
- Coastal Barrier Resource Zone
- Otherwise Protected Area



Scale: 1:242,000

1 inch equals 3.82 miles



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: CBRS Zones obtained from USFWS (<https://fwsp1mar.ywilm.usgs.gov/cbrs-mapper-v2/>), Esri Imagery Basemap service.

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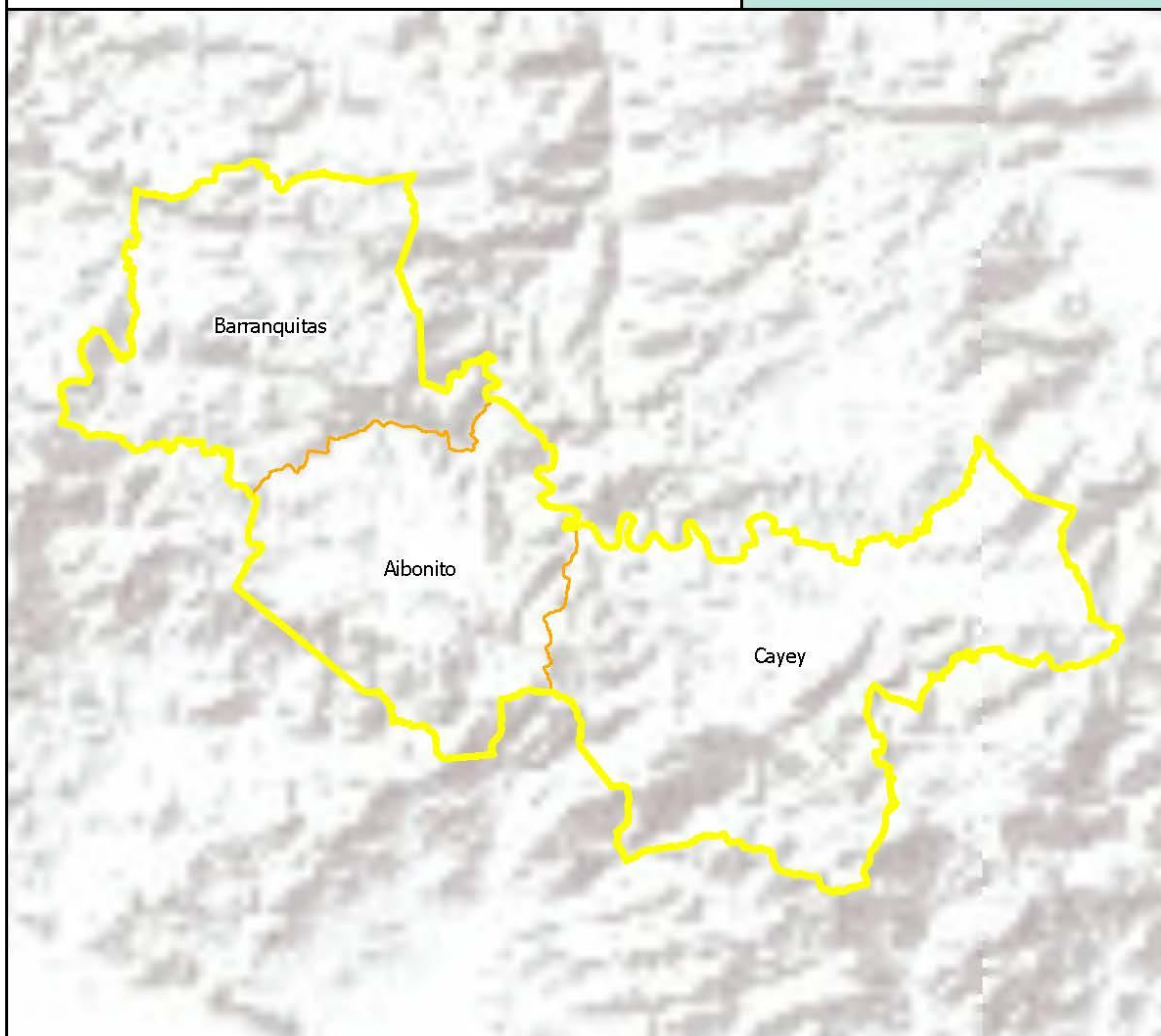
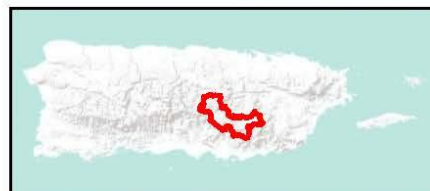


Coastal Barrier Resource Systems (CBRS) -



Cayey Planning Board Region

Municipalities: Aibonito, Barranquitas, Cayey



- Planning Region Boundaries
- Municipalities
- Coastal Barrier Resource Zone
- Otherwise Protected Area



Scale: 1:186,000

1 inch equals 2.94 miles



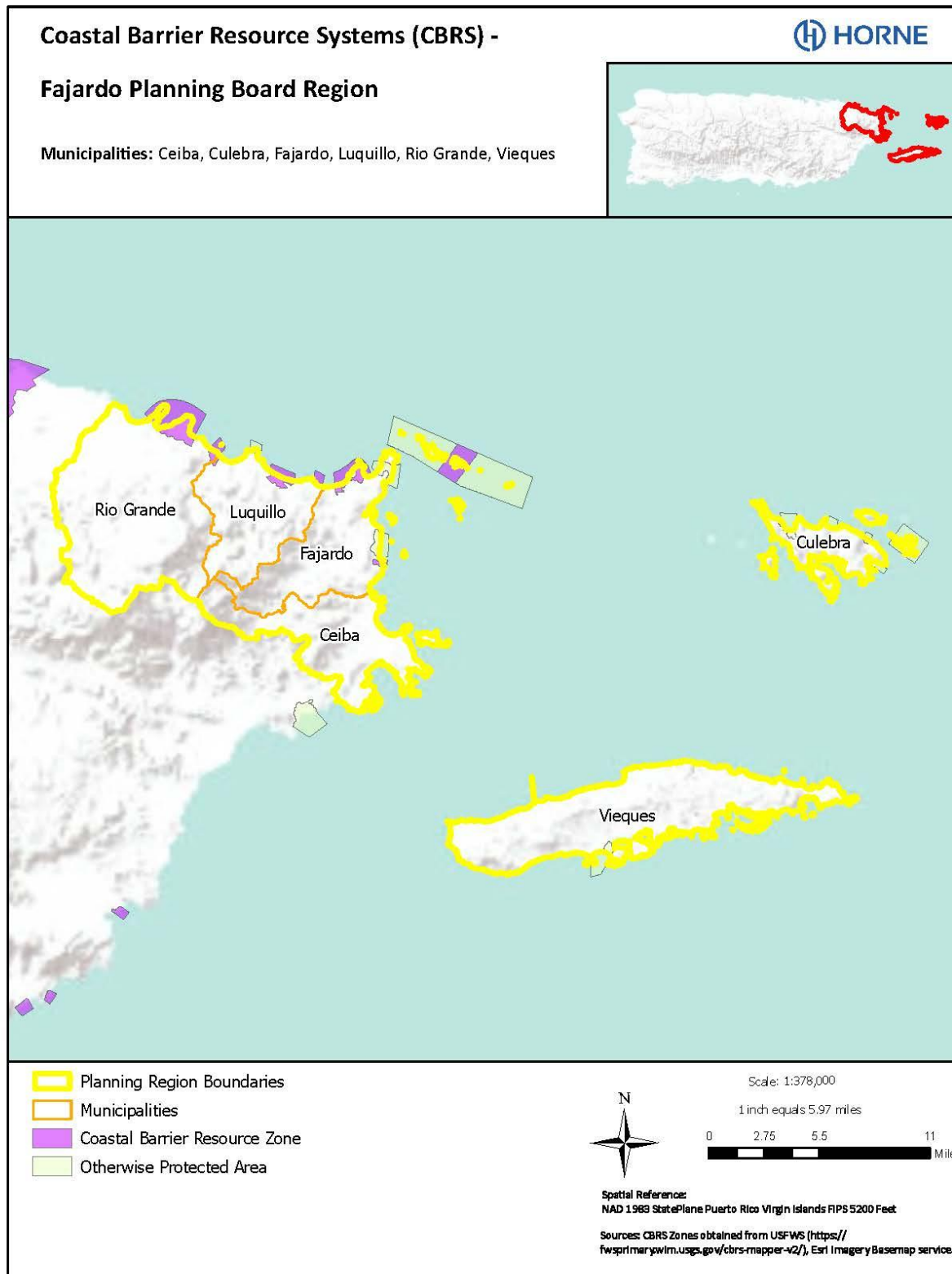
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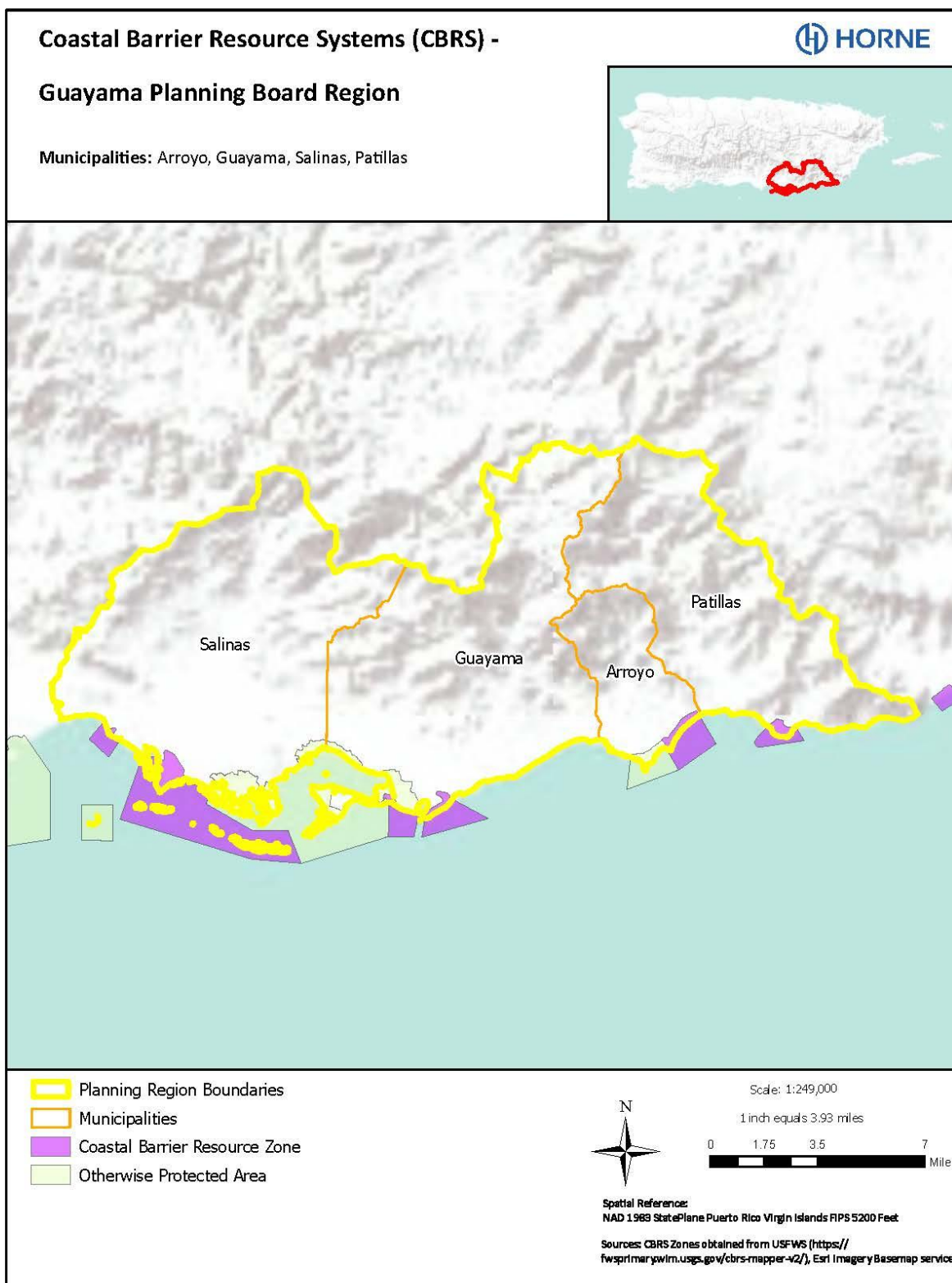
Sources: CBRS Zones obtained from USFWS (<https://fwsp1marywlm.usgs.gov/cbrs-mapper-v2/>), Esri Imagery Basemap service.

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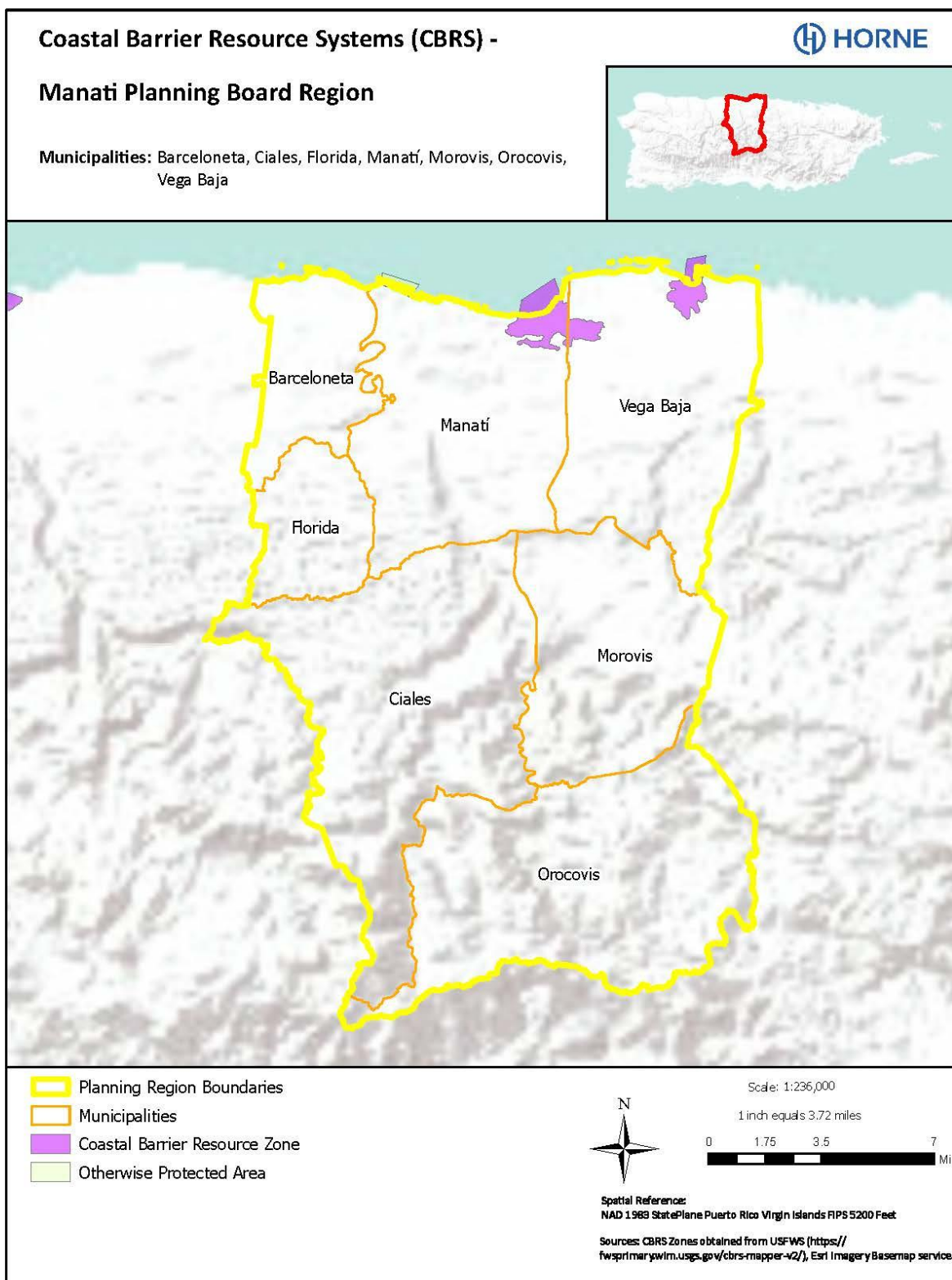




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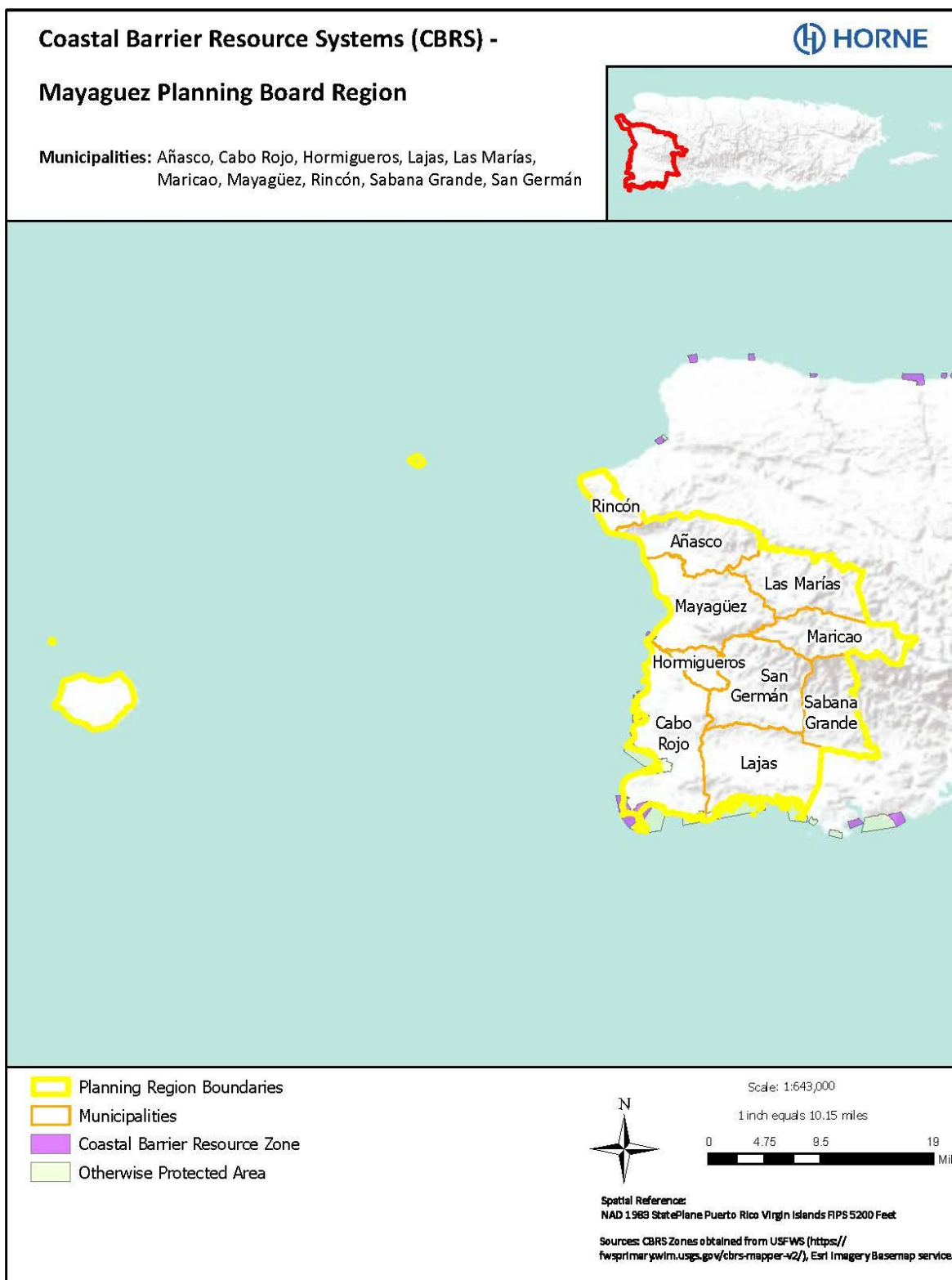


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Coastal Barrier Resource Systems (CBRS) -



Ponce Planning Board Region

Municipalities: Adjuntas, Coamo, Guánica, Guayanilla, Jayuya, Juana Díaz, Peñuelas, Ponce, Santa Isabel, Villalba, Yauco



- Planning Region Boundaries
- Municipalities
- Coastal Barrier Resource Zone
- Otherwise Protected Area



Scale: 1:419,000

1 inch equals 6.61 miles



Spatial Reference:
NAD 1983 StatePlane Puerto Rico Virgin Islands FIPS 5200 Feet

Sources: CBRS Zones obtained from USFWS (<https://fwsprimarywlm.usgs.gov/cbrs-mapper-v2/>), Esri Imagery Basemap service.

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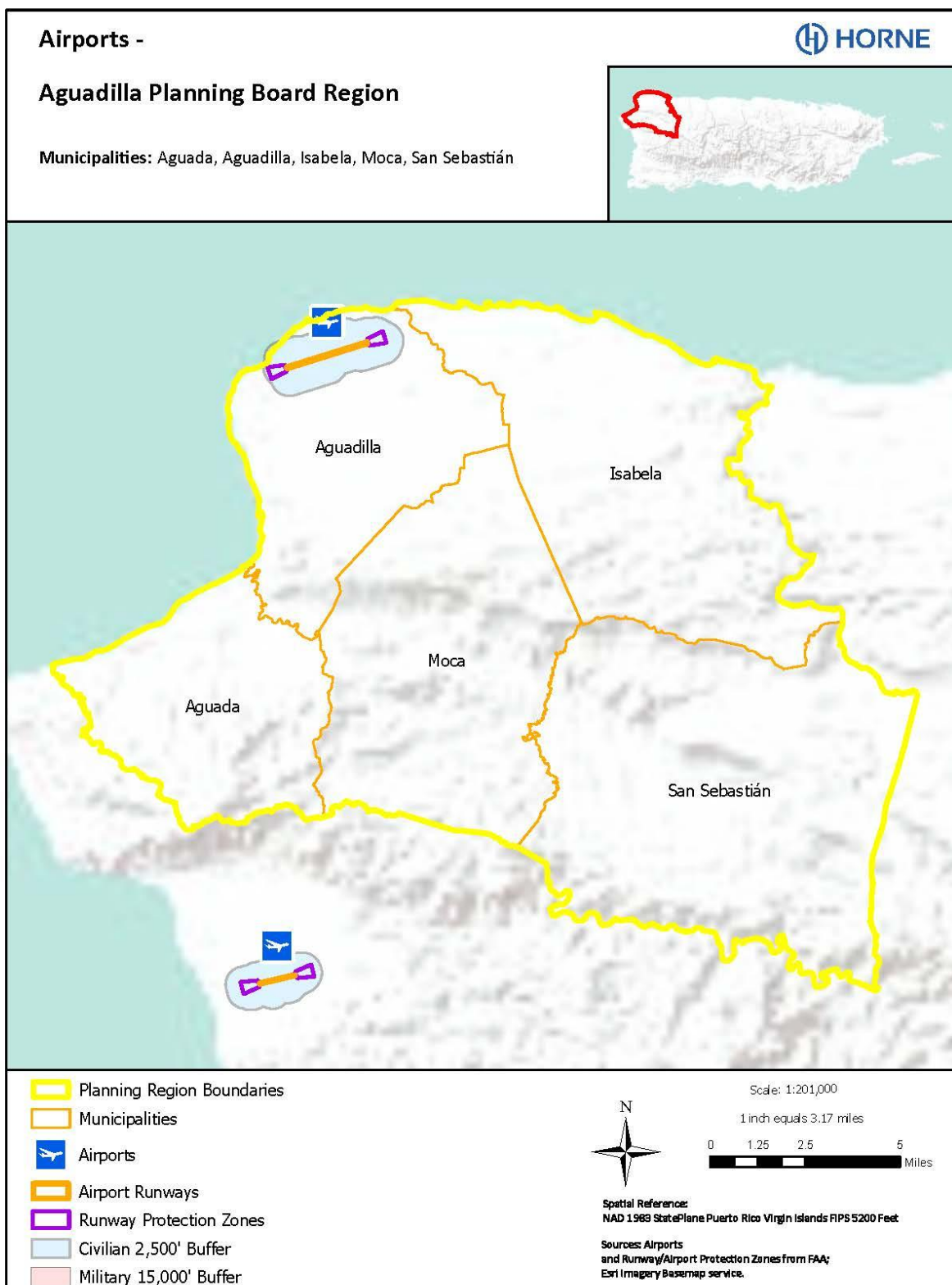
A13: Airports





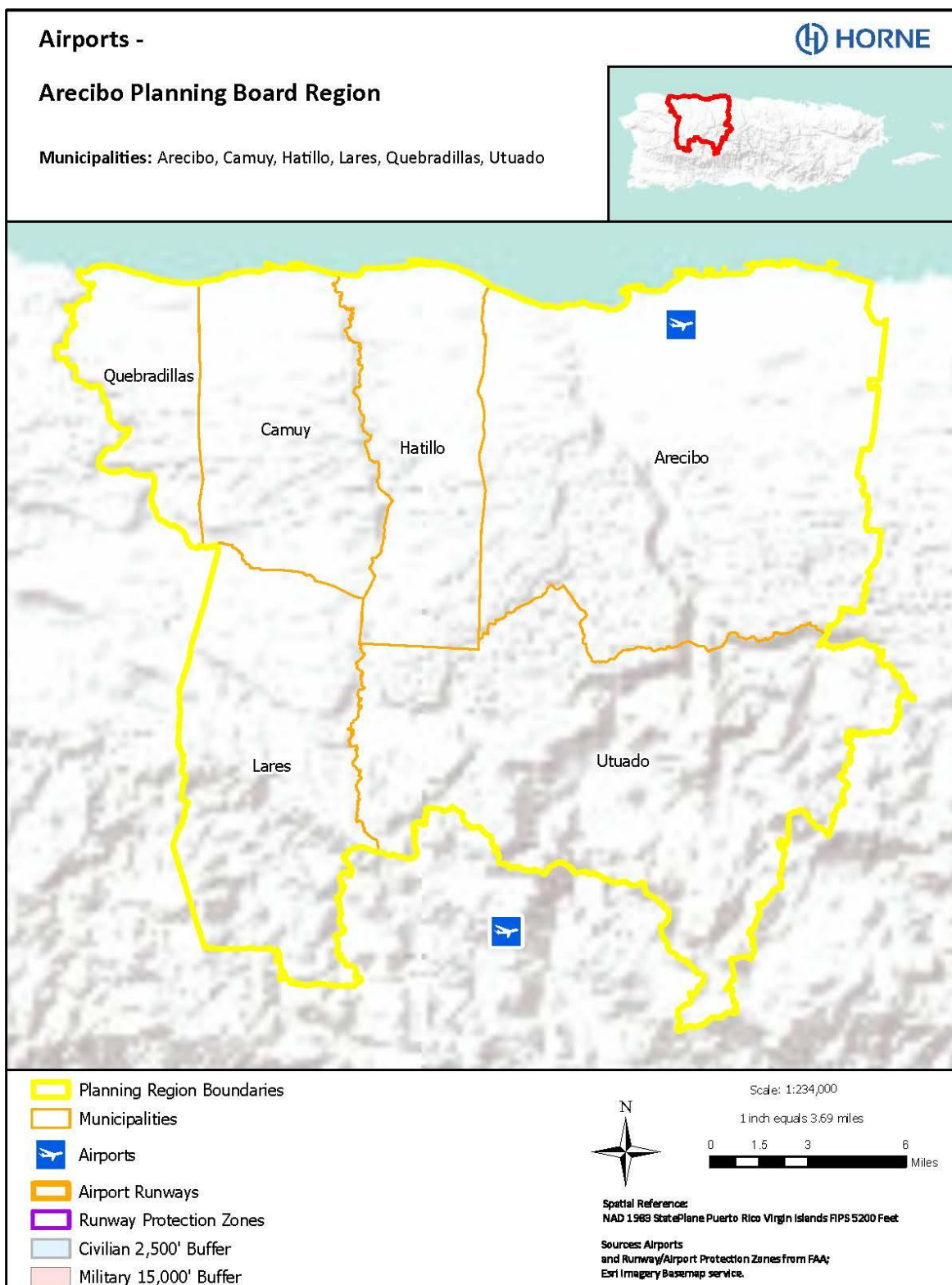
A13-1: Airport and RPZ Maps





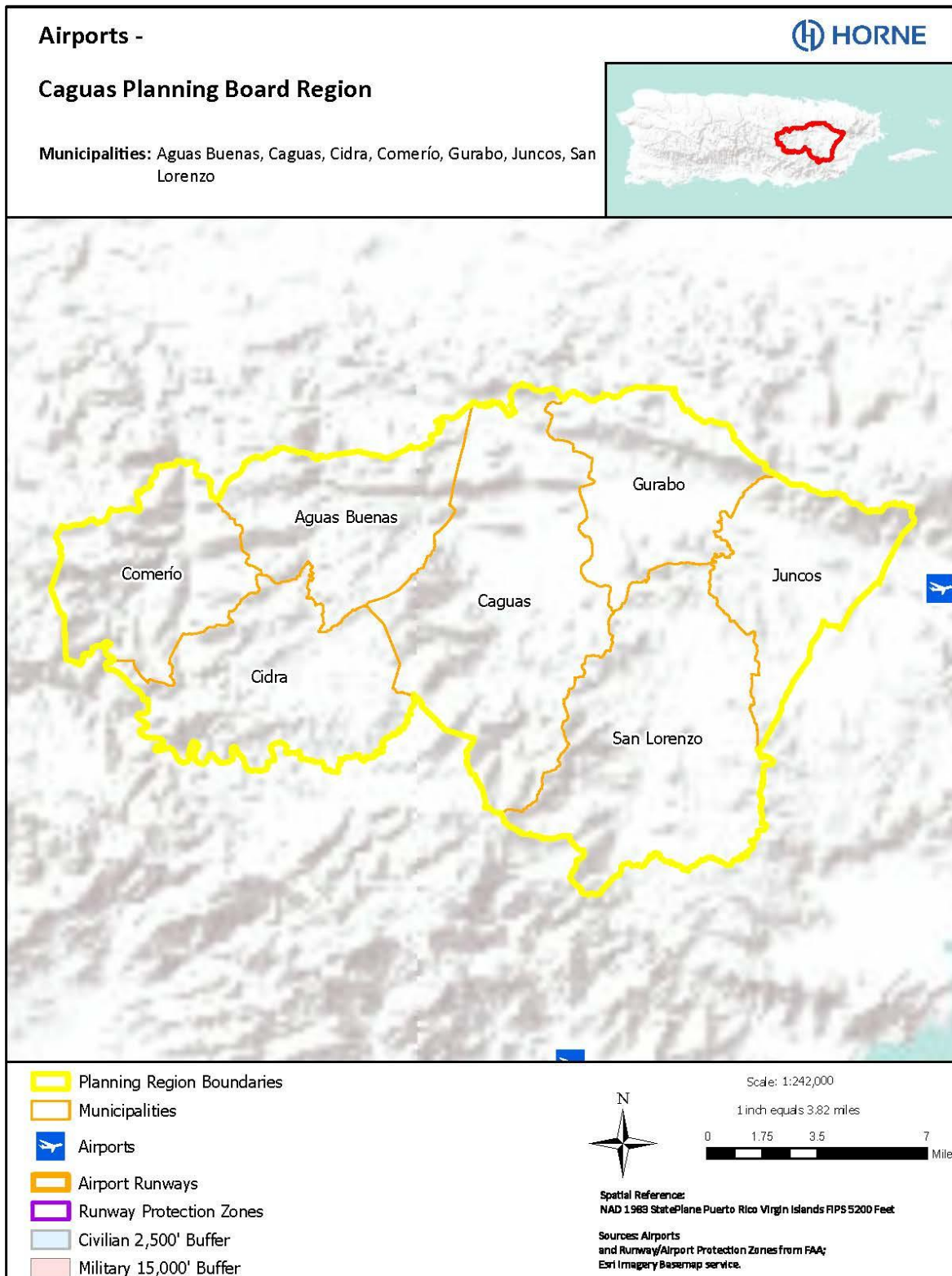
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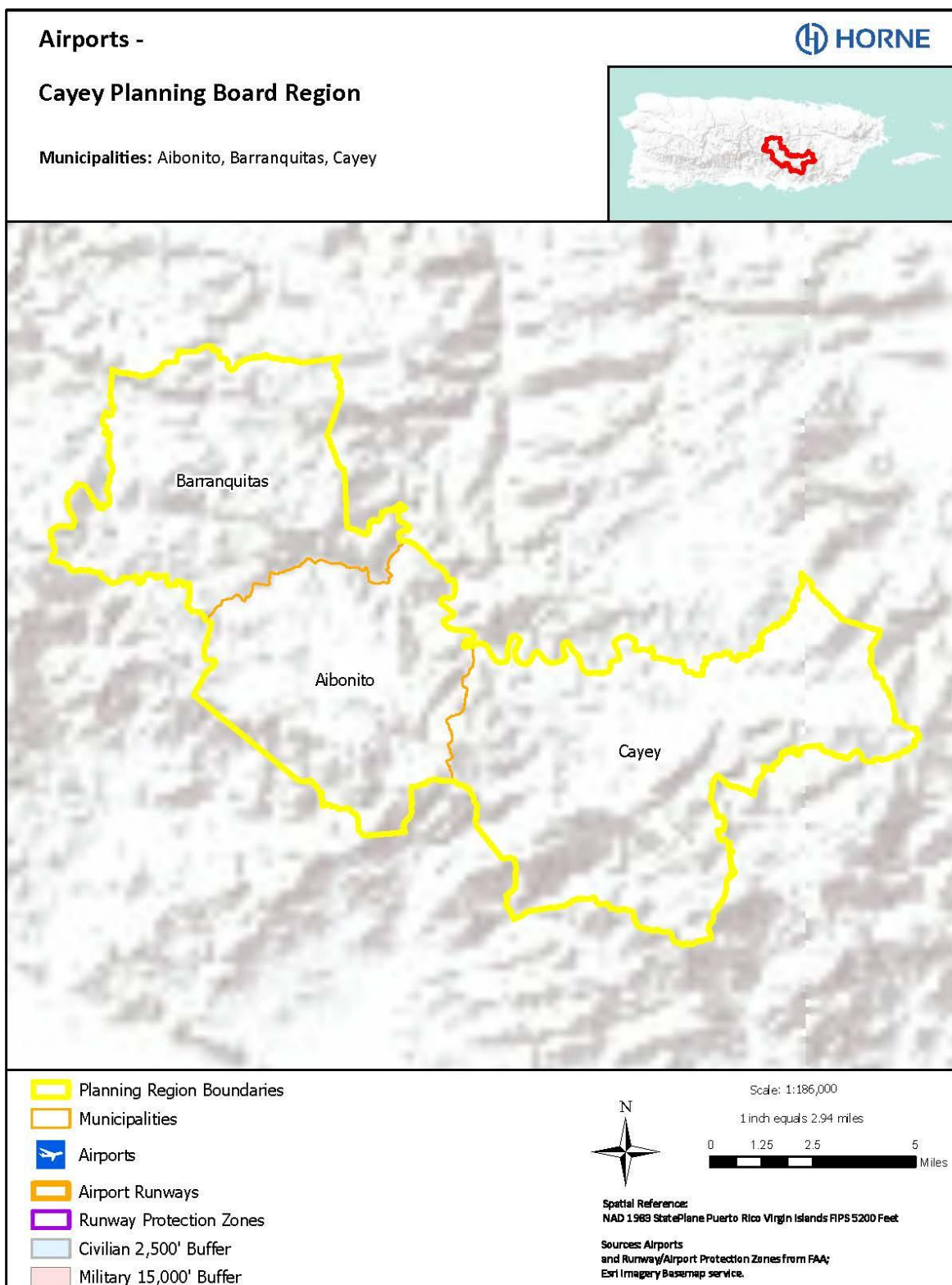
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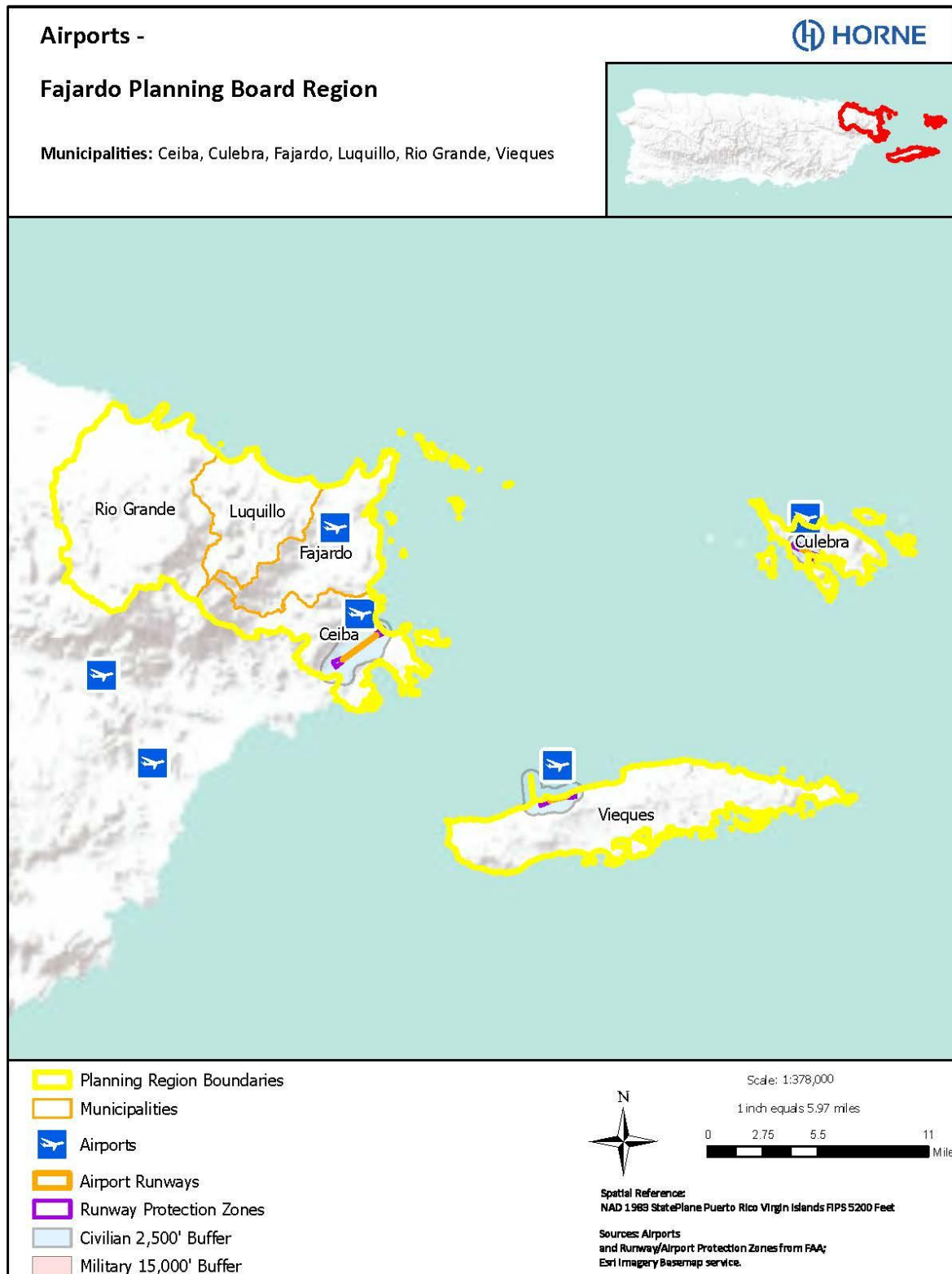
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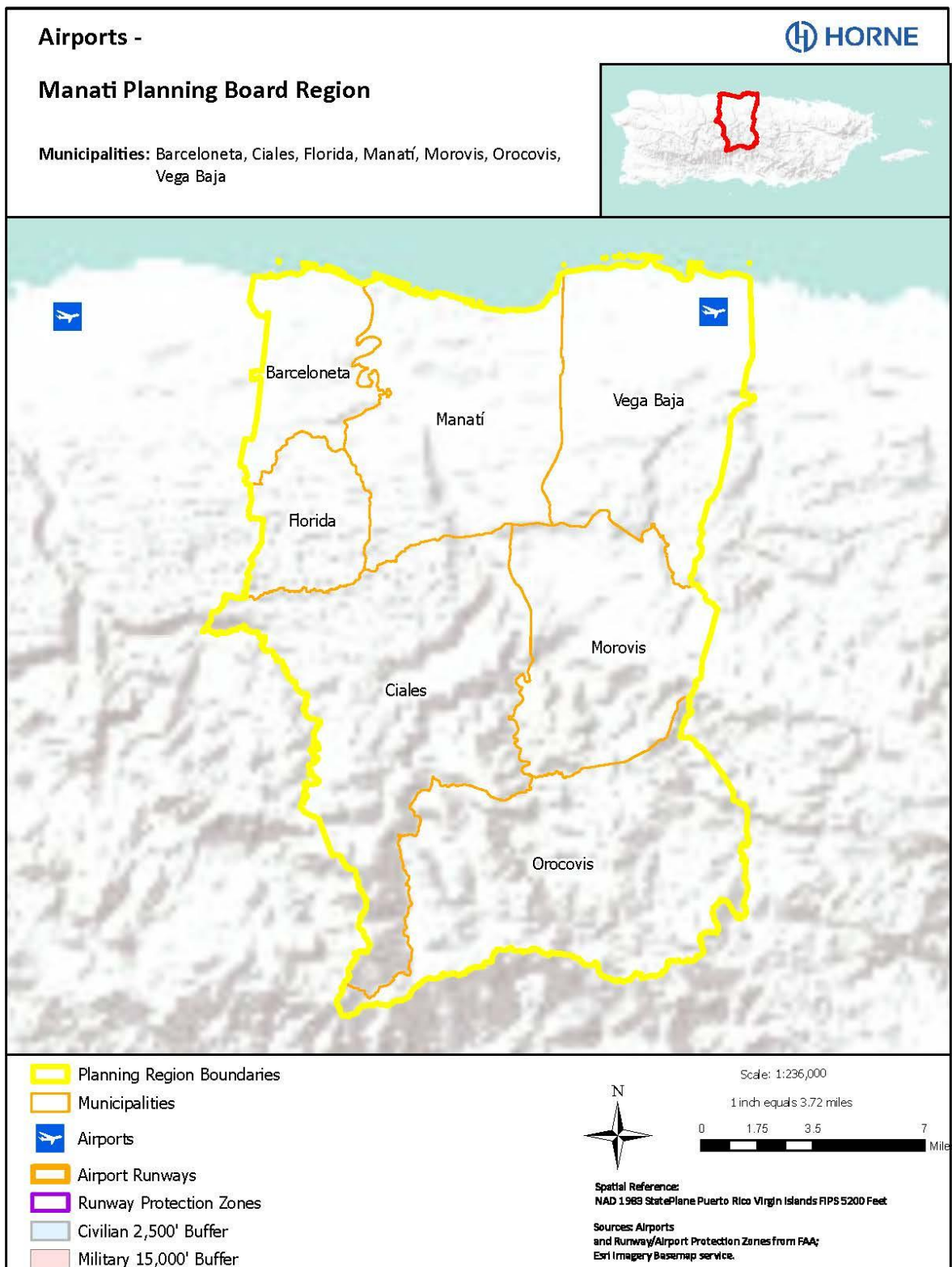
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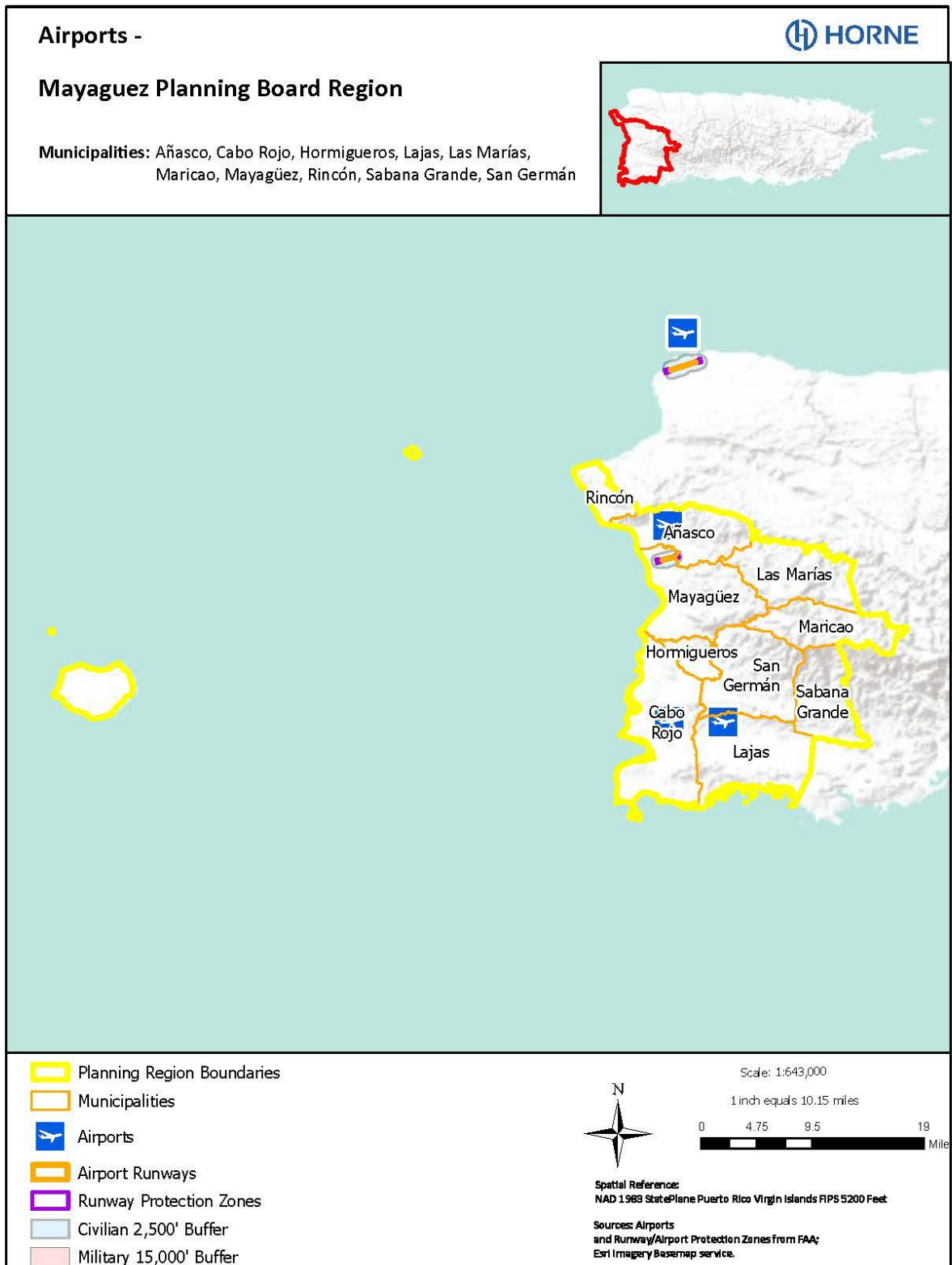
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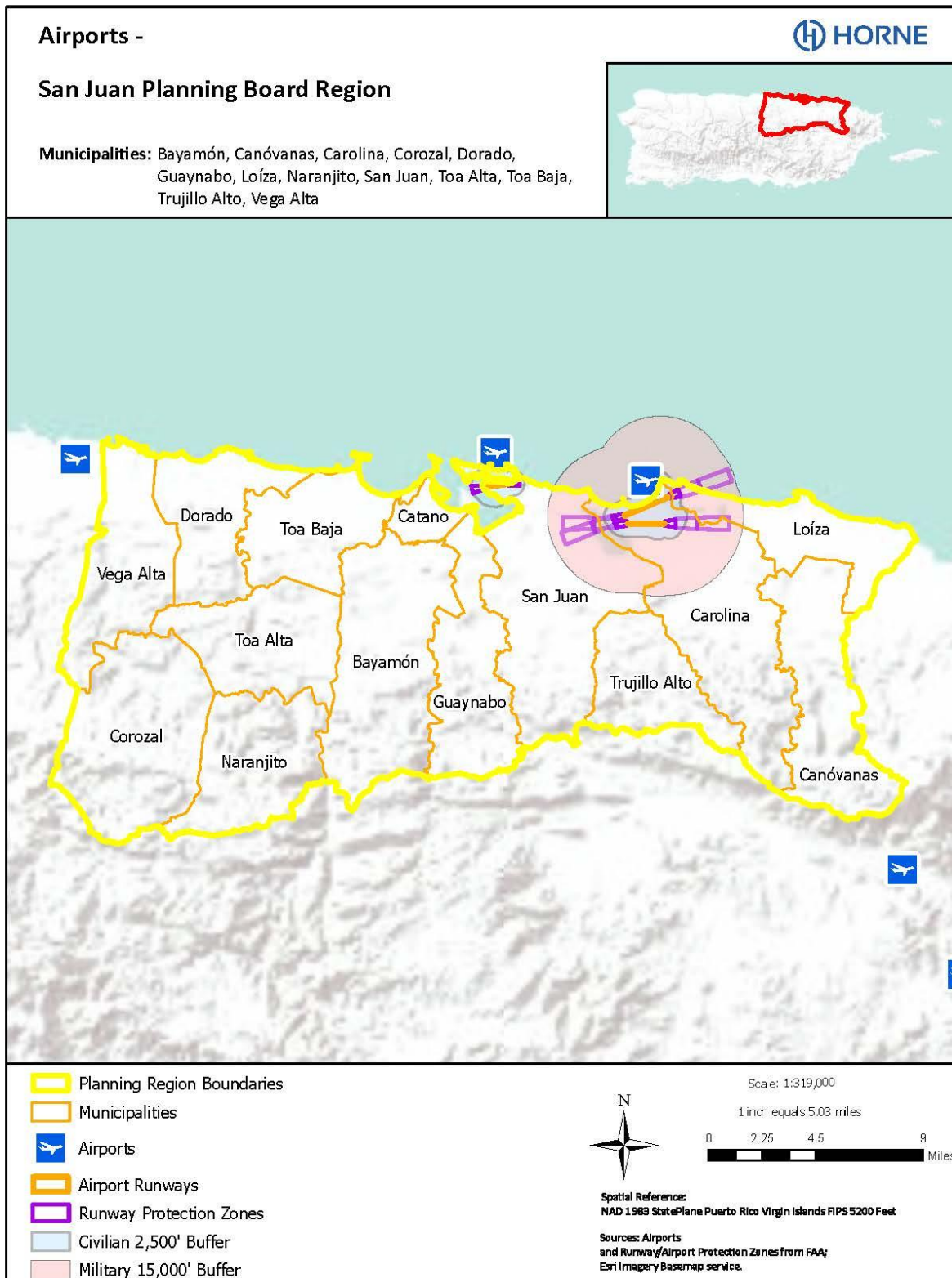
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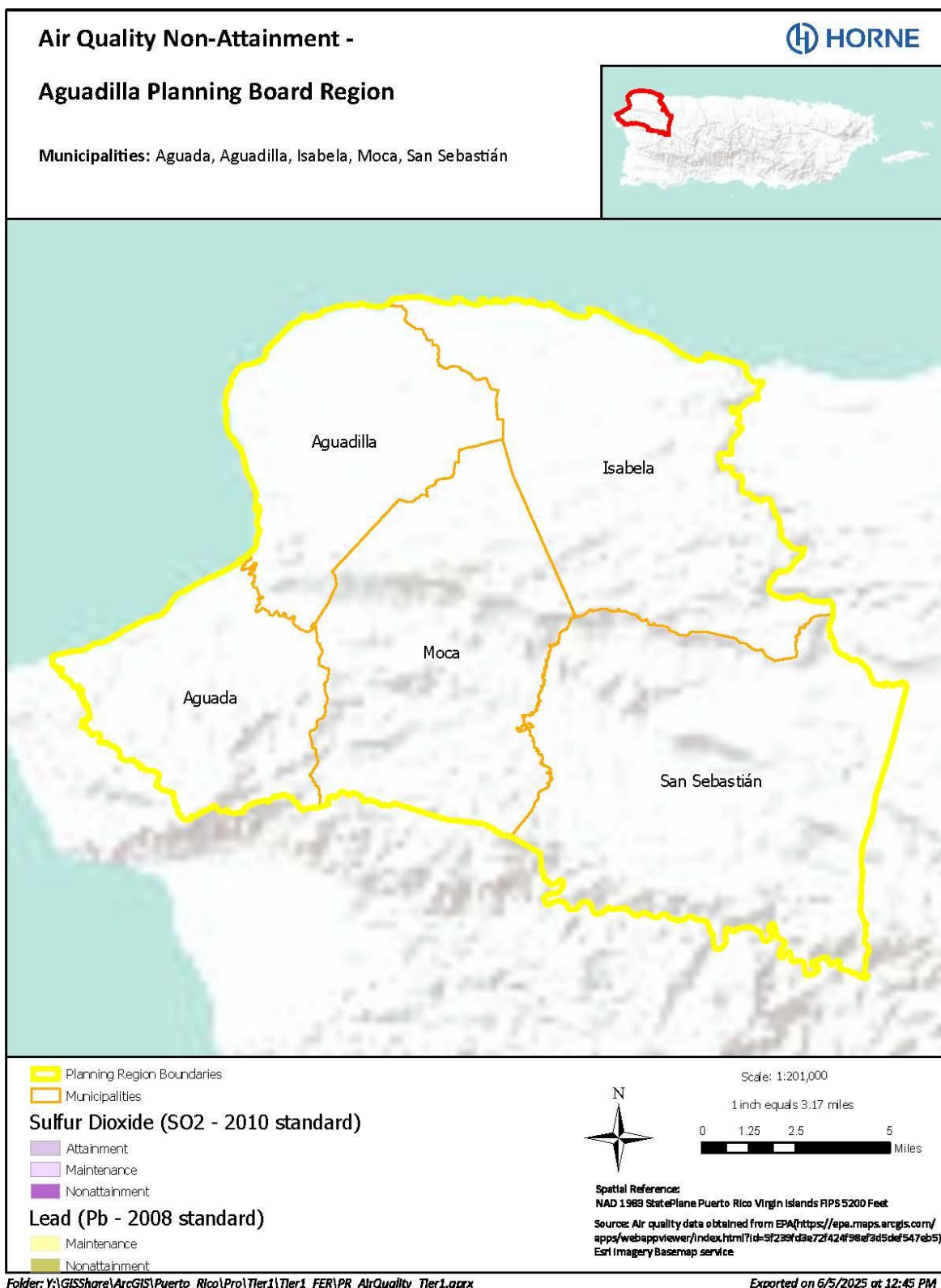
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B1: 8 Step Process





8-STEP DECISION-MAKING PROCESS
EXECUTIVE ORDER 11988 AND 13690 – FLOODPLAIN MANAGEMENT
EXECUTIVE ORDER 11990 – WETLAND PROTECTION
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT COMMUNITY
DEVELOPMENT BLOCK GRANT - MITIGATION

April 11, 2025

This document outlines the 8-Step Decision-Making (8-Step) Process for floodplain management, in accordance with Executive Order (EO) 11988, "Floodplain Management," as amended by EO 13690, and 11990, "Protection of Wetlands." It is designed to address the requirements of activities related to implementing renewable energy solutions for agribusinesses and farmers, including the installation of Photovoltaic Systems (PVS) and Battery Storage Systems (BSS) within Special Flood Hazard Areas (SFHAs), particularly in Zone A and Zone V as delineated by the Federal Emergency Management Agency (FEMA) floodplain maps.

The process ensures compliance with the United States Department of Housing and Urban Development (HUD) regulations, Federal Flood Risk Management Standard (FFRMS) guidelines, and the floodplain and wetland protection standards outlined in these EOs. It aims to mitigate risks associated with floodplains and wetlands while supporting renewable energy installations. Financial assistance provided through the Puerto Rico Department of Housing (PRDOH) Community Development Block Grant – Mitigation (CDBG-MIT) Program will align with these regulations, ensuring both flood risk reduction and wetland protection are integrated into the program's execution.

8-Step Decision Making Process

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GOVERNMENT OF PUERTO RICO



The Agro-Energy Stability (AES) Program¹ aims to foster economic development by enhancing agro-industrial capacity and infrastructure to support more resilient operations. Through the implementation of renewable energy solutions for agribusinesses and farmers, the AES Program will strengthen their ability to withstand energy instability and challenges that may arise in the aftermath of disaster events. Investing in renewable energy development will ensure a steady and reliable energy supply capable of sustaining businesses and upholding supply chains vital to the food and agriculture industry sector, included in the Food, Water, and Shelter Lifeline identified in the CDBG-MIT Action Plan².

Eligible renewable Projects for the Program include PVS and BSS, which can be either new installations or expansions of existing systems tailored to meet eligible agribusinesses and farmers' current electricity demands.

Under 24 CFR 55.13(f), the 8-step decision-making process is not applicable to renewable energy projects that involve the installation of energy efficiency or renewable energy improvements on existing structures, provided the activities do not meet the definition of "substantial improvement" under 24 CFR 55.2(b)(12) and do not place equipment below the FFRMS floodplain elevation.

Projects that do not meet the criteria outlined in 24 CFR 55.13(f) will require compliance with the 8-Step Decision-Making Process as specified in 24 CFR 55.20.

Given the island-wide scope of the AES Program and the diverse environmental conditions present across Puerto Rico, the Tier I review assesses general conditions that are applicable to all potential project locations.

Findings include:

- Program activities may take place in SFHAs or FFRMS floodplains or wetlands due to the geography and topography of Puerto Rico.
- Program activities are non-critical actions as defined by 24 CFR 55.2(b)(3).
- Projects located entirely outside the FFRMS floodplain or wetlands are considered to meet the requirements of EO 11988 and 13690.

¹ [Agro-Energy Stability Program - CDBG-DR/MIT Recovery Funds](#)

² [CDBG-MIT Action Plan - CDBG-DR/MIT Recovery Funds](#)



Step 1:

Determine if a Proposed Action is within the FFRMS floodplain

Although the proposed projects have not yet been confirmed for specific site locations, they are within the 78 municipalities of Puerto Rico impacted by Hurricanes Irma and Maria. To ensure compliance with floodplain management and wetland protection regulations, all applications will undergo a Tier II Site-Specific Evaluation. The following steps outline the processes involved in the evaluation during Tier II:

Floodplain Identification

- The Climate Informed Science Approach (CISA), in which modeling on sea level rise is incorporated into flood risk mapping to provide floodplain boundaries that change over extended time horizons.
- The 500-year floodplain approach, in which the 500-year floodplain serves as the regulatory floodplain instead of the 100-year floodplain
- The Freeboard Value Approach (FVA), in which two feet, or three feet for critical actions, is added to the 100-year flood elevation, and the floodplain is the area extending from the flooding source to that higher elevation

Wetland Identification:

- Identify if the activities are located within or near a wetland the National Wetlands Inventory (NWI) mapper.
- If the mapping is inconclusive, it may be necessary to consult the U.S. Fish and Wildlife Service (USFWS), the Natural Resources Conservation Service (NRCS) Web Soil Survey, and/or a wetland scientist to assess the potential impact on a wetland.

FFRMS Elevation:

- All energy-related equipment, such as solar panels, inverters and battery storage units, must be installed above the minimum elevation level defined by FFRMS policy.

- Floodproofing is not permitted under AES Program activities.
- Letters of Map Amendment and Letters of Map Revision (LOMA/LOMR) may not be utilized to effectively remove a property from the FFRMS floodplain.

Substantial Improvement:

The cost of the proposed activity will be compared to the building's improvement value, based on the 2024 tax record if available or an independent appraisal. If the cost exceeds 50% of the structure's value, the project will be categorized as a substantial improvement and may be ineligible for funding, except for National Register of Historic Places-listed properties.

Eligibility Determination:

Floodplain

- Sites entirely outside the FFRMS floodplain are deemed in compliance with EO 11988 and 13690.
- Sites located within regulated floodways, Coastal High Hazard Areas (Zones V or VE), or within the inland limit of Coastal A Zones (Limit of Moderate Wave Action) will generally be ineligible for funding unless:
 - The activity serves a functionally dependent use and meets all regulatory criteria under 24 CFR 55.8 and 55.12.
- Floodproofing is not allowed; elevation is required for compliance.

Wetlands

- Sites entirely outside the wetlands are deemed in compliance with Executive Order 11990.
- Restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property.
- Minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland.
- Project site with an incidental portion situated in an adjacent floodplain, including the floodway or Coastal High Hazard Area, or wetland, but only if:



- The proposed construction activities do not occupy or modify the 100-year floodplain (or the 500-year floodplain for critical actions) or the wetland;
- appropriate provision is made for the site drainage that would not have an adverse effect on the wetland; and
- A permanent covenant or comparable restriction is placed on the property's continued use to preserve the floodplain or wetland.
- Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disability.

Flood Insurance Requirement:

For applications involving buildings located within the Special Flood Hazard Area (SFHA), a flood insurance policy compliant with the National Flood Insurance Program (NFIP) is required for the entire economic lifespan of the structure to maintain eligibility for funding. The coverage amount must be at least equal to the development cost or the NFIP's maximum coverage limit, whichever is lower, as stipulated under 42 U.S.C. § 4012a.

Consultation for Tier II, if Required

- Municipality Floodplain Coordinator Puerto Rico Planning Board

Site Visit

In addition, site visits will be made to each property to 'ground-truth' the geographic location by collecting precise latitude/longitude positions using a Global Positioning System (GPS) device. Below is a summary of the steps for the review process:

- Locate the parcel on the GIS system with flood map overlays;
- Conduct a site inspection by experienced inspectors with survey-grade GPS equipment to verify location and observe presence of nearby SFHA

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and/or water body(s), if any, to provide field verification to data received by the PRDOH; and

- Complete the site-specific evaluation for each Applicant location and verify if and how the proposed action will impact the SFHA.

Step 2:

Early Review Public Notice

A public notice was published in Primera Hora newspaper on March 11, 2025, for a 15-day comment period (publication are included in **Appendix A, Attachment 1**). The notice targeted agribusiness and farmers in the affected areas on the Island, including those in the floodplain and wetlands. The notice was also sent to the following Federal and State agencies: US Fish and Wildlife Service; US Environmental Protection Agency (EPA); US Army Corps of Engineers (USACE); National Oceanic and Atmospheric Administration Fisheries Service (NOAA); Federal Emergency Management Agency (FEMA); Puerto Rico Historic Preservation Office (SHPO); Puerto Rico Department of Economic Development and Commerce (DDEC); Puerto Rico Planning Board; and Puerto Rico Department of Environment and Natural Resources (DNER). See **Appendix A, Attachment 2** for the sample letter to interested Federal and Puerto Rico agencies. No public comments were received by PRDOH during the designated comment period. Therefore, no specific responses were required. See **Appendix A, Attachment 3**, which confirms that no comments were submitted for this action.

Step 3:

Identify and Evaluate Practicable Alternatives

The following parameters were considered in evaluating practicable alternatives for the program:

Eligible renewable projects under the program include PVS and BSS. These projects can be either new installations or expansions of existing systems, designed to meet

the current electricity demands of eligible agribusinesses and farmers.

At this stage, the number of applicants whose projects will be located within floodplains or wetlands is unknown. This document will explore programmatic alternatives that can be applied to properties located within these areas. In addition to the alternatives discussed, each site will undergo a site-specific environmental review to confirm its location, as described in Step One. Based on this review, three outcomes will be identified to assess the impacts on Special Flood Hazard Areas (SFHA) and/or wetlands:

- Outcome A – No impact (property located outside SFHA or wetlands): Sites located entirely outside the FFRMS floodplain and wetlands will be considered in compliance with Executive Orders 11988, 13690, and 11990.
- Outcome B – No additional impact to the SFHA: If all energy-related equipment, such as solar panels, inverters, and battery storage units, are installed in structures that comply with the minimum elevation level defined by FFRMS policy, there will be no additional impact to the SFHA or wetlands.
- Outcome C – Impact to SFHA or wetlands.

Selected Course of Action: Provide Financial Assistance to Agribusinesses and Farmers to Install PVS and BSS in the Floodplain

This alternative involves the installation of roof-mounted, ground-mounted, pole-mounted, or light-frame (canopy) structure-mounted PVS and BSS, provided these installations comply with all relevant permitting requirements, laws, regulations, and codes. Since a significant portion of Puerto Rico is located within floodplains, this approach seeks to continue providing power to the agribusiness and farms while minimizing negative impacts to the floodplain and wetlands. The goal is to reduce the vulnerability of the agricultural operations served by these systems. Overall, this course of action is not expected to have an undue adverse impact on

floodplains or wetlands.

Alternative 1: Provide Financial Assistance to Agribusinesses and Farmers to Install PVS and BSS Outside the Floodplains

This alternative was considered for applicants who may relocate to reduce their exposure to flooding risks. The relocation program may allow eligible applicants to move their operations from a site within the 100-year floodplain to a new site outside the floodplain, assuming they meet the program's criteria. However, the number of applicants willing to relocate is uncertain. Socio-economic factors will likely influence the decision, with most applicants expected to remain on their existing properties. Additionally, the economic feasibility of relocations could be limited by funding constraints, making this alternative potentially impractical for many applicants.

Alternative 2: Establish Shared Renewable Energy Facilities Outside Floodplains

This option would consider the development of centralized photovoltaic and battery storage installations in non-floodplain areas to serve nearby farms via shared infrastructure or microgrids. This could reduce the number of installations within floodplains while achieving similar energy resilience outcomes. Limitations and drawbacks include:

High Infrastructure Costs

- Shared energy hubs would require new transmission infrastructure, including underground cabling, substations, smart meters, and control systems.
- These systems introduce complex engineering challenges and will result in substantially higher upfront capital costs than on-site systems.

Land Availability and Acquisition Challenges



- Suitable parcels outside floodplains must be identified, acquired, and permitted — a process that is often lengthy, costly, and administratively burdensome.
- In rural Puerto Rico, land near farms that is both non-flood-prone and not in agricultural use is limited, making site selection difficult.

Reduces Resilience Benefits for Individual Farms

- In contrast to on-site PVS and BSS, shared systems may not provide full backup capability during disasters if transmission links are damaged.
- Farms may still experience downtime or be dependent on a central system's operability.

While this alternative has environmental benefits, its practical implementation challenges, cost barriers, and reduced resilience and flexibility for individual farms make it less feasible and less aligned with the AES Program's goals.

Alternative 3: No Action

Under the "No Action" alternative, the AES Program would not provide funding for renewable energy installations in agricultural operations across Puerto Rico. While this approach would not result in immediate environmental impacts, it presents several risks and drawbacks:

- **Impact on Energy Resilience:** Without renewable energy systems, agricultural businesses would remain vulnerable to frequent power outages, especially in the context of Puerto Rico's susceptibility to hurricanes and extreme weather. This could disrupt operations and undermine food security and supply chain, particularly after disasters.
- **Economic Consequences:** Many agricultural operations would likely face increased operational costs due to unreliable power and potentially costly



fossil fuel backup options. This could lead to higher food prices and negatively affect the island's economic stability.

- Environmental Implications: Without renewable energy installations, Puerto Rico would continue to rely on its fossil-fuel-based power grid, contributing to ongoing greenhouse gas emissions and other pollutants associated with traditional power generation.

Thus, the "No Action" alternative is considered inconsistent with the AES Program's objectives, which prioritize energy reliability, environmental sustainability, and resilience in the face of natural disasters.

In conclusion, the evaluation of alternatives for renewable energy installations in floodplains and wetlands reveals a balance between environmental protection and energy resilience. The selected course of action—providing financial assistance for PVS and BSS in floodplains—aims to enhance energy reliability while adhering to environmental regulations. Site-specific outcomes, ranging from no impact to potential impacts on Special Flood Hazard Areas (SFHAs) or wetlands, will guide the evaluation process.

The relocation and microgrids alternative presents challenges due to feasibility, land and funding constraints, while the "No Action" alternative fails to meet the program's goals of improving energy resilience and sustainability. Overall, the proposed course of action minimizes environmental impacts while strengthening the agricultural sector's energy independence and disaster resilience.

Step 4:

Identify the Impacts of the Proposed Action(s)

Floodplains in Puerto Rico, including both riverine and tidal areas, as well as wetlands (comprising both saltwater and freshwater types), are vital components of the local ecosystem. Wetlands serve as natural filters by trapping sediment and absorbing



pollutants from rainfall runoff before they reach coastal waters. Both floodplains and wetlands offer essential ecological services, such as floodwater conveyance, habitat for diverse flora and fauna, and opportunities for recreational and scientific activities (e.g., hunting and species research).

The Agro-Energy Stability Program is designed to foster economic growth by enhancing agro-industrial infrastructure. However, it must adhere to strict guidelines outlined in the U.S. Department of Housing and Urban Development (HUD) regulations, particularly 24 CFR Part 55 (Floodplain Management and Protection of Wetlands), which govern activities within floodplains and wetlands. These regulations aim to safeguard these ecosystems by restricting actions in floodways and wetlands, ensuring development does not disrupt or degrade these important resources.

In accordance with the new FFRMS, HUD regulations specifically prohibit actions in floodways unless the use is functionally dependent—an exemption that does not apply to properties under the PRDOH CDBG-MIT Program. Specifically, 24 CFR Part 55.1 prohibits HUD financial assistance for:

- Any action located in a floodway, unless it is a functionally dependent use (none of the properties under the PRDOH CDBG-MIT Program qualify for this exemption).
- Any non-critical action in a coastal high hazard area, unless the action is designed to be located in such an area (V-zone compliant) or is functionally dependent.

Impacts of the Proposed Actions on Floodplains and Wetlands

The potential impacts of the proposed actions on floodplains and wetlands are as follows. Any applicant with property located in the 100-year floodplain (as identified on FEMA's Flood Insurance Rate Map [FIRM]) will be required to maintain flood insurance at levels specified by the National Flood Insurance Program (NFIP) as a condition of participation in the program.

Compliance with FFRMS and Wetlands Protection for PVS and BSS



The installation of PVS and BSS must comply with FFRMS and wetlands protection requirements. To minimize impacts on water and wetland resources, these structures will be elevated, and impervious surfaces will be avoided within and adjacent to the floodplain. The following measures will be taken to ensure compliance:

- **Elevated structures:** PVS and BSS will be installed on elevated structures to avoid direct encroachment into floodplains and wetlands. This approach minimizes any negative impact on natural flood and erosion control processes while preserving water quality and supporting groundwater recharge.
- **Site design:** The subrecipient is required to ensure that the site plan preserves the natural flow of floodwaters and erosion control mechanisms, while also preventing water contamination and ensuring proper management of stormwater runoff. The site plan must also minimize any negative impacts on wetland areas.
- **Mounting solutions:** If the property has an existing structure that could support the PVS or BSS, such as a roof, this should be considered before opting for alternative mounting solutions such as ground-mounted, pole-mounted, or canopy-mounted systems. This approach reduces additional land use within the floodplain or wetlands.

Best Management Practices (BMPs)

To minimize adverse impacts from stormwater runoff, best management practices (BMPs) will be incorporated into the design of the installations. These BMPs will ensure that the systems are properly managed and maintained to prevent any negative environmental effects over time.

Flood Insurance Requirements

As part of the program, all applicants with properties in the 100-year floodplain (as indicated on FEMA's FIRM) must comply with the flood insurance requirements specified by the NFIP. This ensures that participants are adequately protected against flood risks and adhere to federal regulations.

**Step 5:**

Minimize Threats to Life and Property and to Natural and Beneficial Floodplain Values. Restore and Preserve Natural and Beneficial Floodplain Values

To safeguard both property and the environment, all equipment will be installed in structures elevated to meet the FFRMS for floodplain management. This approach ensures that installations are designed to minimize any adverse impacts on the floodplain and its associated resources.

By adhering to these standards, the program helps to maintain the integrity of the floodplain ecosystem, safeguarding its natural and beneficial functions. These include water quality protection, habitat provision, floodwater storage, and erosion control, all of which are crucial to sustaining the local environment and mitigating future flood risks. The program's requirements are structured to minimize threats to both life and property, while also preserving the ecological benefits provided by floodplains.

In this way, the program strikes a balance between promoting sustainable development and ensuring the preservation of floodplain values, consistent with federal floodplain management regulations.

Step 6:

Re-evaluate Alternatives

PRDOH has determined that the most practicable alternative on a programmatic level is the Selected Course of Action; Provide Financial Assistance for the agribusinesses and farmers to invest in renewable energy development to ensure a steady and reliable energy supply chain vital to the food and agriculture industry sector. This course of action best meets the requirement of the Program, which include aims to foster economic development by enhancing agro-industrial capacity and infrastructure to support more resilient operations. This course of action also best addresses Puerto Rico's need for resilient and dependable



renewable energy solutions across all types of agricultural operations on the island.

Alternative 1 (Relocation Outside the Floodplain) was not selected because it would likely require agribusinesses and farmers to relocate outside their communities, which could disrupt their operations and connections to the local economy. Additionally, this alternative does not align with the program's goals of strengthening agro-industrial capacity and infrastructure to foster more resilient and sustainable operations.

Alternative 2 (Shared Renewable Energy Facilities Outside Floodplains) Although this approach could reduce environmental impacts by avoiding construction in flood-prone areas, it was determined to be less feasible for broad implementation. The costs associated with building the necessary transmission infrastructure are significantly higher than individual installations, and suitable land outside of flood zones that is near existing farms is both limited and difficult to acquire. Furthermore, this model offers less energy resilience for individual farms, which would remain dependent on the centralized system's operability, particularly in disaster scenarios when connectivity could be disrupted. For these reasons, the microgrid option does not align with the AES Program's goals of delivering timely, site-specific energy resilience, and was therefore not selected as the preferred alternative.

Alternative 3 (No Action) was not selected because it would fail to provide agribusinesses and farmers with the financial support needed to invest in renewable energy solutions, limiting their ability to improve energy accessibility and resilience, particularly in underserved areas. Without this support, the agricultural sector would remain vulnerable to energy instability and challenges arising from disasters. Additionally, this alternative would not address the critical food and agriculture supply chain disruptions that often occur in the aftermath of emergency events or disasters.

Step 7:

Issue Findings and a Public Explanation



It is our determination that there is no practicable alternative to Provide Financial Assistance to Agribusiness and Farmers to invest in renewable energy development. This is due to:

- 1) The need to provide reliable energy;
- 2) The desire to not displace agribusiness and farmers; and
- 3) The ability to mitigate and minimize impacts on human health, public property, and floodplain and wetlands values.

A “Notice of Policy Determination” will be published in accordance with 24 CFR 55, for a 7-day comment period. The notice will state the reasons why the project must be in the floodplain, a list of alternatives considered, and all mitigation measures to be taken to minimize adverse impacts and preserve natural and beneficial floodplain values.

Any comments received by the PRDOH will be addressed specifically with the public.

Appendix A, Attachment 4 contains the notice as published in the circular. **Appendix A, Attachment 5** includes the letter sent to interested parties. See **Appendix A, Attachment 6** for the Step seven notice and comments received / answered.

Step EIGHT:

Implement the Action

In this step, the proposed alternative is put into action. The Puerto Rico Department of Housing (PRDOH) will oversee and ensure that all mitigation measures outlined in the previous steps are effectively implemented. During the Tier II Environmental Review process, the PRDOH will conduct thorough monitoring to confirm that these measures are adhered to, addressing any potential environmental impacts and ensuring compliance with established guidelines.





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Appendix A

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Attachment I

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Attachment 2

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From: CDBG - Convenios Ambiental
To: Jose A. Codencillo@hud.gov; Donna M. Mahon@hud.gov; Caribbean_es@hvs.gov; Lourdes_Pena@hvs.gov; xavier.gonzalez@ca.amm.com; osborn@ca.amm.com; cesar.cortez@ca.amm.com; lina.ribeiro@hvs.gov; camden@ca.amm.com; alex.silverman@hvs.com; nris.servicio.consultations@noia.gov; FEMA-R4C1.P@fema.dhs.gov; caribio@pr.gov; comunicaciones@ddcc.pr.gov; Rodolfo@elaz@hvs.com; Gobierno.comunicacion@hvs.com; secretaria@ddcc.pr.gov; jennifercalderon@hvs.com; jennifercalderon@hvs.com; portugal@hvs.com; ayudacivildesastres@hvs.com; anais.cortez@hvs.com
Subject: Public Notice – Early Notice and Public Review of a Proposed Activity in a Federal Flood Risk Management Standard Designated Floodplain and Wetland, JTRCH-CDBG-MIT-Proposed Projects under the Agro-Energy Stability Program
Date: Tuesday, March 11, 2025 2:39:15 PM
Attachments: Early Notice - Primera Hora - AES Proposed Projects.pdf
mace002.png

Conferencia de prensa

Enclosed please find a **Public Notice – Early Notice and Public Review of a Proposed Activity in a Federal Flood Risk Management Standard Designated Floodplain and Wetland**, the Puerto Rico Department of Housing (as the responsible entity) published as part of HUD's requirements for the release of CDBG-MIT funds to undertake the Proposed Projects under the Agro-Energy Stability Program. The Early Notice was published in the *Primera Hora* newspaper of Puerto Rico on March 11, 2025.

Respectfully,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION

Disaster Recovery Office

caribbean@hvs.com | 787/274-2527

www.recuperacion.pr.gov

Contact us: info@hvs.com



DEPARTAMENTO DE LA
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Attachment 3

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Validation Letter

March 27, 2025

To whom it may concern,

This letter is to validate that no comments were received in the Permits and Environmental Compliance Division e-mail: comentariosambiental@vivienda.pr.gov, for the **Proposed Projects under the Agro-Energy Stability Program**, as part of the CDBG-MIT Agro-Energy Stability Program, also referred as Farm & Energy Resilience Program. The Early Notice and Public Review of a Proposed Activity in a Federal Flood Risk Management Standard Designated Floodplain and Wetland was published in the *Primera Hora* newspaper of Puerto Rico on March 11, 2025, with a comment period that concluded on March 26, 2025.

Cordially,

Permits and Environmental Compliance Division
Disaster Recovery Office
comentariosambiental@vivienda.pr.gov | 787.274.2527 ext. 4320

CDBG-DR Puerto Rico Program | PO Box 21365, San Juan, Puerto Rico 00928-1365 | infoCDBG@vivienda.pr.gov | www.recuperacion.pr.gov | 787-274-2527

CDBG-DR Puerto Rico Program | PO Box 21365, San Juan, Puerto Rico 00928-1365 | infoCDBG@vivienda.pr.gov | www.recuperacion.pr.gov | 787-274-2527





To: Kenneth M. García-De León <kgarcia@vivienda.pr.gov>
Subject: Comentarios - Aviso Preliminar - Proyectos Propuestos bajo el Programa para la Estabilidad Agroenergética

Soludos compañeros,

Con respecto a la publicación del Aviso Preliminar y Revisión Final de una Actividad Propuesta en un sitio habilitado designado del Estándar Federal para el Manejo de Riesgo por inundación y humedad (Paso 2) para los **Proyectos Propuestos bajo el Programa para la Estabilidad Agroenergética**, ¿habrá llegado algún comentario a través del correo postal? De ser así, por favor nos lo hace llegar.

Cordialmente,

**PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION
 Disaster Recovery Office**

comer.procedimientos@vivienda.pr.gov /872-2522

www.vivienda.pr.gov

Comer.us@recuperacion.pr.gov



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From: [Kenneth M. García-De León](#)
To: [CDJC - Comentarios Ambientales](#)
Subject: RT: Comentarios - Aviso Preliminar - Proyectos Propuestos bajo el Programa para la Estabilidad Agroenergética
Date: Thursday, March 27, 2025 12:04:19 PM
Attachments: [inmate02.png](#),
[inmate03.png](#)

Saludos,

Por correo postal, he llegado comentarios para mandarlos proyecto.

Quedo en espera,

KENNETH M. GARCÍA DE LEÓN
ESPECIALISTA EN CONTROL DE DOCUMENTOS | OPERACIONES
Oficina de Recuperación de Desastres
kgarcia@vivienda.pr.gov | 787-274-2527 Ext. 7019
www.recuperacion.pr.gov
 Correo electrónico: kgarcia@vivienda.pr.gov



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From: CDJC - Comentarios Ambientales <comentariosambiental@vivienda.pr.gov>
Sent: Thursday, March 27, 2025 11:40 AM





Attachment 4

CDBG-DR Puerto Rico Program | PO Box 21365, San Juan, Puerto Rico 00928-1365 | infoCDBG@vivienda.pr.gov | www.recuperacion.pr.gov | 787-274-2527







DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO



Attachment 5

CDBG-DR Puerto Rico Program | PO Box 21365, San Juan, Puerto Rico 00928-1365 | infoCDBG@vivienda.pr.gov | www.recuperacion.pr.gov | 787-274-2527





DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO



Mireynalis Feliciano-Mendoza

From: CDBG - Comentarios Ambiental
Sent: Thursday, April 3, 2025 2:19 PM
To: Jose.A.CedenoMaldonado@hud.gov; Donna.M.Mahon@hud.gov; Caribbean_es@fws.gov; Lourdes_Mena@fws.gov; vivian.garena@usace.army.mil; nelson.r.colon@usace.army.mil; cesaa-cco@usace.army.mil; Rivera_r1@jp.pr.gov; comentariosjp@jp.pr.gov; Noah Silverman@noaa.gov; nmsfseriesa.consultations@noaa.gov; FEMA-RIEHP@fema.dhs.gov; carubio@prshpo.pr.gov; comunicaciones@ddec.pr.gov; Rodriguez.elias@epa.gov; Guerrero.carmen@epa.gov; secretario@dddec.pr.gov; jennira.colon@dddec.pr.gov; pmzc@dma.pr.gov; eortega@dma.pr.gov; ayudaciudadano@dma.pr.gov; waldemar.quiles@dma.pr.gov
Subject: Public Notice – Final Notice and Public Explanation of a Proposed Activity in a Federal Flood Risk Management Standard Designated Floodplain and Wetland FER Tier 1
Attachments: Public Notice_Primer Hora_AES (FER) Tier 1 Step 7 Final Notice.pdf

Concerned agencies,

Enclosed please find a **Public Notice – Final Notice and Public Explanation of a Proposed Activity in a Federal Flood Risk Management Standard Designated Floodplain and Wetland** the Puerto Rico Department of Housing (as the Responsible Entity) published as part of HUD's requirements for the release of CDBG-MIT funds to undertake the project Proposed Projects under the Agro-Energy Stability Program (FER Tier 1). The final Notice was published in the Primera Hora newspaper of Puerto Rico on April 3, 2025.

Respectfully,

PERMITS AND ENVIRONMENTAL COMPLIANCE DIVISION
Disaster Recovery Office
comentariosambiental@vivienda.pr.gov | 787.274.2527
Visit us: recuperacion.pr.gov
Contact us: infocdbg@vivienda.pr.gov



DEPARTAMENTO DE LA
VIVIENDA
GOBIERNO DE PUERTO RICO

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DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO



Attachment 6

CDBG-DR Puerto Rico Program | PO Box 21365, San Juan, Puerto Rico 00928-1365 | infoCDBG@vivienda.pr.gov | www.recuperacion.pr.gov | 787-274-2527





Validation Letter

April 11, 2025

To whom it may concern,

This letter is to validate that no comments were received in the Permits and Environmental Compliance Division e mail: comentariosambiental@vivienda.pr.gov, for the **Proposed Projects under the Agro-Energy Stability Program**, as part of the CDBG-MIT Agro-Energy Stability Program, also referred as Farm & Energy Resilience Program. The Final Notice and Public Explanation of a Proposed Activity in a Federal Flood Risk Management Standard Designated Floodplain and Wetland was published in the *Primera Hora* newspaper of Puerto Rico on April 3, 2025, with a comment period that concluded on April 10, 2025.

Cordially,

Permits and Environmental Compliance Division
Disaster Recovery Office
comentariosambiental@vivienda.pr.gov | 787.274.2527 ext. 4320

CDBG-DR Puerto Rico Program | PO Box 21365, San Juan, Puerto Rico 00928-1365 | infoCDBG@vivienda.pr.gov | www.recuperacion.pr.gov | 787-274-2527

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DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO



From: Melanie Medina Smaïne
To: CDBG - Comentarios Ambiental
Subject: RF: Comentarios - Aviso Final - Proyectos Propuestos bajo el Programa para la Estabilidad Agroenergética
Date: Friday, April 11, 2025 10:18:34 AM
Attachments: mace002.png;
mace003.png

Buenos días,

Estimado/a participante en el programa de recuperación de desastres, como todos los participantes a cuyo cargo está el Aviso Final y el cierre final de una Actividad Proyectada en el programa de recuperación de desastres designado de Terrestrial Federal para el manejo de riesgo de inundación y humedad (fase 2) como los **Proyectos Propuestos bajo el Programa para la Estabilidad Agroenergética**.

Cordialmente,

MELANIE MEDINA SMAÏNE
RECEPCIONISTA DE PROGRAMA

Oficina de Recuperación de Desastres

mmedina@vivienda.pr.gov 787-274-2527 Do-4007

www.recuperacion.pr.gov

Comentarios: mmedina@vivienda.pr.gov



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From: CDBG - Comentarios Ambiental <comentariosambiental@vivienda.pr.gov>
Sent: Friday, April 11, 2025 10:17 AM
To: Melanie Medina Smaïne <mmedina@vivienda.pr.gov>
Subject: Comentarios - Aviso Final - Proyectos Propuestos bajo el Programa para la Estabilidad





C1: Tier II





Tier II: Site-Specific Review Agro-Energy Stability Program

VI | DRAFT

Project Information	
Grant Number (CDBG-MIT): B-18-DP-72-0002	
Submittal Date: Click or tap to enter a date.	
Application ID #:	
Applicant Name:	
Property Address:	
Municipality: Choose an item.	Year Built:
Parcel ID:	Lat/Long Coordinates:
Inspector name:	Inspection Date: Click or tap to enter a date.
Prepared by:	Date: Click or tap to enter a date.
Preparer Signature	
<p><small>*Approved electronically by the Certifying Officer or Environmental Officer in the System of Record in accordance with the Puerto Rico Electronic Signatures Act (PR E-Sign), enacted on September 16, 2004.</small></p>	
Scope Change? <input type="checkbox"/> N/A (Initial Review) <input type="checkbox"/> Yes, Attach Change Information.	
Project Description	
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Include project description here </div> <p><u>The scope includes (select all that apply):</u></p> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Installation of a Photovoltaic System with a Battery Storage System (PVS+BSS) </div> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Installation of a Battery Storage System for an existing Photovoltaic System (BSS Only) </div> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Expansion of an existing PVS and BSS to address unmet load needs </div> <p><u>Type of installation:</u></p> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Roof mounted </div> <div> <input type="checkbox"/> Ground mounted </div>	

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Tier II: Site-Specific Review Agro-Energy Stability Program

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☐ Pole mounted

☐ Canopy mounted

A location map is required with parcels noted. Maps should include an image of the structure shown, link to the Agency from which the map is obtained (source), and other items in accordance with PRDOH Map Requirements. The project details are shown above. Detailed project descriptions are included in Canopy under the application file in the most recent Project Quote (HA – Project Quote).

The following information and documentation are attached to, and are a part of, this ERR:

- Site Field Observation Report
- Project Work Assessment
- Site Environmental Inspection Photographs
- Tier II figures, including location
- Documentation and/or Consultation, where applicable
- Site-specific mitigation measures are included, unless otherwise noted
- Other information, as needed, to support the environmental review

Tier II Environmental Evaluation, Determination and Compliance Findings

1. Floodplain Management and Flood Insurance [EO 11988; 24 CFR 58.5(b) and 58.6]

Please include the corresponding information for FIRM.
FIRM Flood Zone: **Choose an item..** Include map showing location.
FIRM Panel Number: **Click or tap here to enter text.**
FIRM Panel Effective Date: **Click or tap here to enter text.**

Have Preliminary FIRMs (PFIRM) been developed for the project area? ☐ No ☐ Yes

If yes,

PFIRM Flood Zone: **Choose an item..** Include map showing location, if PFIRM has been developed.

PFIRM Panel Number: **Click or tap here to enter text..**

PFIRM Effective Date: **Click or tap here to enter text..**

Advisory Base Flood Elevation (2018) Flood Zone: **Choose an item.**

Include map showing location.

Is the site within an ABFE Zone A/AE but NOT within a FIRM or PFIRM Zone A/AE? ☐ No ☐ Yes

Federal Flood Risk Management Standard (FFRMS) implementation should be undertaken in accordance with PRDOH guidance for 89 FR 30850 in relation to non-critical activities. PRDOH will apply the 0.2-Percent-Annual-Chance Flood Approach (0.2 PFA) to identify the FFRMS floodplain, and the best available information including the Flood Insurance Rate Map (FIRM), Preliminary Flood Insurance Rate Map (PFIRM), or Advisory Base Flood Elevation (ABFE) maps, whichever is most protective. The rule requires that newly constructed or substantially improved structures within this newly defined floodplain be elevated or floodproofed to this higher FFRMS floodplain elevation.

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Tier II: Site-Specific Review Agro-Energy Stability Program

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1.1: Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination.

Select one of the following three options: (0.2-PFA selected by default)

- ☐ 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.
 - a. Does your project occur in the FFRMS floodplain?
 - ☐ Yes, continue to part b.
 - ☐ No. Review for floodplain management is complete.
 - b. Is your project located in any of the floodplain categories below? Select all that apply. If none apply, continue to question 1.4.
 - ☐ Floodway: Continue to Question 1.2.
 - ☐ Coastal High Hazard Area (V Zone) or Limit of Moderate Wave Action (LiMWA): Continue to Question 1.3.

1.2: Floodways

Do the floodway exemptions at 55.8 or 55.21 apply?

- ☐ Yes → The 8-Step Process is required. Document mitigation measures necessary to meet the requirements in 55.8 or 55.21. Provide a completed 8-Step Process, including the early public notice and the final notice. Continue to Question 1.4.
- ☐ No → Federal assistance may not be used at this location. You must either choose an alternate site or cancel the project at this location.

1.3: Coastal High Hazard Area (V Zone) and LiMWAs

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Tier II: Site-Specific Review Agro-Energy Stability Program

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Do the exemptions at 55.8 or 55.21 apply?

- ☐ Yes → The 8-Step Process is required. Document mitigation measures necessary to meet the requirements in 55.8 or 55.21. Provide a completed 8-Step Process, including the early public notice and the final notice. Continue to Question 1.4.
- ☐ No → Federal assistance may not be used at this location. You must either choose an alternate site or cancel the project at this location.

1.4: 8-Step Process.

Does the 8-Step Process apply? Select one of the following options:

- ☐ No
- ☐ 8-Step Process is inapplicable per 55.13

Select the applicable citation:

- ☐ Special projects for the purpose of improving efficiency of utilities or installing renewable energy that involve the repair, rehabilitation, modernization, weatherization, or improvement of existing structures or infrastructure, do not meet the thresholds for "substantial improvement" under § 55.2(b)(12), and do not include the installation of equipment below the FFRMS floodplain elevation.

- ☐ 8-Step Process applies. Provide a completed 8-Step Process, including the early public notice and the final notice.

1.5 Flood Insurance

Please select one:

- ☐ Not in a 100-year floodplain (A/V or AE/VE zone). Complies with EO 11988, 24 CFR Part 55, and 24 CFR 58.6. Review Concluded.
- ☐ In a 100-year floodplain (A/V or AE/VE zone) and not in a National Flood Insurance Program (NFIP) participating community. Does not comply with EO 11988, 24 CFR Part 55, and 24 CFR 58.6 because required flood insurance is not obtainable. (Ineligible for funding. Application CANNOT Proceed). At the time of the Tier I review; this is not applicable as all of Puerto Rico is participating in the NFIP.
- ☐ In a 100-year floodplain (A/V or AE/VE zone) and in an NFIP-participating community. Is the existing structure and/or the proposed activity in a designated Zone A/AE Floodway area?

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Tier II: Site-Specific Review Agro-Energy Stability Program

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☐ Yes. (Ineligible for funding. Application CANNOT proceed at this location. Stop all activities and Notify Housing and PM) (Attach appropriate floodplain map showing site location.)

☐ No. The structure is not in a Designated Floodway. Proceed to the following question. Does the structure require substantial improvement (repairs equal to or more than 50% of the appraised current market value of the structure [appraisals are required for structures in the floodplain])?

Use calculation for reference:

Project Assessment Value: \$ [Click or tap here to enter text.](#)

Appraised Value: \$ [Click or tap here to enter text.](#)

Substantial Improvement Percentage: % [Click or tap here to enter text.](#)

☐ No. The structure may require elevation and flood insurance if within the effective FIRM. Activity is in general compliance. (Review Concluded)

☐ Yes. (Ineligible for funding. Application CANNOT proceed at this location. Stop all activities and Notify Program and PM)

1.6: Mitigation

For the project to comply with this section, all adverse impacts must be mitigated. Explain in detail the measures that must be implemented to mitigate the impact or effect. Note: newly constructed and substantially improved structures within the FFRMS floodplain must be elevated to the FFRMS floodplain elevation or floodproofed, if applicable.

Include all documentation supporting your findings in your submission to HUD

1.6.1 Are formal compliance steps or mitigation required?

☐ Yes. Continue to Question 1.6.2.

☐ No.

1.6.2 Which of the following if any mitigation/minimization measures have been identified for this project in the 8-Step? Select all that apply.

☐ Insurance purchased in excess of statutory requirement under the Flood Disaster Protection Act of 1973

☐ Floodproofing of structures as allowable

☐ Elevating structures

☐ Other: [Click or tap here to enter text.](#)

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Tier II: Site-Specific Review Agro-Energy Stability Program

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Summary: Compliance Determination

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

- Information on other data or tools used or accessed
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

2. Wetlands (EO 11990)

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

The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.

- ☐ No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.
- ☐ Yes → Continue to Question 3.2.

2.2 Will the new construction or other ground disturbance impact an on- or off-site wetland?

- ☐ No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.
- Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.
- ☐ Yes, 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. Provide a completed 8-Step Process as well as all documents used to make your determination, including a map. Be sure to include the early public notice and the final notice with your documentation.

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Tier II: Site-Specific Review Agro-Energy Stability Program

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2.3 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.

3. Endangered Species Act (16 USC 1531 et seq., 50 CFR Part 402)

3.1 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.

→ Based on the response, the review is in compliance with this section. Continue to the Summary below. Provide any documents used to make your determination.

☐ Yes, the activities involved in the project have the potential to affect species and/or habitats.
→ Continue to Question 3.2.

3.2 Are federally listed species or designated critical habitats present in the action area? Obtain a list of protected species from the Services.

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

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

☐ Yes, there are federally listed species or designated critical habitats present in the action area.
→ Continue to Question 3.3.

3.3 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.

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation

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Tier II: Site-Specific Review Agro-Energy Stability Program

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should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.

- ☐ May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant. → Continue to Question 3.4, Informal Consultation.
- ☐ Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat. → Continue to Question 3.5, Formal Consultation.

3.4 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. Continue to Question 3.6 and provide the following:
 - (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. → Continue to Question 3.5.

3.5 Formal consultation is required

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

- Once consultation is complete, the review is in compliance with this section. Continue to Question 3.6 and provide the following:
 - (1) A biological assessment, evaluation, or equivalent document
 - (2) Biological opinion(s) issued by FWS and/or NMFS
 - (3) Any other documentation of formal consultation

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Tier II: Site-Specific Review Agro-Energy Stability Program

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☐ No mitigation is necessary

☐ Mitigation is necessary. Explain in 3.6.

3.6 For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that will be implemented to mitigate for the impact or effect.

4. Historic Preservation (36 CFR Part 800)

4.1 Puerto Rico State Historic Preservation Office

4.1.1 Is consultation with the SHPO for Historic Buildings and Structures necessary?

☐ No. Activity(es) is listed in the Programmatic Agreement (PA) Stipulations, or the Programmatic Allowances specified in the Programmatic Agreement (PA) can be applied to HB&S.

◇ Activity meets PA Stipulation(s): [Click or tap here to enter text.](#) Review for HB&S Concluded.

◇ Activity meets Tier I Programmatic Allowance: [Click or tap here to enter text.](#) Review for HB&S Concluded.

◇ Activity meets Tier II Programmatic Allowance: [Click or tap here to enter text.](#) Review HB&S Concluded. Name of SOI-Qualified Professional(s): [Click or tap here to enter text.](#) Continue to Archaeological Resources

☐ Yes. Consultation was necessary as the project could not be cleared based on allowances outlined in the PA.

Continue with the questions below.

◇ "No Historic Properties Affected", determination on file (SHPO) HB&S Review Concluded.

◇ Individual historic properties or historic districts are located within the Area of Potential Effects.

Page 9 of 19





Tier II: Site-Specific Review Agro-Energy Stability Program

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- ☐ No Adverse Effect Determination (Document SHPO determination). Are project conditions required?
- ◇ No. HB&S Review Concluded
 - ◇ Yes. (Attach conditions) HB&S Review Concluded.
- ☐ Adverse Effect Determination (SHPO determination on file).
- ◇ Mitigation is not possible. (Ineligible for funding. Application CANNOT proceed.)
 - ◇ Resolution of Adverse Effect complete.
 - ☐ Standard Treatment Measure(s) listed in PA Applied (Document SHPO determination) HB&S Review Concluded.

4.2 Archaeological Resources (AR)

4.2.1 Are any ground-disturbing activities occurring for this project?

- ☐ No. All activities are occurring on the roof of the structure or on the exterior wall with no ground disturbance. (Review for AR Concluded)
- ☐ Yes. (STOP. Work is outside specified boundaries of work scope. SHPO Consultation may be required).

4.3 National Historic Landmark (NHL)

4.3.1 Does the project involve a National Historic Landmark?

- ☐ No. (NPS Review Concluded)
- ☐ Yes. NPS consultation necessary. (Continue with the questions below.)
- ◇ National Park Service National Historic Landmarks Program Manager notified and provided appropriate project documentation. (Document NPS consultation)
 - ☐ No Adverse Effect Determination.
- Are project conditions required?
- ◇ No. (NPS Review Concluded)

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☐ Yes. (Attach conditions.) (NPS Review Concluded)

☐ Adverse Effect Determination (Document NPS determination).

☐ Mitigation is not possible. (Ineligible for funding. Application CANNOT Proceed.)

☐ Resolution of Adverse Effect completed.

☐ MOA on file.

Are project stipulations required?

☐ No. (NPS Review Concluded)

☐ Yes. (Attach conditions.) (NPS Review Concluded)

Summary

Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.

5. Toxic Chemicals and Gases, Hazardous Materials, Contamination, and Radioactive Substances (24 CFR Part 58.5(i)(2))

5.1 Are there any recognized environmental conditions (REC), such as obvious signs of hazardous, toxic, or radioactive materials or substances as observed on the site from the public right of way during the site visit (by the inspector performing the visit in accordance with a Field Observation Report) that could adversely impact the project activity where the specified REC could affect the health and safety of occupants or conflict with the intended utilization of the site?

☐ No. (Continue with Findings from review of regulatory databases and other information sources.)

☐ Yes. (If "yes", attach documentation and continue to the next question.) Application may require additional investigation.

Can mitigation resolve the impact of the REC?

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◇ Yes. Describe mitigation and continue below. [Click or tap here to enter text.](#)

◇ No. (Ineligible for funding. Application CANNOT proceed.)

5.2 Findings from review of regulatory databases and other information sources. Attach regulated facilities figures.

5.2.1 Is the site within **3,000 feet** of a listed Solid or Hazardous Material facility, landfill, or potentially contaminated area?

☐ No. Based on limited site observations made in support of this ERR and review of the listed sources of information, the applicant site DOES NOT appear to be impacted by hazardous, toxic, or radioactive materials or substances where the specified hazard could affect the health and safety of occupants or conflict with the intended utilization of the site. (Proceed to Lead-based Paint and Asbestos questions below.)

☐ Yes. There are sites of environmental concern identified within 3000 feet. Describe the sites following.

Facility Name	Facility Type	Topic ID	Compliance Status	Status	Distance from Subject site (feet)

◇ None of the sites of concern are within 500 feet of the project activity site. Based on review of regulatory databases and other information sources, the applicant site DOES NOT appear to be located proximate (within 500 feet) to a site(s) of environmental concern or have any identified environmental concerns that could impact the site. This conclusion is based on NEPAAssist 500 ft buffer.

◇ The environmental site(s) of concern is within 500 feet of the project activity with no discernable effect. Based on topography and/or distance (or other factors), it DOES NOT appear that the application site is likely to have been impacted by the site(s) of environmental concern to a degree where the hazard could affect the health and safety of occupants or conflict with the intended utilization of the property. This conclusion is based upon [Click or tap here to enter text.](#)

◇ The applicant site is near environmental concern site(s) with potential adverse effect. Based upon the location of the applicant site and the site(s) of environmental concern, it DOES appear likely that there has been or could be an impact by the site(s) of environmental concern to a degree where the hazard could affect the health and safety of occupants or conflict with the intended utilization of the property.





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Can the area of environmental concern be mitigated, or specific actions placed such that the area of concern does not affect the health and safety of occupants or conflict with the intended utilization of the property?

- ☐ Yes. Coordination with the Regulatory Agency has determined specific actions needed for compliance. Mitigation measures and/or specific actions needed for compliance will allow use of the project site. (Document coordination.) (Review Concluded)
- ☐ No. Environmental concerns cannot be mitigated. Project activity cannot proceed at this time. (Stop All Work and notify Certifying Officer.)

5.3 Radon: In compliance. HUD and consulted agencies agreed with the PRDOH position that radon testing is not feasible, and no further site evaluation is required. (Radon Review Concluded. Continue Review)

5.4 Asbestos Review: In compliance. A test for asbestos for this project activity is not required as the activities fall under the minimum regulatory limit outlined in the EPA National Emission Standards for Hazardous Air Pollutants standard for demolition and renovation (40 CFR 61.145) and Puerto Rico Law 9 of June 18, 1970. (Asbestos Review Concluded. Continue Review)

5.6 Lead-Based Paint Review:

Structure built year (or Unknown): [Click or tap here to enter text.](#)

5.6.1 Was the structure built after January 1, 1978, or otherwise meet any exemptions at 24 CFR 35.115?

- ☐ Yes. (Document exemption.) (LBP Review Concluded; continue to Asbestos Review)
- ☐ No. (Continue)

Are significant paint disturbances (more than 20 square feet of exterior surface, more than 6 square feet of any interior room, or prohibited or restricted work practices) expected as part of the project's activities?

- ☐ No. Require a screen for lead-based paint requirements prior to starting the work.
- Work must be performed by RRP Certified Renovation Firm.
 - At least one RRP-Certified Renovator must be at the job site or available when work is being done.
 - Workers at the job site must receive on-the-job training from the Certified Renovator.
 - Lead Safe Work Practices are recommended if paint disturbance is "di minimis".
 - Lead Safe Work Practices are required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold.

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<ul style="list-style-type: none"> Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work if paint disturbance is significant. (LPB Review Concluded) <p><input type="checkbox"/> Yes. Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work. (LBP Review Concluded)</p> <p>Notes</p> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
<p>6. Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]</p> <p>6.1 Is the project located in a CBR Unit?</p> <p><input type="checkbox"/> No → Based on the response, the review is in compliance with this section. Provide a map showing that the site is not within a CBR Unit.</p> <p><input type="checkbox"/> Yes → Project cannot proceed at this location. Activities are ineligible for funding as they do not meet an exception permitted under 16 USC 3505). Include map showing specific CBR.</p>
<p>7. Airport Hazards [24 CFR 51 Subpart D]</p> <p>7.1 Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?</p> <p><input type="checkbox"/> No → Based on the response, the review is in compliance with this section. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.</p> <p><input type="checkbox"/> Yes → Continue to Question 7.2.</p> <p>7.2 Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?</p> <p><input type="checkbox"/> Yes, project is in an APZ → Continue to Question 7.3.</p> <p><input type="checkbox"/> Yes, project is an RPZ/CZ → Project cannot proceed at this location.</p>

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☐ No, project is not within an APZ or RPZ/CZ. → Based on the response, the review is in compliance with this section. Provide a map showing that the site is not within either zone.

7.3 Is the project in conformance with DOD guidelines for APZ?

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

Explain how you determined that the project is consistent:

8. Coastal Zone Management [Coastal Zone Management Act, Sections 307(c) & (d)]

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

☐ Yes → Continue to Question 8.2.

☐ No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

8.2 Does the proposed photovoltaic solar installation meet one of the following conditions?

- For rooftop-mounted systems: the system capacity is 1 megawatt (MW-AC) or less.
- For ground-mounted systems: the system capacity is 100 kilowatts (kW) or less.

☐ Yes → The project does not require a construction or use permit and is consistent with Puerto Rico Planning Board Resolution JP-2024-004. Based on the response, the review is in compliance with this section.

☐ No → The project may require a construction or use permit; further review is necessary.

9. Farmland Protection [7 CFR 658]

In compliance. The AES Program improves agricultural operations, from lowering energy costs and reducing dependency on external power sources to increasing the farm's resilience to natural events and power disruptions. This is necessary for maintaining and enhancing farm operations,

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aligning with FPPA's intention to support agricultural uses of farmland. Compliance determined in Tier I Environmental Assessment.

10. Wild and Scenic Rivers [36 CFR 297]

10.1 Is the project activity within one of the following Municipalities: Río Grande, Luquillo or Naguabo?

☐ No → Project activity will not affect a Wild and Scenic River. Based on the response, the review is in compliance with this section.

☐ Yes. → Continue. (Attach map showing location and distance to the nearest Wild and Scenic River).

10.2 Are all project activities to take place only on the pre-existing structure?

☐ Yes. → Project will not impact a Wild and Scenic River. (Review Concluded)

☐ No. → Continue to Question 10.3

10.3 Is the project activity to occur within 1 mile of the banks of the Wild and Scenic Rivers? Attach map (distance shown in miles or feet if within 1 mile).

☐ No. (Review Concluded)

☐ Yes. (Continue.)

10.4 Is there any potential for the creation of sediment or runoff that may impact the stream?

☐ No. (Review Concluded)

☐ Yes. Mitigation measures for protection of Wild and Scenic Rivers are required. (Review Concluded)

Summary





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Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.

11. Explosive and Flammable Hazards [24 CFR 51C]

Summary

Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.

This project activity would have no impact on residential density or the inclusion of new residents in areas near Hazardous Operations. The structures on which this project activity will occur are already existing. Compliance determined in Tier I Environmental Assessment.

12. Air Quality [(Clean Air Act, Sections 176 (c) & (d), & 40 CFR Part 6, 51, & 93)]

Summary

Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.

There are some locations within Puerto Rico that are in non-attainment areas. However, it has been determined that the project activities would not result in a violation of those regulations. Compliance determined in Tier I Environmental Assessment.

13. Noise Abatement and Control [24 CFR 51 Subpart B]

Summary

Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.

This project activity would have no impact on residential density or inclusion of new residences in noise sensitive areas. The structures on which this project activity will occur are already existing. Compliance determined in Tier I Environmental Assessment.

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14. Sole Source Aquifers [40 CFR 149]
<p>Summary</p> <p>Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>There are no Sole Source Aquifers in Puerto Rico. Compliance determined in Tier I Environmental Assessment.</p> </div>
15. Environmental Justice [Executive Order 12898]
<p>Summary</p> <p>Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>On January 21, 2025, President Trump issued the Executive Order titled "Ending Illegal Discrimination and Restoring Merit-Based Opportunity", which revoked EO 12898 and eliminated federal mandates requiring agencies to assess environmental justice impacts.</p> <p>As a result of this new executive action, there is no longer a federal requirement for the AES Program to evaluate environmental justice concerns as part of its environmental compliance review. The program will continue to adhere to all applicable HUD environmental review standards under 24 C.F.R. Part 58, but will no longer include an environmental justice analysis in its determinations.</p> </div>
16. Magnuson-Stevens Fishery Conservation and Management Act [16 USC 1801 et seq]
<p>Summary</p> <p>Compliance Determination: Provide a clear description of your determination and a synopsis of the information that it was based on.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>In compliance. While some Municipalities may have fishery spawning areas, there are no activities associated with this program that are expected to have any impact on those areas. Compliance determined in Tier I Environmental Assessment.</p> </div>
Environmental Review Determination
Is the project in compliance with applicable laws, regulations, and requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No

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If "No," provide explanation: [Click or tap here to enter text.](#)

Is an Environmental Impact Statement required? ☐ Yes ☐ No

Findings of No Significant Impact (FONSI) can be made. ☐ Yes ☐ No
Project will not significantly affect the quality of the environment.

Are site-specific mitigation measures required for this project? ☐ Yes ☐ No

(If "Yes," identify the site-specific mitigation measures in this checklist and below.)

Site-Specific Mitigation Requirements (Check all that apply):

☐ LBP Testing Required

☐ Other Lead Testing Required (ceramic tile, tile dust, etc.)

☐ Work by RRP Certified Renovation firm and LBP Requirements Screening prior to commencing work:

- at least one RRP-Certified Renovator must be at the job site or available when work is being done.
- workers at the job site must receive on-the-job training from the Certified Renovator.
- lead safe work practices recommended if paint disturbance is "di minimis".
- lead safe work practices required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold.
- if paint disturbance is significant, Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work.

☐ Flood Insurance required

☐ Floodplain Elevation required

☐ Historic Preservation: Specify: [Click or tap here to enter text.](#)

☐ Other mitigation requirements: Specify: [Click or tap here to enter text.](#)

