

## U.S. Department of Housing and Urban Development

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## Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

## **Project Information**

Project Name: PR-ESP-00256 Laboratorio Clinico Tecnolab (Laboratorio Clinico Yaucano

Inc.)

Responsible Entity: Puerto Rico Department of Housing

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

State/Local Identifier: Puerto Rico / Yauco, PR

**Preparer:** Patricia Carmenatty, Environmental Specialist

Behar Ybarra & Associates LLC patricia.carmenatty@byaea.com

787-783-0290

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

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

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

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

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

Consultant (if applicable): Behar Ybarra & Associates LLC

**Direct Comments to:** Puerto Rico Department of Housing at

comentariosambiental@vivienda.pr.gov

**Project Location:** 65 Calle Comercio, Yauco PR, 00698

Coordinates: 18.034439, -66.852865 Parcel cadastral: 361-084-067-07-001

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

The subject property is a commercial building located in Yauco, PR serving as a clinical laboratory. The project is located at 65 Calle Comercio, Yauco PR, 00698, Latitude: 18.034439, Longitude: -66.852865. A Site Map is included in Figure 1 in Appendix 1, illustrating the location of the building. The area is characterized by being urban, near family residences and commercial buildings. The nearest road with access to the building is PR-376.

A field visit was conducted on March 6, 2025, to document existing conditions of the project site. The Field Visit Report is included in Appendix 2. The project scope includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure, with all improvements limited to the roof, floors, and walls of the existing structure. The proposed system includes 44 Solar Panels (400 Watts) and one Tesla Powerwall battery. The system will be interconnected with the LUMA Energy distribution network under the Net Metering Program. The proposed project Scope of Work quote is included in Appendix 3.

### **Level of Environmental Review Determination:**

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

## **Funding Information**

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

**Estimated Total HUD Funded Amount:** \$28,521.60

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$47,536.00

**Privately funded by the applicant:** \$19,014.40

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

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

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE OI & 58.6	RDERS, AND R	EGULATIONS LISTED AT 24 CFR 50.4
Airport Hazards  24 CFR Part 51 Subpart D	Yes No	The project site is not located within 2,500 ft of a civil airport or 15,000 ft of a military airport. The site is located 96,689 feet from the nearest civil airport, Mercedita International Airport in Ponce and 325,338 feet from the nearest military airport, Luis Muñoz Marín International Airport in San Juan. This topic is in compliance with HUD's Airport Hazard Regulations without further evaluation.  Refer to Airports Map Zone, Figure 2
Coastal Barrier Resources  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No	included in Appendix 1.  This project is not located in a CBRS Unit. The project is located 28,309 feet north of the nearest Coastal Barrier Resource System, PR-59. Therefore, this project has no potential to impact on a CBRS Unit and is in compliance
		with the Coastal Barrier Resources Act.  Refer to Coastal Barrier Resource System  Map, Figure 3 included in Appendix 1.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No	As per FEMA's FIRM Panel 72000C1615H, effective April 19, 2005, this project is located within Zone X. The project does not require flood insurance or is excepted from flood insurance. The project is in compliance with the Flood Insurance section without further evaluation.

		Refer to Flood Insurance Rate Map, Figure 4 included in Appendix 1.
STATUTES, EXECUTIVE OF & 58.5	RDERS, AND I	REGULATIONS LISTED AT 24 CFR 50.4
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No	The project is not located in a nonattainment municipality of Puerto Rico (Arecibo, Bayamón, Cataño, Guaynabo, Salinas, San Juan, Toa Baja). The structure located in the Municipio of Yauco, and the project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall. The project activities do not create new sources of air pollution. As described, the project does not involve new construction or a change in land use to facilitate the development of public, commercial, or industrial facilities, nor does it involve five or more dwelling units. Accordingly, under HUD's environmental review procedures, the project is presumed to result in emissions below de minimis levels and is considered compliant with the Clean Air Act (CAA).  The project is located 148,260 feet from the nearest Non-attainment area. The proposed project activities will not create new air emission generator sources. Furthermore, under Puerto Rico's air quality regulations, the project meets the exemption criteria outlined in Rule 206 of the RCAP (1995), Regulation No. 5300, and is therefore in compliance with the Clean Air Act and all applicable federal, state, and local air quality standards. The installation and operation of this project will have no impact and is in compliance with the Clean Air Act without further evaluation.  See attached published list of Puerto Rico Nonattainment/Maintenance Status for each country by year for all criteria pollutants in Appendix 4.

		Refer to Clean Air Map, Figure 5 included in Appendix 1.
Coastal Zone Management  Coastal Zone Management Act, sections 307(c) & (d)	Yes No	The project is located 16,736 feet from the nearest Coastal Zone Management Area and does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.  Refer to CZMA map, Figure 6 included in
Contamination and Toxic Substances  24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No	Appendix 1.  This project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure. The project site was evaluated for potential contamination by conducting a field inspection on March 6, 2025, to identify any onsite hazards including, but not limited to, soil staining, above ground storage tanks, signs of underground storage tanks, odors, hazardous debris, potential contamination regarding lead-based paint or asbestos, etc. The site inspection did not identify any onsite hazards. In addition, a desktop review of USEPA databases, NEPAssist, and other sources was conducted to determine if the project site was located near dump sites, junk yards, landfills, hazardous waste sites, or industrial sites, including USEPA National Priorities List Sites (Superfund sites), CERCLA or state equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. The desktop review finds twenty-one sites within 3,000 feet of the project area. Twelve sites are registered as RCRA facilities, three are registered as RCRA facilities, one as TRIS facility and six as Brownsfields sites (ACRES) facilities with no current cleanup activities.  Sartorius Stedim Filters, Inc – Eco Site

noncompliant under the Clean Water Act for failure to submit the quarterly DMR reports. Even though this is an administrative noncompliance, not necessarily indicating contamination in this facility, an analysis was conducted to confirm whether any potential contamination resulting from stormwater effluents does not have an adverse effect on the safety and health of the end users of the project site. First, the non-compliant site discharges based on the echo report to the Rio Yauco. This river is 1,936 feet from the project site. However, the nearby wetland to the project site is identified as Berrenchín Creek (see Wetlands Map, Figure 14 included in Appendix 1). Even though these systems intersect or connect in various points, Berrenchín Creek is not listed in the 2024 Puerto Rico 305(b)/303(d) Integrated Report (Refer to Appendix 5). Additionally, based on the USGS elevation, the facility with the noncompliance located is 137.06943620052627 ft of elevation, and the project site location for project PR-ESP-00256 is at 126.44302497661111 according to the USGS EPQS included in Appendix 5. Therefore, any potential contamination that may be associated with the reported noncompliance from this facility will not have the potential or likelihood of reaching the project site nor affect the health and safety of the end users of the project.

The sites within 3,000 feet of the project area are:

- ESSO STANDARD OIL CO MUNOZ ESSO SVC, REGISTRY ID: 110009437779, CALLE 25 DE JULIO 19A – RCRAINFO – The site is inactive. No violations identified, 602 feet
- ESSO STANDARD OIL CO PR CO-408, REGISTRY ID: 110004892215, PR-116 CRUCE CUATRO CALLES – RCRAINFO – The site is active. No violations identified, 759 feet

- ESSO STANDARD OIL CO PR 2P-397, REGISTRY ID: 110012259616, 36 25 DE JULIO ST RCRAINFO The site is active. No violations identified, 937 feet
- ESSO STANDARD OIL CO PR CO-402, REGISTRY ID: 110022478335, PR-128 KM 0.6 LA TROCHA FIN – RCRAINFO – The site is active. No violations identified, 1,741 feet
- ESSO STANDARD OIL CO PR DO-395, REGISTRY ID: 110004895711,
   25 DE JULIO ST #21 – RCRAINFO
   The site is inactive. No violations identified, 2,158 feet
- MUNICIPALITY OF YAUCO, REGISTRY ID: 110044243850, SANTIAGO BIBALDI STREET – NPDES – Non-Major: General Permit Covered Facility. The site permit is expired. Compliance Tracking Partially Off, 880 feet
- ORAL-B LABS MANUFACTURING CORP OF PR, REGISTRY ID: 110002466581, PR-335 KM 0.4 – RCRAINFO and TRIS – The site is inactive. No violations identified, 2,720 feet
- PR ARMY NATIONAL GUARD, REGISTRY ID: 110007813553, PR-127 KM 0.7 – RCRAINFO – The site is inactive. No violations identified, 1,430 feet
- PREPA YAUCO TECHNICAL OPERATIONS OFFICE, REGISTRY ID: 110004891467, 49 MATIENZO CINTRO ST INT PR-116 – RCRAINFO – The site is active. No violations identified, 796 feet
- SARTORIUS STEDIM FILTERS, INC – ECO SITE, REGISTRY ID: 110071074880, PR-128 INT. PR-368 KM 2.1 – NPDES – Non-Major: General Permit Covered Facility. The site permit is effective. Violation

- identified. Failure to report DMR, 2,746 feet
- SARTORIUS STEDIM FILTERS, INC. – MB, REGISTRY ID: 110070033311, PR-128 – NPDES – Non-Major: General Permit Covered Facility. The site permit is effective, 2,882 feet
- SHELL CO PR LTD SS 1627 GARAJE SAN JOSE, REGISTRY ID: 110004893036, 68 25 DE JULIO ST – RCRAINFO – The site is inactive. No violations identified, 612 feet
- SHELL CO PR LTD SS 804347 YAUCO, REGISTRY ID: 110007819272, PR-376 KM 0.19 RCRAINFO The site is inactive. No violations identified, 1,744 feet
- TEXACO PR INC JUAN GARCIA PACHECO, REGISTRY ID: 110009437500, 25 JULIO 9 RCRAINFO The site is inactive. No violations identified, 1,609 feet
- YAUCO SS 0493, REGISTRY ID: 110004892741, CALLE 25 DE JULIO – RCRAINFO – The site is inactive. No violations identified, 616 feet
- TROCHA STREET SERVICE STATION, Property ID: 125690, La Trocha Street #1 Yauco, PR 00698 – ACRES - There are no current cleanup activities. 1,541 feet
- RAMILLI THEATER, Property ID: 125702 BETANCES STREET #4 ACRES There are no current cleanup activities, site showed signs of being abandoned for several years. 1,449 feet
- MUÑOZ AUTO PARTS, Property ID: 125689, Corner of Betances Street and Santiago Vivaldi Avenue – ACRES - There are no current cleanup activities. 1,421 feet

- MUÑOZ RIVERA BUILDING, Property ID: 125703 - Luis Muñoz Rivera Street #56 - ACRES - There are no current cleanup activities. 1,098 feet
- FORMER NATALI FAMILY RESIDENCE, Property ID: 125704 Pacheco Street #24 ACRES There are no current cleanup activities. 649 feet
- PUERTO RICO ARMY NATIONAL GUARD ARMORY BUILDING, Property ID: 125685 - State Road PR-127 kilometer 1.0 near the Jacanas Industrial Park – ACRES - There are no current cleanup activities. 2,993 feet

Refer to the ECHO and Facility Reports included in Appendix 5.

The lead-based paint review is subject to the Lead Safe Housing Rule (LSHR) under 24 CFR Part 35, the EPA's Renovation, Repair and Painting (RRP) Rule under 40 CFR Part 745 Subpart E, and Puerto Rico DNER Regulation 9098. A lead-based paint inspection and/or risk assessment is not required if the building was constructed after January 1, 1978. The subject property was built in circa 1968; therefore, it is required to perform a screen for lead-based paint prior to starting the work.

- The work must be performed by RRP Certified Renovation Firm.
- At least one RRP-Certified Renovator must be at the job site or available when work is being done.
- Workers at the job site must receive on-the-job training from the Certified Renovator.
- Lead Safe Work Practices are recommended if paint disturbance is "di minimis".
- Lead Safe Work Practices are required if paint disturbance exceeds

- "di minimis" but not EPA's minor repair and maintenance threshold.
- Property Risk Assessment and abatement of all lead-based paint hazards are required prior to commencing work if paint disturbance is significant.

The proposed activities are minor in scope and involve limited surface penetration (e.g., drilling to mount equipment). They do not include demolition or renovation activities that would disturb significant quantities of ACM. The systems being installed have been consistently evaluated as non-invasive and do not trigger permitting thresholds under NESHAP.

While minimal dust or particulate emissions may result from surface drilling, these emissions are expected to remain well below de minimis thresholds and do not result in the release of regulated asbestos fibers. Additionally, the program does not include new construction or land conversion.

Under Puerto Rico's air quality regulations, these activities qualify for permitting exemptions under Rule 206 of the Regulation for the Control of Atmospheric Pollution (RCAP), Regulation No. 5300, confirming compliance with the Clean Air Act and all applicable federal, state, and local air quality standards.

The Energy Support Incentive Program 2.0 – Set-Aside Program, funded through CDBG-DR, does not involve construction activities that would require a building or use permit. According to Planning Board Regulation 9473, approved on June 16, 2023, Section 9.4.1.3.a.1 states: "Photovoltaic solar installations that are installed on the roofs of structures and whose capacity is up to one megawatt do not require a construction or use permit. Nor will a building permit be required for systems up to one hundred kilowatts above ground."

As such, the proposed activities do not trigger construction permit requirements and do not involve regulated asbestos disturbance. No renovation or demolition activities that would exceed ACM thresholds are included in the program.

On January 11, 2024, HUD issued Notice CPD-23-103, Departmental Policy Addressing Radon in the Environmental Review Process. which requires Responsible Entity (RE) to consider radon as part of the site contamination analysis for projects subject to HUD's contamination regulations at 24 CFR 58.5(i), unless the project qualifies for an exemption. According to the notice, radon must be addressed in environmental reviews for projects involving structures that are or will be occupied for at least four (4) hours per day. The eligible business activities under the Energy Support Incentive Program 2.0 – Set-Aside Program are expected to meet this occupancy threshold and thus would typically require radon consideration as part of the environmental review. However, there is currently no largescale dataset available for Puerto Rico that meets HUD's standards for determining radon hazard levels. On March 6, 2024, the Rico Department of Housing (PRDOH) formally consulted with HUD to document the absence of reliable scientific data and to explain that radon testing in Puerto Rico would be impractical and infeasible. This determination was based on prior research efforts that lacked adequate laboratory support, making it difficult to obtain accurate or consistent results.

Additionally, there is a limited number of trained radon testing professionals on the island, which presents another barrier to compliance with HUD's testing requirements. In response, on May 15, 2024, HUD requested that PRDOH consult with relevant agencies—including the Environmental Protection Agency (EPA), United States Geological Survey (USGS),

		University of Puerto Rico – Mayagüez Campus, and the Puerto Rico Department of Natural and Environmental Resources (DNER)—to further document the lack of scientific data, as outlined in Section III.C. of Notice CPD-23-103. On August 20, 2024, PRDOH conducted formal consultations with the above-mentioned agencies and submitted information requests to state and federal entities. Responses were received from the following: United States Geological Survey (USGS); Centers for Disease Control and Prevention (CDC); Puerto Rico Department of Health; United States Environmental Protection Agency (EPA).  All responding agencies confirmed the absence of reliable, large-scale radon data for Puerto Rico and acknowledged the technical and logistical challenges associated with radon testing on the island. Based on these consultations and findings, radon testing is deemed infeasible and impracticable for the Energy Support Incentive Program 2.0 – Set-Aside Program. Therefore, no further consideration or evaluation of radon is required as part of the environmental review, in accordance with HUD Notice CPD-23-103. Supporting documentation is provided in Appendix 5. In conclusion, after reviewing the program in the context of the site contamination analysis requirements under 24 CFR 58.5(i), PRDOH has determined that radon testing is impractical and infeasible, and no further evaluation is required for radon.  The project is in compliance with Contamination and Toxic Substances requirements.
		Substances, Figure 7 included in Appendix 1.
Endangered Species  Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes No	After reviewing data from the United States Fish and Wildlife Service (USFWS) Information and Planning Consultation (IPaC), the Puerto Rican boa ( <i>Chilabothrus inornatus</i> ) could be found in the project area.

The scope of work includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure. Since the work to be carried out is limited to the roof and wall of the structure, it does not involve any type of ground disturbance or removal of vegetation. The nature of the project, scope of work, information available, a careful analysis of the IpaC, the Caribbean Dkey in the US Fish Service's online Wildlife application, and the observations during the field visit on March 6, 2025, were used to evaluate the potential impacts to federally listed species from this project. Based on the answers provided, a consistency letter was obtained for the Puerto Rican boa which determined that the proposed actions for this project would have "No Effect" (NE) for this species.

The nearest Critical Habitat is 9,922 feet from the project site. USFWS "No Effect" Memo was submitted on May 1, 2025, and an Agency response was received on May 29, 2025. The project is in compliance with the Endangered Species Act of 1973.

If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask them to relocate the Boa. As established by the USFWS Puerto Rican Boa Conservation Guideline. Measures https://ipac.ecosphere.fws.gov/guideline/desi gn/population/156/office/41430.pdf

Refer to Threatened and Endangered Species Map, Figure 8 included in Appendix 1.

See USFWS "No Effect" Memo and supporting documentation in Appendix 6.

Explosive and Flammable Hazards  24 CFR Part 51 Subpart C	Yes No	This project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure and will not result in increased densities, conversion to residential uses, or making a vacant building habitable. The project itself is not the development of a hazardous facility, nor will the project increase residential densities or result in land
		conversion. The project is in compliance with HUD Explosive and Flammable Hazards.
Farmlands Protection  Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes No	The scope of work includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure. This project does not include any activities that could potentially convert agricultural land to non-agricultural use. The project is in a designated area as not prime farmland. The project is in compliance with the Farmland Protection Policy Act.  Refer to Farmland Protection Map, Figure 9 included in Appendix 1.
Floodplain Management  Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No	PFIRMs in Puerto Rico was only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan, Trujillo Alto and Rio Grande. The proposed project is located in the municipality of Yauco. Therefore, PFIRM information is not available for the area and considered in the review.  As per the FEMA Advisory Based Flood Elevation Maps (ABFE), the project site is located within Zone X (area of minimal flood hazard). As the project site is not located within the FEMA-designated Special Flood Hazard Areas for the 1 percent (100-year) or 0.2 percent (500-year) flood zones, it is not classified as being within the floodplain. The project is in compliance with the HUD

		Floodplain Management Regulations and the Executive Order 11988.  Refer to Advisory Base Flood Elevation Map, Figure 10 and Preliminary FIRM Figure 11, included in Appendix 1.
Historic Preservation  National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No	The scope of work includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure. The State Historic Preservation Office reviewed the proposed project location in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) and 36 CFR Part 800: Protection of Historic Properties. Documentation with photographs and maps was subsequently submitted to SHPO (attached Appendix 7). The property is located within the Yauco Traditional Urban Center and was built circa 1968. In response from PR SHPO dated September 12, 2025, SHPO concurred with a finding of "No Adverse Effect" upon historic properties, conditioned that, when installed, the PVS/BSS shall remain not visible or will be minimally visible from the street to be consistent with the related Secretary of the Interior's Standards, Guidelines, and Technical Briefs.  Therefore, this activity is in compliance with the National Historic Preservation Act.  Refer to Historic Preservation Map, Figure 12 included in Appendix 1.
Noise Abatement and Control	Yes No	This project includes the installation of a
Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B		photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) installed on the exterior, on the right-hand wall of the structure. The project does not include new construction for residential use or rehabilitation of an existing residential property. The site is urban developed and there will be no impact to or from the

		surrounding area from a noise perspective. This topic is in compliance with Noise abatement and Control without further evaluation. Refer to Noise Abatement and Control Map, Figure 13 included in Appendix 1.
Sole Source Aquifers  Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No	According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. Therefore, the proposed project site is not located within a sole source aquifer, nor will it directly or indirectly impact one. Therefore, the project is in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 C.F.R. Part 149 without further evaluation.
		Refer to Sole Source Aquifer Map, Figure 14 included in Appendix 1.
Wetlands Protection  Executive Order 11990, particularly sections 2 and 5	Yes No	The project does not involve new constructions and/or activities that may have a direct or indirect adverse impact on any on site wetlands, there are no wetlands within or in the vicinity of the project area. The closest wetland is located 492 feet from the Project Site. The project does not have the potential to impact wetlands. The project is in compliance with E.O. 11990.
		Refer to Wetlands Map, Figure 15 included in Appendix 1.
Wild and Scenic Rivers  Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No	This project is not within proximity of the NWSRS river. The project is located 378,056 feet from the nearest Wild and Scenic River (De la Mina River). The project is in compliance with the Wild and Scenic Rivers Act.
		Refer to Wild and Scenic Rivers Map, Figure 16 included in Appendix 1.

Field Inspection: March 6, 2025, by Egon Gonzalez and Patricia Carmenatty.

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

## **Mitigation Measures and Conditions**

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	<ul> <li>The subject property was built circa 1968; therefore, it is required to perform a screen for lead-based paint prior to starting the work.</li> <li>The work must be performed by RRP Certified Renovation Firm.</li> <li>At least one RRP-Certified Renovator must be at the job site or available when work is being done.</li> <li>Workers at the job site must receive on-the-job training from the Certified Renovator.</li> <li>Lead Safe Work Practices are recommended if paint disturbance is "di minimis".</li> <li>Lead Safe Work Practices are required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold.</li> <li>Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work if paint disturbance is significant.</li> </ul>
Historic Preservation  National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	When installed, the PVS/BSS shall remain not visible or will be minimally visible from the street to be consistent with the related Secretary of the Interior's Standards, Guidelines, and Technical Briefs.

Deter	mination:		
	This categorically excluded activity/project corno circumstances which require compliance w §58.5. <b>Funds may be committed and drawn</b>	ith any of the federal law	s and authorities cited at
$\boxtimes$	EXEMPT project; OR This categorically excluded activity/project circumstances which require compliance with §58.5. Complete consultation/mitigation protoc	one or more federal law	
	publish NOI/RROF and obtain "Authority	to Use Grant Funds" (H	UD 7015.16) per Section
	58.70 and 58.71 before committing or drawing This project is now subject to a full Environme to extraordinary circumstances (Section 58.35)	ntal Assessment according	g to Part 58 Subpart E due
Prenai	rer Signature:	Date: 9/25/2	025
Ттерш	ier signature.	Dute. 9/23/2	023
Name	Title/Organization: Patricia Carmenatty San Environmental Speciali Behar Ybarra & Associ	st,	
Respo	onsible Entity Agency Official Signature:		
			Date:10/7/2025

Name/Title: Janette I. Cambrelén ,Permit and Environmental Compliance Specialist

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



## **Appendices**



### **List of Appendices**

Appendix Number	Appendix Description
1	Figures
2	Field Visit Report
3	Scope of Work Quote
4	EPA's published Summary of Nonattainment Area Population Exposure 1 Report. This is a summary of the 2010 population living in an area that is in nonattainment for at least one of the National Ambient Air Quality Standards (NAAQS). EPA's Published Status of Puerto Rico Designated Areas. This is a summary of Puerto Rico's designated areas by NAAQS and year
5	RADON - Memorandum to File and Supporting documentation, ECHO Reports, USGS EPQS, and 2024 Integrated Report
6	USFWS "No Effect" Memo and supporting documentation
7	Section 106 Consultation Package



**Appendix 1:** Figures



### **List of Figures**

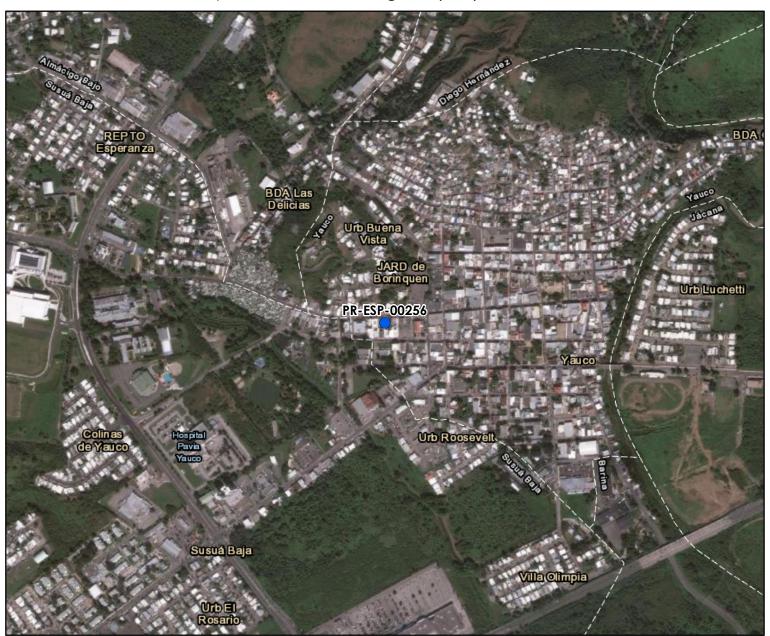
Figure Number	Appendix 1 Description
1	Location: Aerial Map
2	Airports Map
3	Coastal Barrier Resource System Map
4	Flood Insurance Rate Map
5	Clean Air Map
6	Coastal Zone Management Map
7	Toxic and Hazardous Facilities Map
8	Threatened and Endangered Species Map
9	Farmland Protection Map
10	Advisory Base Flood Elevation Map
11	Preliminary Flood Insurance Rate Map
12	Historic Preservation Map
13	Noise Abatement and Control Map
14	Sole Source Aquifer
15	Wetlands Map
16	Wild and Scenic Rivers Map



Location: Aerial Map
Electrical Power Reliability and Resilience Program (ER2)

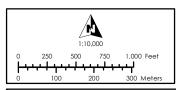
Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001

Lat: 18.034439, Lon: -66.852865



### Legend:

PR-ESP-00256





Service Layer Credits:

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

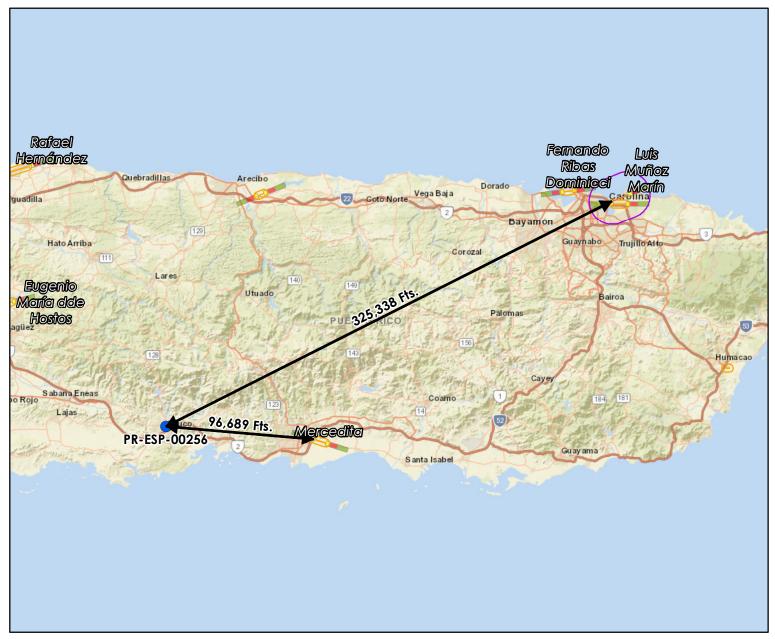
Centro de Recaudación de Ingresos Municipales (CRIM) https://catastro.crimpr.net/cdprpc/

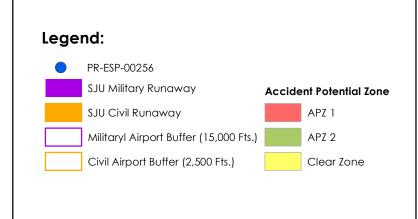


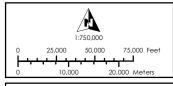
**Airports Map**Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001

Lat: 18.034439, Lon: -66.852865









Service Layer Credits:

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

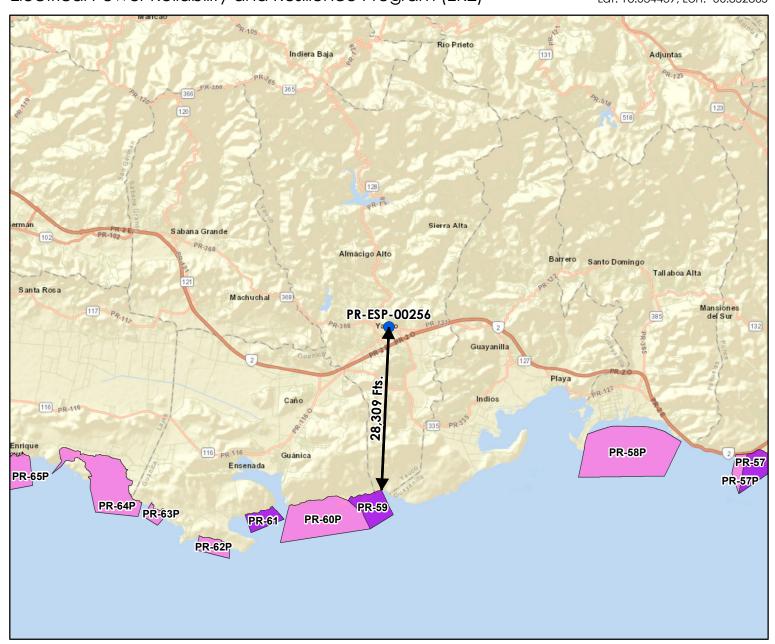
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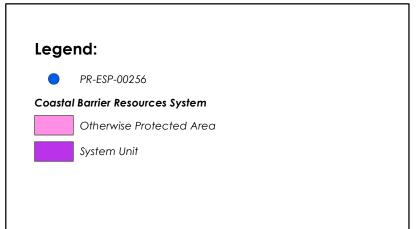
Federal Aviation Administration (FAA) https://adds-faa.opendata.arcgis.com/ The Environmental Protection Agency https://www.epa.gov/nepa/nepassist

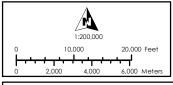


# **Coastal Barrier Resource System Map**Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Layer Credits:

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

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

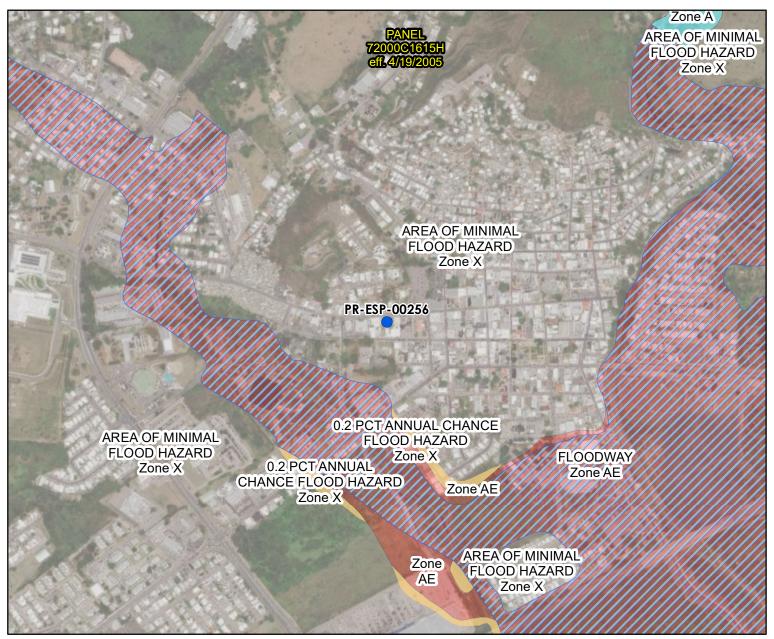
U.S. Fish and Wildlife Service (FWS)

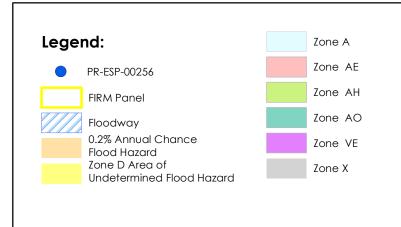
https://www.fws.gov/program/coastal-barrier-resources-act

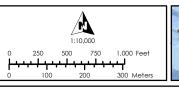


# Flood Insurance Rate Map Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









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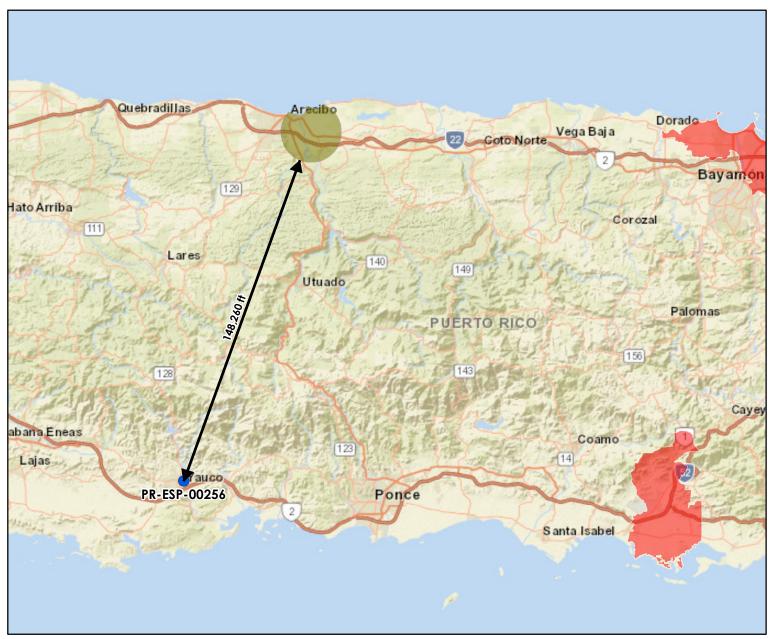
Federal Emergency Management Agency (FEMA) https://msc.fema.gov/portal/home



**Člean Air Map**Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001

Lat: 18.034439, Lon: -66.852865







Service Layer Credits:

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

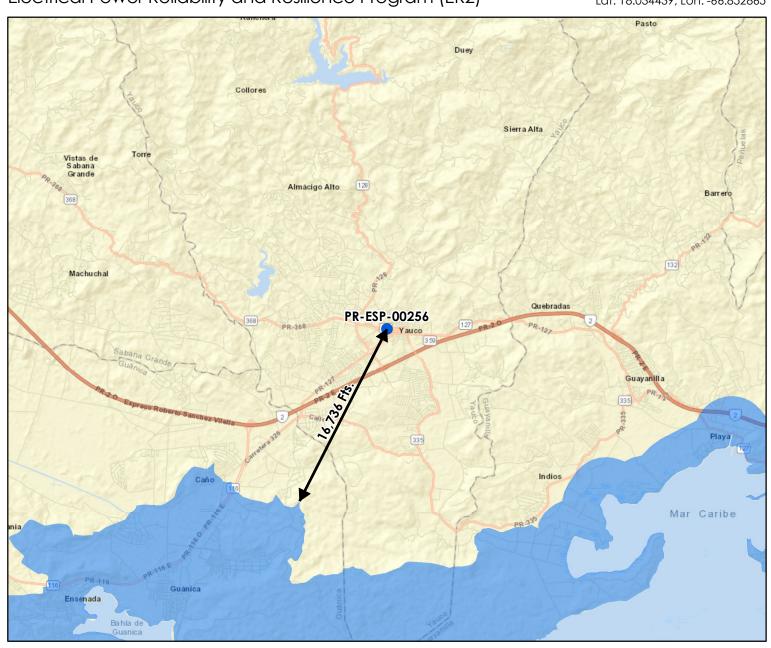
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

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



# **Coastal Zone Management Map**Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865



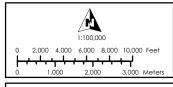




PR-ESP-00256



Coastal Zone Management Act Boundary





Service Layer Credits:

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

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

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

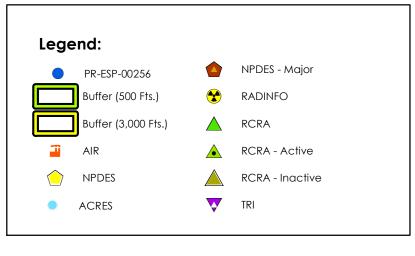


## Toxic and Hazardous Facilities Map

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865







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

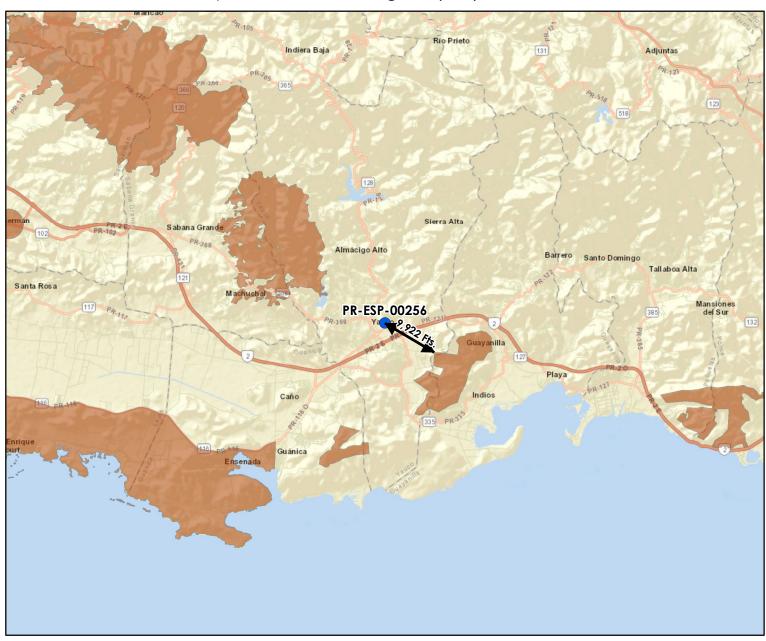
Source: EPA Facility Registry Service (FRS) https://www.epa.gov/frs



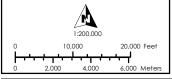
## Threatened and Endangered Species Map

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Layer Credits:

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

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

### Source

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

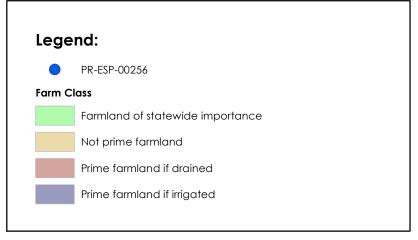


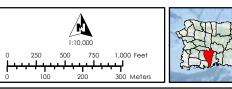
## **Farmland Protection**

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Layer Credits:

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

Source:

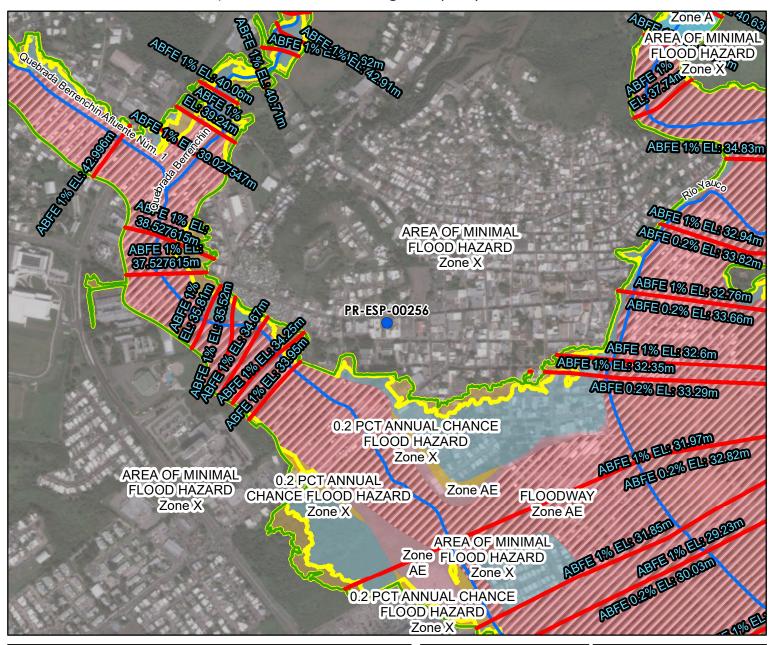
Underground Storage Tanks (USTs) https://www.epa.gov/ust

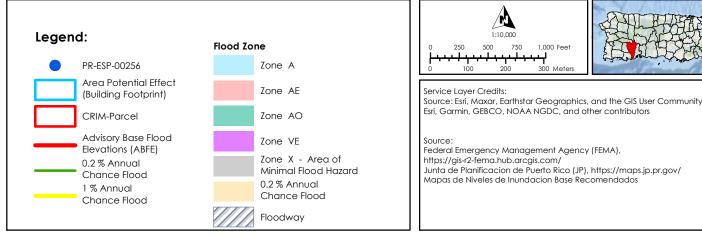


## **Advisory Base Flood Elevation Map**

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865

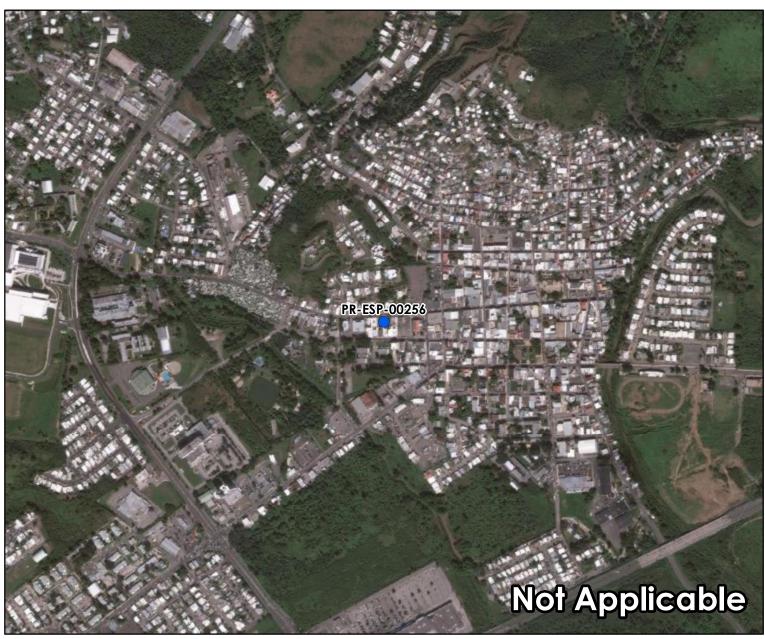


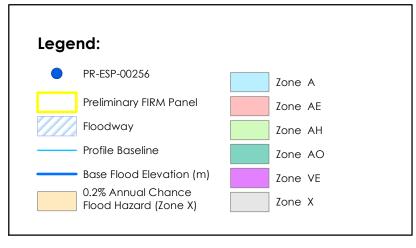


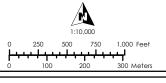


# Preliminary Flood Insurance Rate Map Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Laver Credits:

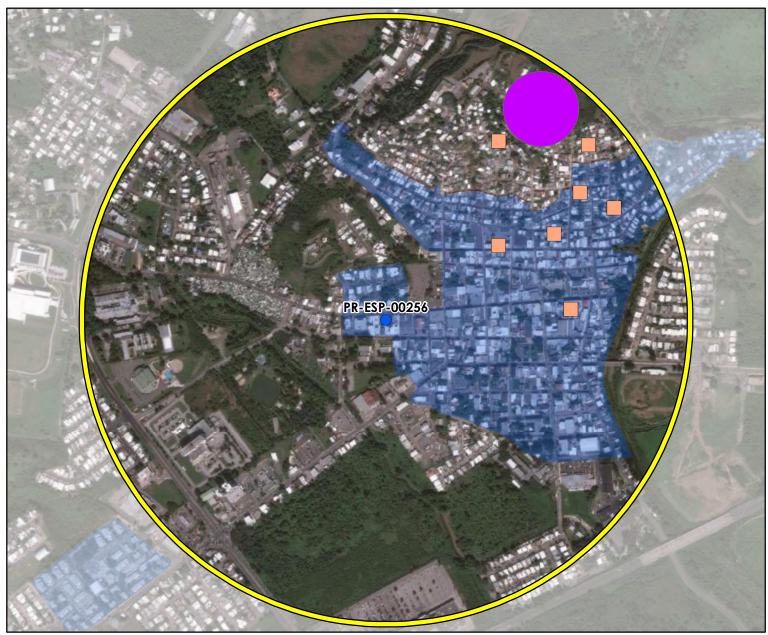
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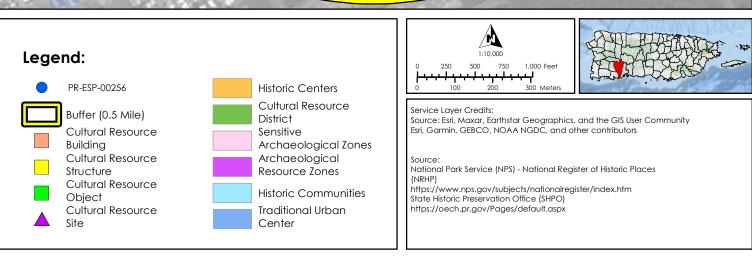
Federal Emergency Management Agency (FEMA) https://msc.fema.gov/portal/home



# **Historic Preservation Map**Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865







## **Noise Abatement and Control Map**

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865

ARTURO LLUBERAS HOSPITAL DE AREA Н VOCACIONAL SANTIAGO ONOFRE TORRES PR-ESP-00256 MUÑOZ MARIN RAFAEL
MARTINEZ ELVIRA
NADAL VICENTI HOSPITAL DOCTOR VICENTE TITO MATTEII DE YAUCO / SOUTHERN MEDICAL CENTER LUIS MUÑOZ 443 SANTIAGO NEGRONI RIVERA ERNESTO RAMOS COLUMBIA COLLEGE ANTONINI





PR-ESP-00256



University



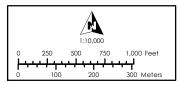
School



Hospital



**Emergency Hospital** 





Service Layer Credits:

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

Source

U.S. Geological Survey (USGS)

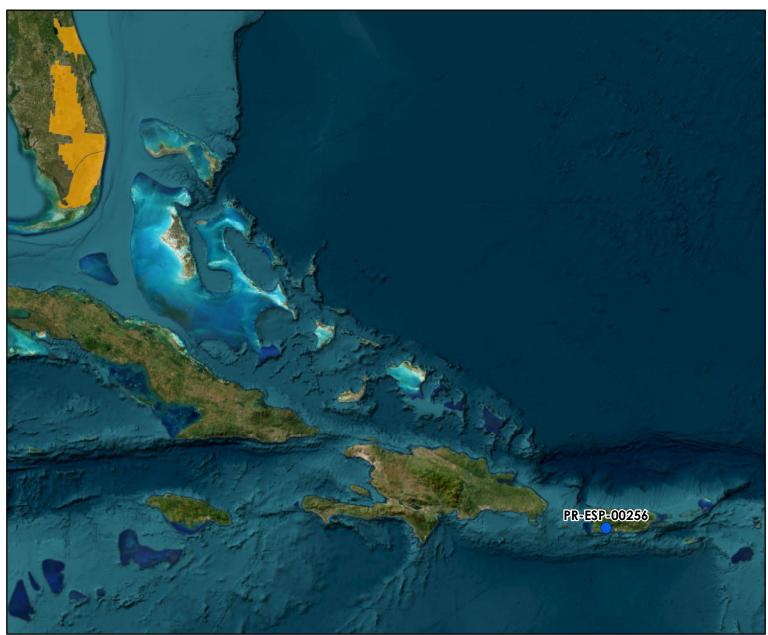
https://pubs.er.usgs.gov/publication/ofr20201022



# **EPA Sole Source Aquifers**Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001

Lat: 18.034439, Lon: -66.852865



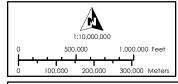




PR-ESP-00256



**EPA Sole Source Aquifers** 





Service Laver Credits:

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

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

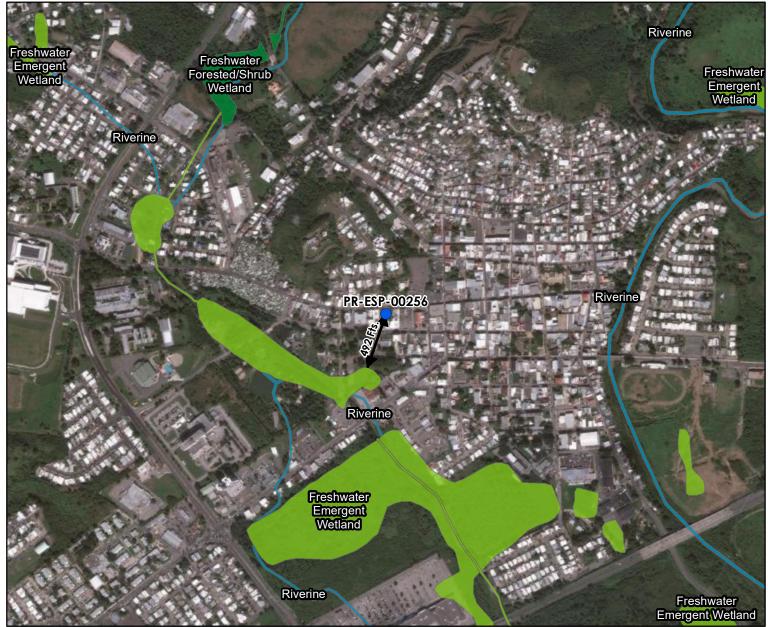


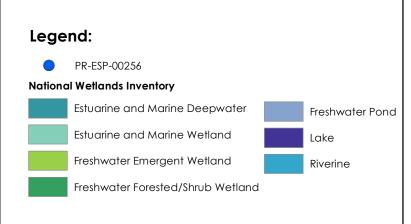
Figure 15

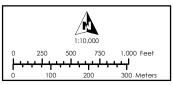
Wetlands Map
Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698

Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865 Riverine









Service Layer Credits:

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

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



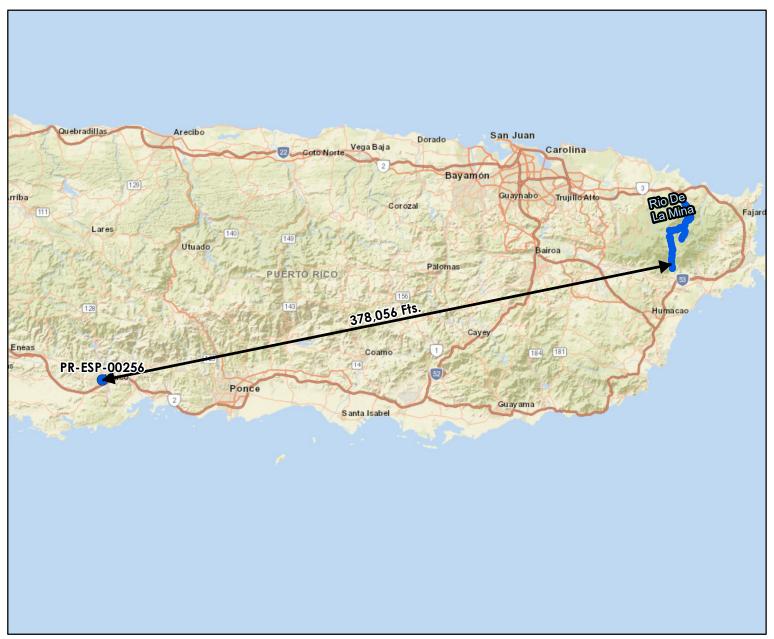
Figure 16

# Wild and Scenic Rivers Map

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab (Laboratorio Clínico Yaucano Inc.) 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001

Lat: 18.034439, Lon: -66.852865



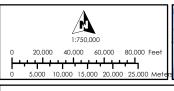




PR-ESP-00256



Wild and Scenic Rivers





Service Layer Credits:

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

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

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



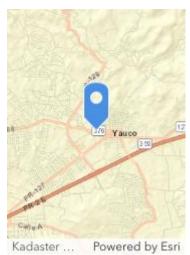
Appendix 2: Field Visit Report





# **Environmental Field Assessment Form - PR-ESP-00256**

		APPLICANT/LOCATION INFORMATION
Applicant ID:	PR-ESP-00256	
Applicant Name:	Laboratorio Clínico Tecnolab	The State of the
Parcel ID:	361-084-067-07-001	
Coordinates:	18.034439, -66.852865	
Street Address:	65 Calle Comercio	na sin Yauce
Municipio:	Yauco	300
Zip Code:	00698	
Site Inspector:	Egon Gonzalez	and a
Date of Visit:	March 6, 2025	
Time of Visit:	11:31	Carlos
Year Built:	Circa 1930	Kadaster Powered by





	Building Information						
	Question	Answer	Notes				
1.	Location verified:	Yes	18.034439, -66.852865				
2.	Is the building correct on GIS?	Yes	Building is correct on GIS				
3.	Building Type:	Commercial/Reside ntial					
4.	# of Stories:	2					
5.	Building Foundation:	Concrete Slab					
6.	Is the building in use?	Yes	Building is in use				
7.	Does the building have a detached garage / carport present?	No					
8.	Is the electricity connected?	Yes	Electricity is connected				
9.	Is the water connected?	Yes	Water is connected				
10.	Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, electrical equipment etc.)	No					
11.	Is a septic system present? If Yes report apparent condition.	No					
12.	Are there any obvious signs of animals, birds nesting or burrows near the site?	No					





	Parcel Conditions					
	Question	Answer	Notes			
1)	Are there any 55-gallon drums visible on site? If yes, are they leaking?	No	There are (2) 55gal drums used as trash bins located in front of structure			
2)	Are there any (or signs of any) underground storage tanks on the property?	No				
3)	Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	Yes	100gal Diesel tank for generator located in front of structure			
4)	Is there any stained soil or pavement on the parcel?	No				
5)	Are there any potentially hazardous trees that could fall?	No				
6)	Are there any groundwater monitoring wells on the site or adjacent parcel?	No				
7)	Is there distressed vegetation on the parcel?	No				
8)	Are any additional environmental or non-environmental site hazards observed?	No				
9)	Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No				
10)	Does the subject property have water frontage?	No				
11)	Is the applicant aware of any significant historical event or persons associated with the structure, or of it being located in a historic district/ area?	No				
12)	Is a historic marker present?	No				
13)	Based on the above finding, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No				





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

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

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

Inspector Signature

Egon Gonzalez

March 6, 2025





### Front of Structure

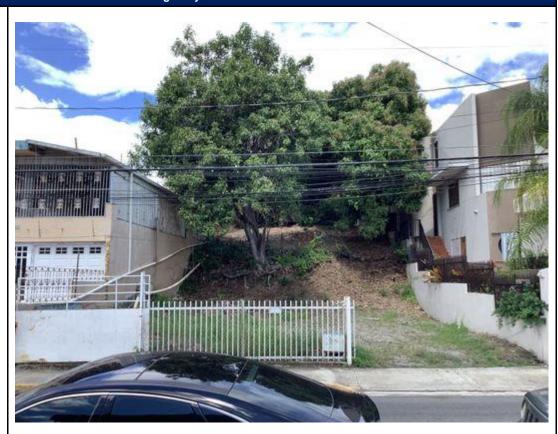
Photo Direction: South

Comments:



# Facing Away from Front

Photo Direction: North







### Side #1 of Structure

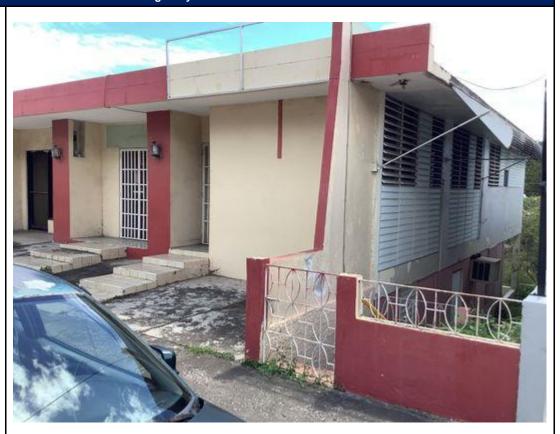
Photo Direction: South

Comments:



# Facing Away From Side #1

Photo Direction: Southeast







### Back of Structure

Photo Direction: East

Comments:



# Facing Away from Back

Photo Direction: Southeast



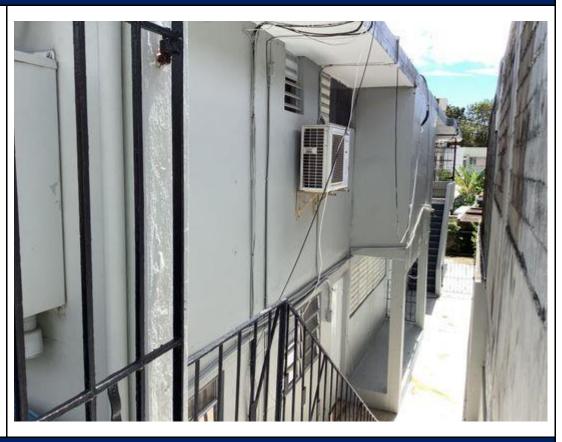




### Side #2 of Structure

Photo Direction: South

Comments:



# Facing Away from Side #2

Photo Direction: Southwest







# Streetscape #1

Photo Direction: East

Comments:



### Streetscape #2

Photo Direction: West







### Address

Photo Direction: South







Photo Direction:

Photo Description: Electricity is connected



### **Architectural Details 2**

Photo Direction:

Photo Description: Water is connected







Photo Direction:

Photo Description: 100gal Diesel tank for generator located infront of structure



# **Architectural Details 4**

Photo Direction:

Photo Description: General interior

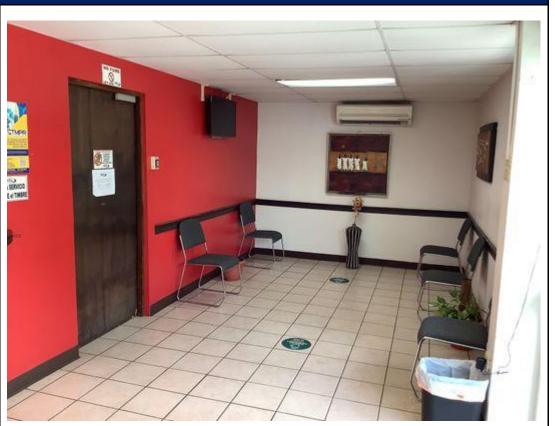






Photo Direction:

Photo Description: General interior view



### **Architectural Details 6**

Photo Direction:

Photo Description: (2) 55gal Drums used as trash bins located in front of structure

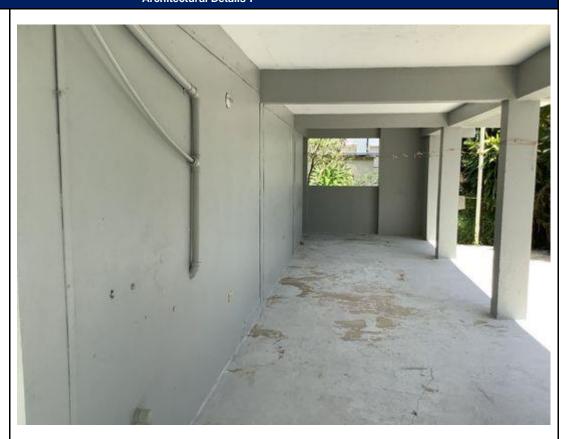






Photo Direction:

Photo Description: Additional back of structure view



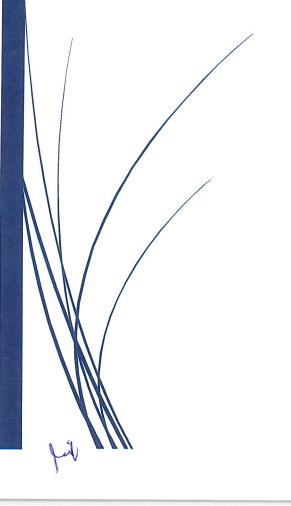
# Photo Direction: Photo Description:

**Architectural Details 8** 



Appendix 3: Scope of Work Quote

Propuesta para Instalación de Sistema de Energía Solar APOYO ENERGETICO 2.0





# CÁLCULO DE CONSUMO ANUAL Y SISTEMA PROPUESTO

Iniciales

Nombr	e de cliente	LABOR	ATORIC	CLÍNIC	O YAU	CANO II	VC	***************************************			
Dirección	del servicio	65 C C	OMERCI	O ALTO	S YAUC	O PR 0	0698		**********************		***************************************
	ID Contrato	LCYI 20	64			******************			***************************************		
	Fecha	8/9/20	24				************************************	*******************************		CONTROL TO STATE OF SAME AND AND ADDRESS.	***************************************
			U	timos 1	2 mese	s de co	nsumo				
2290	2030	2210	2330	2100	1890	1680	1920	1890	2000	2150	2330
	Placa (W)	400						***************************************	TOTAL SALA SALAS SE SANA SER SE RESTORE ES	***************************************	
	Pueblo	Yauco									
					A 1 10 10 10 10 10 10 10 10 10 10 10 10 1	***************************************	C	Consum	o anual	(kWh)	24,820
***************************************			F-0.4-0/4 a.4.4				Cos	to por l	«Wh en	LUMA	0.26
What was a supplemental and a su				-	Tamaño	de sist	ema se	gún con	sumo (l	(WDC)	17.3
		77 To F and a second at 1 1 10 April 2 April 2				(1	.) Sisten	na prop	uesto (l	(WDC)	17.6
			***************************************	***************************************	(2	) Almac	enamie	nto pro	puesto	(kWh)	14
						(3) Cu	bierta c	le consi	umo est	imada	102%
				*************************		****	(4) Cc	sto de	placas s	olares	\$13,200
		~~~					(!	5) Costo	de bat	eria(s)	\$13,250
***************************************		\$ 5.5 kg			(6) Ins	talacior	n, Ingen	ieria, Pe	ermisos	y BOS	\$21,086
								(	7) Costo	Total	\$47,536
*******************************		**************************************					(8	3) Incen	tivo pot	tencial	-\$28,521
	***************************************	***************************************	*	***************************************	0/F F 20/F (-0/F) (-0/F	(9) E	Balance	aporta	do por d	cliente	\$19,014
			***********************	(1	0) Retoi	rno de i	nversio	n estim	ado (en	años)	2.9
				(11)	Ahorro a	anual es	stimado	en fact	tura de	LUMA	\$6,567

# TIPO DE SISTEMA

Sistema fotovoltaico nuevo con sistema de almacenamiento de batería(s).

# **EQUIPOS**

Equipo	Marca	Modelo	Cantidad
Placas	Canadian Solar	CS6R-400MS-HL	44
Batería	Tesla	Powerwall 2	1
Inversor	Tesla	7.6 kW/AC Powerwall+	1
Inversor	Enphase	IQ8 Series	24
Transformador	Hammond	SG3L0050BE	0

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787-643-6767

info@caribbeansolarenergypr.com

# Introducción

Le damos las gracias por la oportunidad que nos ha dado para presentar nuestra propuesta para el trabajo de referencia. Caribbean Solar Energy, LLC se complace en presentar esta propuesta para la instalación de un Sistema Fotovoltaico para generación de energía. Agradecemos sus esfuerzos para ayudarnos a definir y entender las necesidades de su proyecto en su casa o negocio. Caribbean Solar Energy LLC se compromete a proporcionar los recursos necesarios para ejecutar con éxito este proyecto conforme a su petición y de acuerdo con las especificaciones y acuerdos aquí presentados.

# **SEGUROS**

Caribbean Solar Energy reconoce el riesgo inherente y las exposiciones en la prestación de servicios a los clientes y utiliza un programa de seguro integral para protegerse contra cualquier acto negligente por el que pueda volverse legalmente responsable. Nuestro programa incluye \$1,000,000 en cobertura general y \$1,000,000 en exceso de cobertura. Adicional a esto contamos con una fianza para realizar proyectos de energía renovable, según establece la Ley 146 del Estado Libre Asociado de Puerto Rico.

# Fuerza de trabajo

La fuerza de trabajo de Caribbean Solar Energy está formada por profesionales de la industria con experiencia en miles de instalaciones. Nuestra fuerza de trabajo está compuesta por ingenieros con licencia, electricistas certificados, personal administrativo, personal de ventas e instaladores altamente experimentados.

# Certificaciones

Caribbean Solar Energy cuenta con las prestigiosas certificaciones de Tesla, Inc como "Tesla Certified Installer", Enphase Energy como "Enphase Certified Installer", UNIRAC, Gobierno Federal de Estados Unidos (SAM), Agencia de Protección Ambiental (EPA), entre otros. Adicional, nuestro personal de diseño cuenta con certificación del Colegio de Ingenieros y Agrimensores de Puerto Rico y de Instalador de Sistemas Eléctricos Renovables del Programa de Política Pública del Gobierno de Puerto Rico. Todos nuestros componentes cumplen con las certificaciones requeridas por la Oficina de Gerencia y Permisos (OGPE) y la Autoridad De Energía Eléctrica de Puerto Rico.







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# CARTERA DE INSTALACIONES



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# ALCANCE DEL TRABAJO

 Iniciales
Illiciales

Esta propuesta incluye (según aplique):

- 1) Diseño e ingeniería.
- 2) Permisos requeridos para operación e instalación.
  - a) Someter solicitud para programa de medición neta ante LUMA.
  - b) Certificaciones Oficina de Gerencia y Permisos (OGPE).
- 3) Equipos
  - a) Paneles solares.
  - b) Inversores de corriente.
  - c) Sistemas de almacenamiento (baterías).
  - d) Accesorios necesarios para operación de sistema.
  - e) Anclaje estructural de aluminio y acero inoxidable ("racking").
  - f) Materiales misceláneos: tuberías, cables, interruptores, etc.

# 4) Instalación

- a) Instalación y encendido.
- b) Pruebas y "System Commissioning".
- c) Adiestramiento sobre operación y mantenimiento.



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# MREL

If interprit tragerable on larger one lift along the distance retrieval depth or an experience of the content of the larger of t

companies. Loss remoleture IDSE/DEES, Efficient tre indeben-cionno minimiscon del relevant de presentation de minimiscon del minimiscon del manimiscon del minimiscon del minimiscon del minimiscon del promonentorio a minimiscon del minimiscon del

an individual transport of improved 
processions of the procession of the procession

### Calculations PVWatts

# RESULTADOS

# 26,185 kWh/año\*

Mes	Radiación solar (886 tes <sup>2</sup> (de.)	Energia de corriente alterna (50%)
Enero	4.00	2,028
Febrero	5.38	2,004
Marzo	5.49	2,213
Abrill	5.70	2,229
Mayo	IS.DOP	25,有效的
Jum	55.000	32,7868
Jul	5.00	2.40%
Agosto	43.003	北州世际
Septiembre	5.55	2,1020
Octubre	44.9611	1,309
Noviembre -	4.129	1,874
Diciembre	4.82	1,003
\nnual	5.46	26,187

### Ubicación e identificación de la estación

Ulaicación solicitada	10.0245119,-86.4529186	
Fuente de datos meteorológicos	Lut., long.: 18.05, 488.86 1.2 mi	
Linfiltund	18.05° M	
Langitud	60.06° W	

Tamato del sistema en CC	17.84	Adda		***************************************			***************************************
Tipo de módulo	Et subden	dur					
Tipo de campe	Pipa jr	nontoj	e en best	York .			
Principles del sistema	14.00	The Contract of the Contract o					
Inclinación del campo	5"						
Assimult dial company	180*						
Delinciëm die Immerie de 100 a 104	1.2						
Stratemate del invener	18.027%						
finanda cobertura dal terrero	0.4						
Uberdo	Person	weath	or dillo				
Effectal	War (A)						
	Erre	Feb	Marao	Wher	Marga	Jun	
Servida de irradiación menoral	0%	O.P.	10/%	0%	40/%	@/%	
	Jul	Augo	Supt	Oct	Nove	<b>Dic</b>	
	O'S.	W%.	0/%	0%	0%	0%	

https://pewaits.nnd.gov/pewaits.php

1/2





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# ACUERDO DE INSTALACIÓN

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# TÉRMINOS, CONDICIONES Y DEFINICIONES

- 1. **DEFINICIONES.** "INSTALACIÓN" PARA USO EN ESTE DOCUMENTO SE REFIERE A MANO DE OBRA Y SITUAR LOS EQUIPOS PROPUESTOS EN EL SITIO. "PROPUESTA" O "CONTRATO" SE REFIERE A ESTE DOCUMENTO. "SITIO" SE REFIERE A LA PROPIEDAD DONDE SE INSTALARÁ EL SISTEMA PROPUESTO. "PROGRAMA" SE REFIERE A PROGRAMA DE APOYO ENERGETICO 2.0. "ACTIVIDADES DE INSTALACION" SE REFIERE A DISEÑO, ADQUISION DE MATERIALES O INSTALACION. "DDEC" SE REFIERE A DEPARTAMENTO DE DESARROLLO ECONOMICO Y COMERCIO DE PUERTO RICO. "CSE" SE REFIERE A CARIBBEAN SOLAR ENERGY, LLC.
- 2. DIVULGACIÓN. ESTA PROPUESTA CONTIENE INFORMACIÓN CONFIDENCIAL, PROPIETARIA Y/O SENSIBLE A LA COMPETENCIA DE CSE POR LO TANTO; TODA LA INFORMACIÓN PROPORCIONADA EN ESTA PROPUESTA SE CONSIDERARÁ CONFIDENCIAL Y NO SE DIVULGARÁ A TERCEROS SIN EL CONSENTIMIENTO ESCRITO DE CSE.
- 3. GARANTÍAS. CSE CORREGIRÁ CUALQUIER DEFECTO DE INSTALACIÓN, SIN COSTO ALGUNO, DURANTE LOS PRIMEROS 10 AÑOS DESDE ENCENDIDO EL SISTEMA. NUESTROS MANUFACTUREROS OFRECEN LAS SIGUIENTES GARANTÍAS, EN DESEMPEÑO; PANELES SOLARES 25 AÑOS; MICRO-INVERSORES ENPHASE 25 AÑOS; SOPORTE UNIRAC O SWH 25 AÑOS; BATERÍA TESLA O ENPHASE 10 AÑOS. MANIPULACIÓN AL EQUIPO POR PERSONAL NO-AUTORIZADO INVALIDARÍA GARANTÍAS. EL CLIENTE, CON LA FIRMA DE ESTE DOCUMENTO, CERTIFICA HABER LEIDO EL(LOS) MANUAL(ES) DE TÉRMINOS Y CONDICIONES DE GARANTÍA DEL MANUFACTURERO.
- TÉRMINOS DE PAGO. (1) CSE RECIBIRÁ 50% DE LA APORTACION TOTAL CORRESPONDIENTE AL CLIENTE CON LA FIRMA DEL ACUERDO DE RESERVA DEL INCENTIVO. (2) CSE RECIBIRA EL RESTANTE 50% DE LA APORTACION TOTAL CORRESPONDIENTE AL CLIENTE UNA VEZ CULMINADA LA INSTALACIÓN. LOS PAGOS <u>SERÁN EMITIDOS EN UN PERIODO NO MAYOR DE 7 DÍAS</u> LABORABLES Y NO PODRÁN SER RETENIDOS BAJO NINGUN CONCEPTO. DEFICIENCIAS EN LA RED ELÉCTRICA QUE LIMITEN LA INTERACCIÓN DEL SISTEMA SOLAR CON DICHA RED NO SERÁ CAUSA PARA EXTENDER ESTE PERIODO. CSE SE RESERVA EL DERECHO DE APAGAR EL SISTEMA FOTOVOLTAICO, SIN EMITIR AVISO, SI SE EXCEDE ESTE PERIODO DE 7 DÍAS. EN CASO DE QUE CUALQUIER PAGO NO SEA EMITIDO DENTRO DE LOS TÉRMINOS ESTABLECIDOS EN ESTE CONTRATO, Y SIN MENOSCABO O MODIFICACIÓN DE OTRAS SECCIONES DE ESTE CONTRATO, EL CLIENTE ACUERDA Y SE OBLIGA A PAGAR A CSE UN CARGO POR DEMORA ADICIONAL DE DIEZ POR CIENTO (10%) DEL BALANCE ADEUDADO, MENSUALMENTE, HASTA QUE LOS PAGOS SEAN RECIBIDOS EN SU TOTALIDAD.
- EQUIPOS. EN CASO DE "BACK-ORDER" EN INVENTARIO SE PROVEERÁ EQUIVALENTE DE IGUAL O MAYOR CAPACIDAD.
- 6. TIEMPO DE INSTALACIÓN. SE ESTIMA LA INSTALACIÓN SE REALIZARÁ DENTRO DEL TERMINO QUE PROVEE EL PROGRAMA. ESTE PERIODO PUEDE VERSE AFECTADO POR EVENTOS DE LLUVIA EXTENSOS, ESCASEZ DE MATERIAL Y EVENTOS DE FUERZA MAYOR (ATMOSFÉRICOS, PANDEMIAS, TERREMOTOS, ENTRE OTROS EVENTOS IMPREDECIBLES). EL CLIENTE

- RELEVA A CSE DE EXCEDERSE EL TERMINO DEL PROGRAMA A CAUSA DE UNO DE ESTOS EVENTOS.
- 7. PRODUCCIÓN SOLAR ANUAL ESTIMADA. SU PRODUCCIÓN SOLAR PUEDE VARIAR DEPENDIENDO DEL CLIMA Y EL ACORTAMIENTO (EN CASO DE APAGONES). CSE UTILIZA LA BASE DE DATOS DEL "NATIONAL RENEWABLE ENERGY LABORATORY" PARA LA RECOMENDACIÓN DE TAMAÑO DE SISTEMA POR LO QUE CSE NO SE HACE RESPONSABLE DE LAS VARIACIONES QUE PUDIERAN SURGIR.
- 8. CANCELACIONES. EN CUALQUIERA DE LOS ESCENARIOS DE CANCELACIÓN POSTERIOR AL COMIENZO DE LAS ACTIVIDADES DE INSTALACIÓN, SE COBRARÁ UNA TARIFA PROPORCIONAL AL GASTO INCURRIDO HASTA EL MOMENTO DE LA CANCELACIÓN EL CUAL NO SERÁ MENOR DE UN 5% DEL COSTO TOTAL DEL PROYECTO. CSE SE RESERVA EL DERECHO DE RESCINDIR DE ESTE CONTRATO, EN CUALQUIER MOMENTO, PREVIO A LA INSTALACIÓN DEL SISTEMA. ESTO NOTIFICANDO AL CLIENTE CON 10 DIAS DE ANTICIPACIÓN.
- MEDICIÓN NETA. MEJORAS A INFRAESTRUCTURA SOLICITADAS POR LUMA NO ESTÁN CUBIERTOS EN ESTA PROPUESTA. LA APROBACIÓN DE ESTE PROGRAMA ESTÁ BAJO LA DISCRECIÓN DE LUMA.
- 10. ALCANCE. CUALQUIER TRABAJO NO IDENTIFICADO EN ESTA PROPUESTA O COMPONENTE (EJ. MEJORAS A EXISTENTE, ETC.) INFRAESTRUCTURA CONSIDERARÁ FUERA DEL ALCANCE Y PUEDE REQUERIR UNA ORDEN DE TRABAJO O UNA ORDEN DE COMPRA ADICIONAL. ESTA PROPUESTA INCLUYE UNA INSTALACIÓN BÁSICA DE 25 PIES AL PUNTO DE INTERCONEXIÓN Y CON TUBERÍAS EXPUESTAS, CUALQUIER PREFERENCIA ADICIONAL REQUERIRÁ UN CAMBIO DE ORDEN. EL DÍA DE INSTALACIÓN SE REPASARÁ EL PLANO DE INSTALACIÓN PRESENTARAN LOS EQUIPOS EN SUS RESPECTIVAS ÁREAS PARA SU APROBACIÓN ESCRITA. UNA VEZ APROBADOS E INSTALADOS LOS EQUIPOS SI DESEA REALIZAR UN CAMBIO DE UBICACIÓN EL MISMO CONLLEVARA UN CAMBIO DE ORDEN.
- 11. SEGUROS. ESTA PROPUESTA NO INCLUYE CUBIERTA PARA DAÑOS POR EVENTOS DE FUERZA MAYOR (ATMOSFÉRICOS, FUEGOS, TERREMOTOS, ENTRE OTROS), ROBO, VANDALISMO Y/O VARIACIONES DE VOLTAJE DE LA RED ELÉCTRICA UNA VEZ CULMINADA LA INSTALACION. EL CLIENTE ASUME RESPONSABILIDAD TOTAL DE CUALQUIER DAÑO AL SISTEMA UNA VEZ CULMINADA DICHA INSTALACIÓN EN EL SITIO.
- 12. **PERMISOS DE CONSTRUCCIÓN.** SEGÚN ESTABLECE EL REGLAMENTO DE OGPE, ESTAS INSTALACIONES NO REQUIEREN PERMISO DE CONSTRUCCIÓN POR SER MENORES A 1MW Y LLEVARSE A CABO SOBRE EL TECHO DE LA RESIDENCIA O COMERCIO.
- 13. APAGONES. PARA FUNCIONAR EN EL EVENTO DE UN APAGÓN, DE DÍA O NOCHE, ES NECESARIO EL SISTEMA INCLUYA ALMACENAMIENTO (BATERÍAS).
- 14. MONITOREO. REQUIERE CONECTAR EL SISTEMA A RED WI-FI CON INTERNET ESTABLE Y DE ALTA VELOCIDAD.
- 15. VISITAS TÉCNICAS. VISITAS DE SERVICIO NO-ASOCIADAS A DEFECTOS DE INSTALACIÓN TENDRÁN TARIFA MÍNIMA, COMENZANDO DESDE \$150.
- 16. CÓDIGOS Y REQUERIMIENTOS. LOS EQUIPOS SOLO PODRÁN SER INSTALADOS EN ÁREAS APROBADAS POR





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- MANUFACTUREROS, CÓDIGOS DE ELECTRICIDAD Y LA AUTORIDAD DE ENERGÍA ELÉCTRICA DE PUERTO RICO ("AEE" O "LUMA", EN ADELANTE). EL CLIENTE RELEVA DE CUALQUIER RESPONSABILIDAD A CSE DE EL CLIENTE EXIGIR QUE NO SE CUMPLA CON ESTOS REQUISITOS.
- 17. FACILIDADES. SE PRESUME QUE SU INFRAESTRUCTURA ENERGÉTICA EXISTENTE CUMPLE CON LOS PARÁMETROS (VOLTAJES, FRECUENCIAS, ETC.) REQUERIDOS POR AEE-LUMA Y EL "NATIONAL ELECTRICAL CODE" PARA LA INTERACCIÓN DE SISTEMAS FOTOVOLTAICOS CON SU PROVEEDOR DE ENERGÍA ELÉCTRICA. CSE NO SE RESPONSABILIZA POR DAÑOS ESCONDIDOS, DISIMULADOS U OCULTOS QUE SE DESCUBRAN EN, DURANTE O DESPUÉS DE LA INSTALACIÓN; CORREGIRLOS REQUERIRÁ UNA ORDEN DE TRABAJO ADICIONAL.
- 18. TECHO. SE PRESUME ESPACIO DE TECHO DISPONIBLE Y EN CONDICIONES ADECUADAS PARA INSTALAR EL SISTEMA SIN REALIZAR MEJORAS, MODIFICACIONES O ADICIONES. CSE SE RESERVA EL DERECHO DE CLASIFICAR LAS CONDICIONES DEL TECHO. NO SE INCLUYE IMPERMEABILIZACIÓN DE TECHOS, SIN EMBARGO, TODAS LAS PENETRACIONES GARANTIZAN LAS MEJORES PRÁCTICAS PARA NO AFECTAR NINGUNA GARANTÍA (SI CORRESPONDE) O INTEGRIDAD DEL TECHO. CSE NO SE HACE RESPONSABLE BAJO NINGUN CONCEPTO DE DAÑOS AL TECHO NO RELACIONADOS A LA INSTALACIÓN O A LOS TRABAJOS REALIZADOS POR CSE. UNA VEZ INSTALADO EL SISTEMA FOTOVOLTAICO Y HABIENDO SIDO ACEPTADO POR EL CLIENTE, CSE NO SERA RESPONSABLE POR NINGUN RECLAMO RELACIONADO A LA IMPERMEABILIZACIÓN Y/O DAÑOS DEL TECHO.
- 19. VALIDEZ Y CORRECCIONES. ESTA PROPUESTA TIENE UNA VALIDEZ DE NOVENTA DÍAS (90) DÍAS A PARTIR DE LA EMISIÓN. LAS CITAS VERBALES EXPIRAN EL MISMO DÍA EN QUE SE REALIZAN. TODOS LOS ERRORES TIPOGRÁFICOS Y ADMINISTRATIVOS ESTÁN SUJETOS A CORRECCIÓN.
- 20. TITULARIDAD. EL CLIENTE RECONOCE QUE EL SISTEMA PROPUESTO Y TODOS SUS COMPONENTES SON PROPIEDAD EXCLUSIVA DE CSE HASTA TANTO SE SATISFAGAN EL 100% DE LOS PAGOS ACORDADOS BAJO ESTE CONTRATO.
- 21. ACCESO. EL CLIENTE RECONOCE QUE CONCEDE ACCESO A CSE A SU PROPIEDAD (PROPIA O ARRENDADA), EN CUALQUIER MOMENTO, PARA REMOVER Y/O REPOSEER LOS EQUIPOS, DE SER INCUMPLIDOS LOS TÉRMINOS DE PAGO POR CUALQUIER RAZÓN.
- 22. FOTOGRAFÍAS. CSE ESTÁ AUTORIZADO A UTILIZAR FOTOGRAFÍAS DE LOS EQUIPOS INSTALADOS EN SU PROPIEDAD (PROPIA O ARRENDADA) PARA PROPÓSITO PUBLICITARIOS SIEMPRE Y CUANDO SE PROTEJA SU PRIVACIDAD. □ MARCAR SI NO AUTORIZA,
- 23. LLAMADAS GRABADAS. TODAS LAS LLAMADAS RECIBIDAS Y REALIZADAS DE CSE SE REALIZAN A TRAVÉS DE UNA LÍNEA GRABADA.
- 24. HONORARIOS DE ABOGADO. EN CASO DE QUE CSE RECURRA A UN ABOGADO PARA MANEJAR POR MEDIO DE LA VÍA JUDICIAL, O EXTRAJUDICIAL, CUALQUIER VIOLACIÓN DE CUALQUIER TÉRMINO O CONDICIÓN DE ESTE CONTRATO, EL CLIENTE PAGARÁ LOS HONORARIOS RESULTANTES POR UNA CANTIDAD NO MENOR DEL VEINTE POR CIENTO (20%) DE LA CANTIDAD RECLAMADA EN EL MOMENTO, O QUE ESTÉ ACUMULANDO, PERO EN NINGÚN CASO DICHA CANTIDAD SERÁ MENOR DE DOS MIL QUINIENTOS DÓLARES (\$2,500.00). ADEMÁS, SE ACUERDA QUE, SI SE

- INICIA UNA ACCIÓN JUDICIAL EN SU CONTRA POR VIOLAR LOS TÉRMINOS DE ESTE CONTRATO, ÉSTA SE SOMETERÁ A LA JURISDICCIÓN DEL TRIBUNAL QUE ESCOJA CSE.
- 25. INCENTIVOS. EL CLIENTE SE COMPROMETE A REALIZAR DE MANERA DILIGENTE Y PROACTIVA TODAS LAS GESTIONES PERTINENTES Y REQUERIDAS, DE SU PARTE, POR CUALQUIER ENTIDAD QUE LE HAYA APROBADO U OTORGADO UN INCENTIVO PARA LA ADQUISICIÓN DE SU SISTEMA Y ESTE SE HAYA CONSIDERADO COMO PARTE O TOTALIDAD DE LOS PAGOS POR EL PRESENTE CONTRATO. EL CLIENTE SE COMPROMETE A PAGAR EL 100% DE LOS COSTOS DEL PROYECTO, OBJETO DE ESTE CONTRATO, SI POR NEGLIGENCIA, OMISIÓN, PREFERENCIA O DEJADEZ DE SU PARTE EXPIRA EL PERIODO PARA RECLAMAR EL PAGO DE DICHO INCENTIVO Y EL SISTEMA HA SIDO INSTALADO. DE SER REQUERIDO POR EL CLIENTE QUE CSE O SUS REPRESENTANTES LE ASISTAN EN EL SOMETIMIENTO, LLENADO O RADICACIÓN DE CUALQUIER PROCESO, DOCUMENTO O SOLICITUD, EL CLIENTE, RELEVA A CSE Y SUS REPRESENTANTES DE CUALQUIER NEGLIGENCIA, OMISIÓN O ERROR EN TODO MOMENTO. HASTA TANTO SE EJECUTE EL ACUERDO DE RESERVA DE SUBVENCIÓN: (A) NO SE INICIARÁN NI REALIZARÁN NINGÚN TRABAJO PARA LA INSTALACIÓN DEL SISTEMA; (B) NO SE ORDENARÁN O TOMARÁN ACCIONES PARA ADQUIRIR EQUIPO O MATERIAL PARA EL SISTEMA; Y (C) NO SE INCURRIRÁ O PAGARÁ COSTOS RELACIONADOS CON EL TRABAJO O CUALOUJER OTRA RESPONSABILIDAD DE LAS FASES DE INSTALACIÓN PARA EL SISTEMA. ESTE CONTRATO QUEDARA AUTOMATICAMENTE CANCELADO, SIN PENALIDAD ALGUNA PARA LAS PARTES, SI EL DDEC NO APRUEBA EL INCENTIVO. LOS SUPLIDORES Y LOS BENEFICIARIOS NO PODRÁN MODIFICAR LAS SOLICITUDES APROBADAS Y DEBIDAMENTE NOTIFICADAS NI LOS CRITERIOS EXAMINADOS PARA EL PROCESO DE EVALUACIÓN Y APROBACIÓN, ENTIÉNDASE: LA PROPUESTA DEL SUPLIDOR, COSTO TOTAL DEL PROYECTO, CAMBIO DE UBICACIÓN O LOCAL, TAMAÑO DEL SISTEMA DE RENOVABLE, ENERGÍA TAMAÑO ALMACENAMIENTO DE BATERÍA Y, SI SOLICITÓ, LA INFRAESTRUCTURA PARA EL CARGADOR DE AUTO ELÉCTRICO, SEGÚN SECCIÓN 10.4 DE GUIA.
- 26. ACEPTACIÓN. TAL ES EL CONTRATO QUE OTORGAN LOS COMPARECIENTES Y POR EL CUAL SE COMPROMETEN Y OBLIGAN MUTUAMENTE, HACIENDO CONSTAR QUE EL PRESENTE CONTIENE LA TOTALIDAD DE LOS ACUERDOS ENTRE LAS PARTES Y QUE CUALQUIER CAMBIO O ENMIENDA AL MISMO TENDRÁ QUE CONSTAR POR ESCRITO PARA SURTIR EFECTO Y OBLIGAR A LAS PARTES. SI ALGUNA DE LAS CLÁUSULAS DE ESTE CONTRATO FUERA DECLARADA ILEGAL O CONTRARIA A DERECHO, QUEDARÁN VIGENTES Y EN TODO VIGOR LAS CLÁUSULAS RESTANTES DEL CONTRATO.

FIRMA CLIENTE:

Ling I. Roig Franceschio NOMBRE EN LETRA DE MOLDE

EIDMA

10 marzo 2025

**FECHA** 

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CARIBBEAN



**CARIBBEAN SOLAR ENERGY:** 

Juan A. Echegaray Romero

NOMBRE DE REPRESENTANTE AUTORIZADO

FIRMA

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395 W ~ 420 W

CS6R-395 | 400 | 405 | 410 | 415 | 420MS-HL





Module power up to 420 W Module efficiency up to 21.5 %



Lower LCOE & system cost



Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation



Better shading tolerance

### MORE RELIABLE



Minimizes micro-crack impacts



Heavy snow load up to \$100 Pa. wind load up to 5000 Pa\*

\* For detailed information, please refer to the Installation Manual.



Industry Leading Product Warranty on Materials and Workmanship\*



Linear Power Performance Warranty\*

1" year power degradation no more than 2% Subsequent annual power degradation no more than 0.55%

\*Subject to the terms and conditions contained in the applicable Canadian Solar Limited Warranty Statement. Also this 25-year limited product warranty is available only for products installed and operating on residential receitops in certain regions.

### MANAGEMENT SYSTEM CERTIFICATES\*

ISO 9001:2015 / Quality management system ISO 14001:2015 / Standards for environmental management system ISO 45001: 2018 / International standards for occupational health & safety

# PRODUCT CERTIFICATES\*

IEC 61215 / IEC 61730 / CE CEC listed (US California) / FSEC (US Florida) UL 61730 / IEC 61701 / IEC 62716









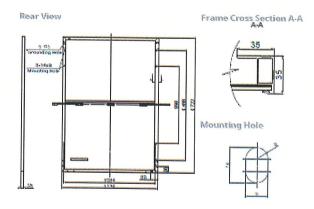
\* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative. to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

CSI SOLAR (USA) CO., LTD. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 20 years, it has successfully delivered over 70 GW of premium-quality solar modules across the world.

CSI SOLAR (USA) CO., LTD.

1350 Treat Blvd. Suite 500, Walnut Creek, CA 94598, USA | www.csisolar.com/na | service.ca@csisolar.com

### ENGINEERING DRAWING (mm)



### **ELECTRICAL DATA | STC\***

CS6R-395/400/405/410/415/420MS-HL

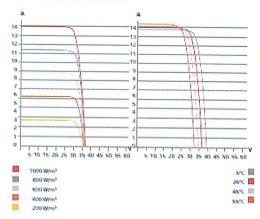
Nominal Max. Power (Pmax) 395 W 400 W 405 W 410 W 415 W 420 W Opt. Operating Voltage (Vmp)30.6 V 30.8 V 31.0 V 31.2 V 31.4 V 31.6 V Opt. Operating Current (Imp) 12.91 A 12.99 A 13.07 A 13.15 A 13.23 A 13.31 A Open Circuit Voltage (Voc) 36.6 V 36.8 V 37.0 V 37.2 V 37.4 V 37.6 V Short Circuit Current (Isc) 13.77 A 13.85 A 13.93 A 14.01 A 14.09 A 14.17 A Module Efficiency 20.2% 20.5% 20.7% 21.0% 21.3% 21.5% Operating Temperature -40°C ~ +85°C Max. System Voltage 1000V (IEC/UL) TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730) Module Fire Performance Max. Series Puse Rating 25 A Application Classification Class A Power Tolerance 0~+10W

### ELECTRICAL DATA | NMOT\*

CS6R-395/400/405/410/415/420MS-HL

Nominal Max. Power (Pmax) 296 W 300 W 304 W 307 W 311 W 315 W 0pt. Operating Voltage (Vmp)28.7 V 28.9 V 29.1 V 29.2 V 29.4 V 29.6 V 0pt. Operating Current (Imp) 10.33 A 10.39 A 10.45 A 10.52 A 10.58 A 10.65 A 0pen Circuit Voltage (Voc) 34.6 V 34.8 V 35.0 V 35.1 V 35.3 V 35.5 V Short Circuit Current (Ise) 11.09 A 11.15 A 11.21 A 11.28 A 11.34 A 11.41 A

### CS6R-405MS-HL / I-V CURVES



### MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	108 [2 X (9 X 6) ]
Dimensions	1722 × 1134 × 35 mm
ROHARCH PROFITS	(67.8 × 44.6 × 1.38 in)
Weight	22.4 kg (49.4 lbs)
Front Cover	3.2 mm tempered glass with anti- reflective coating
Frame	Anodized aluminium alloy,
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Connector	T6, MC4, MC4-EVO2 or MC4-EVO2A
Cable Length (Including Connector)	1550mm(61.0in)(+)/1100mm(43.3in)(-)
Per Pallet	30 pieces
Per Container (40' HQ)	780 pieces
For detailed information, ple	sase contact your local Canadian Solar sales and

### TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.34 % / °C
Temperature Coefficient (Voc)	-0.26 %/°C
Temperature Coefficient (Isc)	0.05 % / ℃
Nominal Module Operation Temperature	41 + 220

### PARTNER SECTION

technical representatives.

CSI SOLAR (USA) CO., LTD.

Aug 2022 | All rights reserved | PV Module Product Datasheet v1.1C25\_F23\_J1\_NA



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Under Standard Test Conditions (STC) of irradiance of 1000 Wife, spectrum AM 1.5 and cell temperature of 25°C.

Under Nominal Module Operating Temperature (NMOT), Irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 30°C, wind speed 1 m/s.

<sup>\*</sup> The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the en going innovation and product enhancement, CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice.

Please be unity advised that FV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before



### POWERWALL -

Powerwall+ is an integrated solar battery system that stores energy from solar production. Powerwall+ has two separate inverters, one for battery and one for solar, that are optimized to work together. Its integrated design and streamlined installation allow for simple connection to any home, and improved surge power capability brings whole home backup in a smaller package. Smart system controls enable owners to customize system behavior to suit their renewable energy needs.

### KEY FEATURES

- Integrated battery, inverter, and system controller for a more compact install
- A suite of application modes, including self-powered, time-based control, and backup modes
- Wi-Fi, Ethernet, and LTE connectivity with easy over-the-air updates



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787-643-6767

info@caribbeansolarenergypr.com

# PHOTOVOLTAIC (PV) AND BATTERY ENERGY STORAGE SYSTEM (BESS) SPECIFICATIONS

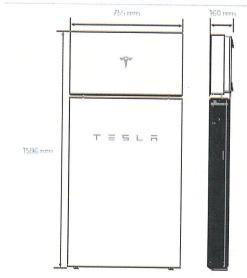
Powerwall+ Model Number	A-XX-0000°581
Solar Assembly Model Number	15.58000-xx-y
Nominal Battery Energy	13.5 kWh
Nominal Grid Voltage (Input / Output)	120/240 VAC
Grid Voltage Range	211,2 - 264 VAC
Frequency	00 Hz
Phase	240 VAC: 2W+N+GND
Maximum Continuous Power On-Grid	AG kVA tull sun / 5,8 kVA no sur
Maximum Continuous Power Off-Grid	9.6 kW full sun / 7 kW no sun'
Peak Off-Grid Power (10 s)	22 kW full sun ≠ 10 kW no sun*
Maximum Continuous Current On-Grid	32 A cutput
Maximum Continuous Current Off-Grid	40 A output
Load Start Capability	98 - 118 A LRA/
PV Maximum input Voltage	600 VDC
PV DC Input Voltage Range	60 - 550 VDC
PV DC MPPT Voltage Range	60 - 400 VOC
MPPTs	4 (or 2 combined strings)
Input Connectors per MPPT	1.2.1.2
Maximum Current per MPPT (I <sub>me</sub> )	15 A (26 A for combined strings)
Maximum Short Circuit Current per MPPT (I <sub>st</sub> )	15 A
Allowable DC/AC Ratio	1,7
Overcurrent Protection Device	50 A breaker
Maximum Supply Fault Current	10 kA
Output Power Factor Rating	√- 0.9 to 1).
Round Trip Efficiency	90% <sup>1</sup>
Solar Generation CEC Efficiency	97.55 at 208 V 98.05 at 240 V
Customer Interface	Tesia Mobile App
nternet Connectivity	Wi-Fi, Ethornot, Collular Lite /4G)
PV AC Metering	Revenue grade (+7-0.5%)
Protections	Integrated are fault circuit interrupter (AFCI). PV Rapid Shuldown
Varranty	10 years
the distance of the second of	The Received

### COMPLIANCE INFORMATION

PV Certifications	UL 1699B, UL 1741, UL 3201, UL 1241 SA, UL 1998 (US), IEEE 1547, IEEE 1547, 1
Battery Energy Storage System Certifications	UL 1642, UL 1741, UL 1741 PCS, UL 1741 SA, UL 1973, UL 9540, HEEL 1547, IEEE 1547,1, UN 38.3
Grid Connection	Umbed States
Emissions	LCC Part 15 Class B
Environmental	Roll's Directive 2011/65/EU
Selsmic	AC156, IEEE 695-2005 (high)

### MECHANICAL SPECIFICATIONS

Dimensions	1596 x 755 x 160 mm (62.8 x 29.7 x 6.3 m)
Total Weight	140 kg (\$10 lb) <sup>6</sup>
Battery Assembly	118 kg (261 lb)
Solar Assembly	22 kg (49 lb)
Mounting options	I loor or wall mount

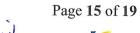


### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-20°C to 50°C (-4°F to 122°F) <sup>2</sup>
Recommended Temperature	0°C to 30°C (32°F to 86°F)
Operating Humidity (RH)	Up to 100%, condensing
Storage Conditions	-20°C to 30°C (-4°F to 86°F) Up to 95° RH, non-condensing State of Energy (SeE); 25% initial
Maximum Elevation	3000 m (9943 ft)
Environment	Indoor and outdoor rated
Enclosure Type	Type 32
Solar Assembly Ingress Rating	IPS5 (Wiring Compartment)
Battery Assembly Ingress Rating	IPS6 (Wiring Compartment) IPS7 (Battery & Power Electronics)
Noise Level 🤠 1 m	< 40 db(A) optimal, < 50 db(A) maximum
What are presented and the Part a brief of	

Walusa provided for 25°C (77°F).

LEST MICCOMPLINE INC





it ead start capability may sary.

Power tactor rating at max real power.

WC to battery to WC, at beginning of life.

<sup>&</sup>quot;Callular correctivity subject to network service coverage and signal strength.

The total weight does not include the Powerwalli bracket, which weighs an additional  $9\,\mathrm{kg}$  ( $20\,\mathrm{lp}$ ).

Performance may be tig-rated at executing temperatures below 10°C (50°E) or greater than 45°C (168°F).

### SOLAR SHUTDOWN DEVICE

The Tesla Solar Shutdown Device is part of the PV system rapid shutdown (RSD) function in accordance with Article 690 of the applicable NEC. When paired with Powerwall+, solar array shutdown is initiated by turning the Powerwall+ Enable switch off, or by pushing the System Shutdown Switch if one is present.



### **ELECTRICAL SPECIFICATIONS**

Nominal Input DC Current Rating (I <sub>sp</sub> )	12 A
Maximum Input Short Circuit Current (I <sub>sc</sub> )	15 A
Maximum System Voltage	600 A DC

### RSD MODULE PERFORMANCE

Maximum Number of Devices per String	5
Control	Power Line Excitation
Passive State	Normaliy open
Maximum Power Consumption	/ W
Warranty	25 years

# COMPLIANCE INFORMATION

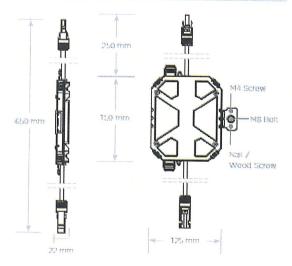
Certifications	UL 1741 PVRSE, UL 3741.
	PVRSA (Photovoltaic Rapid
	Shutdown Array)
RSD initiation Method	External System Shutdown Switch
Compatible Equipment	See Cempatibility table below

### **ENVIRONMENTAL SPECIFICATIONS**

Ambient Temperature	-40°C to 50°C (-40°F to 172°F)
Storage Temperature	-30°C to 60°C (-22°F to 140°F)
Enclosure Rating	NEMA 4 / IP65

### MECHANICAL SPECIFICATIONS

Electrical Connections	MC4 Connector	
Housing	Pasuc	***************************************
Dimensions	125 nan x 150 nan x 22 mm	***************************************
	(5 ln x G in x 1 in)	
Weight	\$50 g (0.77 lb)	
Mounting Options	⊋FP Flome Run Clip	
	M4 Screw (#10)	
	M8 (boit (5/16")	
	NaH Z Wood scrow	



# UL 3741 PV HAZARD CONTROL (AND PVRSA) COMPATIBILITY

Tosts Solar Roof and Tosts /ZED ZE Arrays using the following modules are certified to UL 3741 and UL 1741 PVRSA when installed with the Powerwall+ and Solar Shutdown Devices. See the Powerwall+ Installation Manual for detailed instructions and for guidance on installing Powerwall+ and Solar Shutdown Devices with either modules.

Brand	Model	Required Solar Shutdown Devices
Losia	Solat Roef V&	1 Selar Shutdown Device per 16 modules
Losia	Tosla TxxxS (where xxx - 405 to 450 W, increments of 5)	1 Splar Shutdown Disvice per 3 modules*
Tiesia	Tesia TxxxII (where xxx - 395 to 475 W, increments of 5)	1 Solar Shutdown Device per 3 modules
Hamwha	Q.PFAK DUO BEK-Q5	1 Solar Shutdown Disvice per 3 modules
Remyba	Q.PLAR DUO BLR-G6+	1 Selar Shutdown Disince per 3 modules

Exception: Tesia solar modules installed in locations where the max Vocitor three modules at low design temperatures exceeds 165 V shall be limited to two modules between MCIs.

Section 1995

HISLAGONYI NE ROV



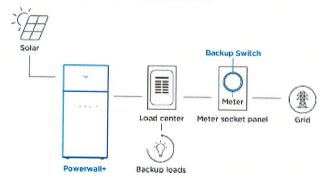


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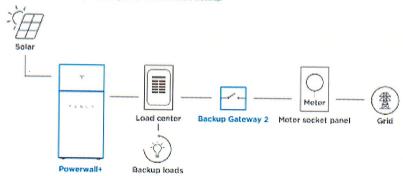
787-643-6767

### SYSTEM LAYOUTS

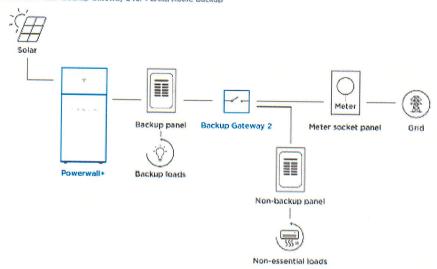
Powerwall+ with Backup Switch for Whole Home Backup



Powerwall+ with Backup Gateway 2 for Whole Home Backup



Powerwall+ with Backup Gateway 2 for Partial Home Backup



THIS I ALCOMAL NET BOX

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# **IQ8** Series Microinverters

Our newest IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



Part of the Enphase Energy System, IQ8 Series Microinverters Integrate with the Enphase IQ Battery. Enphase IQ Seteway, and the Enphase App monitoring and analysis software.



IQS Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industryleading limited warranty of up to 25 years.



Connect PV modules quickly and easily to IQS Series Microinverters using the included Q-DCC-2 adapter cable with plug-n-play MC4 connectors.



IQ8 Series Microinverters are UL Listed as FV Rapid Shut Down Equipment and conform with various regulations, when installed according to manufacturer's instructions.

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IQ85E-DS-0001-01-EN-US-2022-03-17

### Easy to install

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

### High productivity and reliability

- Produce power even when the grid is down\*
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest highpowered PV modules

### Microgrid-forming

- Complies with the latest advanced grid support\*\*
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) requirements

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Only when installed with IQ System Controller 2, meets UL 1741. IQ8H-208V operates only in grid-tied mode.

<sup>\*\*</sup> IC8 Series Microinverters supports split phase, 240v. IC8H-208 supports split phase, 208v only.

# IQ8 Series Microinverters

INPUT DATA (OC)		108-80-2-US	IQBPLUS-72-2-US	108M-72-2-US	108A-72-2-US	108H-240-72-2-US	108H-208-72-2-US	
Commonly used module pairings <sup>2</sup>	W	235-350	235 - 440	260 - 460	295 - 500	320 - 540+	295 - 500+	
Module compatibility	6	0-cell/120 half-cell		60-cell/120 half-cell.	21-2-22	and 72-cell/144 half-ce		
MPPT voltage range	V	27-37	29-45	33-45	36-45	38-45	38 - 45	
Operating range	V	25 - 48			25 - 58			
Min/max start voltage	V	30/48			30758			
Max Input DC voltage	v	50			60			
Max DC current <sup>3</sup> [module isc]	A				5			
Overvoltage class DC port					M			
DC port backfeed current	mili				0			
PV array configuration		1x1 Ungrounded a	rray: No additional t			lon requires max 20A pe	or horomody sylven att	
DUTPUT DATA (AC)		109-80-2-US	108PLUS-72-2-US	108M-72-2-US	108A-72-2-US	IQ8H-240-72-2-US	108H-208-72-2-US*	
Peak output power	.VA	245	300	330	366	384	366	
Max continuous output power	WA.	240	290	325	349	380	360	
Nominal (L-L) voltage/range*	٧			240 / 211 - 264		0.00	208 / 183 - 250	
Max continuous output current	A	1.0	1,21	1.35	1,45	1.58		
Nominal frequency	Hz				0	1.00	1.73	
Extended frequency range	Hz							
AC short circuit fault current over 3 cycles	Arms			2			4.4	
Max units per 20 A (L-L) branch circuit <sup>s</sup>		16	13	Ħ	Ħ	10		
Total harmonic distortion				×8		10	9	
Overvoltage class AC port				II				
AC port backfeed current	mil			3				
Power factor setting								
Grid-tied power factor (adjustable)		1.0 0.85 keding 0.85 lagging						
Peak efficiency	%	97.5	97.6	97.6	97.6	97.6	27.4	
CEC weighted efficiency	₩.	97	97	97	97.5	97	97.4	
Night-time power consumption	Witt			60		a,	31	
MECHANICAL DATA								
Ambient temperature range		-40°C to +60°C (-40°F to +140°F)						
Relative humidity range		4% to 100% (condensing)						
DC Connector type		MC4						
Dimensions (HXWXD)		212 mm (8.3") x 175 mm (6.9") x 30.2 mm (1.2")						
Weight		1.00 kg (2.38 lbs)						
Cooling		Natural convection – no fans						
Approved for wet locations				Yes				
Pollution degree				PDS				
Enclosure		Class II double-insulated, corrosion resistant polymeric enclosure						
Environ, category / UV exposure rating		NEMA Type 6 / outdoor						
COMPLIANCE								
	C/	Rule 21 (UL 1741-SA)	. UL 62109-1, UL1741	I/IEEEISAZ, PCC Part 15	Class B, ICES-0003	Class B, CAN/CSA-C22	2 NO 1021-01	
Certifications	Th 69	ls product is Ut. Liste	d as PV Rapid Shut i Rule 64-215 Rapid S	Down Equipment and e	onforms with Nice on	14, NEC 2017, and NEC : ductors, when installed	1000	

(1) The IQ8H-208 variant will be operating in grid-tied mode only at 208V AC. (2) No enforced DC/AC ratio. See the compatibility calculator at https://link.enphase.com/module-compatibility (3) Maximum continuous input DC current is 10.6A (4) Nominal voltage range can be extended beyond nominal if required by the utility. (5) Limits may vary, Refer to local requirements to define the number of microinverters per branch in your area.

IQ8SE-DS-0001-01-EN-US-2022-03-17

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**Appendix 4:** EPA's Published Summary of Nonattainment Areas Population Exposure Report & Status of Puerto Rico Designated Areas EPA's Published Summary of Nonattainment Areas Population Exposure Report & Status of Puerto Rico Designated Areas



You are here: EPA Home > Green Book > Summary Nonattainment Area Population Exposure Report

# **Summary Nonattainment Area Population Exposure Report**

Data is current as of June 30, 2025

#### Ordered by state(s)

The  $\mathrm{NO}_2$  nonattainment area became a maintenance area on September 22, 1998. All Carbon Monoxide areas were redesignated to maintenance areas as of September 27, 2010. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

Download National Dataset: dbf | xls | Data dictionary (PDF)

State(s)	General		2010 Population in 1000s (area count)								
State(s)	Area Name (see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	1-10 SO <sub>2</sub> (2010)  (1) (1) (3(1) (1) (3(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	SO <sub>2</sub> (1971)	Lead (2008)	Lead (1978)
AK	Fairbanks				87(1)						
AZ	Douglas/Paul Spur (Cochise County)						17(1)				
AZ	Hayden/Miami						26(2)	20(2)	5(1)	5(1)	
AZ	Nogales						30(1)	(-)	- (-)		
AZ	Phoenix-Mesa	3,945(1)	3,850(1)				3,853(1)				
AZ	Rillito (Pima County)						1(1)				
AZ	West Pinal				52(1)		283(1)				
AZ	Yuma	87(1)					101(1)				
CA	Amador and Calaveras Cos (Central Mountain Cos)	84(2)	46(1)				, ,				
CA	Chico	220(1)	220(1)								
CA	Imperial County	175(1)	175(1)	154(1)	154(1)						
CA	Los Angeles- South Coast Air Basin	15,704(3)	15,723(3)	15,716(1)	15,716(1)	15,716(1)				9,437(1)	
CA	Mariposa and Tuolumne Cos (Southern Mountain Cos)	74(2)	18(1)								
CA	Mono County						0(1)				
CA	Nevada County (Western Part)	82(1)	82(1)				` .				
CA	Owens Valley						7(1)				
	Plumas County			6(1)							
CA	Sacramento Metro	2,240(1)	2,241(1)		2,206(1)						
CA	San Diego	3,077(1)	3,095(1)								
CA	San Francisco- Bay Area	6,969(1)	6,973(1)		6,971(1)						

State(a)	General	2010 Population in 1000s (area count)									
State(s)	(see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)		SO <sub>2</sub> (1971)	Lead (2008)	Lead (1978)
CA	San Joaquin Valley	3,937(2)	3,938(2)	3,842(1)	3,842(1)	3,842(1)	126(1)				
	San Luis Obispo	1(1)	2(1)								
	Searles Valley Southeast						4(1)				
CA	Desert Modified AQMA	1,292(2)	1,294(2)				495(2)				
CA	Tuscan Buttes	0(1)	0(1)								
CA	Ventura County	821(1)	823(1)								
CA	Yuba City	0(1)									
	Denver- Boulder- Greeley-Ft. Collins- Loveland	3,331(1)	3,330(1)								
СТ	Greater Connecticut	1,629(1)	1,629(1)								
DC- MD- VA	Washington	5,136(1)									
GU	Piti-Cabras							6(1)	1(1)		
	Tanguisson Power Plant								1(1)		
	Muscatine County							30(1)			
	Pocatello						1(1)				
WI	Chicago- Joliet-Napier	9,075(1)									
IN	Fort Wayne- Huntington- Auburn							21(1)			
	Salina									0(1)	
KY	Henderson- Webster Counties							7(1)			
	Louisville	876(1)									
TΛ	Evangeline Parish							0(1)			
LA	New Orleans							36(1)			
MA-	Boston- Worcester- Manchester		17(1)								
	Baltimore	2,663(1)	2,663(1)					990(1)			
МІ	Allegan County	47(1)	_,=,==(1)					(1)			
	Benton Harbor	157(1)									
МІ	Detroit-Ann Arbor							306(2)			
	Muskegon	147(1)									
MNI	Minneapolis- St. Paul	, ,								9(1)	

Stato(s)	General	2010 Population in 1000s (area count)									
State(s)	Area Name (see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO <sub>2</sub> (2010)	SO <sub>2</sub> (1971)	Lead (2008)	Lead (1978)
МО	Iron, Dent, and Reynolds Counties	, , ,	Ź							0(1)	
1 1/1/1	New Madrid County							0(1)			
MO-IL	St. Louis Billings/Laurel	2,488(1)							7(1)	5(1)	3(1)
	Lame Deer						1(1)		. (-)		
	Polson (Lake County)						4(1)				
МТ	Ronan (Lake County)						3(1)				
	Las Vegas	1,892(1)									
NY	Jamestown		135(1)								
	St. Lawrence County		Ì					12(1)			
NY-NJ- CT	New York-N. New Jersey- Long Island	20,217(1)	20,217(1)								
	Canton- Massillon									6(1)	
	Cleveland- Akron-Elyria	2,780(1)									
	Klamath Falls				47(1)						
PA	Clearfield and Indiana Counties							93(1)			
PA	Lancaster		519(1)								
DΛ	Pittsburgh- New Castle		2,356(1)	1,223(1)	21(1)	21(1)		20(2)	5(1)	18(1)	
	Reading		411(1)							49(2)	
PA	Warren County							18(1)			
PA-NJ	Allentown- Bethlehem- Easton		712(1)								
PA-NJ- DE-	Philadelphia- Wilmington-	7,437(1)	7,634(2)								
	Atlantic City									22(1)	
	Arecibo Guayama- Salinas							23(1)		32(1)	
PR	San Juan							275(1)			
TN	Johnson City- Kingsport-							15(1)			
TX	Bristol Dallas-Fort	6,202(1)	6,280(1)								
	Worth	0,202(1)	0,200(1)					4(1)			
	Fairfield Houston-Sugar Land-Baytown	5,773(1)	5,892(1)					4(1)			
	Land-Baytown Howard County							0(1)			

	General			2010	Populati	on in 1000	)s (area	count)			
State(s)	(see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)		SO <sub>2</sub> (2010)	SO <sub>2</sub> (1971)	Lead (2008)	Lead (1978)
1 1 X	Hutchinson County							15(1)			
	Mount Pleasant							0(1)			
1 I X	Navarro County							2(1)			
	San Antonio	1,715(1)									
TX	Tatum							2(1)			
	El Paso-Las Cruces	813(1)					652(2)				
	Provo	516(1)			518(1)						
	Salt Lake City	1,616(1)			1,665(1)				1,030(1)		
	Tooele County								58(1)		
	Uinta Basin	47(1)									
	Giles County							0(1)			
	Milwaukee- Racine	1,648(1)									
WI	Sheboygan	68(1)									
	Parkersburg- Marietta							4(1)			
	Upper Green River Basin		11(1)								
			20	010 Popul	ation in 1	000s (are:	a count)	by Pol	lutant		1
Total E	stimated 2010					,					
Population in Nonattainment Areas (1000's)		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)		SO <sub>2</sub> (2010)	SO <sub>2</sub> (1971)	Lead (2008)	Lead (1978)
Across All Criteria Pollutants: 121,102		114,981 ( 46)	90,288 (34)	20,942 (5)	31,280 (11)	19,579 (3)	5,605 ( 20)	1,900 ( 28)	1,106 (7)	9,561 (11)	3 (1)

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

#### Area Name:

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

Discover.	Connect.	Ask.
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You are here: EPA Home > Green Book > National Area and County-Level Multi-Pollutant Information > Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

# Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of June 30, 2025

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

\* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 μg/m³) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:	
PUERTO RICO V	GO

Important N	Votes		Download	oad National Da	ataset: dbf   :	kls   D	ata dictiona	ry (PDF)
	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
PUERTO :							,	
Arecibo Municipio	Lead (2008)	Arecibo, PR	11 12 13 14 15 16 17 18 192021 2223 24 25	//		Part	32,185	72/013
Municipio	(2010)	San Juan, PR	1819202122232425	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Whole	28,140	72/033
Guaynabo Municipio	PM-10 (1987)	Mun. of Guaynabo, PR	929394959697989900010203040506070809	02/11/2010	Moderate	Part	90,470	72/061
	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama- Salinas, PR	1819202122232425	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Part	147,963	72/127
Toa Baja Municipio	Culfin	San Juan, PR	1819202122232425	//		Part	52,441	72/137
Important N	lotes							

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# Status of Puerto Rico Designated Areas

**Puerto Rico Areas by NAAQS** 

NOTE: As of 03/12/2021, these reports are no longer being updated. For the latest information, see the SIP Status Tools.

Jump to Puerto Rico section for: CO (1971) Lead (1978) Lead (2008) NO2 (1971) Ozone-1Hr (1979) Ozone-8Hr (1997) Ozone-8Hr (2008) Ozone-8Hr (2015) PM-10 (1987) PM-2.5 (1997) PM-2.5 (2006) PM-2.5 (2012) SO2 (1971) SO2 (2010)

Puerto	Rico CO	(1971) A	areas <u>R</u>	eturn to m	<u>nap</u>								
No desig	No designated areas for this pollutant.												
Puerto	Rico Lea	d (1978)	Areas	Return to	<u>тар</u> То	op of page							
No designated areas for this pollutant.													
Puerto	Rico Lea	d (2008)	Areas <u>F</u>	Return to I	<u>map</u>	Top of page							
Click on he Area name to view SIP Require d Element s	Status	Designa tion Date	Classifica tion	2010 Populati on (state por tion)	Meet s NAA QS Basis	Design Value Annual (μg/m³) (entire are a)	Meets NAAQS	SIP Requirem ents Original/ Approved	Clean Air Determin ation Citation Effective Date Click to view FR notice	Redesign ation Request Date	Redesigna tion Citation Effective Date Click to view FR notice		
Arecib o	Nonattain ment	12/31/2 011		32,185	201 7- 201 9	0.18	No	6/6					
Puerto	Rico NO	2 (1971)	Areas <u>I</u>	Return to	mapTo	p of page							
No designated areas for this pollutant.													
Puerto	Puerto Rico Ozone-1Hr (1979) Areas Return to map Top of page												

No designated areas for this pollutant.

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

No designated areas for this pollutant.

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

No designated areas for this pollutant.

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

No designated areas for this pollutant.

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

Click on the Area name to view SIP Require d Element S		Designa tion Date	Classifica tion		Meet s NAA QS Basis	Average Estimate d Exceeda nces (est. exc.) (entire are a)	Meets NAAQS	SIP Requirem ents Original/ Approved	Clean Air Determin ation Citation Effective Date Click to view FR notice	Redesign ation Request Date	Redesigna tion Citation Effective Date Click to view FR notice
Guayn abo County	Maintena nce	11/15/1 990	Moderat e	90,470	201 7- 201 9		Insuffic ient Data	3/3		03/31/20 09	02/11/20 10 <u>75 FR</u> <u>1543</u>

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

No designated areas for this pollutant.

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

No designated areas for this pollutant.

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

No designated areas for this pollutant.

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

No designated areas for this pollutant.

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

Click on the Area name to view SIP Require d Element s	Status	Designa tion Date	Classifica tion	2010 Populati on (state por tion)	Meet s NAA QS Basis	3 Year 1-Hour Design Value (ppb) (entire are a)	Meets NAAQS	SIP Requirem ents Original/ Approved	Clean Air Determin ation Citation Effective Date Click to view FR notice	Redesign ation Request Date	Redesigna tion Citation Effective Date Click to view FR notice
Guaya ma- Salinas	Nonattain ment	04/09/2 018		23,401	201 7- 201 9		No Data	6/0			
<u>San</u> <u>Juan</u>	Nonattain ment	04/09/2 018		275,267	201 7- 201 9		No Data	6/0			

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

Current and historical design value data can be found on the <u>EPA Air Quality Design Values website</u> and the <u>EPA Green Book</u> contains comprehensive nonattainment area, designation status, and historical information.

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



# **Appendix 5:** RADON Memo to file and supporting documentations and ECHO Reports





#### **Memorandum to File**

**Date:** July 1, 2025



From: Patricia Carmenatty Santiago

**Environmental Specialist** 

Behar Ybarra & Associates LLC

CDBG-DR Program

Electrical Power Reliability and Resilience Program (ER2)

Puerto Rico Department of Housing

**Application Number:** PR-ESP-00256

Project: Laboratorio Clinico Tecnolab (Laboratorio Clinico Yaucano Inc.)

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

After reviewing Application Number PR-ESP-00256 under the Electrical Power Reliability and Resilience Program (ER2), administered by the Puerto Rico Department of Housing (**PRDOH**), to complete the property's contamination analysis in accordance with 24 C.F.R. § 50.3(i) and 24 C.F.R. § 58.5(i), we have determined that testing the property's radon levels is infeasible and impracticable.

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

 As required by the CPD Notice 23-103, the scientific data reviewed in lieu of testing must consist of a minimum of ten documented test results over the previous ten years. If there are less than ten documented results over this period, it is understood that there is a lack of scientific data. The latest report

CDBG-DR Program
Electrical Power Reliability and Resilience Program (ER2)
Memorandum to File
Infeasibility and Impracticability of Radon Testing
Page 2 of 3

for radon testing in Puerto Rico was prepared in 1995 by the U.S. Department of the Interior in Cooperation with the U.S. Environmental Protection Agency. No other completed studies and reports on radon testing are available in Puerto Rico.

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

CDBG-DR Program
Electrical Power Reliability and Resilience Program (ER2)
Memorandum to File
Infeasibility and Impracticability of Radon Testing
Page 3 of 3

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

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

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



August 20, 2024

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

Vía email: guerrero.carmen@epa.gov

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

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

Community Planning and Development (CPD) Notice CDP-23-103. This Notice emphasizes the importance of radon testing and milligation in ensuring safe living environments, particularly in HUD-assited properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Miligation (CDBG-DR/MII), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MII programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any miltigation efforts within the Islands of Puerto Rico. Rico.

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

 $\underline{Radon\ testing\ data} - Results\ from\ radon\ testing\ conducted\ within\ your\ agency's\ purview,\ including\ details\ on\ location,\ testing\ methods,\ and\ recorded\ radon\ levels.$ 

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



August 20, 2024

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

Vía email: silvina.cancelos@upr.edu

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

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

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

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

Barbosa Ave. #606 , Building Juan C. Cordeto Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel. (767) 274-2527 | <a href="https://www.nienda.pr.gov">https://www.nienda.pr.gov</a>

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

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

<u>Policies and quidelines</u> – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

<u>Historical data</u> – 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.

llmn ( nez Rodfiguez, Esq.

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

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

Sincerely.

My Rodríguez, Esq.

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



August 20, 2024

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

Via email: OIA@cdc.gov

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

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

This Notice emphasizes the importance of radon testing and mitigation in Inis Notice emphasizes the importance of radon testing and miligation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Biosaster Recovery and Miligation (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 miligation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following

 $\frac{Radon\ testing\ data}{Results} - Results\ from\ radon\ testing\ conducted\ within\ your\ agency's\ purview,\ including\ details\ on\ location,\ testing\ methods,\ and\ recorded\ radon\ levels.$ 

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August 20, 2024

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

Via email: anais.rodriquez@drna.pr.gov

#### RE: Request for Information regarding available data on radon testing

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

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Specifically, we are seeking for possible availability of the following

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

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

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

agency has produced or commissioned that address radon testing or mitigation.

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

<u>Historical data</u> – 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.

D. Rodríguez, Esq

CD8G-DR/MIT Pro Request for Information in relation with HUD CPD-23-103 for Puerli

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

William O. Rodríguez Rodríguez, Esq.

Secretary

Mr. Luis Márquez, <u>secretariaaire@drna.pr.gov</u> Eng. Amarilys Rosario, <u>aire@drna.pr.gov</u> Mrs. Elid Ortega, <u>eortega@drna.pr.gov</u>



August 20, 2024

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

Vía email: drcarlos.mellado@salud.pr.gov

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

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

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

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August 20, 2024

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

Vía email: hsweyers@usgs.gov

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

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

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

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

Sincerely.

Ladriguez Rodriguez, Esq.

Mr. Raúl Hernández Doble, rhernandez2@salud.pr.gov

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Request for Information in relation with HUD CPD-23-103 for Puerto Rico
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Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative

Sincerely

Ariauez Rodriguez, Esq.

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

From: Charp, Paul (CDC/NCEH/DEHSP) <pac4@cdc.gov>

Sent: Tuesday, September 3, 2024 6:36 AM

To: Miranda, Sandra (CDC/PHIC/DPS); Irizarry, Jessica (CDC/PHIC/DPS); Rzeszotarski, Peter

(CDC/NCEH/DEHSP); Vinson, D. Aaron (CDC/NCEH/DEHSP)

Cc: Kostak, Liana (CDC/PHIC/DPS); Vazquez, Germaine (CDC/NCEH/DEHSP)

Subject: RE; REHi: Puerto Rico Request for Information- Randon testing and levels

#### Good morning, Sandra and others,

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

I was not able to find any data in the CDC systems and this was confirmed by Mr. Vinson. We also reached out the US Environmental Protection Agency who indicated they had no radon data in their systems. Please relay this information to Mr. 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 <a href="https://pubs.usgs.gov/of/1993/0292k/report.pdf">https://pubs.usgs.gov/of/1993/0292k/report.pdf</a>. 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
Geociences 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- Randon testing and levels

Good afternoon, Ms. Medina

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

Raul Hernandez Doble
Director, Seccion Salud Radiologica
Division de Salud Ambiental
Secretaria Auxiliar para la Vigilancia y la Proteccion de la Salud Publica
rhernandez2@salud.gov.pr

Phone: (787)765-2929 ext. 3210

From: Reyes, Brenda <Reyes.Brenda@epa.gov> Sent: Wednesday, September 18, 2024 11:48 AM

To: Cesar O Rodriguez Santos <cesarrodriguez@drna.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>;

Silvina Cancelos Mancini <silvina.cancelos@upr.edu>; Melanie Medina Smaine <mmedina@vivienda.pr.gov>

Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez

<aarivera@vivienda.pr.gov>; Povetko, Oleg (he/him/his) <Povetko.Oleg@epa.gov>

Subject: RE: Request for Information- Randon testing and levels

#### Saludos.

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

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

\_\_\_

From: Silvina Cancelos Mancini <silvina.cancelos@upr.edu>

Sent: Friday, September 6, 2024 15:04

To: Melanie Medina Smaine < mmedina@vivienda.pr.gov >

Cc: Elaine Dume Mejia < Edume@vivienda.pr.gov>; Luz S Colon Ortiz < Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez

<a href="mailto:aarivera@vivienda.pr.gov"><a href="mailto:Aarivera@vivie

<<u>Reyes.Brenda@epa.gov</u>>; Povetko, Oleg <<u>Povetko.Oleg@epa.gov</u>>

Subject: Re: Request for Information- Randon testing and levels

#### Estimada Melanie Medina

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

#### Atentamente

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



Bubble Dynamics Lab



September 23, 2024

#### VIA EMAIL

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

## 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 (DNER) and referred to the U.S. Environmental Protection Agency (EPA) regarding available data on radon testing and levels within Puerto Rico

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

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

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

Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered devices) are impractical in Puerto Rico because of high humidity and power outages. The recovery and rebuilding of communities following the aftermath of 2017 Hurricanes Irms and Maria presented an opportunity to develop radon prevention and mitigation strategies in 2019. Initially, EPA sampled indoor radon air in over 170 single-family residences in the municipalities of San Sebastian, Lares, Ciales, Arecibo, Morovis, Camuy, and Hatillo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadalli, stabela, Questradillas, Barecloneta and Vega Baja. The quality assurance protocols were anchored in American National Standards institute/American Association of Radon Scientists and Technologists (ANSI/AARS) standards of practice (ANSI/AARS) 1939. The sampling was designed in two stages: scoping and confirmatory sampling. The scoping sampling was conducted using Corentium Home (CH) electronic monitors and E-Perm ystems. Locations measuring above the EPA Action Level of 4 pCI/L with CH were measured at the second stage of the sampling using RAD7 and Corentium Pro Continuous Radon Monitors (CRMs). Nationally certified and on sampling professionals led by one such professional form 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. Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered levels.

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

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

CITY VIEW PLAZA II BUILDING, 7<sup>TH</sup> FLOOR ROUTE 165 GUAYNABO, PR 00968

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

Sincerely,

CARMEN **GUERRERO** PEREZ

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

Carmen R. Guerrero Pérez Director

Roberto Mendez, Esq (Acting Secretary, PR Department of Natural and Env. Resources)

Melany Medina: mmedina@vivienda.pr.gov Elaine Dume Mejia: Edume@vivienda.pr.gov Luz S Colon Ortiz: Lcolon@vivienda.pr.gov
Aldo A. Rivera-Vazquez: aarivera@vivienda.pr.gov Cesar O. Rodriguez: cesarrodriguez@drna.pr.gov Marita Rosa Olivares: maritzarosaolivares@drna.pr.gov

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



# **ECHO Reports**



# **Detailed Facility Report**

**Facility Summary** 

ESSO STANDARD OIL CO - MUNOZ ESSO SVC

CALLE 25 DE JULIO 19A, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110009437779

EPA Region: 02 Latitude: 18.03313 Longitude: -66.8518 Locational Data Source: FRS

Industries: -Indian Country: N

### **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

**Other Regulatory Reports** 

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

### **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000008722)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

#### **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110009437779					N	18.03313	-66.8518
RCRAInfo	RCRA	PRR000008722	Other	Inactive ( )			N	18.033374	-66.848836

#### **Facility Address**

System	System Statute Identifier		Facility Name	Facility Address	Facility County
FRS		110009437779	ESSO STANDARD OIL CO - MUNOZ ESSO SVC	CALLE 25 DE JULIO 19A, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PRR000008722	ESSO STANDARD OIL CO - MUNOZ ESSO SVC	CALLE 25 DE JULIO 19A, YAUCO, PR 00698-3604	Yauco Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

#### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

### Compliance Monitoring History

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

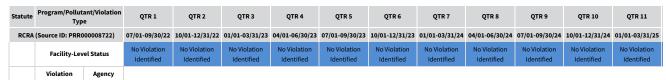
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <a href="https://www.epa.gov/compliance/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/complia
- <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

#### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)		Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000008722	No	05/31/2025	0	05/30/2025

#### Three-Year Compliance History by Quarter



## **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

### **Formal Enforcement Actions**

Last 5 Years

Statute System Law/ Source Type of Section ID Action No. Agency Name Date State Action Date Settlements/ Settlements/ Settlement/ Assessed State/Local Penalty Assessed State/Local Penalty Assessed Collected Value Action Cost

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System)) Beach Closures Within Last Two Years Pollutants Potentially Related to Impairment Species Act)-listed Aquatic Species?

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

**Pollutants** 

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

#### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

#### Community

#### Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic</a>.

General Statistics (ACS (American Community Survey)	
Total Persons	9,443
Population Density	3,029/sq.mi.
Housing Units in Area	5,189
Percent People of Color	100%
Households in Area	3,571
Households on Public Assistance	613
Persons With Low Income	7,245
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.03313
Center Longitude	-66.8518
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey	y)) - Households (%)
Less than \$15,000	1,472 (41.16%)
\$15,000 - \$25,000	601 (16.81%)
\$25,000 - \$50,000	909 (25.42%)
\$50,000 - \$75,000	376 (10.51%)
Greater than \$75,000	218 (6.1%)

Children 5 years and younger	456 (5%)
Minors 17 years and younger	1,772 (19%)
Adults 18 years and older	7,671 (81%)
Seniors 65 years and older	2,081 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	6,677 (71%)
African-American	434 (5%)
Hispanic-Origin	9,389 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	24 (0%)
Other/Multiracial	1,344 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)
Less than 9th Grade	738 (10.89%)
9th through 12th Grade	374 (5.52%)
High School Diploma	2,287 (33.74%)
Some College/2-year	604 (8.91%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,115 (31.2%)



# **Detailed Facility Report**

**Facility Summary** 

ESSO STANDARD OIL CO - PR CO-408

PR-116 CRUCE CUATRO CALLES, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110004892215

**EPA Region:** 02 **Latitude:** 18.032355 **Longitude:** -66.852698

Locational Data Source: RCRAINFO

Industries: -Indian Country: N

### **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

**Other Regulatory Reports** 

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

### **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

 $\textbf{Resource Conservation and Recovery Act (RCRA):} \quad \text{Active VSQG},$ 

(PRR000002501)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

#### **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004892215					N	18.032355	-66.852698
ICIS		600007637					N	18.0375	-66.841667
RCRAInfo	RCRA	PRR000002501	VSQG	Active (H )			N	18.032355	-66.852698

#### **Facility Address**

System	System Statute Identifier		Statute Identifier Facility Name		Facility Name	Facility Address	Facility County
FRS		110004892215	ESSO STANDARD OIL CO - PR CO-408	PR-116 CRUCE CUATRO CALLES, YAUCO, PR 00698	Yauco Municipio		
ICIS		600007637	ESSO S/S #408	RD. 4 YAUCO SHOPPING CTR, YAUCO, PR 00698	Yauco Municipio		
RCRAInfo	RCRA	PRR000002501	ESSO STANDARD OIL CO - PR CO-408	CARR 116 CRUCE CUATRO CALLES, YAUCO, PR 00698	Yauco Municipio		

#### **Facility SIC (Standard Industrial** Classification) Codes

#### **Facility NAICS (North American Industry** Classification System) Codes

NAICS Code SIC Code NAICS Description

No data records returned

No data records returned

### **Facility Tribe Information**

Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

### **Compliance Monitoring History**

Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

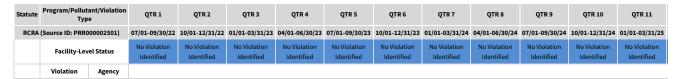
 $< https://www.epa.gov/compliance/compliance-monitoring-programs > activities \ or \ because \ they \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results$ 

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

#### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000002501	No	05/31/2025	0	05/30/2025

### Three-Year Compliance History by Quarter



# **Informal Enforcement Actions**

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

#### **Formal Enforcement Actions**

Last 5 Years

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary WBD (Watershed Boundary Dataset) Beach Closures atershed with ESA (Endan: Reach Closures Pollutants Potentially Dataset) HUC (RAD (Reach Address Subwatershed Name (RAD (Reach Address Species Act)-listed Aquation Within Last Year

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

**Pollutants** 

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

#### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

#### Community

### Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic</a>.

General Statistics (ACS (American Community Survey)	)
Total Persons	10,147
Population Density	3,254/sq.mi.
Housing Units in Area	5,533
Percent People of Color	100%
Households in Area	3,848
Households on Public Assistance	654
Persons With Low Income	7,751
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.032355
Center Longitude	-66.852698
Total Area	-
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	y)) - Households (%)
Less than \$15,000	1,567 (40.74%)
\$15,000 - \$25,000	655 (17.03%)
\$25,000 - \$50,000	966 (25.12%)
\$50,000 - \$75,000	413 (10.74%)
Greater than \$75,000	245 (6.37%)

Children 5 years and younger	473 (5%)
Minors 17 years and younger	1,890 (19%)
Adults 18 years and older	8,256 (81%)
Seniors 65 years and older	2,229 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%	)
White	7,166 (71%)
African-American	463 (5%)
Hispanic-Origin	10,094 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	25 (0%)
Other/Multiracial	1,453 (14%)
Education Level (Persons 25 & older) (ACS (American Community S	urvey)) - Persons (%)
Less than 9th Grade	766 (10.48%)
9th through 12th Grade	385 (5.27%)
High School Diploma	2,475 (33.85%)
Some College/2-year	637 (8.71%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,323 (31.77%)



# **Detailed Facility Report**

**Facility Summary** 

ESSO STANDARD OIL CO PR 2P-397

36 25 DE JULIO ST, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110012259616

EPA Region: 02 Latitude: 18.03339 Longitude: -66.8504 Locational Data Source: FRS

Industries: --

Indian Country: N

### **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

#### **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG,

(PRR000014233)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

#### **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110012259616					N	18.03339	-66.8504
RCRAInfo	RCRA	PRR000014233	VSQG	Active (H )			N	18.033401	-66.850453

# **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

#### **Facility Address**

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110012259616	ESSO STANDARD OIL CO PR 2P-397	36 25 DE JULIO ST, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PRR000014233	ESSO STANDARD OIL CO PR 2P-397	36 25 DE JULIO ST, YAUCO, PR 00698	Yauco Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

#### No data records returned

#### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

### Compliance Monitoring History

ast 5 Years.

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

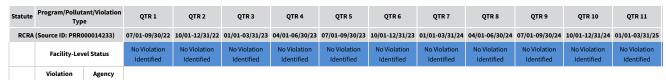
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <a href="https://www.epa.gov/compliance/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/complia
- <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

#### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000014233	No	05/31/2025	0	05/30/2025

#### Three-Year Compliance History by Quarter



## **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

# **Formal Enforcement Actions**

Last 5 Years

Statute System Carbon Statute System Statute System Statute System Statute System Statute System Statute System ID Action No. Agency Name Date Status Status

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System)) Beach Closures Within Last Two Years Pollutants Potentially Related to Impairment Species? Within Last Years Pollutants Potentially Related to Impairment Species?

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

#### No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)			
	No data considerate condi						
No data records returned							

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers No data records returned

#### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

#### Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic</a>.

General Statistics (ACS (American Community Survey))	
Total Persons	8,750
Population Density	2,806/sq.mi.
Housing Units in Area	4,822
Percent People of Color	100%
Households in Area	3,289
Households on Public Assistance	557
Persons With Low Income	6,728
Percent With Low Income	78%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.03339
Center Longitude	-66.8504
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey)	) - Households (%)
Less than \$15,000	1,357 (41.28%)
\$15,000 - \$25,000	538 (16.37%)
\$25,000 - \$50,000	867 (26.38%)
\$50,000 - \$75,000	339 (10.31%)
Greater than \$75,000	186 (5.66%)

Children 5 years and younger	427 (5%)
Minors 17 years and younger	1,645 (19%)
Adults 18 years and older	7,105 (81%)
Seniors 65 years and older	1,927 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	6,164 (70%)
African-American	403 (5%)
Hispanic-Origin	8,699 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	23 (0%)
Other/Multiracial	1,247 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)
Less than 9th Grade	700 (11.21%)
9th through 12th Grade	360 (5.76%)
High School Diploma	2,099 (33.61%)
Some College/2-year	565 (9.05%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,900 (30.42%)



# **Detailed Facility Report**

**Facility Summary** 

ESSO STANDARD OIL CO PR CO-402

PR-128 KM 0.6 LA TROCHA FIN, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110022478335

EPA Region: 02

Latitude: 18.039115

Longitude: -66.853968

Locational Data Source: FRS
Industries: Gasoline Stations
Indian Country: N

#### **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

#### **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

 $\textbf{Resource Conservation and Recovery Act (RCRA):} \quad \text{Active VSQG},$ 

(PRR000017798)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

#### **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110022478335					N	18.039115	-66.853968
RCRAInfo	RCRA	PRR000017798	VSQG	Active (H )			N	18.291937	-66.875306

### **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

#### **Facility Address**

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110022478335	ESSO STANDARD OIL CO PR CO-402	PR-128 KM 0.6 LA TROCHA FIN, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PRR000017798	ESSO STANDARD OIL CO PR CO-402	CARR #128 KM 0.6 LA TROCHA FIN, YAUCO, PR 00698	Yauco Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

RCRAInfo PRR000017798 44719 Other Gasoline Stations

#### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

### **Compliance Monitoring History**

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

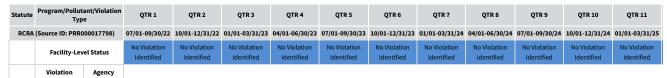
<https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

#### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000017798	No	05/31/2025	0	05/30/2025

### Three-Year Compliance History by Quarter



#### **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

#### **Formal Enforcement Actions**

Last 5 Years

Statute System Carbon Statute System S

No data records returned

#### **Environmental Conditions**

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset)
Database))

WBD (Watershed Boundary Dataset)
State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

WBD (Watershed Boundary Dataset)
State Water Body Name (ICIS (Integrated Compliance Information System))

Watershed Boundary Dataset)

Watershed Boundary Dataset)

Watershed Seach Closures Within Last Two Years

Watershed to Impairment

Species Act)-listed Aquatic Species?

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)		
	No data records returned					
		No data records retu	irned			

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

#### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

\$50,000 - \$75,000

Greater than \$75,000

#### Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic</a>.

General Statistics (ACS (American Community Survey))					
Total Persons	8,426				
Population Density	2,703/sq.mi.				
Housing Units in Area	4,804				
Percent People of Color	99%				
Households in Area	3,195				
Households on Public Assistance	571				
Persons With Low Income	6,502				
Percent With Low Income	78%				
Geography					
Radius of Selected Area	1 mi.				
Center Latitude	18.039115				
Center Longitude	-66.853968				
Total Area					
Land Area	100%				
Water Area	0%				
Income Breakdown (ACS (American Community Survey)) - Households (%)					
Less than \$15,000	1,309 (40.97%)				
\$15,000 - \$25,000	571 (17.87%)				
\$25,000 - \$50,000	820 (25.67%)				

336 (10.52%)

Children 5 years and younger	440 (5%)		
Minors 17 years and younger	1,530 (18%)		
Adults 18 years and older	6,896 (82%)		
Seniors 65 years and older	1,927 (23%)		
Race Breakdown (ACS (American Community Survey)) - Persons (%)			
White	6,132 (73%)		
African-American	376 (4%)		
Hispanic-Origin	8,357 (99%)		
Asian	0 (0%)		
Hawaiian/Pacific Islander	0 (0%)		
American Indian	19 (0%)		
Other/Multiracial	1,141 (14%)		
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)		
Less than 9th Grade	739 (12.11%)		
9th through 12th Grade	373 (6.11%)		
High School Diploma	2,041 (33.45%)		
Some College/2-year	521 (8.54%)		
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,849 (30.3%)		



# **Detailed Facility Report**

**Facility Summary** 

ESSO STANDARD OIL CO PR DO-395

25 DE JULIO ST #21, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110004895711

**EPA Region:** 02 **Latitude:** 18.033384 **Longitude:** -66.84675

Locational Data Source: RCRAINFO

Industries: -Indian Country: N

### **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

**Other Regulatory Reports** 

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

#### **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000012807)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

### **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004895711					N	18.033384	-66.84675
RCRAInfo	RCRA	PRR000012807	Other	Inactive ()			N	18.033384	-66.84675

#### **Facility Address**

S	System	Statute	Identifier	Facility Name	Facility Address	Facility County	
	FRS		110004895711	ESSO STANDARD OIL CO PR DO-395	25 DE JULIO ST #21, YAUCO, PR 00698	Yauco Municipio	
R	CRAInfo	RCRA	PRR000012807	ESSO STANDARD OIL CO PR DO-395	25 DE JULIO ST #21, YAUCO, PR 00698	Yauco Municipio	

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

#### No data records returned

#### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

### Compliance Monitoring History

Last 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

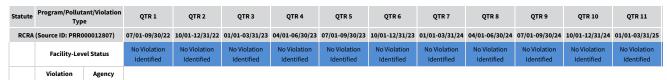
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results
- <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

#### **Compliance Summary Data**

Statut	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000012807	No	05/31/2025	0	05/30/2025

#### Three-Year Compliance History by Quarter



## **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

### **Formal Enforcement Actions**

Last 5 Years

Statute System System System System Section ID Action No. Agency Name Date State Action Date Settlements/ Section State System S

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))

WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Information System))

Watershed Boundary Dataset)

Watershed Boundary Dataset)

Watershed State Water Body Name (ICIS (Integrated Compliance Information System))

Within Last Two Years

Watershed State Water Body Name (ICIS (Integrated Compliance Information System))

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

#### No data records returned

## **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)							
No date as early materials											
		No data records retu	irnea								

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land

No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

# Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey))	
Total Persons	7,353
Population Density	2,358/sq.mi.
Housing Units in Area	4,117
Percent People of Color	100%
Households in Area	2,747
Households on Public Assistance	431
Persons With Low Income	5,681
Percent With Low Income	78%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.033384
Center Longitude	-66.84675
Total Area	-
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey	r)) - Households (%)
Less than \$15,000	1,129 (41.1%)
\$15,000 - \$25,000	435 (15.84%)
\$25,000 - \$50,000	764 (27.81%)
\$50,000 - \$75,000	284 (10.34%)
Greater than \$75,000	135 (4.91%)

Children 5 years and younger	337 (5%)
Minors 17 years and younger	1,276 (17%)
Adults 18 years and older	6,078 (83%)
Seniors 65 years and older	1,628 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	5,108 (69%)
African-American	309 (4%)
Hispanic-Origin	7,307 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	19 (0%)
Other/Multiracial	1,079 (15%)
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)
Less than 9th Grade	590 (11.14%)
9th through 12th Grade	333 (6.29%)
High School Diploma	1,804 (34.08%)
Some College/2-year	487 (9.2%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,539 (29.07%)



**Facility Summary** 

MUNICIPALITY OF YAUCO

SANTIAGO BIBALDI STREET, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110044243850

EPA Region: 02 Latitude: 18.03403 Longitude: -66.85037 Locational Data Source: FRS

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	CWA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	04/21/2025
Compliance Status	Unknown
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	

# **Regulatory Information**

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Expired; Compliance Tracking

Partially Off (PRR040077)

**Resource Conservation and Recovery Act (RCRA):** No Information

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

	System	Statute	Identifier	Universe	Status	Areas	<b>Permit Expiration Date</b>	Indian Country	Latitude	Longitude
	FRS		110044243850					N	18.03403	-66.85037
1	CIS-NPDES	CWA	PRR040077	Non-Major: General Permit Covered Facility	Expired; Compliance Tracking Partially Off	Urban Stormwater (Small MS4)	06/30/2021	N	18.03405	-66.84792

# **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

**Greenhouse Gas Emissions (eGGRT):** No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110044243850	MUNICIPALITY OF YAUCO	SANTIAGO BIBALDI STREET, YAUCO, PR 00698	
ICIS-NPDES	CWA	PRR040077	MUNICIPALITY OF YAUCO	SANTIAGO BIBALDI STREET, YAUCO, PR 00698	Yauco Municipio

# **Facility SIC (Standard Industrial** Classification) Codes

# **Facility NAICS (North American Industry** Classification System) Codes

No data records returned

#### No data records returned

# **Facility Industrial Effluent Guidelines**

## **Facility Tribe Information**

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description	Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
	No data records ret	urned		No data	records returned	

#### **Enforcement and Compliance**

# **Compliance Monitoring History** Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	PRR040077	ICIS-NPDES	Offsite Record Review	Urban Stormwater (MS4) - Desk Audit	EPA	04/21/2025	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

 $< https://www.epa.gov/compliance/compliance-monitoring-programs > activities \ or \ because \ they \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results$ 

## **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PRR040077	No	12/31/2024	0	05/30/2025

# Three-Year Compliance History by Quarter

5	Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
	CWA (Source ID: PRR040077)		01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24
		Facility-Level Status	Unknown										
		Quarterly Noncompliance Report History	Undetermined										

## **Informal Enforcement Actions** Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

# Formal Enforcement Actions | Last 5 Years

Statuto	System	Law/	Source	Type of	Case	Lead	Case	Issued/ Filed	Settlements/	Settlement/	Federal Penalty	State/ Local Penalty	Penalty Amount	SEP	Comp
Statute	System	Section	ID	Action	No.	Agency	Name	Date	Actions	Action Date	Assessed	Assessed	Collected	Value	<b>Action Cost</b>

No data records returned

#### **Environmental Conditions**

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100040202	Rio Yauco at mouth		No	No		Yes

<sup>&</sup>lt;a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

S	tate	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
	PR	2024	PRSR68A1	RIO YAUCO	Impaired - 303(d) Listed - With Restoration Plan	NUTRIENTS   ORGANIC ENRICHMENT/OXYGEN DEPLETION   PATHOGENS	Not Supporting	Not Supporting		Not Supporting	

## **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
		No data records retu	urned	

Pollutants

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

# Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

# CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID Description

No data records returned

Community

# Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey	n)
Total Persons	8,391
Population Density	2,691/sq.mi.
Housing Units in Area	4,673
Percent People of Color	99%
Households in Area	3,156
Households on Public Assistance	548
Persons With Low Income	6,478
Percent With Low Income	78%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.03403
Center Longitude	-66.85037
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surv	ey)) - Households (%)
Less than \$15,000	1,319 (41.77%)
\$15,000 - \$25,000	521 (16.5%)
\$25,000 - \$50,000	822 (26.03%)
\$50,000 - \$75,000	321 (10.16%)
Greater than \$75,000	175 (5.54%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	420 (5%)
Minors 17 years and younger	1,582 (19%)
Adults 18 years and older	6,806 (81%)
Seniors 65 years and older	1,860 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%	)
White	5,944 (71%)
African-American	389 (5%)
Hispanic-Origin	8,338 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	23 (0%)
Other/Multiracial	1,182 (14%)
Education Level (Persons 25 & older) (ACS (American Community St	urvey)) - Persons (%)
Less than 9th Grade	688 (11.5%)
9th through 12th Grade	353 (5.9%)
High School Diploma	2,014 (33.65%)
Some College/2-year	549 (9.17%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,801 (30.09%)



**Facility Summary** 

ORAL-B LABS MANUFACTURING CORP OF PR

PR-335 KM 0.4, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110002466581

EPA Region: 02
Latitude: 18.030189
Longitude: -66.846419
Locational Data Source: TRIS
Industries: Chemical Manufacturing

Indian Country: N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	09/09/2005
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

**Other Regulatory Reports** 

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): 00768RLBLBSTATE

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

# **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRD105820815)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110002466581					N	18.030189	-66.846419
TRI	EP313	00768RLBLBSTATE	Toxics Release Inventory	Last Reported for 1987			N	18.030189	-66.846419
RCRAInfo	RCRA	PRD105820815	Other	Inactive ( )			N	18.030189	-66.846419

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110002466581	ORAL-B LABS MANUFACTURING CORP OF PR	PR-335 KM 0.4, YAUCO, PR 00698	Yauco Municipio
TRI	EP313	00768RLBLBSTATE	ORAL-B LABS MANUFACTURING CORP OF PR	STATE RD 335, KM 04, YAUCO, PR 007691657	Yauco Municipio
RCRAInfo	RCRA	PRD105820815	ORAL-B LABORATORIES MFG OF PR	STATE RD 335 KM 0.4, YAUCO, PR 00768	Yauco Municipio

## **Facility SIC (Standard Industrial** Classification) Codes

# **Facility NAICS (North American Industry** Classification System) Codes

System	Identifier	SIC Code	SIC Description	System	Identifier	NAICS Code	NAICS Description
TRI	00768RLBLBSTATE	2844	Toilet Preparations	TRI	00768RLBLBSTATE	325611	Soap and Other Detergent Manufacturing

# **Facility Tribe Information**

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

# Compliance Monitoring History | Last 5 Years

|--|

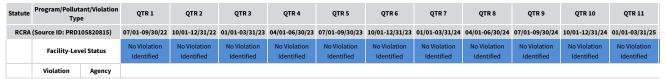
No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

## **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRD105820815	No	05/31/2025	0	05/30/2025

# Three-Year Compliance History by Quarter



# **Informal Enforcement Actions**

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

# **Formal Enforcement Actions**

C+	tuto	Syctom	Law/	Source	Type of	Case	Lead	Case	Issued/ Filed	Settlements/	Settlement/	Federal Penalty	State/ Local Penalty	Penalty Amount	SEP	Comp
36	tatute System	System	Section	ID	Action	No.	Agency	Name	Date	Actions	Action Date	Assessed	Assessed	Collected	Value	<b>Action Cost</b>

No data records returned

**Environmental Conditions** 

#### Watersheds

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

#### Community

## Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey))	
Total Persons	7,819
Population Density	2,508/sq.mi.
Housing Units in Area	4,247
Percent People of Color	100%
Households in Area	2,875
Households on Public Assistance	431
Persons With Low Income	5,978
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.030189
Center Longitude	-66.846419
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey)) - Househol	ds (%)
Less than \$15,000	1,127 (39.23%)
\$15,000 - \$25,000	453 (15.77%)
\$25,000 - \$50,000	814 (28.33%)
\$50,000 - \$75,000	310 (10.79%)
Greater than \$75,000	169 (5.88%)

Children 5 years and younger	327 (4%)
Minors 17 years and younger	1,418 (18%)
Adults 18 years and older	6,403 (82%)
Seniors 65 years and older	1,664 (21%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	5,409 (69%)
African-American	341 (4%)
Hispanic-Origin	7,779 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	21 (0%)
Other/Multiracial	1,147 (15%)
Education Level (Persons 25 & older) (ACS (American Community Su	ırvey)) - Persons (%)
Less than 9th Grade	579 (10.42%)
9th through 12th Grade	331 (5.96%)
High School Diploma	1,896 (34.13%)
Some College/2-year	501 (9.02%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,665 (29.97%)



**Facility Summary** 

PR ARMY NATIONAL GUARD

PR-127 KM 0.7, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110007813553

**EPA Region:** 02 **Latitude:** 18.033469 **Longitude:** -66.848879

Locational Data Source: RCRAINFO

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

**Other Regulatory Reports** 

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

## **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PR7210420017), Inactive Other, (PRD987382108) **Safe Drinking Water Act (SDWA):** No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007813553					N	18.033469	-66.848879
RCRAInfo	RCRA	PR7210420017	Other	Inactive ()			N		
RCRAInfo	RCRA	PRD987382108	Other	Inactive ()			N	18.033128	-66.851617

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007813553	PR ARMY NATIONAL GUARD	PR-127 KM 0.7, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PR7210420017	USARC - PFC LUIS F GARCIA OLIVERAS	RD 127 KM 1.0, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PRD987382108	PR ARMY NATIONAL GUARD	RD 127 KM 0.7, YAUCO, PR 00698	Yauco Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

## **Compliance Monitoring History**

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

<https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

# **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PR7210420017	No	05/31/2025	0	05/30/2025
RCRA	PRD987382108	No	05/31/2025	0	05/30/2025

# Three-Year Compliance History by Quarter



# **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

## **Formal Enforcement Actions**

Last 5 Years

Statute System Law/ Source Type of Section ID Action No. Agency Name Date State Action Date Settlements/ Settlements/ Settlements/ Settlements/ Settlements/ Settlements/ Settlements/ Settlements/ Action Date Settlements/ Settlements/ Action Date State/Local Penalty Penalty Amount SEP Comp

Collected Value Action Cost

No data records returned

#### **Environmental Conditions**

#### Watersheds

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant With	nin Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)			
No data records returned							

**Pollutants** 

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

## e-Manifest Hazardous Waste History (Public)

#### Hazardous Waste Shipped in Kilograms by Year (Through 3/1/2025)

Source ID	Waste Description	2022	2023	2024	2025
PR7210420017	Hazardous Waste		159		
PR7210420017	Acute Hazardous Waste		0		
PR7210420017	Pharmaceutical Hazardous Waste		0		

"Pharmaceutical Hazardous Waste" refers to quantities managed under 40 CFR part 266 subpart P and thus excluded from the Hazardous and Acute Hazardous Waste quantities shown above.

Community

## Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey))	
Total Persons	8,123
Population Density	2,605/sq.mi.
Housing Units in Area	4,496
Percent People of Color	100%
Households in Area	3,039
Households on Public Assistance	503
Persons With Low Income	6,260
Percent With Low Income	78%

Age Breakdown (ACS (American Community Survey))	- Persons (%)
Children 5 years and younger	394 (5%)
Minors 17 years and younger	1,502 (18%)
Adults 18 years and older	6,620 (81%)
Seniors 65 years and older	1,790 (22%)
Race Breakdown (ACS (American Community Survey)	) Persons (0/)
Race Breakdown (ACS (American Community Survey)	) - Fersons (%)
White	5,692 (70%)
African-American	369 (5%)
Hispanic-Origin	8,075 (99%)
Asian	0 (0%)

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.033469
Center Longitude	-66.848879
Total Area	=
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Sur	vey)) - Households (%)
Less than \$15,000	1,257 (41.36%)
\$15,000 - \$25,000	484 (15.93%)
\$25,000 - \$50,000	827 (27.21%)
\$50,000 - \$75,000	310 (10.2%)
Greater than \$75,000	161 (5.3%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
Hawaiian/Pacific Islander	0 (0%)
American Indian	22 (0%)
Other/Multiracial	1,168 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	ırvey)) - Persons (%)
Less than 9th Grade	657 (11.34%)
9th through 12th Grade	352 (6.08%)
High School Diploma	1,947 (33.61%)
Some College/2-year	531 (9.17%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,721 (29.71%)



**Facility Summary** 

PREPA - YAUCO TECHNICAL OPERATIONS OFFICE

49 MATIENZO CINTRO ST INT PR-116, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110004891467

EPA Region: 02 Latitude: 18.032723 Longitude: -66.851437 Locational Data Source: FRS

**Industries:** Utilities **Indian Country:** N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

# **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

 $\textbf{Resource Conservation and Recovery Act (RCRA):} \quad \text{Active VSQG},$ 

(PRR00000331)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004891467					N	18.032723	-66.851437
RCRAInfo	RCRA	PRR00000331	VSQG	Active (H )			N	18.03281	-66.852267

# **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

	System	Statute	Identifier	Facility Name	Facility Address	Facility County
	FRS		110004891467	PREPA - YAUCO TECHNICAL OPERATIONS OFFICE	49 MATIENZO CINTRO ST INT PR-116, YAUCO, PR 00698	Yauco Municipio
Г	RCRAInfo	RCRA	PRR000000331	LUMA - YAUCO DISTRICT OFFICE LINES	49 MATIENZO CINTRO ST INT PR 116, YAUCO, PR 00698	Yauco Municipio

# Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

 Identifier
 SIC Code
 SIC Description
 System
 Identifier
 NAICS Code
 NAICS Description

 No data records returned
 RCRAInfo
 PRR000000331
 22112
 Electric Power Transmission, Control, and Distribution

## **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

# **Compliance Monitoring History**

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

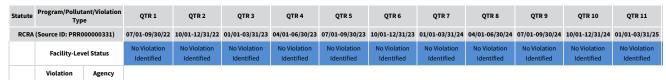
<https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000000331	No	05/31/2025	0	05/30/2025

# Three-Year Compliance History by Quarter



### **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

## **Formal Enforcement Actions**

Last 5 Years

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset)
Database))

WBD (Watershed Boundary Dataset)
State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

WBD (Watershed Boundary Dataset)
State Water Body Name (ICIS (Integrated Compliance Information System))

Watershed Boundary Dataset)

Watershed Boundary Dataset)

Watershed Mithin Last Two Years

Within Last Two Years

Watershed Name (RD (Integrated Compliance Information System))

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

## **Air Quality Nonattainment Areas**

Pollutant	Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status		Maintenance Status Applicable Standard(s)	
	No data records returned			
		No data records reto	irried	

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

\$50,000 - \$75,000

Greater than \$75,000

## Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic</a>.

General Statistics (ACS (American Community Survey))				
Total Persons	9,516			
Population Density	3,052/sq.mi.			
Housing Units in Area	5,195			
Percent People of Color	100%			
Households in Area	3,590			
Households on Public Assistance	603			
Persons With Low Income	7,284			
Percent With Low Income	77%			
Geography				
Radius of Selected Area	1 mi.			
Center Latitude	18.032723			
Center Longitude	-66.851437			
Total Area				
Land Area	100%			
Water Area	0%			
Income Breakdown (ACS (American Community Survey)) - Households (%)				
Less than \$15,000	1,466 (40.84%)			
\$15,000 - \$25,000	596 (16.6%)			
\$25,000 - \$50,000	928 (25.85%)			

381 (10.61%)

219 (6.1%)

Children 5 years and younger	450 (5%)
Minors 17 years and younger	1,780 (19%)
Adults 18 years and older	7,734 (81%)
Seniors 65 years and older	2,089 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	6,699 (70%)
African-American	436 (5%)
Hispanic-Origin	9,464 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	24 (0%)
Other/Multiracial	1,363 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	ırvey)) - Persons (%)
Less than 9th Grade	735 (10.77%)
9th through 12th Grade	374 (5.48%)
High School Diploma	2,301 (33.71%)
Some College/2-year	603 (8.84%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,128 (31.18%)



**Facility Summary** 

SARTORIUS STEDIM FILTERS, INC -ECO SITE

PR-128 INT. PR-368 KM 2.1, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110071074880

**EPA Region:** 02 **Latitude:** 18.034113 **Longitude:** -66.860769

Locational Data Source: NPDES

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	CWA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	Significant/Category I Noncompliance
Qtrs in Noncompliance (of 12)	1
Qtrs with Significant Violation	1
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

## **Regulatory Information**

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Effective (PRR05J00Y)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

0.7.5.6

# Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

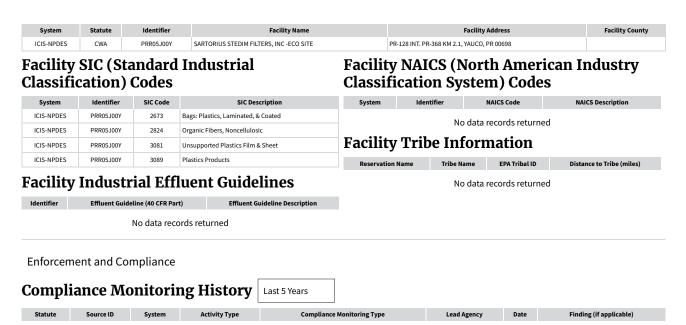
Facility/System Characteristics

# **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110071074880					N	18.034113	-66.860769
ICIS-NPDES	CWA	PRR05J00Y	Non-Major: General Permit Covered Facility	Effective	Industrial Stormwater	02/28/2026	N	18.034505	-66.862309

## **Facility Address**

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110071074880	SARTORIUS STEDIM FILTERS, INC -ECO SITE	PR-128 INT. PR-368 KM 2.1, YAUCO, PR 00698	Yauco Municipio



No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

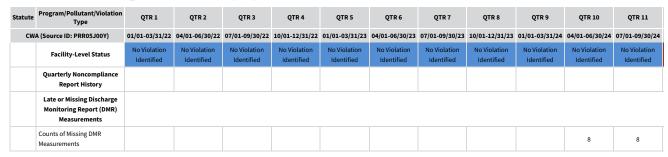
<https://www.epa.gov/compliance/compliance/monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

## **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed	
CWA	PRR05J00Y	Yes	12/31/2024	1	05/30/2025	

# Three-Year Compliance History by Quarter



## **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.



#### **Environmental Conditions**

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)- listed Aquatic Species?
210100040202	Rio Yauco at mouth	RIO YAUCO, YAUCO RIVER	No	No	Chemical Oxygen Demand (COD)   Oxygen, dissolved (DO)   Phosphorus, total (as P)	Yes

## **Assessed Waters From Latest State Submission (ATTAINS)**

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
PR	2024	PRSR68A1	RIO YAUCO	Impaired - 303(d) Listed - With Restoration Plan	NUTRIENTS   ORGANIC ENRICHMENT/OXYGEN DEPLETION   PATHOGENS	Not Supporting	Not Supporting		Not Supporting	

## **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s)		Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)	
No data records returned					

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

# Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

# CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID Description

No data records returned

#### Community

Total Area

# Demographic Profile of Surrounding Area (1-Mile Radius)

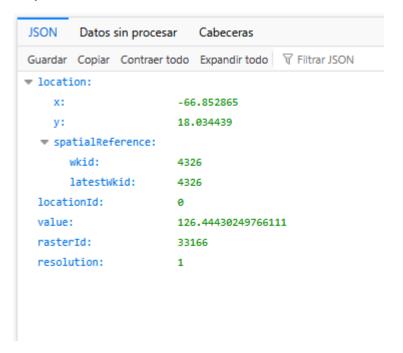
13,386
4,295/sq.mi.
6,788
99%
5,070
889
10,263
77%
1 mi.
18.034113
-66.860769

Age Breakdown (ACS (American Community Survey)) -	Persons (%)
Children 5 years and younger	604 (5%)
Minors 17 years and younger	2,608 (19%)
Adults 18 years and older	10,775 (80%)
Seniors 65 years and older	2,966 (22%)
	- (n)
Race Breakdown (ACS (American Community Survey))	- Persons (%)
White	9,618 (72%)
African-American	570 (4%)
Hispanic-Origin	13,310 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	28 (0%)

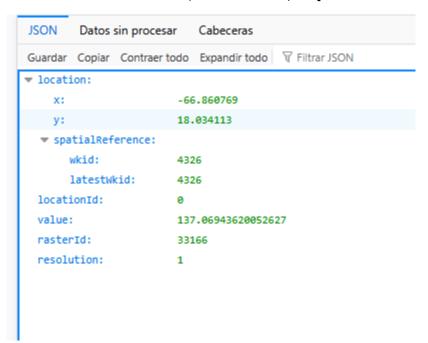
Geography	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community	Survey)) - Households (%)
Less than \$15,000	2,018 (39.79%)
\$15,000 - \$25,000	882 (17.39%)
\$25,000 - \$50,000	1,326 (26.15%)
\$50,000 - \$75,000	520 (10.25%)
Greater than \$75,000	325 (6.41%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)										
Less than 9th Grade	1,111 (11.49%)									
9th through 12th Grade	491 (5.08%)									
High School Diploma	3,387 (35.03%)									
Some College/2-year	775 (8.02%)									
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	3,005 (31.08%)									

### Project PR-ESP-00256 EPWS elevation



## SARTORIUS STEDIM FILTERS, INC -ECO SITE, EPQS Elevation



Environmental<https://
Topics www.epa.gov/
environmentaltopics>

Laws & <a href="https://">https://</a>
Regulationswww.epa.gov/laws-regulations>

**Report a** <a href="https://">https://</a> www.epa.gov/report-violation>

**About**<a href="https://">https://</a> **EPA** www.epa.gov/ aboutepa>

Glossary

Data

About

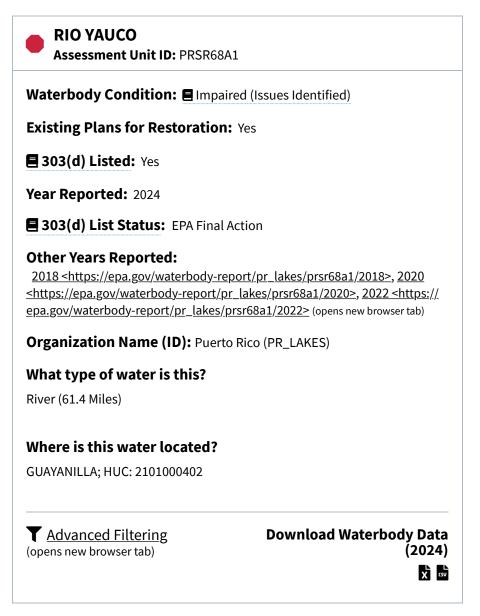
Educators

Contact Us <a href="https://www.epa.gov/waterdata/forms/contact-us-about-hows-my-waterway">https://www.epa.gov/waterdata/forms/contact-us-about-hows-my-waterway</a>

# How's My Waterway?

Explore, Discover and Learn about your water.

# Waterbody Report



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Kadaster Netherlands, Esri, TomTom, Garm	Powered by Esri < https://www.esri.com/>

State or Tribal Nation specific designated uses		
Information on Water Quality Standards <a href="https://www.epa.gov/wqs-tech/state-specific-water-quality-standards-effective-under-clean-water-act-cwa">https://www.epa.gov/wqs-tech/state-specific-water-quality-standards-effective-under-clean-water-act-cwa</a>	Expand	All 🗹
Aquatic Life	Impaired	>
Drinking Water Supply	Impaired	>
Primary Contact Recreation	Impaired	>
		>
Secondary Contact (Recr)	Impaired	_
Probable sources contributing to impairment		
Probable sources contributing to impairment	from 2024:	•
Probable sources contributing to impairment	from 2024:	•
Probable sources contributing to impairment	from 2024:	•
Probable sources contributing to impairment	from 2024:	•
Probable sources contributing to impairment to Click a column heading to sort	from 2024:	•

Source	Parameter	C
Filter	Filter	F
Urban Runoff/storm Sewers	Dissolved Oxygen	No
Urban Runoff/storm Sewers	Fecal Coliform	N
Sanitary Sewer Overflows (Collection System Failures)	Dissolved Oxygen	No
Sanitary Sewer Overflows (Collection System Failures)	Fecal Coliform	No
Sanitary Sewer Overflows (Collection System Failures)	Phosphorus, Total	No
On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems)	Dissolved Oxygen	No
On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems)	Fecal Coliform	No
On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems)	Phosphorus, Total	No
Municipal Point Source Discharges	Dissolved Oxygen	No
Municipal Point Source Discharges	Fecal Coliform	Ne
Municipal Point Source Discharges	Phosphorus, Total	Ne
Landfills	Fecal Coliform	N
Industrial Point Source Discharge	Dissolved Oxygen	No
Industrial Point Source Discharge	Fecal Coliform	Ne
Industrial Point Source Discharge	Phosphorus, Total	Ne
Agriculture	Dissolved Oxygen	N
Agriculture	Phosphorus, Total	Ne
Click a column heading to sort		Clear Filter

Assessment Documents
No documents are available

Plans to Restore Water Quality									
What plans are in place to protect or restore water quality?  Links below open in a new browser tab.									
Plan Impairments Type Completion Date									
	are in place to prot open in a new brows	are in place to protect or restore open in a new browser tab.							

Plan	Impairments	Туре	Completion Date
Fecal Coliform Bacteria Total Maximum Daily Loads for Assessment Units in the Commonweal th of Puerto Rico (September 2012) <a href="https://epa.gov/plan-summary/pr_lakes/4251">https://epa.gov/plan-summary/pr_lakes/4251</a> 5>	Enterococcus Bacteria, Fecal Coliform, Total Coliform	■ TMDL	2012-09-28



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<a href="https://www.epa.gov/planandbudget">https://www.epa.gov/planandbudget</a>

**Contracting** <a href="https://www.epa.gov/contracts">https://www.epa.gov/contracts></a>

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**Grants** <a href="https://www.epa.gov/grants">https://www.epa.gov/grants>

# No FEAR Act Data <a href="https://">https://</a>

www.epa.gov/ocr/whistleblowerprotections-epa-and-how-they-relatenon-disclosure-agreements-signed-epa>

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www.epa.gov/web-policies-and-procedures/plain-writing>

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www.regulations.gov/>

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# 

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www.epa.gov/foia>

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www.epa.gov/aboutepa/frequentquestions-specific-epa-programstopics>

# Follow.













**Facility Summary** 

SARTORIUS STEDIM FILTERS, INC. - MB

PR 128, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110070033311

EPA Region: 02 Latitude: 18.039588 Longitude: -66.859028 Locational Data Source: NPDES

Industries: --Indian Country: N

## **Enforcement and Compliance Summary**

Statute	CWA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	

## **Regulatory Information**

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Effective (PRR053326)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

#### **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110070033311	SARTORIUS STEDIM FILTERS, INC MB	PR 128, YAUCO, PR 00698	
ICIS-NPDES	CWA	PRR053326	SARTORIUS STEDIM FILTERS, INC MB	PR 128, YAUCO, PR 00698	Yauco Municipio

### Facility SIC (Standard Industrial Classification) Facility NAICS (North American Industry Codes

# Classification System) Codes

System	Identifier	SIC Code	SIC Description	System	Identifi
ICIS-NPDES	PRR053326	2823	Cellulosic Manmade Fibers		
System	Identifier	SIC Code	SIC Description		
ICIS-NPDES	PRR053326	3081	Unsupported Plastics Film & Sheet	Facility	Triba
ICIS-NPDES	PRR053326	3089	Plastics Products	Facility	111be

#### Information

### **Facility Industrial Effluent Guidelines**

No data records returned

No data records returned

No data records returned

**Enforcement and Compliance** 

# **Compliance Monitoring History**

No data records returned

 $Entries \ in \ italics \ are \ not \ included \ in \ ECHO's \ Compliance \ Monitoring \ Activity \ counts \ because \ they \ are \ not \ compliance \ monitoring \ strategy < https://www.epa.gov/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/co$ monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PRR053326	No	06/30/2025	0	09/12/2025

#### Three-Year Compliance History by Quarter

Statute	Program/ Pollutant/ Violation Type	QTR 1	QTR 2	QTR3	QTR 4	QTR 5	QTR 6	QTR 7	QTR8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13+
	A (Source ID: RR053326)	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25	07/01-09/12/25
	Facility-Level Status	No Violation Identified	Undetermined											
	Quarterly Noncompliance Report History	Resolved	Resolved								Resolved			
	Late or Missing Discharge Monitoring Report (DMR) Measurements													
	Counts of Late DMR Measurements								12					

### **Informal Enforcement Actions**

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

#### **Formal Enforcement Actions**

Last 5 Years

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------	-------------------------------------------------------------------------------	------------------------------------	--------------------------------------------	-------------------------------------------------	---------------------------------------------------------------------------

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100040202	Rio Yauco at mouth	RIO YAUCO	No	No	Chemical Oxygen Demand (COD)   Oxygen, dissolved (DO)   Phosphorus, total (as P)	Yes

Sta	ate	teport Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
P	R 2	2024	PRSR68A1	RIO YAUCO	Impaired - 303(d) Listed - With Restoration Plan	NUTRIENTS   ORGANIC ENRICHMENT/OXYGEN DEPLETION   PATHOGENS	Not Supporting	Not Supporting		Not Supporting	

## **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status App		Maintenance Status Applicable Standard(s)	
No data records returned					
No data records returned					

**Pollutants** 

#### Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

#### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

# CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID Description

No data records returned

Community

#### Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey))	
Total Persons	10,686
Population Density	3,429/sq.mi.
Housing Units in Area	5,719
Percent People of Color	99%
Households in Area	4,070
Households on Public Assistance	705
Persons With Low Income	8,147
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.039588
Center Longitude	-66.859028
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey)) - Hous	seholds (%)
Less than \$15,000	1,601 (39.33%)
\$15,000 - \$25,000	749 (18.4%)
\$25,000 - \$50,000	1,039 (25.52%)
\$50,000 - \$75,000	455 (11.18%)
Greater than \$75,000	227 (5.58%)

Children 5 years and younger	484 (5%)		
Minors 17 years and younger	1,896 (18%)		
Adults 18 years and older	8,791 (82%)		
Seniors 65 years and older	2,444 (23%)		
Race Breakdown (ACS (American Community Survey)) - Persons (%)			
White	7,730 (72%)		
African-American	446 (4%)		
Hispanic-Origin	10,615 (99%)		
Asian	0 (0%)		
Hawaiian/Pacific Islander	0 (0%)		
American Indian	18 (0%)		
Other/Multiracial	1,541 (14%)		
Education Level (Persons 25 & older) (ACS (American Community Surv	vey)) - Persons (%)		
Less than 9th Grade	907 (11.55%)		
9th through 12th Grade	444 (5.66%)		
High School Diploma	2,687 (34.23%)		
Some College/2-year	585 (7.45%)		
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,459 (31.32%)		



**Facility Summary** 

SHELL CO PR LTD SS 1627 GARAJE SAN JOSE

68 25 DE JULIO ST, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110004893036

EPA Region: 02 Latitude: 18.03295 Longitude: -66.85204 Locational Data Source: FRS

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

**Other Regulatory Reports** 

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

# **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000005405)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004893036					N	18.03295	-66.85204
ICIS		1400002779					N	18.032778	-66.8525
RCRAInfo	RCRA	PRR000005405	Other	Inactive ()			N		

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110004893036	SHELL CO PR LTD SS 1627 GARAJE SAN JOSE	68 25 DE JULIO ST, YAUCO, PR 00698	Yauco Municipio
ICIS		1400002779	SHELL #1627	25 DE JULIO #68, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PRR000005405	SHELL CO PR LTD SS 1627 GARAJE SAN JOSE	68 25 DE JULIO ST, YAUCO, PR 00698-3512	Yauco Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

# **Compliance Monitoring History**

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

 $Entries\ in\ italics\ are\ not\ included\ in\ ECHO's\ Compliance\ Monitoring\ Activity\ counts\ because\ they\ are\ not\ compliance\ monitoring\ strategy$ 

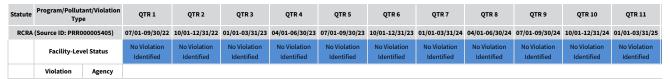
 $< https://www.epa.gov/compliance/compliance-monitoring-programs > activities \ or \ because \ they \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ not \$ 

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

### **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000005405	No	05/31/2025	0	05/30/2025

# Three-Year Compliance History by Quarter



# **Informal Enforcement Actions**

Actions | Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

#### **Formal Enforcement Actions**

Last 5 Years

Statute System Law/ Section ID Action No. Agency Name Date Date Settlements/ Settlements/ Settlements/ Settlement/ Federal Penalty State/Local Penalty Penalty Amount SEP Composition Collected Value Action Cost

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))

WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

Beach Closures Within Last Two Years

Watershed Boundary Database) Watershed Boundary Dataset) Species Actt-listed Aquatic Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

#### No data records returned

## **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
		No data records retu	irned	
		No data records retu	irrieu	

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land

No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

# Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey))	
Total Persons	9,629
Population Density	3,088/sq.mi.
Housing Units in Area	5,283
Percent People of Color	100%
Households in Area	3,645
Households on Public Assistance	622
Persons With Low Income	7,379
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.03295
Center Longitude	-66.85204
Total Area	-
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey	r)) - Households (%)
Less than \$15,000	1,496 (41.04%)
\$15,000 - \$25,000	617 (16.93%)
\$25,000 - \$50,000	921 (25.27%)
\$50,000 - \$75,000	386 (10.59%)
Greater than \$75,000	225 (6.17%)

Children 5 years and younger	460 (5%)
Minors 17 years and younger	1,801 (19%)
Adults 18 years and older	7,828 (81%)
Seniors 65 years and older	2,123 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	6,808 (71%)
African-American	443 (5%)
Hispanic-Origin	9,577 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	25 (0%)
Other/Multiracial	1,371 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)
Less than 9th Grade	748 (10.81%)
9th through 12th Grade	375 (5.42%)
High School Diploma	2,338 (33.78%)
Some College/2-year	612 (8.84%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,169 (31.34%)



**Facility Summary** 

SHELL CO PR LTD SS 804347 YAUCO

PR-376 KM 0.19, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110007819272

EPA Region: 02 Latitude: 18.037079 Longitude: -66.85706 Locational Data Source: FRS

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

## **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000005785)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007819272					N	18.037079	-66.85706
RCRAInfo	RCRA	PRR000005785	Other	Inactive ()			N	18.037079	-66.85706

# **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

System	tem Statute Identifier		Facility Name	Facility Address	Facility County	
FRS		110007819272	SHELL CO PR LTD SS 804347 YAUCO	PR-376 KM 0.19, YAUCO, PR 00698	Yauco Municipio	
RCRAInfo	RCRA	PRR000005785	SHELL CO PR LTD SS 804347 YAUCO	RD PR 376 KM 0.19, YAUCO, PR 00698	Yauco Municipio	

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

### No data records returned

### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

# **Compliance Monitoring History**

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

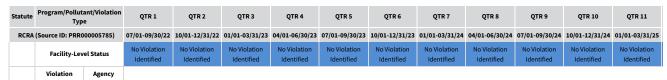
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <a href="https://www.epa.gov/compliance/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/complia
- <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>>.

## **Compliance Summary Data**

Statu	e Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCR	PRR000005785	No	05/31/2025	0	05/30/2025

# Three-Year Compliance History by Quarter



# **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

# **Formal Enforcement Actions**

Last 5 Years

Statute System System System System Section ID Action No. Agency Name Date State Action Date Settlements/ Section State System System State System Sy

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System)) Beach Closures Within Last Two Years Pollutants Potentially Related to Impairment Species Act)-listed Aquatic Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

#### No data records returned

### **Air Quality Nonattainment Areas**

Pollutant Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
	No data records retu	ırned	

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

# Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey)	))
Total Persons	11,211
Population Density	3,596/sq.mi.
Housing Units in Area	6,089
Percent People of Color	99%
Households in Area	4,277
Households on Public Assistance	744
Persons With Low Income	8,579
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.037079
Center Longitude	-66.85706
Total Area	-
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	ey)) - Households (%)
Less than \$15,000	1,714 (40.05%)
\$15,000 - \$25,000	777 (18.15%)
\$25,000 - \$50,000	1,073 (25.07%)
\$50,000 - \$75,000	460 (10.75%)
Greater than \$75,000	256 (5.98%)

Children 5 years and younger	530 (5%)
Minors 17 years and younger	2,067 (18%)
Adults 18 years and older	9,146 (82%)
Seniors 65 years and older	2,524 (23%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	1
White	8,096 (72%)
African-American	499 (4%)
Hispanic-Origin	11,138 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	24 (0%)
Other/Multiracial	1,580 (14%)
Education Level (Persons 25 & older) (ACS (American Community St	ırvey)) - Persons (%)
Less than 9th Grade	920 (11.26%)
9th through 12th Grade	435 (5.33%)
High School Diploma	2,779 (34.03%)
Some College/2-year	670 (8.2%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,584 (31.64%)



**Facility Summary** 

TEXACO PR INC - JUAN GARCIA PACHECO

25 JULIO 9, YAUCO, PR 00768

FRS (Facility Registry Service) ID: 110009437500

EPA Region: 02 Latitude: 18.0334 Longitude: -66.848365 Locational Data Source: FRS

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	

## **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000003277)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

## **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110009437500					N	18.0334	-66.848365
RCRAInfo	RCRA	PRR000003277	Other	Inactive ()			N		

# **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

System	System Statute Identifier		Facility Name	Facility Address	Facility County	
FRS			TEXACO PR INC - JUAN GARCIA PACHECO	25 JULIO 9, YAUCO, PR 00768	Yauco Municipio	
RCRAInfo			TEXACO PR INC - JUAN GARCIA PACHECO	25 JULIO 9, YAUCO, PR 00768		

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

### No data records returned

#### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

# **Compliance Monitoring History**

ast 5 Years.

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

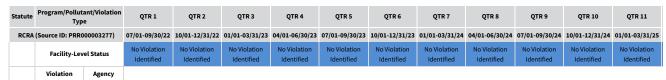
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <a href="https://www.epa.gov/compliance/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/complia
- <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

## **Compliance Summary Data**

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000003277	No	05/31/2025	0	05/30/2025

# Three-Year Compliance History by Quarter



# **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

# **Formal Enforcement Actions**

Last 5 Years

Statute System Carbon Statute System Statute Statut

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) BUC (RAD (Reach Address Database))

WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

WBD (Watershed Boundary Dataset) Beach Closures Within Last Two Years

Wellutants Potentially Related to Impairment Species Act)-listed Aquatic Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

#### No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)					
	No data manufacture at								
	No data records returned								

#### **Pollutants**

# Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land No. Site Releases Total Off-Site Transfers No data records returned

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

#### Community

# Demographic Profile of Surrounding Area (1-Mile Radius)

General Statistics (ACS (American Community Survey)	0
Total Persons	, 7,975
Population Density	2,558/sq.mi.
Housing Units in Area	4,416
Percent People of Color	100%
Households in Area	2,981
Households on Public Assistance	487
Persons With Low Income	6,144
Percent With Low Income	78%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.0334
Center Longitude	-66.848365
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	y)) - Households (%)
Less than \$15,000	1,229 (41.23%)
\$15,000 - \$25,000	473 (15.87%)
\$25,000 - \$50,000	818 (27.44%)
\$50,000 - \$75,000	306 (10.27%)
Greater than \$75,000	155 (5.2%)

Children 5 years and younger	382 (5%)
Minors 17 years and younger	1,459 (18%)
Adults 18 years and older	6,515 (82%)
Seniors 65 years and older	1,756 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	5,573 (70%)
African-American	357 (4%)
Hispanic-Origin	7,926 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	21 (0%)
Other/Multiracial	1,154 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)
Less than 9th Grade	644 (11.31%)
9th through 12th Grade	347 (6.1%)
High School Diploma	1,918 (33.7%)
Some College/2-year	522 (9.17%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,687 (29.64%)



**Facility Summary** 

**YAUCO SS 0493** 

CALLE 25 DE JULIO, YAUCO, PR 00698

FRS (Facility Registry Service) ID: 110004892741

EPA Region: 02 Latitude: 18.03313 Longitude: -66.8518 Locational Data Source: FRS

Industries: -Indian Country: N

# **Enforcement and Compliance Summary**

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

## **Regulatory Information**

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000004259)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

Facility/System Characteristics

# **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004892741					N	18.03313	-66.8518
RCRAInfo	RCRA	PRR000004259	Other	Inactive ()			N	18.033384	-66.84675

# **Other Regulatory Reports**

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

oreemouse ous Emissions (cooking, no morning

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

#### **Facility Address**

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110004892741	YAUCO SS 0493	CALLE 25 DE JULIO, YAUCO, PR 00698	Yauco Municipio
RCRAInfo	RCRA	PRR000004259	YAUCO SS 0493	CALLE 25 DE JULIO, YAUCO, PR 00698-3604	Yauco Municipio

## Facility SIC (Standard Industrial Classification) Codes

## Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

#### **Facility Tribe Information**

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

**Enforcement and Compliance** 

#### Compliance Monitoring History

Last 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

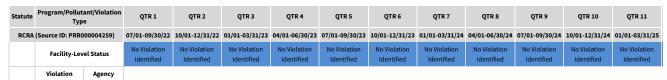
<a href="https://www.epa.gov/compliance/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/compliance/complia

<a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

#### **Compliance Summary Data**

Statut	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000004259	No	05/31/2025	0	05/30/2025

#### Three-Year Compliance History by Quarter



#### **Informal Enforcement Actions**

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

#### **Formal Enforcement Actions**

Last 5 Years

Statute System Carbon Statute System Statute Statut

No data records returned

**Environmental Conditions** 

#### Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System)) Beach Closures Within Last Two Years Pollutants Potentially Related to Impairment Species? Within Last Years Pollutants Potentially Related to Impairment Species?

No data records returned

#### Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

#### No data records returned

#### **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
		No data records retu	ırned	
		No data records retu	ineu	

#### **Pollutants**

## Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land

No data records returned

#### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name	
No data records returned	

#### Community

#### Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic</a>.

General Statistics (ACS (American Community Survey)	1
Total Persons	9.443
	•
Population Density	3,029/sq.mi.
Housing Units in Area	5,189
Percent People of Color	100%
Households in Area	3,571
Households on Public Assistance	613
Persons With Low Income	7,245
Percent With Low Income	77%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.03313
Center Longitude	-66.8518
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	y)) - Households (%)
Less than \$15,000	1,472 (41.16%)
\$15,000 - \$25,000	601 (16.81%)
\$25,000 - \$50,000 909 (25.42%)	
\$50,000 - \$75,000 376 (10.51%)	
Greater than \$75,000 218 (6.1%)	

Children 5 years and younger	456 (5%)
Minors 17 years and younger	1,772 (19%)
Adults 18 years and older	7,671 (81%)
Seniors 65 years and older	2,081 (22%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	6,677 (71%)
African-American	434 (5%)
Hispanic-Origin	9,389 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	24 (0%)
Other/Multiracial	1,344 (14%)
Education Level (Persons 25 & older) (ACS (American Community Su	rvey)) - Persons (%)
Less than 9th Grade	738 (10.89%)
9th through 12th Grade	374 (5.52%)
High School Diploma	2,287 (33.74%)
Some College/2-year	604 (8.91%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	2,115 (31.2%)

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## Property Details for Trocha Street Service Station

#### On this page:

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- Additional Property Attributes

Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

#### **Profile Information**

Property Alias
Property Owner Private
ACRES Property ID 125690

Property Address La Trocha Street #1 Yauco, PR 00698

.5

**Parcel Numbers** 

Latitude/ Longitude

18.039969 / -66.852905

Congressional District

Property Contact Madera, Carmen

cdbgyauco@hotmail.com

787-267-4008

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### **Property Location**

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### **Property Progress**

Assessment

Clean Up

Institutional

Controls in Place

Engineering Controls in Place

Ready for Anticipated Use

Redevelopment Underway

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## **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year
Yauco, Municipality of	BF97244008	PR	Assessment	2008

### **Assessment Activities at this Property**

Activity	EPA Funding	Start Date	Completion Date	CA	Accomplishment Counted?	Counted When?
Phase I Environmental Assessment	\$16,389.00	08/06/2010	12/07/2010	Yauco, Municipality of	Υ	FY11

Is Cleanup Necessary? **Unknown**EPA Assessment Funding: **\$16,389.00**Leveraged Funding:
Total Funding: **\$16,389.00** 

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# Climate Adaption and Mitigation - Planning or Assessment

There is no data for Climate Adaption and Mitigation - Planning or Assessment.

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#### **Contaminants and Media**

Media Affected
Unknown

Remediating Action for Media **NOT Cleaned up** 

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### **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info: Address of Data Source:

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# Climate Adaption and Mitigation - Demolition or Cleanup

There is no data for Climate Adaption and Mitigation - Demolition or Cleanup.

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### **Institutional and Engineering Controls**

Indicate whether **U** Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available) Are Institutional No Controls in Place

Date Institutional Controls were put in place

Indicate whether No Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether No Engineering Controls are in place

Date Engineering Controls were put in place

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# Redevelopment and Other Leveraged Accomplishments

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

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# Climate Adaption and Mitigation – Redevelopment

There is no data for Climate Adaption and Mitigation - Redevelopment

#### **Additional Property Attributes**

Property Highlights Former Use: The Site is a former gasoline service station. The facility is located on the south-east side of state road PR-3372. The section of PR-3372 in which the Site is located is also known as La Trocha Street in the Municipality of Yauco. The exact address of the site is #1 La Trocha Street, Yauco, Puerto Rico. The parcel has a rectangular shape with an area of approximately 2,000 square meter. Most of the Site so outdoor area is paved with concrete. Indoor areas include an office, restrooms, and a storage room. Outdoor areas appear to be designated for fuel dispensing area, vehicle maintenance/check up area, and oil change area. A tire air pump and a water faucet is located near the north east corner of the Site. A manhole which apparently gives access to an underground fuel storage tank was observed on the northwest side of the facility.

Predominant Past Usage

What types of funding are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/Signed Report Received from a Qualified Professional

Other Cleanup Documentation Petroleum

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# Property Details for Mu�oz Rivera Building

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- Additional Property Attributes

Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

#### **Profile Information**

Property Alias
Property Owner Private
ACRES Property ID 125703

Property Address Luis Mu oz Rivera Street #56 Yauco, PR 00698

.03 Size

Parcel Numbers

Latitude/ Longitude

18.036031 / -66.851383

Congressional District

Property Contact Madera, Carmen

cdbgyauco@hotmail.com

787-267-4008

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### **Property Location**

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### **Property Progress**

Assessment

Clean Up

Institutional

Controls in Place

Engineering Controls in Place

Ready for Anticipated Use

Redevelopment Underway

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## **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year
Yauco, Municipality of	BF97244108	PR	Assessment	2008

### **Assessment Activities at this Property**

Activity	EPA Funding	Start Date	Completion Date	CA	Accomplishment Counted?	Counted When?
Phase I Environmental Assessment	\$16,389.00	05/25/2010	12/07/2010	Yauco, Municipality of	Υ	FY11

Is Cleanup Necessary? **Unknown**EPA Assessment Funding: **\$16,389.00**Leveraged Funding:
Total Funding: **\$16,389.00** 

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## Climate Adaption and Mitigation – Planning or Assessment

There is no data for Climate Adaption and Mitigation - Planning or Assessment.

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#### **Contaminants and Media**

Media Affected
Unknown

Remediating Action for Media

NOT Cleaned up

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### **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info: Address of Data Source:

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# Climate Adaption and Mitigation - Demolition or Cleanup

There is no data for Climate Adaption and Mitigation - Demolition or Cleanup.

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## **Institutional and Engineering Controls**

Indicate whether No Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available) Are Institutional No Controls in Place

Date Institutional Controls were put in place

Indicate whether No Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether No Engineering Controls are in place

Date Engineering Controls were put in place

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# Redevelopment and Other Leveraged Accomplishments

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

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# Climate Adaption and Mitigation – Redevelopment

There is no data for Climate Adaption and Mitigation - Redevelopment

#### **Additional Property Attributes**

Property Highlights Former Use: At the time of the ESA the Site showed signs of being abandoned for several years. The site consists of a land parcel of approximately 0.13 acres with a three-story vacant building within the parcel.currently owned by Mrs. Rosa Mar�Carri�n Ruiz de Esteves. The patio has an area of approximately 3 meters per 30 meters feet. It has an **�L�** shape that connects the east side of the property with the back side. The patio is separated from the continuous buildings by a masonry wall of approximately 8 feet tall. The building fully occupies the west side of the parcel with a separation of one foot from the next building wall. The access door connects directly to the Betances street sidewalk, and the building has one exit door which connects to the patio at the east side of the facility. See Figure No.3 for a site plan of the facility. The facility was used since it was constructed in the 1900 s as a theater. In recent years a section of the building was also used as a travel agency. The building is approximately thirteen 13 meters in front and thirty 30 meters in length, located in a lot with an area of approximately 512 square meters. The structure os interiors are divided with walls which separate the cinema room, from the receiving area, and the travel agency. The second floor interior walls separate the projection room from the public bathrooms. The third floor is inaccessible and could not be inspected. The building walls are made of concrete, and its roof is consists of a structural steel covered with metal panels. Its ceiling is deteriorated with some acoustic insulator installed. The building is floor has vinyl tiles on all rooms except in the cinema and its access area are covered with rugs. Bathroom floors and walls are finished with ceramic tiles.

Predominant Past Usage

What types of funding are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/Signed Report Received from a Qualified Professional

Other Cleanup Documentation **Hazardous** 

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## Property Details for Former Natali Family Residence

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Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

#### **Profile Information**

Property Alias
Property Owner Private
ACRES Property ID 125704

Property Address Pacheco Street #24 Yauco, PR 00698

.22 Size

Parcel Numbers

Latitude/ Longitude

18.035338 / -66.851363

Congressional District

Property Contact Madera, Carmen

cdbgyauco@hotmail.com

787-267-4008

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### **Property Location**

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### **Property Progress**

Assessment

Clean Up

Institutional

Controls in Place

Engineering Controls in Place

Ready for Anticipated Use

Redevelopment Underway

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## **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year
Yauco, Municipality of	BF97244108	PR	Assessment	2008

### **Assessment Activities at this Property**

Activity	EPA Funding	Start Date	Completion Date	CA	Accomplishment Counted?	Counted When?
Phase I Environmental Assessment	\$16,389.00	08/06/2010	12/07/2010	Yauco, Municipality of	Υ	FY11

Is Cleanup Necessary? **Unknown**EPA Assessment Funding: **\$16,389.00**Leveraged Funding:
Total Funding: **\$16,389.00** 

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# Climate Adaption and Mitigation - Planning or Assessment

There is no data for Climate Adaption and Mitigation - Planning or Assessment.

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#### **Contaminants and Media**

Media Affected
Unknown

Remediating Action for Media

NOT Cleaned up

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### **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info: Address of Data Source:

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# Climate Adaption and Mitigation - Demolition or Cleanup

There is no data for Climate Adaption and Mitigation - Demolition or Cleanup.

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## **Institutional and Engineering Controls**

Indicate whether No Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available) Are Institutional No Controls in Place

Date Institutional Controls were put in place

Indicate whether No Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether No Engineering Controls are in place

Date Engineering Controls were put in place

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# Redevelopment and Other Leveraged Accomplishments

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

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# Climate Adaption and Mitigation – Redevelopment

There is no data for Climate Adaption and Mitigation - Redevelopment

#### **Additional Property Attributes**

Property Highlights Former Use: The Site is a parcel with an area of approximately 900 square meters of area located in the urban center in the Municipality. The Site has a brick house, which was built in the 1800 \( \phi \)s. Currently the Site \( \phi \)s structure is in very poor conditions. The structure \( \phi \)s fa\( \phi \)e survives but observations of the inside reveal that much of the roof, walls, and floors are missing, or in advanced deterioration. A floor plan was not prepared for the brick structure since MPPR could not gain access to its interior due to safety reasons.

Predominant Past Usage

What types of funding are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/Signed Report Received from a Qualified Professional

Other Cleanup Documentation **Hazardous** 

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## **Property Details for Muoz Auto Parts**

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- Climate Adaption and Mitigation Redevelopment
- Additional Property Attributes

Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

#### **Profile Information**

**Property Alias** 

Property Owner **Private**ACRES Property ID **125689** 

Property Address Corner of Betances Street and Santiago Vivaldi Avenue Yauco, PR 00698

Size .1

**Parcel Numbers** 

Latitude/ Longitude

18.034100 / -66.849008

Congressional

District

Property Contact Madera, Carmen

cdbgyauco@hotmail.com

787-267-4008

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### **Property Location**

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### **Property Progress**

Assessment

Clean Up

Institutional Controls in Place

Engineering Controls in Place

Ready for Anticipated Use

Redevelopment Underway

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## **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year
Yauco, Municipality of	BF97244008	PR	Assessment	2008

### **Assessment Activities at this Property**

Activity	EPA Funding	Start Date	Completion Date	CA	Accomplishment Counted?	Counted When?
Phase I Environmental Assessment	\$16,389.00	05/25/2010	12/07/2010	Yauco, Municipality of	Υ	FY11

Is Cleanup Necessary? **Unknown**EPA Assessment Funding: **\$16,389.00**Leveraged Funding:
Total Funding: **\$16,389.00** 

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# Climate Adaption and Mitigation - Planning or Assessment

There is no data for Climate Adaption and Mitigation - Planning or Assessment.

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#### **Contaminants and Media**

Contaminant Found Media Affected **Unknown**  Remediating Action for Contaminants Remediating Action for Media **NOT Cleaned up** 

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### **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info: Address of Data Source:

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# Climate Adaption and Mitigation - Demolition or Cleanup

....

There is no data for Climate Adaption and Mitigation - Demolition or Cleanup.

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## **Institutional and Engineering Controls**

Indicate whether **U** Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available)

Are Institutional No Controls in Place

Date Institutional Controls were put in place

Indicate whether **U** Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether No Engineering Controls are in place

Date Engineering Controls were put in place

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# Redevelopment and Other Leveraged Accomplishments

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

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# Climate Adaption and Mitigation - Redevelopment

There is no data for Climate Adaption and Mitigation - Redevelopment

#### **Additional Property Attributes**

Property Highlights Former Use: The Site is located in Betances Street in the municipality of Yauco. The physical address of the facility is the corner of Betances Street and Santiago Vivaldi Avenue. The Site is a brick building of one level located in a land parcel of approximately 0.097 acres. The building occupies approximately 0.094 acres. The Site was constructed in the 1920 s and has been operating as an auto part warehouse for approximately 25 years. The access door connects directly to the corner of the Betances street and the Santiago Vivaldi Avenue, and the building has one exit door which connects to an internal patio at the west side of the facility. See Figure No. 3 for a detailed site plan. The building has dimension of approximately eighty 80 feet wide and forty-seven 47 feet in length and has an area of approximately 4,122 square feet. The building s second floor is made of wood and is also a storage area of car motor parts. The building floor, walls and roof are made of concrete.

Predominant Past Usage

What types of funding are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/Signed Report Received from a Qualified Professional

Other Cleanup Documentation **Petroleum** 

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## **Property Details for Ramilli Theater**

#### On this page:

- Profile Information
- Property Location
- Property Progress
- CAs Associated with this Property
- · Assessment Activities at this Property
- Climate Adaption and Mitigation Planning or Assessment
- Contaminants and Media
- Cleanup Activities
- Climate Adaption and Mitigation Demolition or Cleanup
- Institutional & Engineering Controls
- Redevelopment and Other Leveraged Accomplishments
- Climate Adaption and Mitigation Redevelopment
- Additional Property Attributes

Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

#### **Profile Information**

**Property Alias** 

Property Owner **Private** ACRES Property ID **125702** 

Property Address Betances Street #4 Yauco, PR 00698

Size **.13** 

**Parcel Numbers** 

Latitude/ Longitude

18.034489 / -66.848886

Congressional

District

Property Contact Madera, Carmen

cdbgyauco@hotmail.com

787-267-4008

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### **Property Location**

Top of Page

### **Property Progress**

Assessment

Clean Up

Institutional Controls in Place

Engineering Controls in Place

Ready for Anticipated Use

Redevelopment Underway

Top of Page

## **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year
Yauco, Municipality of	BF97244108	PR	Assessment	2008

### **Assessment Activities at this Property**

Activity	EPA Funding	Start Date	Completion Date	CA	Accomplishment Counted?	Counted When?
Phase I Environmental Assessment	\$16,389.00	05/25/2010	12/07/2010	Yauco, Municipality of	Υ	FY22

Is Cleanup Necessary? **Unknown**EPA Assessment Funding: **\$16,389.00**Leveraged Funding:
Total Funding: **\$16,389.00** 

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# Climate Adaption and Mitigation - Planning or Assessment

There is no data for Climate Adaption and Mitigation - Planning or Assessment.

Top of Page

#### **Contaminants and Media**

Contaminant Found Media Affected **Unknown**  Remediating Action for Contaminants Remediating Action for Media **NOT Cleaned up** 

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### **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info: Address of Data Source:

Top of Page

### **Climate Adaption and Mitigation - Demolition or** Cleanup

....

There is no data for Climate Adaption and Mitigation - Demolition or Cleanup.

Top of Page

### **Institutional and Engineering Controls**

Indicate whether No Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available)

Are Institutional Controls in Place

Date Institutional Controls were put in place

Indicate whether No Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether No Engineering Controls are in place

Date Engineering Controls were put in place

Top of Page

# Redevelopment and Other Leveraged Accomplishments

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

Top of Page

# Climate Adaption and Mitigation - Redevelopment

There is no data for Climate Adaption and Mitigation - Redevelopment

#### **Additional Property Attributes**

Property Highlights

Former Use: At the time of the ESA the Site showed signs of being abandoned for several years. The site consists of a land parcel of approximately 0.13 acres with a three-story vacant building within the parcel currently owned by Mrs. Rosa Mar&Carri&n Ruiz de Esteves. The patio has an area of approximately 3 meters per 30 meters feet. It has an • Los shape that connects the east side of the property with the back side. The patio is separated from the continuous buildings by a masonry wall of approximately 8 feet tall. The building fully occupies the west side of the parcel with a separation of one foot from the next building wall. The access door connects directly to the Betances street sidewalk, and the building has one exit door which connects to the patio at the east side of the facility. See Figure No.3 for a site plan of the facility. The facility was used since it was constructed in the 1900 s as a theater. In recent years a section of the building was also used as a travel agency. The building is approximately thirteen 13 meters in front and thirty 30 meters in length, located in a lot with an area of approximately 512 square meters. The structure s interiors are divided with walls which separate the cinema room, from the receiving area, and the travel agency. The second floor interior walls separate the projection room from the public bathrooms. The third floor is inaccessible and could not be inspected. The building walls are made of concrete, and its roof is consists of a structural steel covered with metal panels. Its ceiling is deteriorated with some acoustic insulator installed. The building is floor has vinyl tiles on all rooms except in the cinema and its access area are covered with rugs. Bathroom floors and walls are finished with ceramic tiles.

Predominant Past Usage

What types of funding are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/Signed Report Received from a Qualified Professional

Other Cleanup Documentation **Hazardous** 

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## Property Details for Puerto Rico Army National Guard Armory Building

#### On this page:

- Profile Information
- Property Location
- Property Progress
- CAs Associated with this Property
- Assessment Activities at this Property
- Climate Adaption and Mitigation Planning or Assessment
- Contaminants and Media
- Cleanup Activities
- Climate Adaption and Mitigation Demolition or Cleanup
- Institutional & Engineering Controls
- Redevelopment and Other Leveraged Accomplishments
- Climate Adaption and Mitigation Redevelopment
- Additional Dranarty Attributes

Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

#### **Profile Information**

**Property Alias** 

Property Owner Government

ACRES Property 125685

ID

Property State Road PR-127 kilometer 1.0 near the Jacanas Industrial Park Yauco, PR

Address 00698

Size **1.01** 

**Parcel Numbers** 

Latitude/ Longitude

18.032894 / -66.844857

Congressional 1

District

Property Contact

Madera, Carmen

cdbgyauco@hotmail.com

787-267-4008

Top of Page

## **Property Location**

Top of Page

## **Property Progress**

Assessment





Institutional Controls in Place

Engineering Controls in Place

Ready for Anticipated Use

Redevelopment Underway

Top of Page

## **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year
Yauco, Municipality of	BF97244008	PR	Assessment	2008

Top of Page

## **Assessment Activities at this Property**

There are no current assessment activities.

Is Cleanup Necessary? EPA Assessment Funding: Leveraged Funding: Total Funding:

# Climate Adaption and Mitigation – Planning or Assessment

There is no data for Climate Adaption and Mitigation - Planning or Assessment.

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### **Contaminants and Media**

Contaminant Found Media Affected **Unknown**  Remediating Action for Contaminants Remediating Action for Media **NOT Cleaned up** 

Top of Page

## **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info:

Address of Data Source:

## Climate Adaption and Mitigation – Demolition or Cleanup

There is no data for Climate Adaption and Mitigation - Demolition or Cleanup.

Top of Page

## **Institutional and Engineering Controls**

Indicate **U** whether Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available)

Are **No**Institutional
Controls in

Place

Date Institutional Controls were put in place

Indicate **U** whether Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether Engineering Controls are in place

Date Engineering Controls were put in place

Top of Page

## Redevelopment and Other Leveraged Accomplishments

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

Top of Page

## Climate Adaption and Mitigation – Redevelopment

There is no data for Climate Adaption and Mitigation – Redevelopment

## **Additional Property Attributes**

Property Highlights

Predominant Past Usage

What types of **Petroleum** funding are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/ Signed Report Received from a Qualified Professional

Other Cleanup
Documentation

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USGS Elevation Point Query Service (UPQS)Data

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# 2024 Puerto Rico 305(b)/303(d) Integrated Report

Plans and Special Projects Division Water Quality Area



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#### **EXECUTIVE SUMMARY**

To comply with the requirements established in Section 305(b) of the Clean Water Act (CWA), The Puerto Rico Department of Natural and Environmental Resources (PRDNER) performs the required assessment in terms of the current water quality in the different water resources throughout Puerto Rico (PR). This assessment allows us to determine whether these resources comply with the applicable water quality standards and achieve the designated uses. The PRDNER is the local agency responsible for seeking the attainment of the designated uses established in the Puerto Rico Water Quality Standards Regulation (PRWQSR, as amended on August 8, 2022) for the various water resources and is also responsible for the oversight, maintenance, and protection of the quality of these water resources. The designated uses established in the PRWQSR are: Primary Contact Recreation, Secondary Contact Recreation, Propagation, and maintenance of desirable species, including threatened or endangered species (Aquatic Life) and Raw Source of Public Water Supply.

For water bodies that do not meet the applicable standard for a designated use, the Act requires that the state develop control measures for pollutants. These water bodies will form 303(d) List (Appendix I). Control measures should address the problem that caused the non-compliance of the standard for the designated use. Each impairment reflected on the 303(d) List requires a calculation of the maximum amount of the impairing pollutant that a water body can receive and still meet water quality standards. This calculation is called the Total Maximum Daily Load (TMDL). TMDL's include reduction of pollution sources impacting the water body which, when achieved, will result in the attainment of the water quality standard in the impaired water body.

The information considered for the assessment for the water bodies is routine ambient water quality sampling data from various networks, water quality special monitoring projects and existing or secondary data requested to government agencies and non-government entities. This will provide physical, chemical, and biological water quality data from the different water bodies. The PRDNER generates data from four (4) routine monitoring networks. These are: *Surface Water Monitoring Network, Clean Lakes Monitoring Network, Coastal Monitoring Network and Beach Monitoring and Public Notification Program.* Supplementary information, such as: NPDES compliance evaluation inspections, operation and maintenance inspections and pump station by-passes, implementation of BMPs by non-point sources, fish-kills, or spill events, make possible identified potential pollution sources.

To restore and preserve the designated uses and water quality in our streams, lakes, and coastal shorelines, DNER will coordinate efforts with various government agencies, private enterprise and concerned citizen groups as well as outreach and educational programs, both in communities and through the public media. These promote the incorporation of actions to increase resilience and adaptation to climate change impacts and improve conditions in communities with environmental justice concerns.

In addition, to achieve the restoration and preservation of the water quality in our water bodies, the PRDNER is working with the implementation of the PR Non-Point Sources Management Program (PRNPSMP) and the development of the 2022 – 2032 Clean Water Act 303(d) Long – Term Vision Program.

- **PRNPSMP** has set the goal to establish the strategies that will mark the progress to achieve and maintain water quality standards and water quality benefits; short term or long terms objectives that are activity-based measures (milestones) were established to accomplishing the program's goal. The milestones associated with each objective may include those of local agencies which are partners in the PRNPSMP. The main goal is to identify non-point sources of pollution of surface waters to prevent and reduce non-point source pollution, such that water quality standards are achieved.
- 2022 2032 Clean Water Act 303(d) Long Term Vision Program This document is under development.

In this Cycle, the PRDNER has reviewed the 2024 Integrated Reporting (IR) Memo (*Information Concerning 2024 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*), for which has specific comments on its content (Appendix II). The Department has already addressed most of the topics included in this Memorandum. The memorandum focuses on the following topics:

- 2022 2032 CWA Section 303 (d) Vision
- Clarification Regarding Priority Rankings and Total Maximum Daily Load Submission Schedule
- Environmental Justice
- Participatory Science
- Climate Change
- Indian Tribes and Tribal Water Resources
- CWA Section 303 (d) Assessment / Listing for Trash Related Impairments
- CWA Section 303 (d) Assessment / Listing for Nutrient Related Impairment
- Identifying the Pollutants Causing or Expected to Cause and Exceedance of Applicable Water Quality Standards for Water on CWA 303 (d) List

This report constitutes the PR 305(b)/303(d) Integrated Report (IR) for fiscal year 2024. For 2024 cycle there are total of three hundred fifty-eight (358) Assessment Units (AUs), of these one hundred ninety-four (194) are river basins, sixty-two (62) are river estuaries, eighteen (18) are lakes, seventeen (17) lagoons, three (3) are San Juan Bay Estuary System (SJBES) and sixty-four (64) are coastal shoreline.

#### **Rivers & Streams**

The water quality assessment for the 2024 cycle indicates that five thousand four hundred three point five (5,403.5) miles of rivers and streams were assessed. For this cycle, two thousand six hundred eighty-nine point five (2,689.5) of river and stream were assessed with water quality monitoring stations. From the evaluation of the water quality data obtained it was found that the impairment for primary and secondary recreation designated uses was due to Enterococci exceeding the standard. For aquatic life and raw source for drinking water designated uses Chromium VI, Total Phosphorus, Turbidity, Temperature and Total Nitrogen were the most

common causes of impairment. A total of forty-two (42) AU/parameter combination was removed from the 2024 303(d) List.

#### **Lakes (reservoirs)**

The water quality assessment for the 2024 cycle indicates that seven thousand three hundred twenty-four (7,324) acres were assessed. At the present time seven thousand two hundred sixtynine (7,269) acres of lakes have a permanent water quality monitoring station. The primary and secondary recreation designated uses were evaluated as Category 4a, which means that have an approved TMDL for fecal coliform. For aquatic life designated use Dissolved Oxygen, pH and Temperature were the most common causes of impairment. For raw sources for drinking water designated use the most common cause of impairment were Total Phosphorus, Total Nitrogen and Turbidity. One (1) AU/parameter combination was removed from the 2024 303(d) List.

#### **Coastal Waters**

The water quality assessment for the 2024 cycle indicates that five hundred forty-six point six three (546.63) coastal miles of PR were assessed. At the present time four hundred seventy-two point five two (472.52) coastal miles have permanent water quality monitoring stations. From the evaluation of the water quality data obtained it was found that the impairment for primary and secondary recreation designated uses was due to Enterococci exceeding the applicable standard. For aquatic life designated use Turbidity, Copper and Temperature were the most common causes of impairment.

#### **Estuaries**

The assessment of estuaries corresponds to the lower reaches of the rivers near the coastal shoreline as defined in the PRWQSR. Island wide, there are a total of five point three six zero two (5.3602) square miles (sq. mi.) of river estuaries. For this cycle the river estuaries do not have a permanent water quality monitoring station. The San Juan Bay Estuary System (SJBES) is addressed separately, below.

#### San Juan Bay Estuary System

The SJBES is the only estuary identified as a separate basin due to its complex composition and interrelation of streams, lagoons, channels, and closed bay. The five (5) basins included in the overall drainage area of the SJBES are Caño Martin Peña, Quebrada Juan Méndez, Quebrada San Antón, Río Piedras and Quebrada Blasina. The SJBES it consists of three (3) AU with twenty-six (26) monitoring stations of the San Juan Bay Estuary Program.

For SJBES the water quality assessment for the 2024 cycle indicates that the three point eight three four zero (3.8340) sq. mi. and eighteen point eight (18.8) miles were assessed with water quality monitoring stations. From the evaluation of the water quality data obtained it was found that the impairment for the primary and secondary recreation designated uses was due to Enterococci exceeding the standard. Among the most important causes of impairment for aquatic life designated uses were Chromium VI, Dissolved Oxygen, Oil and Grease, pH, Temperature,

Total Nitrogen, Total Phosphorus and Turbidity. A total of three (3) AU/parameter combinations were removed from the 2024 303(d) List.

#### PART A. Background

#### 1.0 Total Waters

Is the goal of the PRDNER to preserve, maintain and enhance the quality of the water of PR to protect the designated uses and threatened and endangered species, among other responsibilities.

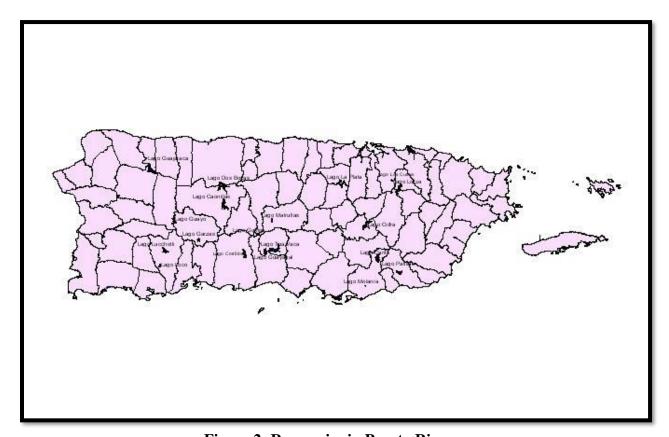
This report constitutes the Puerto Rico (PR) 305(b)/303(d) Integrated Report (IR) for the fiscal year 2024. For the 2024 cycle, there are a total of three hundred fifty-eight (358) Assessment Units (AU), of these one hundred ninety-four (194) are river basins (See Figure 1), sixty-two (62) are river estuaries, eighteen (18) are lakes (See Figure 2), seventeen (17) lagoons, three (3) are San Juan Bay Estuary System (SJBES) and sixty-four (64) are coastal shoreline. (See Figure 3).



Figure 1: Watersheds in Puerto Rico

PRDNER groups all the river basins in four hydrographic regions, in which the different watersheds are included: to the north (9 watersheds), east (28 watersheds), south (33 watersheds), and west (26 watersheds).

The reservoirs in PR, constructed in the main rivers basins to store water for domestic and industrial consumption, irrigation, production of electrical power and control of floods, also provide an additional benefit, recreation (Figure 2). The recreational activities performed in the reservoirs include direct contact (swimming) and indirect contact (recreational fishing and strolls in boats).



**Figure 2: Reservoirs in Puerto Rico** 

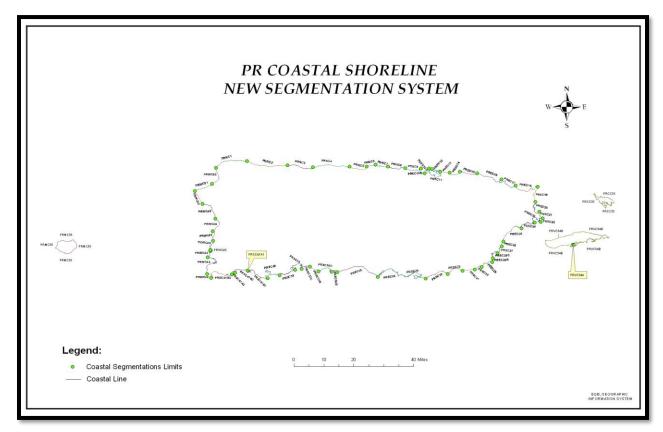


Figure 3: Puerto Rico Coastal Shoreline Segmentation System

The coastal shoreline presents a great variety of geologic aspects such as: cliffs, dunes, beaches, wooded hills, sinkhole, forests, lagoons, mangrove, salt mines, earth flooding, bays, small barren islands, and keys, which altogether give the characteristics and specific form to the archipelago. The coastal zone is one of the areas of greater tourist-recreational value and the areas bordering to the coasts constitute very active zones of economic and social development, where it undergoes a fast growth of population and an active commercial and industrial growth.

#### 2.0 Water Quality Area

The PRDNER Water Quality Area (WQA) is the area responsible for preparing the Integrated Water Quality Monitoring and Assessment Report (Integrated Report) to comply with sections 303(d) and 305(b) of the Clean Water Act. The WQA is organized as follows (Figure 4).

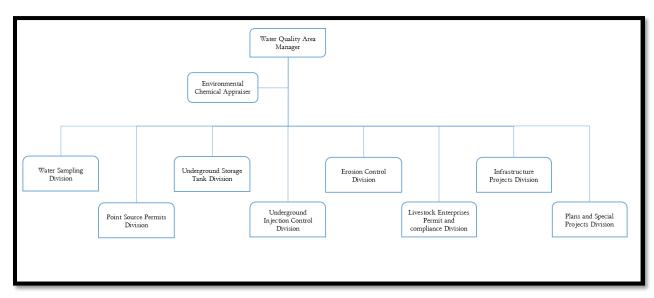


Figure 4: Water Quality Area Organization Chart

Below is an overview of the WQA divisions and their respective responsibilities.

Plans and Special Projects Division manages and evaluates the monitored water quality data to determine if the desirable water quality in the different hydric resources from the country is achieved. Plans and Special Projects Division develops the 305(b)/303(d) Integrated Report as required by Clean Water Act. It includes the water quality evaluation for rivers, streams, coastal, lakes, lagoons, estuary, and groundwater of the island. Also, verifies the effectiveness of the management and control programs implemented and develops the strategies for the improvement of the water quality, as required by the CWA and the PRWOSR. Those strategies include implementation of the TMDL for the impaired water bodies, the Wellhead Protection Program, Non-Point Sources Management Program and PR Unified Watershed Assessment and Restoration Activities. Also consistent with the new EPA's vision, this Division will have the responsibility for implementing the CWA Section 303(d) Program – A long-term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program. This 2022 – 2032 long-term Vision is under development. Other responsibility is the evaluation, preparation and coordination with the Quality Assurance Control Officer of the Water Quality Area and the Division of Environmental Science and Assessment of the USEPA Region II in all sampling and analytical activities that are subjected to a Water Quality Assurance Program Plan. The Beach Monitoring and Public Notification Program is also managed under this Division.

The **Underground Injection Control Division** was created to regulate/control the facilities with underground injection system (UIS) and respond to the wastewater releases or escapes from these systems that could be affecting the underground water resource. To control these types of systems, permits and authorizations are issued, sampling monitoring reports are evaluated, and remedial plans are required for those where the bad operation of the systems has caused spills to the water or to the subsoil. The USEPA, through a memorandum of understanding delegated the pursuit of UIS to PRDNER.

The **Point Source Permit Division** (PSPD) regulates wastewater treatment systems that do not have direct discharges to surface and coastal waters. The discharge of pollutants to surface and coastal waters is regulated by the National Discharge Elimination System (NPDES) under Section 402 of the CWA. This is a program administered by the USEPA. Section 401 of the Act, as amended requires USEPA that prior to issuing a discharge permit under NPDES a Water Quality Certificate must be obtained from a state agency with jurisdiction over water pollution control. In PR, such responsibility is also, on PRDNER specifically to the PSPD.

The **Underground Storage Tanks Division** (UST) was created to regulate/control the UST facilities and respond to leaking tanks that could be affecting the underground water resources. To control this type of system, permits and authorizations are issued, sampling monitoring reports are evaluated, and remedial plans are required for those where the bad operations of the systems have caused spills to the water or to the subsoil. USEPA, through a memorandum of understanding delegated the pursuit of UST to PRDNER.

**The Erosion Control Division** implements and manages the Erosion Control and Sedimentation Prevention Regulation, which performs enforcement actions to the facilities regulated under the General Permit. The division is responsible to perform inspections of all the permitted projects and presenting them to PRDNER to verify compliance with the permit granted and take corrective action or legal action if needed. The way to grant this permit was changed, to increase the oversight of the project and verify compliance with regulations.

The **Infrastructure Projects Division** has the responsibility of managing the federal funds assigned by USEPA through the State Revolving Fund program. Also, assess the planning, design, and construction phases of each project to verify compliance with Title VI of the CWA.

The CWSRF program maintains revolving loan funds to provide independent and permanent sources of low-cost financing for a wide range of water quality infrastructure projects including all types of NPS, watershed protection or restoration, and estuary management projects, as well as municipal wastewater treatment projects. The program allows the flexibility to target resources to the state's particular environmental needs. Also, it allows the flexibility to customize the loan terms to meet the needs of small and disadvantaged communities.

The **Livestock Permit and Compliance Division** performs inspections, evaluates, and approve the Animal Waste Management Plans that submit livestock enterprises such as: dairy facilities, poultry facilities, horse farms, among others. Through the approved *Reglamento para el Control de los Desperdicios Fecales de Animales en Confinamiento* (January 2009), this Division regulate the procedures, requirements, and prohibitions with respect to the design, implementation, operation, and maintenance of the Animal Waste Management Plan for each facility where animal in confinement stay.

The **Water Sampling Division** as part of their responsibilities must perform the sampling of the surface, coastal, underground waters, lakes, and sampling projects in some watersheds in PR.

Following a summary of Actions Initiated by Point and Non-Point Source Control Units (Table 1 and Table 2).

**Table 1: Actions Initiated Point Sources Control Units** 

Actions	NPDES Facilities	UST	UIC	Non-Filer (Illegal Discharges)
Certificates or permits Issued		1,621	136	-
Permits of operation	ı	348	166	-
Total number of inspections		653	130	182
Referrals to Legal Affairs	ı	77	15	16
Notification of violation	-	374	158	142
Administrative Orders	-	-	10	-
Consent Orders	-	-	-	-

**Table 2: Actions Initiated Non-Point Sources Control Units** 

Actions	SEC Activities	<b>Livestock Enterprises</b>
Certificates or permits Issued	306	156
Total number of inspections	368	534
Referrals to Legal Affairs	6	5
Notification of violation	307	180
Administrative Orders	4	4

#### 3.0 Cost/Benefit Assessment

Accurate costs associated with water quality improvements in PR are not readily available. This type of assessment would require diverse data on government and private expenditures concerning multiple aspects of direct environmental improvement efforts, including installation of treatment methods, changes and improvements in treatment levels, technologies and methods, installation and improvements of sewerage and storm water sewer systems, development, and implementation costs of best management practices, as well as urban, rural and industrial development improvements. Other necessary information would include increased use and/or demand of the improved environmental resource as well as the monitoring and assessment efforts and activities performed to measure the improvements or lack of improvements achieved in each basin or regional area.

Although this information is not readily available, we do provide some of the costs involved in efforts pertaining to water quality improvement and protection. These costs are only those incurred directly by PRDNER utilizing state and federal funds to operate and manage water quality planning and control programs. Another cost, such as sanitary infrastructure improvements, governmental and private sector expenditures on waste and storm water management and control programs, recreational benefits (including tourism promotional activities and costs), governmental and private expenditures to promote natural resources protection, preservation and enjoyment are not being considered.

The major costs incurred with federal and state funds to operate environmental protection and planning activities in the WQA are show in Table 3 thru Table 7.

**Table 3: Federal and State Funds (US dollars)** 

Categories	Po	erformance Part	Beach Monitoring and Public Notification Program			
g	20	)22	202	3	2022	2023
	Federal	State	Federal	State	Federal	Federal
Salaries	1,497,777	320,858	2,007,383	390,780	171,426	178,824
Fringe Benefits	240,102	51,434	326,876	63,634	28,275	29,267
Travel	31,000	6,641	31,000	6,035	9,000	7,000
Equipment	107,064	22,936	107,064	20,842	-	-
Supplies	155,000	33,205	155,000	30,174	36,500	36,500
Contractual	746,049	139,877	282,500	54,994	-	-
Construction	-	-	-	-	=	-
Others	87,631	18,771	79,125	15,404	21,341	21,663

**Table 4: Federal and State Funds (Cont.)** 

Tuble 4. I cuci ul ullu State I ullus (Colit.)											
Categories		Quality ent 604(B)	State Revolving Fund (SRF)								
	2022	2023	202	2	202	3					
	Federal	Federal	Federal	State	Federal	State					
Salaries	63,656	65,458	343,960	68,808	124,258	24,857					
Fringe Benefits	10,513	10,802	56,450	11,293	19,009	3,803					
Travel	250	250	1,667	333	2,500	500					
Equipment	-	-	1,333	267	1,333	267					
Supplies	4,500	4,500	1,667	333	3,333	667					
Contractual	51,600	295,600	44,582	8,918	60,000	10,002					
Construction	-	-	-	-	-	-					
Others	1,255	1,230	14,521,817	2,904,338	9,506,432	1,903,274					

**Table 5: Federal and State Funds (Cont.)** 

Table 3. Federal and State Funds (Cont.)										
		SRF	- BIL		SRF - E	merging	SRF - OSG			
Categories	202	22	202	23	2022	2023	2022	2023		
	Federal	State	Federal	State	Federal	Federal	Federal	State		
Salaries	385,017	38,502	312,845	31,285	ı	ı	-	-		
Fringe Benefits	62,972	6,297	47,873	4,787	ı	ı	-	-		
Travel	3,636	364	4,545	455	ı	ı	-	-		
Equipment	2,909	291	4,363	437	ı	ı	-	-		
Supplies	5,942	594	5,364	536	1	-	-	-		
Contractual	117,727	11,773	272,727	27,273	ı	ı	663,000	165,750		
Construction	-	-	-	-	-	-	-	-		
Others	22,425,870	2,242,586	26,369,250	2,636,924	1,220,000	2,773,000	-	-		

**Table 6: Federal and State Funds (Cont.)** 

Catagorias	L	UST - C	Corrective		1	UST - Pı	eventive		UST- Hurricane Relief			
Categories	2022		2023		2022		2023		2022		2023	
	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State
Salaries	248,231	27,582	248,231	27,582	193,104	64,368	193,104	64,368	53,035	5,893	53,035	5,893
Fringe Benefits	40,160	4,462	40,160	4,462	31,765	10,589	31,765	10,589	8,543	949	8,543	949
Travel	5,600	622	5,600	622	5,600	1,867	5,600	1,867	500	56	500	56

Catagorias	L	UST - C	Corrective		UST - Preventive				UST- Hurricane Relief			
Categories 2022		22	2023		2022		2023		2022		2023	
	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State
Equipment	-	1	-	ı	1	-	-	-	12,600	1,400	12,600	1,400
Supplies	10,000	1,112	10,000	1,112	7,500	2,500	7,500	2,500	2,000	222	2,000	222
Contractual	-	İ	ı	i	ı	-	-	-	602,347	66,927	602,347	66,927
Construction	-	İ	ı	i	ı	-	-	-	ı	-	-	-
Others	5,500	611	5,500	611	13,000	4,334	13,000	4,334	2,440	271	2,440	271

**Table 7: Total Federal and State Funds** 

Summary of Federal and State Funds		
Federal	88,752,212	
State	11,668,630	
Total	100,420,842	

## **4.0 Special State Concerns and Recommendations**

[RESERVED]

## PART B. Assessment Methodology Used for 305(b)/303(d) Integrated Report for 2024 Cycle and Assessment Results

#### 1.0 Assessment Units (AU)

This report constitutes the PR 305(b)/303(d) Integrated Report (IR) for fiscal year 2024. For 2024 cycle there are total of three hundred fifty-eight (358) AU, of these one hundred ninety-four (194) are river basins, sixty-two (62) are river estuaries, eighteen (18) are lakes, seventeen (17) lagoons, three (3) are San Juan Bay Estuary System and sixty-four (64) are coastal shoreline.

#### 1.1 Assessment Unit for Inland Waters

The PRDNER uses the river basins system for planning activities and implementation of restoration efforts. Under this system, each main river is divided into AUs that consist of complete sub-basins. The smaller river basins have been maintained as a single AU or, for the most, it may be segmented in two.

Each AU generally consists of one of the following:

- A section of the main basin, with the corresponding minor first order tributaries.
- Sub-basin represented by major first order tributary (a river or stream that flows directly into main basin), second order tributary (a river or stream that flows into a first order tributary), and in some cases, third order tributary (a river or stream that flows into a second order tributary).
- In cases where either the main basin or any major tributary includes a lake (reservoir), the lake constitutes another AU. The AU includes the lake (from the dam up to the highest reach that defines the lake) and all the immediate minor tributaries that discharge directly to the lake.

The Table 8 provides basic information pertaining to the ninety-six (96) basins. For 2022 cycle there is a total of two hundred - fifteen (215) AU: of these one hundred ninety-four (194) AU are river basins, eighteen (18) AU are lakes. And three (3) AU are of San Juan Bay Estuary System.

Table 8: Basins for the Inland Waters Segmentation System

BASIN NAME	BASIN ID	BASIN SIZE (miles)	REGION	SUB-BASIN
QUEBRADA DE LOS CEDROS	PRNQ1A	12.0	N	1
QUEBRADA DEL TORO	PRNQ2A	1.0	N	1
RÍO GUAJATACA*	PRNR3A	38.0	N	4
QUEBRADA BELLACA	PRNQ4A	1.7	N	1
RÍO CAMUY	PRNR5A	48.6	N	1
QUEBRADA SECA	PRNQ6A	2.0	N	1
RÍO GRANDE DE ARECIBO*	PRNR7A	424.6	N	12
RÍO GRANDE DE MANATÍ*	PRNR8A	234.6	N	11
RÍO CIBUCO*	PRNR9A	144.6	N	6
RÍO DE LA PLATA*	PRER10A	470.1	Е	18
RÍO HONDO	PRER11A	22.0	Е	1
RÍO BAYAMÓN*	PRER12A	185.0	Е	5
SAN JUAN BAY ESTUARY SYSTEM*	PREE13A	3.8340 sq.mi.,	Е	3
		18.8 miles		
RÍO GRANDE DE LOIZA*	PRER14A	554.3	Е	15
RÍO HERRERA	PRER15A	17.0	Е	1
RÍO ESPÍRITU SANTO*	PRER16A	58.4	Е	2

		D A GINT GYES		
BASIN NAME	BASIN ID	BASIN SIZE (miles)	REGION	SUB-BASIN
RÍO MAMEYES	PRER17A	()	Е	2
OUEBRADA MATA DE PLÁTANO	PREQ18A		E	1
RÍO SABANA	PRER19A		E	2
RÍO JUAN MARTÍN	PRER20A		E	1
QUEBRADA FAJARDO	PREQ21A		E	1
RÍO FAJARDO*	PRER22A		E	1
RÍO DEMAJAGUA	PRER23A		E	1
	PREQ24A		E E	1
QUEBRADA ACHAS CLABAS	PREQ24A PREQ25A		E E	1
QUEBRADA AGUAS CLARAS			E	
RÍO DAGUAO	PRER26A		E	1
QUEBRADA PALMA	PREQ27A			1
QUEBRADA BOTIJAS	PREQ28A		E	1
RÍO SANTIAGO	PRER29A		E	2
RÍO BLANCO	PRER30A		E	2
RÍO ANTÓN RUIZ	PRER31A		Е	2
QUEBRADA FRONTERA	PREQ32A		E	1
RÍO HUMACAO*	PRER33A		E	1
RÍO CANDELERO	PRER34A		E	1
RÍO GUAYANÉS*	PRER35A		Е	2
QUEBRADA EMAJAGUA	PREQ36A		Е	1
RÍO MAUNABO*	PRER37A		Е	1
QUEBRADA MANGLILLO	PRSQ38A		S	1
QUEBRADA FLORIDA	PRSQ39A		S	1
RÍO JACABOA	PRSR40A		S	1
QUEBRADA PALENQUE	PRSQ41A		S	1
RÍO CHICO	PRSR42A		S	1
RÍO GRANDE DE PATILLAS*	PRSR43A	48.6	S	4
QUEBRADA YAUREL	PRSQ44A	6.0	S	1
RÍO NIGUAS – ARROYO	PRSR45A	21.0	S	1
QUEBRADA SALADA	PRSQ46A	1.7	S	1
QUEBRADA CORAZÓN	PRSQ47A	9.7	S	1
QUEBRADA BRANDERI	PRSQ48A	4.5	S	1
RÍO GUAMANÍ	PRSR49A	22.0	S	1
QUEBRADA MELANÍA	PRSQ50A	7.0	S	2
RÍO SECO	PRSR51A	24.7	S	1
QUEBRADA AMORÓS	PRSQ52A	0.7	S	1
QUEBRADA AGUAS VERDES	PRSQ53A	15.0	S	1
RÍO NIGUAS – SALINAS	PRSR54A	102.5	S	1
RÍO JUEYES	PRSR55A	11.0	S	1
RÍO CAYURES	PRSR56A	5.0	S	1
RÍO COAMO*	PRSR57A	115.7	S	3
RÍO DESCALABRADO	PRSR58A	18.8	S	1
RÍO CAÑAS	PRSR59A	8.0	S	1
RÍO JACAGUAS	PRSR60A	89.5	S	4
RÍO INABÓN	PRSR61A	66.7	S	1
RÍO BUCANÁ – CERRILLOS*	PRSR62A	60.4	S	3
RÍO PORTUGUÉS*	PRSR63A	54	S	1
RÍO MATILDE - PASTILLO	PRSR64A	51.2	S	2
RÍO TALLABOA	PRSR65A	59.6	S	1
RÍO MACANÁ	PRSR66A	21.7	S	1
RÍO GUAYANILLA*	PRSR67A	60.0	S	1
RÍO YAUCO	PRSR68A	93.7	S	3
RÍO LOCO	PRSR69A	113.4	S	3
RÍO ARROYO CAJÚL	PRSR70A	7.4	S	1
MO MINO I O CAJUL	I INDIX / UA	/.→	ט	1

BASIN NAME	BASIN ID	BASIN SIZE (miles)	REGION	SUB-BASIN
QUEBRADA BOQUERÓN	PRWQ71A	11.7	W	1
QUEBRADA ZUMBÓN	PRWQ72A	1.7	W	1
QUEBRADA GONZÁLEZ	PRWQ73A	1.8	W	1
QUEBRADA LOS PAJARITOS	PRWQ74A	2.7	W	1
CAÑO CONDE ÁVILA	PRWK75A	4.0	W	1
QUEBRADA IRIZARRY	PRWQ76A	2.0	W	1
RÍO GUANAJIBO*	PRWR77A	324.6	W	9
CAÑO MERLE	PRWK78A	11.1	W	2
RÍO YAGÜÉZ*	PRWR79A	42.2	W	1
QUEBRADA DEL ORO	PRWQ80A	10.0	W	1
CAÑO MANÍ	PRWK81A	3.0	W	1
CAÑO BOQUILLA	PRWK82A	12.3	W	3
RÍO GRANDE DE AÑASCO*	PRWR83A	488.6	W	10
QUEBRADA JUSTO	PRWQ84A	1.0	W	1
QUEBRADA ICACOS	PRWQ85A	1.4	W	1
QUEBRADA CAGUABO	PRWQ86A	1.0	W	1
CAÑO GARCÍA	PRWK87A		W	1
QUEBRADA GRANDE DE CALVACHE	PRWQ88A	14.8	W	1
QUEBRADA LOS RAMOS	PRWQ89A	6.9	W	1
QUEBRADA PUNTA ENSENADA	PRWQ90A	5.0	W	1
QUEBRADA PILETAS	PRWQ91A	2.0	W	1
RÍO GRANDE	PRWR92A	21.8	W	1
CAÑO DE SANTI PONCE	PRWK93A	4.8	W	1
RÍO GUAYABO	PRWR94A	43.1	W	1
RÍO CULEBRINAS*	PRWR95A	308.8	W	11
CAÑO CORAZONES	PRWK96A	1.3	W	1

<sup>\*</sup> Basins with permanent monitoring stations

Of the one hundred ninety-four (194) river basin AUs, forty-nine (49) AUs are monitored routinely. Also, two (2) of the three (3) SJBES AUs are monitored routinely, for a total of fifty-one (51) AUs with monitoring stations (Table 9). One hundred forty-five (145) river basin AUs do not have monitoring stations (Table 10).

**Table 9: The 51 AUs with monitoring stations** 

AU NAME	AU ID
RÍO GUAJATACA	PRNR3A1
RÍO GUAJATACA	PRNR3A2
RÍO GRANDE DE ARECIBO	PRNR7A1
RÍO GRANDE DE ARECIBO	PRNR7A2
RÍO GRANDE DE ARECIBO	PRNR7A3
RÍO CAONILLAS	PRNR7C1
RÍO LIMÓN	PRNR7C2
RÍO YUNES	PRNR7C3
RÍO TANAMÁ	PRNR7B2
RÍO GRANDE DE MANATI	PRNR8A1
RÍO GRANDE DE MANATI	PRNR8A2
RÍO CIALITO	PRNR8B
RÍO OROCOVIS	PRNR8E1
RÍO CIBUCO	PRNR9A
RÍO DE LA PLATA	PRER10A1
RÍO DE LA PLATA	PRER10A3

AU NAME	AU ID
RÍO DE LA PLATA	PRER10A4
RÍO DE LA PLATA	PRER10A5
RÍO GUADIANA	PRER10E
RÍO ARROYATA	PRER10G
RÍO MATÓN	PRER10J
RÍO BAYAMÓN	PRER12A1
RÍO BAYAMÓN	PRER12A2
RÍO GUAYNABO	PRER12B
SAN JUAN BAY ESTUARY SYSTEM	PREE13A2
SAN JUAN BAY ESTUARY SYSTEM	PREE13A3
RÍO GRANDE DE LOIZA	PRER14A1
RÍO GRANDE DE LOIZA	PRER14A2
RÍO GURABO	PRER14G1
RÍO VALENCIANO	PRER14G2
RÍO BAIROA	PRER14H
RÍO CAGÜITAS	PRER14I
RÍO TURABO	PRER14J
RÍO CAYAGUAS	PRER14K
RÍO ESPÍRITU SANTO	PRER16A
RÍO FAJARDO	PRER22A
RÍO HUMACAO	PRER33A
RÍO GUAYANÉS	PRER35A
RÍO MAUNABO	PRER37A
RÍO GRANDE DE PATILLAS	PRSR43A2
RÍO COAMO	PRSR57A2
RÍO BUCANÁ – CERRILLOS	PRSR62A1
RÍO BUCANÁ – CERRILLOS	PRSR62A2
RÍO PORTUGUÉS	PRSR63A
RÍO GUAYANILLA	PRSR67A
RÍO GUANAJIBO	PRWR77A
RÍO ROSARIO	PRWR77C
RÍO VIEJO	PRWR77D
RÍO YAGÜEZ	PRWR79A
RÍO GRANDE DE AÑASCO	PRWR83A
RÍO CULEBRINAS	PRWR95A

Table 10: The 145 AUs without monitoring stations

1 water 100 1110 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 110 a 1			
AU NAME	AU ID		
QUEBRADA DE LOS CEDROS	PRNQ1A		
QUEBRADA DEL TORO	PRNQ2A		
QUEBRADA LAS SEQUÍAS	PRNQ3B		
QUEBRADA BELLACA	PRNQ4A		
RÍO CAMUY	PRNR5A		
QUEBRADA SECA	PRNQ6A		
RÍO SANTIAGO	PRNR7A1a		
RÍO TANAMÁ	PRNR7B1		
RIO GRANDE DE MANATÍ	PRNR8A3		
RÍO TORO NEGRO	PRNR8C1		
RÍO BAUTA	PRNR8C2		
RÍO SANA MUERTOS	PRNR8D		

AU NAME	AU ID
RÍO BOTIJAS	PRER8E2
RÍO INDIO	PRNR9B1
RÍO MOROVIS	PRNR9B2
RÍO UNIBÓN	PRNR9B3
RÍO MAVILLAS	PRNR9C
RÍO DE LOS NEGROS	PRNR9D
RÍO DE LA PLATA	PRER10A2
RÍO LAJAS	PRER10B
RÍO BUCARABONES	PRER10C
RÍO CAÑAS	PRER10D
RÍO CUESTA ARRIBA	
	PRER10F
RÍO HONDO	PRER10H
RÍO USABÓN	PRER10I1
RÍO AIBONITO	PRER10I2
RÍO GUAVATE	PRER10K
RÍO HONDO	PRER11A
RÍO MINILLAS	PRER12C
RÍO CANÓVANAS	PRER14B
RÍO CANOVANILLAS	PRER14C
QUEBRADA MARACUTO	PRER14D
QUEBRADA GRANDE	PREQ14E
RÍO CAÑAS	PRER14F
RÍO EMAJAGUA	PRER14L
RÍO HERRERA	PRER15A
RÍO ESPÍRITU SANTO	PRER16A1
RÍO MAMEYES	PRER17A
RÍO MAMEYES	PRER17A1
QUEBRADA MATA DE PLÁTANO	PREQ18A
RÍO SÁBANA	PRER19A
RÍO SÁBANA	PRER19A1
RÍO JUAN MARTÍN	PRER20A
QUEBRADA FAJARDO	PREQ21A
RÍO DEMAJAGUA	PRER23A
QUEBRADA CEIBA	PREQ24A
QUEBRADA AGUAS CLARAS	PREO25A
RÍO DAGUAO	PRER26A
QUEBRADA PALMA	PREQ27A
QUEBRADA BOTIJAS	PREQ28A
RÍO SANTIAGO	PRER29A
RÍO SANTIAGO	PRER29A1
RÍO BLANCO	PRER30A
QUEBRADA PEÑA POBRE	PREQ30B
RÍO ANTÓN RUIZ	PRER31A
QUEBRADA MULAS	PREQ31A1
QUEBRADA FRONTERA	PREQ32A
RÍO CANDELERO	PRER34A
RÍO INGENIO	PRER35A1
QUEBRADA EMAJAGUA	PREQ36A
QUEBRADA MANGLILLO	PRSQ38A
QUEBRADA FLORIDA*	PRSQ39A
RÍO JACABOA	PRSR40A
QUEBRADA PALENQUE	PRSQ41A
RÍO CHICO	PRSR42A
RÍO GRANDE DE PATILLAS	PRSR43A1
RÍO MARÍN	PRSR43B
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AU NAME	AU ID
QUEBRADA YAUREL	PRSQ44A
RÍO NIGUAS DE ARROYO	PRSR45A
QUEBRADA SALADA	PRSQ46A
QUEBRADA CORAZÓN	PRSQ47A
QUEBRADA BRANDERI	PRSQ48A
RÍO GUAMANÍ	PRSR49A
QUEBRADA MELANÍA	PRSQ50A
RÍO SECO	PRSR51A
QUEBRADA AMORÓS	PRSQ52A
QUEBRADA AGUAS VERDES	PRSQ53A
RÍO NIGUAS DE SALINAS	PRSR54A
RÍO JUEYES	PRSR55A
RÍO CAYURES	PRSR56A
RÍO COAMO	PRSR57A1
RÍO CUYÓN	PRSR57B
RÍO DESCALABRADO	PRSR58A
RÍO CAÑAS	PRSR59A
RÍO JACAGUAS	PRSR60A1
RÍO JACAGUAS	PRSR60A1
RÍO INABÓN	PRSR61A
RÍO MATILDE-PASTILLO	
QUEBRADA DEL AGUA	PRSR64A PRSQ64A1
~	
RÍO TALLABOA	PRSR65A
RÍO MACANÁ	PRSR66A
RÍO YAUCO	PRSR68A1
RÍO YAUCO	PRSR68A2
RÍO LOCO	PRSR69A2
RÍO LOCO	PRSR69A1
RÍO ARROYO CAJÚL	PRSR70A
QUEBRADA BOQUERÓN	PRWQ71A
QUEBRADA ZUMBÓN	PRWQ72A
QUEBRADA GONZÁLEZ	PRWQ73A
QUEBRADA LOS PAJARITOS	PRWQ74A
CAÑO CONDE ÁVILA	PRWK75A
QUEBRADA IRIZARRY	PRWQ76A
RÍO HONDO	PRWR77B
RÍO DUEY Y RÍO HOCONUCO	PRWR77E
RÍO CAÍN	PRWR77F
RÍO CUPEYES	PRWR77G
RÍO CRUCES	PRWR77H
RÍO GRANDE	PRWR77I
CAÑO MERLE	PRWK78A
CAÑO MERLE	PRWK78A1
QUEBRADA DEL ORO	PRWQ80A
CAÑO MANÍ	PRWK81A
CAÑO BOQUILLAS	PRWK82A
CAÑO BOQUILLAS	PRWK82A1
CAÑO BOQUILLAS	PRWK82A2
RÍO CAÑAS	PRWR83B
RÍO CASEY	PRWR83C
RIO HUMATA	PRWR83D
RÍO ARENAS	PRWR83E
RÍO MAYAGUECILLO	PRWR83F
RÍO GUABÁ	PRWR83G
RÍO BLANCO	PRWR83H
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AU NAME	AU ID
RÍO PRIETO	PRWR83I
QUEBRADA JUSTO	PRWQ84A
QUEBRADA ICACOS	PRWQ85A
QUEBRADA CAGUABO	PRWQ86A
CAÑO GARCIA	PRWK87A
QUEBRADA GRANDE DE CALVACHE	PRWQ88A
QUEBRADA LOS RAMOS	PRWQ89A
QUEBRADA PUNTA ENSENADA	PRWQ90A
QUEBRADA PILETAS	PRWQ91A
RÍO GRANDE	PRWR92A
CAÑO DE SANTI PONCE	PRWK93A
RÍO GUAYABO	PRWR94A
RÍO CAÑO (RIO CAÑAS)	PRWR95B
QUEBRADA GRANDE	PRWQ95C
QUEBRADA LAS MARÍAS	PRWQ95D
QUEBRADA YAGRUMA	PRWQ95E
QUEBRADA LA SALLE	PRWQ95F
QUEBRADA EL SALTO	PRWR95G
QUEBRADA GRANDE DE LA MAJAGUA	PRWQ95H
QUEBRADA SALADA	PRWR95I
RÍO SONADOR	PRWR95J
RÍO GUATEMALA	PRWR95K
CAÑO CORAZONES	PRWK96A

<sup>\*</sup> This AU was always dry in this cycle and not assess

For purposes of water quality assessment and planning, PRDNER continues to group all the river basins into four (4) geographic regions. The Table 11 presents geographic regions with its corresponding basins as part of the monitoring network.

**Table 11: Geographic Regions** 

REGION	BASIN	BASIN IN PERMANENT STREAM WATER QUALITY NETWORK	ASSESSMENT UNITS BY WATER QUALITY EXISTING DATA
North	9	4	0
South	33	5	0
East	28*	10	3 (26 monitoring stations)
West	26	4	0

<sup>\*</sup> Included the San Juan Bay Estuary System

In the case of assessment units with several monitoring stations in the same assessment unit, the water quality evaluation is performed by evaluating all the data from all the stations within that assessment unit and the evaluation is indicative for the whole assessment unit.

Potential pollution sources are identified through supplementary information: NPDES compliance evaluation inspections, operation and maintenance inspections, pump station by-passes and sanitary sewer system overflow incidents for a period of two years, implementation of Best Management Practices by non-point sources, fish-kills, or spill events.

#### 1.2 Assessment Unit for Coastal Shoreline

The Coastal Shoreline consists of 64 AUs, of which fifty-five (55) have monitoring stations and nine (9) do not have monitoring stations. (The AU that do not have monitoring stations were classified on Category 3 because there is insufficient available data and/or information to determine if any designated uses are being attained). The monitoring stations are positioned along coastal shoreline AUs to maximize efficiency. The following description provides the rationale for setting the number of stations according to the length of the AU:

- AUs eleven (11) miles or greater, have three (3) stations.
- AUs shorter than eleven (11) miles but longer than or equal to four (4) miles, have two (2) stations.
- AU shorter than four (4) miles has one station.

Due to accessibility, the monitoring network excludes Roosevelt Roads Naval Station in Ceiba (PREC21 and PREC22), Vieques (PRVC54B), Culebra (PRCC53), Mona Island (PRMC55), Isla de Cabra to Punta El Morro (PREC11).

AUs that have waters classified as SA are not monitored by the Coastal Monitoring Network. Class SA waters are defined in the PRWQSR, as coastal and estuarine waters of high quality or exceptional ecological or recreational value whose existing conditions shall not be altered, except by natural phenomena, as defined under this regulation to preserve its natural characteristics. Class SA waters include the following: *Bahía Bioluminiscente La Parguera*, *Lajas*, two (2) miles (AU PRSC41A1), *Bahía Monsio José*, Lajas, three point seventy-two (3.72) miles (AU PRSC41A2) and *Bahía Mosquito*, Vieques, three (3) miles (AU PRVC54A).

The Table 12 summarize the coastal shoreline AUs. *AU DESCRIPTION column* indicates where the AU begins and ends.

**Table 12: Coastal Shoreline Assessment Units** 

AU ID	AU DESCRIPTION	AU SIZE (miles)	GEOGRAPHIC REGION
PRNC01*	Punta Borinquen to Punta Sardina	11.72	North
PRNC02*	Punta Sardina to Punta Manglillo	14.10	North
PRNC03*	Punta Manglillo to Punta Morrillos	9.65	North
PRNC04*	Punta Morrillos to Punta Manatí	13.66	North
PRNC05*	Punta Manatí to Punta Chivato	7.46	North
PRNC06*	Punta Chivato to Punta Puerto Nuevo	3.23	North
PRNC07*	Punta Puerto Nuevo to Punta Cerro Gordo	5.05	North
PRNC08*	Punta Cerro Gordo to Punta Boca Juana	7.32	North
PREC09*	Punta Boca Juana to Punta Salinas	5.78	East
PREC10B*	Punta Salinas to Río Bayamón mouth	2.91	East
PREC10C*	Río Bayamón mouth to Isla de Cabras	6.63	East
PREC11	Isla de Cabras to Punta del Morro	7.79	East
PREC12*	Punta del Morro to west side of Condado Bridge	3.50	East
PREC13*	East side of Condado Bridge to Punta Las Marías	4.31	East
PREC14*	Punta Las Marías to Punta Cangrejos	4.19	East
PREC15*	Punta Cangrejos to Punta Vacía Talega	6.23	East
PREC16*	Punta Vacía Talega to Punta Miquillo	9.46	East
PREC17*	Punta Miquillo to Punta La Bandera	8.41	East
PREC18*	Punta La Bandera to Cabezas de San Juan	10.46	East
PREC19*	Cabezas de San Juan to Punta Barrancas	7.08	East

AU ID	AU DESCRIPTION	AU SIZE (miles)	GEOGRAPHIC REGION
PREC20*	Punta Barrancas to Punta Medio Mundo	5.33	East
PREC21	Punta Medio Mundo to Punta Puerca	3.00	East
PREC22	Punta Puerca to Isla Cabras	3.30	East
PREC23*	Isla Cabras to Punta Cascajo	8.83	East
PREC24*	Punta Cascajo to Punta Lima	9.07	East
PREC25*	Punta Lima to Morro de Humacao	9.83	East
PREC26*	Morro de Humacao to Punta Candelero	1.84	East
PREC27*	Punta Candelero to Punta Guayanés	3.74	East
PREC28C*	Punta Guayanés to Punta Quebrada Honda	4.68	East
PREC28B*	Punta Quebrada Honda to Punta Yeguas	0.74	East
PREC29*	Punta Yeguas to Punta Tuna	4.35	East
PREC30*	Punta Tuna to Cabo Mala Pascua	2.65	East
PRSC31*	Cabo Mala Pascua to Punta Viento	4.06	South
PRSC32*	Punta Viento to Punta Figuras	6.16	South
PRSC33*	Punta Figuras to Punta Ola Grande	8.10	South
PRSC34*	Punta Ola Grande to Punta Petrona	40.96	South
PRSC35*	Punta Petrona to Punta de Cabullones	2.53	South
PRSC36B*	Punta de Cabullones to Punta Carenero	6.70	South
PRSC36C*	Punta Carenero to Punta Cucharas	9.23	South
PRSC37B*	Punta Cuchara to Cayo Parguera	3.30	South
PRSC37C*	Cayo Parguera to Punta Guayanilla	4.20	South
PRSC38*	Punta Guayanilla to Punta Verraco	13.20	South
PRSC39*	Punta Verraco to Punta Ballenas	6.41	South
PRSC40*	Punta Ballenas to Punta Brea	13.26	South
PRSC41B1*	Punta Brea to Bahía Fosforescente La Parguera	10.93	South
PRSC41A1	Bahía Fosforescente La Parguera	2.00	South
PRSC41B2*	Bahía Fosforescente to Punta Cueva de Ayala	7.00	South
PRSC41A2	Bahía Monsio José	3.72	South
PRSC41B3*	Bahía Monsio José to Faro de Cabo Rojo	13.45	South
PRWC42*	Faro de Cabo Rojo to Punta Águila	2.89	West
PRWC43*	Punta Águila to Punta Guaniquilla	9.54	West
PRWC44*	Punta Guaniquilla to Punta La Mela	2.50	West
PRWC45	Punta La Mela to Punta Carenero	2.95	West
PRWC46*	Punta Carenero to front of Cayo Ratones	4.00	West
PRWC47*	In front of Cayo Ratones to Punta Guanajibo	3.85	West
PRWC48*	Punta Guanajibo to Punta Algarrobo	5.60	West
PRWC49*	Punta Algarrobo to Punta Cadena	6.98	West
PRWC50*	Punta Cadena to Punta Higüero	4.98	West
PRWC51*	Punta Higüero to Punta del Boquerón	6.14	West
PRWC52*	Punta del Boquerón to Punta Borinquen	6.80	West
PRCC53	Culebra Island	32.70	Offshore Islands
PRVC54A	Bahía Mosquito	3.00	Offshore Islands
PRVC54B	Vieques Island	67.60	Offshore Islands
PRMC55	Mona Island	18.60	Offshore Islands

<sup>\*</sup> Assessment Units with monitoring stations

#### 2.0 Monitoring Program

#### 2.1 Permanent Water Quality Monitoring Network

The PRDNER monitoring activities for this reporting cycle (October 1, 2021, to September 30, 2023), included routine ambient water quality sampling at the various networks, special water quality studies performed in the water bodies of concern and existing or secondary data requested.

Also, where available, effluent quality data from the discharge monitoring reports submitted by NPDES permitted point sources are used as contributing sources that may impact the use support potential of the water bodies. In addition, PRDNER may perform special sampling activities whenever necessary to investigate fish kills, hydrocarbons leak and spills, and illegal discharges to storm sewers and water bodies to obtain water quality data to assess the impact.

In this cycle the PRDNER generates data from four (4) routine monitoring networks. This will provide physical, chemical, and biological water quality data from the different water bodies. These are:

• Surface Water Monitoring Network: Operated by the United States Geological Survey (USGS) under a cooperative agreement with PR, this network includes fifty-one (51) water quality sampling stations in twenty-three (23) major river basins, which corresponds to fifty-one (51) AU in the north, south, east, and west hydrographic regions of PR. The USGS collects samples on a quarterly basis and analyzes for the following parameters:

Dissolved Oxygen	pН	
Enterococci	Specific Conductance*	
Flow*	Temperature	
Hardness*	Total Nitrogen	
Nitrate + Nitrite as Nitrogen	Total Phosphorus	
$NH_3 + NH_4$ as $N$	Turbidity	

<sup>\*</sup> Parameter that does not have numeric standard as establish in the PRWOSR

Analyses for the detection of cyanide and methylene blue active substances (MBAS), as well as the other following parameters, are performed twice a year:

Arsenic	Chromium VI	Mercury
Cadmium	Copper	Selenium
Chromium III	Lead	Zinc

Additional samples are collected for dissolved solids, such as calcium and magnesium.

For data provided by the USGS, all results are used regardless of whether they include remarks such as >, <, estimated (E), or average (A), under each parameter. All results reported with or without the remarks were used as a valid result for this assessment cycle.

• Clean Lakes Monitoring Network: Operated by PRDNER, this network monitors water quality in the eighteen (18) major lakes (reservoirs) that are mostly used as raw sources of public water supply, propagation and preservation of desirable species, including threatened and endangered species, as well as primary and secondary contact recreation (Table 13).

**Table 13: Lakes Monitoring Network** 

1 able 13: Lakes Monitoring Network					
BASIN	WATER BODY NAME	WB SIZE (Acres)	2024 PERMANENT MONITORING STATION ID		
Río Guajataca	Lago Guajataca PRNL3A1	1000 acres	10720 10790 10790C		
Río Grande De Arecibo	Lago Dos Bocas PRNL <sub>1</sub> 7A1	634 acres	25110 27090 27090E		
Río Grande De Arecibo	Lago Caonillas PRNL <sub>2</sub> 7C1	700 acres	89001 89002 89003		
Río Grande De Arecibo	Lago Garzas PRNL <sub>3</sub> 7A3	108 acres	20050		
Río Grande De Manatí	Lago Matrullas PRNL <sub>2</sub> 8C1	77 acres	89009 89010		
Río De La Plata	Lago La Plata PREL <sub>1</sub> 10A1	560 acres	44400 44950 44950C		
Río De La Plata	Lago Carite PREL <sub>2</sub> 10A5	333 acres	39900 39950 39950C		
Río Bayamón	Lago Cidra PREL12A2	268 acres	89029 89030 89031		
Estuario De La Bahía De San Juan	Lago Las Curías PREE13A2	55 acres	89027		
Río Grande De Loiza	Lago Loiza PREL14A1	713 acres	57500 58800 58800D		
Río Grande De Patillas	Lago Patillas PRSL43A1	312 acres	89022 89023 89024		
Quebrada Melanía	Lago Melanía PRSL50A	35 acres	89026		
Río Jacaguas	Lago Guayabal PRSL <sub>1</sub> 60A1	373 acres	89011 89012 89013		
Río Jacaguas	Lago Toa Vaca PRSL <sub>2</sub> 60A1	836 acres	89014 89015 89016		
Río Bucaná-Cerrillos	Lago Cerrillos PRSL62A1	700 acres	89032 89033 89034		
Río Yauco	Lago Luchetti PRSL68A1	266 acres	89017 89018 89019		
Río Loco	Lago Loco PRSL69A	69 acres	89021C		
Río Grande de Añasco	Lago Guayo PRWL83H	285 acres	89004 89005 89006		

Samples taken at these lakes are analyzed for the following parameters:

Arsenic	Nickel			
Cadmium	Pesticides (organochlorides)			
Copper	pН			
Dissolved Oxygen (profile)	Selenium			
Enterococci	Temperature (profile)			
Hardness*	Total Nitrogen			
Lead	Total Phosphorous			
Mercury	Turbidity			
Zinc				

<sup>\*</sup> Parameter that does not have numeric standard as establish in PRWQSR

All parameters are collected once in each of three (3) sampling cycles (rainy season, dry season, and midpoint between these two (2) periods):

- October-November- represents flows greater than low flow.
- February-March- represents minimum dilution of discharge; typically, lowest rainfall period in Puerto Rico.
- May-represents first stream flush-effects.
- August-September- represents flows greater than low flow; typically, more humid and highest ambient temperature in Puerto Rico.
- Coastal Monitoring Network: Operated by PRDNER, this network includes one hundred four (104) monitoring stations around the coastal perimeter of PR (Table 14). The network covers a total of four hundred nineteen-point zero one (419.01) coastal miles of PR's main island, out of a total of five hundred forty-six-point sixty-three (546.63) shore miles from the archipelago. The Coastal Monitoring Network Stations are sampled for the following parameters:

Dissolved Oxygen	рН			
Enterococci	Temperature			
***Oil and Grease Total Nitrogen				
Turbidity				

<sup>\*\*\*</sup> Sample for this parameter will be collected only if oil sheen is observed in the water body.

**Table 14: Puerto Rico Coastal Permanent Network Water Quality Monitoring Stations** 

STATION	AU ID	CLASSIFICATION	COORDINATES		FREQUENCY OF
NUMBER		(PRWQSR)	LATITUDE	LONGITUDE	SAMPLING
MAC-049	PRNC04	SB	18° 29′ 12.30″	66° 40′ 33.92″	Every two months
SBZ-008	PRNC04	SB	18° 29′ 03.84″	66° 34′ 39.01″	Every two months
MAC-055	PRNC04	SB	18° 28′ 54.93″	66° 32′ 11.61″	Every two months
SEG5-01	PRNC05	SB	18° 28′ 36.50″	66° 30′ 24.80″	Every two months
SBZ-010	PRNC05	SB	18° 28′ 22.50″	66° 29′ 08.36″	Every two months
MAC-087	PRNC06	SB	18° 29′ 30.80″	66° 23′ 55.28″	Every two months

STATION	AU ID	CLASSIFICATION	COORDINATES		FREQUENCY OF
NUMBER		(PRWQSR)	LATITUDE	LONGITUDE	SAMPLING
SEG7-01	PRNC07	SB	18° 29′ 24.70″	66° 23′ 40.49″	Every two months
MAC-088	PRNC07	SB	18° 28′ 52.56″	66° 20′ 26.81″	Every two months
SBZ-013	PRNC08	SB	18° 28′ 32.86″	66° 19′ 11.95″	Every two months
SBZ-014	PRNC08	SB	18° 28′ 28.22″	66° 16′ 51.88″	Every two months
SEG9-01	PRNC09	SB	18° 28′ 15.66″	66° 14′ 47.38″	Every two months
MAC-077	PRNC09	SB	18° 28′ 21.27″	66° 11′ 09.68″	Every two months
MAC-063	PREC10B	SB	18° 27′ 17.64″	66° 10′ 43.31″	Every two months
SEG10C-01	PREC10C	SB	18° 27′ 09.58″	66° 09′ 27.38″	Every two months
SEG10C-02	PREC10C	SB	18° 27′ 55.18″	66° 08′ 19.21″	Every two months
SBZ-019	PREC12	SB	18°28′ 01.72″	66°05′25.19″	Every two months
SBZ-018	PREC12	SB	18° 28′ 00.23″	66° 05′ 12.00″	Every two months
B-1	PREC13	SB	18° 27′ 40.07″	66° 04′ 56.67″	Every two months
B-2	PREC13	SB	18° 27′ 10.84″	66° 02′ 55.97″	Every two months
EB-40	PREC14	SB	18° 26′ 38.73″	66° 01′ 19.74″	Every two months
SEG14-01	PREC14	SB	18° 26′ 45.50″	66° 00′ 13.10″	Every two months
B-3	PREC14	SB	18° 27′ 01.86″	65°59′48.63″	Every two months
SEG14-02	PREC14	SB	18° 27′ 32.84″	66° 59′ 34.27″	Every two months
SBZ-024	PREC15	SB	18° 27′ 22.62″	65° 58′ 25.74″	Every two months
SBZ-026	PREC15	SB	18° 26′ 52.29″	65° 54′ 22.43″	Every two months
SBZ-027	PREC16	SB	18° 26′ 04.49″	65° 51′ 08.34″	Every two months
SBZ-028	PREC16	SB	18° 25′ 24.30″	65° 49′ 44.73″	Every two months
SEG17-01	PREC17	SB	18° 24′ 08.80″	65° 46′ 19.90″	Every two months
MAC-009	PREC17	SB	18° 23′ 05.67″	65° 43′ 47.98″	Every two months
SBZ-030	PREC18	SB	18° 22′ 54.72″	65° 43′ 06.45″	Every two months
SEG23-01	PREC23	SB	18° 13′ 29.20″	65° 37′ 00.40″	Every two months
SEG20-02	PREC20	SB	18° 15′ 46.10″	65° 37′ 48.13″	Every two months
SEG20-01	PREC20	SB	18° 17′ 06.10″	65° 37′ 52.60″	Every two months
MAC-078	PREC19	SB	18° 20′ 02.39″	65° 37′ 48.76″	Every two months
MAC-010	PREC18	SB	18° 22′ 10.45″	65° 38′ 10.79″	Every two months
SEG24-02	PREC24	SB	18° 12′ 10.90″	65° 40′ 08.10″	Every two months
SEG25-01	PREC25	SB	18° 11′ 22.80″	65° 43′ 10.60″	Every two months
MAC-080	PREC25	SB	18° 11′ 12.94″	65° 43′ 33.48″	Every two months
MAC-081	PREC25	SB	18° 09′ 27.90″	65° 45′ 21.44″	Every two months
SEG26-01	PREC26	SB	18° 06′ 32.70″	65° 47′ 00.60″	Every two months
SEG27-01	PREC27	SB	18° 04′ 52.64″	65° 47′ 47.60″	Every two months
MAC-012	PREC28C	SB	18° 03′ 45.70″	65° 49′ 09.10″	Every two months
SBZ-040	PRSC32	SB	17° 58′ 26.00″	65° 59′ 19.00″	Every two months
SEG31-01	PRSC31	SB	17° 58′ 23.50″	65° 56′ 39.10″	Every two months
MAC-082	PREC30	SB	17° 59′ 31.69″	65° 53′ 28.32″	Every two months
SEG29-02	PREC29	SB	18° 00′ 20.70″	65° 52′ 16.60″	Every two months
SEG29-01	PREC29	SB	18° 00′ 53.90″	65° 50′ 44.50″	Every two months
SBZ-038	PREC28B	SB	18° 01′ 44.54″	65° 49′ 52.27″	Every two months
SBZ-037	PREC28C	SB	18° 02′ 34.97″	65° 50′ 00.06″	Every two months
MAC-020	PRSC35	SB	17° 57′ 13.67″	66° 24′ 22.76″	Every two months
SEG34-02	PRSC34	SB	17° 57′ 35.60″	66° 22′ 13.50″	Every two months
SEG34-01	PRSC34	SB	17° 58′ 39.30″	66° 19′ 56.90″	Every two months
MAC-019	PRSC34	SB	17° 57′ 04.76″	66° 13′ 34.38″	Every two months
MAC-017	PRSC33	SB	17° 55′ 55.97″	66° 09′ 03.62″	Every two months
SEG33-01	PRSC33	SB	17° 57′ 46.18″	66° 03′ 55.95 ″	Every two months
MAC-083	PRSC32	SB	17° 57′ 43.14″	66° 02′ 23.94″	Every two months
MAC-084	PRSC37B	SB	17° 58′ 15.88″	66° 40′ 38.16″	Every two months
MAC-023	PRSC36C	SB	17° 58′ 54.05″	66° 37′ 33.87″	Every two months
MAC-022	PRSC36C	SB	17° 58′ 13.93″	66° 37′ 04.75″	Every two months
SEG36B-01	PRSC36B	SB	17° 58′ 09.40″	66° 36′ 09.80″	Every two months

STATION	AU ID	CLASSIFICATION	COOR	DINATES	FREQUENCY OF
NUMBER		(PRWQSR)	LATITUDE	LONGITUDE	SAMPLING
SEG35-02	PRSC35	SB	17° 58′ 30.80″	66° 32′ 09.40″	Every two months
SEG35-01	PRSC35	SB	17° 59′ 26.10″	66° 29′ 11.20″	Every two months
MAC-030	PRSC39	SB	17° 57′ 54.22″	66° 48′ 33.45″	Every two months
MAC-028	PRSC38	SB	17° 59′ 43.51″	66° 47′ 06.50″	Every two months
MAC-089	PRSC38	SB	18° 00′ 22.54″	66° 46′ 06.00″	Every two months
MAC-027	PRSC38	SB	17° 59′ 39.62″	66° 45′ 43.21″	Every two months
MAC-025	PRSC37C	SB	17° 59′ 00.12″	66° 45′ 12.90″	Every two months
MAC-024	PRSC37C	SB	17° 59′ 29.54″	66° 43′ 53.30″	Every two months
SEG41B2-01	PRSC41B2	SB	17° 58′ 24.30″	67° 02′ 57.50″	Every two months
SBZ-046	PRSC41B2	SB	17° 58′ 19.17″	66° 01′ 55.12″	Every two months
SEG41B1-01	PRSC41B1	SB	17° 57′ 40.30″	66° 58′ 55.30″	Every two months
SBZ-045	PRSC41B1	SB	17° 56′ 19.57″	66° 54′ 21.05″	Every two months
MAC-034	PRSC40	SB	17° 57′ 53.14″	66° 54′ 30.46″	Every two months
MAC-085	PRSC40	SB	17° 57′ 09.11″	66° 53′ 04.42″	Every two months
SEG39-01	PRSC39	SB	17° 57' 22.80"	66° 51' 18.09"	Every two months
SEG41B3-01	PRSC41B3	SB	17° 57′ 54.60″	67° 10′ 44.40″	Every two months
SEG41B3-02	PRSC41B3	SB	17° 56′ 07.60″	67° 11′ 25.00″	Every two months
SEG42-01	PRSC42	SB	17° 57′ 05.00″	67° 11′ 47.80″	Every two months
SBZ-047	PRSC43	SB	17° 58′ 29.26″	67° 12′ 46.46″	Every two months
SBZ-048	PRWC43	SB	17° 58′ 57.49″	67° 12′ 55.51″	Every two months
MAC-037	PRWC43	SB	18° 01′ 09.99″	67° 10′ 20.08″	Every two months
SBZ-050	PRWC44	SB	18° 02′ 56.20″	67° 11′ 51.10″	Every two months
SBZ-051	PRWC44	SB	18° 03′ 52.32″	67° 11′ 51.10″	Every two months
SEG45-01	PRWC45	SB	18° 04′ 24.40″	67° 11′ 17.40″	Every two months
SBZ-052	PRWC46	SB	18° 05′ 42.37″	67° 11′ 42.36″	Every two months
SEG47-01	PRWC47	SB	18° 08′ 26.60″	67° 10′ 48.30″	Every two months
MAC-038	PRWC48	SB	18° 11′ 41.18″	67° 09′ 21.07″	Every two months
MAC-040	PRWC48	SB	18° 13′ 19.02″	67° 10′ 08.05″	Every two months
MAC-041	PRWC49	SB	18° 17′ 16.31″	67° 11′ 38.23″	Every two months
SEG49-01	PRWC49	SB	18° 17' 41.80 "	67° 12' 36.00 "	Every two months
SBZ-054	PRWC50	SB	18° 18′ 47.81″	67° 14′ 34.21″	Every two months
SBZ-055	PRWC50	SB	18° 20′ 26.52″	67° 15′ 22.16″	Every two months
SEG51-01	PRWC51	SB	18° 22′ 14.20″	67° 15′ 25.00″	Every two months
SEG51-02	PRWC51	SB	18° 23 ′4.42″	67° 12′ 45.81″	Every two months
MAC-043	PRWC52	SB	18° 24′ 51.78″	67° 09′ 42.05″	Every two months
SBZ-002	PRWC52	SB	18° 27′ 28.01″	67° 09′ 49.21″	Every two months
SBZ-003	PRNC01	SB	18° 29′ 26.21″	67° 09′ 25.09″	Every two months
SBZ-004	PRNC01	SB	18° 30′ 51.24″	67° 04′ 32.41″	Every two months
MAC-044	PRNC01	SB	18° 30′ 30.49″	67° 01′ 22.85″	Every two months
MAC-086	PRNC02	SB	18° 29′ 23.21″	66° 57′ 31.76″	Every two months
SBZ-006	PRNC02	SB	18° 29′ 26.16″	66° 51′ 21.16″	Every two months
MAC-047	PRNC02	SB	18° 29′ 15.53″	66°49′42.50″	Every two months
SBZ-007	PRNC03	SB	18° 29′ 34.51″	66° 47′ 53.70″	Every two months
SEG3-01	PRNC03	SB	18° 28′ 45.33″	66° 47′ 70.04″	Every two months

■ Beach Monitoring and Public Notification Program: Operated by PRDNER, implemented in thirty-five (35) beaches included in the Beach Monitoring and Public Notification Program. All the stations were sampled biweekly for the Enterococcus, pH, and Temperature parameters. From April 2015, bacteriological samples are analyzed using Defined Substrate Technology and Quanti-Tray (Enterolert). These changes were made to comply with the CWA as amended by Beaches Environmental Assessment and Coastal Health Act (Beach Act) that requires compliances with the requirements of the National Beach Guidance and Required Performance Criteria for Grants (NBGRPCG)

2014. This document outlines the eleven (11) performance criteria that States and eligible territorial, tribal or local governments, must meet to receive the grant from the USEPA, to implement programs of monitoring, and public notification of recreational waters under section 406 of the CWA. The frequency of samples collection is every two weeks, throughout the year, since in PR, the season variability through the whole year is not significant and local bathers and tourists visit the beaches frequently.

All sampling and analytical activities are subjected to a Water Quality Assurance Program Plan, coordinated through the Quality Assurance Control Officer of the Water Quality Area and the Division of Environmental Science and Assessment of USEPA Region II.

Each monitoring initiative is supported by the corresponding Quality Assurance Project Plan (QAPP), which must comply with the Water Program's Quality Assurance Management Plan (QAMP).

All samples are collected, preserved, transported, and analyzed in accordance with the protocols established in the corresponding QAPP. The purpose and goals of PRDNER's fixed monitoring station programs are:

- 1. Provide current data on the quality of the various water bodies throughout PR.
- 2. Provide information on specific pollutants of concern and uses that may be impaired in the different water bodies monitored.
- 3. Provide information on potential pollution sources responsible for water quality impairment.
- 4. Provide information to determine the compliance with the water quality standards applicable to the different designated uses as established in the PRWQSR.
- 5. Determine if the pollution control measures being implemented throughout PR are effective in protecting the quality of the different water bodies.

Data generated from the rivers and stream stations sampled and analyzed by the USGS are not available through national STORET database; however, the data is available in the Internet through the water quality portal (<a href="www.waterqualitydata.us/">www.waterqualitydata.us/</a>) or hardcopy files from its Caribbean Field Office.

## 2.2 Special Monitoring Projects

## 1. Surface Water Assessment of Pesticides Sampling Plan 2020-2021

The EPA and the United States Fish and Wildlife Service (USFWS) requested the Puerto Rico Environmental Quality Board (PREQB, now PRDRNA) to begin sampling for known pesticides; Naled, Camaphos, and Fenthion in the fifty-one stations of the Permanent Monitoring Network. This project was completed in November 2021, and was not detected the presence of these Pesticides in any of the monitoring stations.

# 2. Development of an Ecological Index for Palustrine Wetland Assessment in Puerto Rico

Below is a summary taken from the last report of this project, which includes the period from July 1, 2020, to September 3O, 2023. All sampling and analyses were conducted

by Agricultural Experiment Station (AES) personnel. This project was led by a multidisciplinary team of scientists from the University of Puerto Rico.

The purpose of this study is to develop and evaluate the efficacy of a quantitative comprehensive framework for palustrine wetlands assessment in Puerto Rico using a combination of different indices of ecological wetland condition. The conceptual approach follows that used to develop the Florida Wetland Condition Index (FWCI) (Chinners-Reiss and Brown, 2005). This study will provide statistically defendable evidence on the feasibility of developing a comprehensive framework for Palustrine Wetlands assessment in Puerto Rico to discriminate for the effects of the human imprint on the ecological integrity of palustrine wetlands.

The objectives of the study are: 1) Assess the effectiveness of different ecological indices to characterize the degree of human intervention in palustrine wetlands of Puerto Rico and its impact on wetland functions. 2) Develop a comprehensive wetland assessment framework for palustrine wetland assessment in Puerto Rico using an integrated approach based on the combination of several distinct indices.

In this study, different indices based on multiple biotic components, environmental parameters and landscape development intensity metrics will be combined to produce a comprehensive wetland assessment framework for Palustrine Wetlands of Puerto Rico. Separate measures of wetland biological integrity (i.e., diatom and macroinvertebrate community composition or assemblages), as well as the WQI and different soil properties, will be used to develop a quantitative measure of biological integrity. Six (6) locations were selected (three forested and three emergent wetlands) as representatives of the best attainable conditions for the evaluation of potential indicators towards the development of an ecological index for Palustrine Wetlands in Puerto Rico. A second group of six (6) wetlands was chosen to represent "impaired" wetlands. The latter were selected from the population of sites with total Antilles Rapid Assessment Method (ARAM) scores  $\leq$  than the 75th percentile value, and stressor scores  $\geq$  than the 25th percentile value.

Selected sites for the reference wetlands are: Forested sites (El Manantial-Vega Baja, Finca Virginia- Loíza, Palmas del Mar- Humacao); Emergent sites (Finca La Esperanza B-Manatí, Arroyo I-Arroyo, Corredor Ecológico A-Luquillo). Impaired wetlands are: Forested sites (Laguna Tortuguero-Vega Baja, Canóvanas, Luquillo-PR-3); Emergent sites (Río Grande, Humacao, Laguna Cartagena).

Until this phase, six impacted wetlands and five non-impacted wetlands were identified, evaluating their compliance with the hydrological criterion established by the EPA, which requires a water column of at least 18 inches above the ground surface. The reference wetlands demonstrated compliance with the criterion and saturation above the ground surface, indicating a healthy hydrological state. Although a wetland in Loíza experienced a dry period, it consistently met the standards. The impacted wetlands also met the hydrology criterion, but with greater variation in the water column. Human intervention alters the flow, level, and water quality in impacted wetlands, potentially affecting biodiversity and ecosystem health. Understanding the hydraulic retention time (HRT) is essential, and through its calculation (HRT = V / Q), the wetlands' effectiveness in water filtration and purification was assessed. The

affected HRT in impacted wetlands highlights the need to mitigate the effects of human intervention and restore these ecosystems to maintain their hydrological function and ecological role. Overall, this study emphasizes the importance of hydrology in the conservation and proper management of wetlands to safeguard water quality and biodiversity.

# 3. Development and Implementation of a Water Quality Monitoring Project in Shallow Coral Reef Areas around Puerto Rico 2022-2024

The DNER is interested in collecting information on water quality at the sites included in the Puerto Rico Coral Reef Monitoring Program (PRCRMP) for shallow coral reef areas (at depths less than or equal to 30 meters) around of Puerto Rico, quarterly, for two consecutive years. A total of 42 coral reef sites will be visited 4 times a year for 16 water quality parameters, resulting in an annual total of 2,688 data points per year.

Due to variable environmental conditions and anthropogenic impacts that threaten the integrity of coral reefs, the primary goal of this project will be the identification of parameters that help sustain healthy coral reefs. The QAPP (August 2022), additionally includes demographic monitoring of corals at PRCRMP sites and implementation of the biological condition gradient (BCG) from the PRCRMP and coral demographic data. This project is managed and carried out by the University of Puerto Rico (UPR), Department of Marine Sciences (DMS), and the Caribbean Coral Reef Institute (CCRI) in La Parguera, PR.

## 2.3 Water Quality Existing Data

The development of the IR requires the assessment of existing and readily available water quality-related data and information. In addition, PR is required to evaluate and consider any other readily available information. The assessment determination must include all relevant data and take into consideration the QA/QC requirements established in the QAPP for the use of Water Quality Existing Data for the Development of the 303(d)/305(b) IR, March 17, 2021. For the development of the IR in addition to the water quality data obtained by the routine monitoring networks, secondary or external data requested from governmental agencies, non-governmental entities and/or reliable sources of the web should be considered.

Existing data will be gathered and used to address the following objectives related to the assessment of the quality of the water bodies:

- **Objective 1**: Determine compliance with the water quality criteria and attainment with the designated uses.
- **Objective 2**: Develop the 303(d) list and the AU to be delisted.
- **Objective 3**: Develop and publish the 305(b)/303(d) IR.

The data requested and downloaded must be the most recent or from the previous two federal fiscal years from the even-numbered year that comprises the assessment cycle (October 1, 2021, to September 30, 2023). The information must be comparable to the PRWQSR to supplement the information available from PRDNER monitoring networks to carry out the water quality assessment.

The list of sources PRDNER has actively solicited data from government agencies and non-governmental entities can be found in Table 15.

**Table 15: Government Agencies and Non-Governmental Entities** 

NAME	POSITION	AGENCY
Eng. Carlos Rodríguez	Chairman	Associated General Contractors of
	<del></del>	America PR Chapter
Mr. Orlando Rodríguez	Executive Director,	PR Aqueduct and Sewer Authority
Hernández	Environmental Compliance and Quality Control	1
Eng. Alexandra Velázquez	Director	PR Highway and Transportation
Delgado	Programming and Special Studies	Authority
Ms. Jeannette Villamil Rivera	Chief	PR Highway and Transportation
	Environmental Studies Office	Authority
Eng. Faustino González Quiles	Chairman	College of Engineers and Land
		Surveyors of PR
Mr. Alex R. Muñiz Lasalle	Director	PR Department of Agriculture
	Auxiliary Secretariat of Agrocommercial Integrity	
Mr. Juan C. Muñoz Ruiz	Supervisor	PR Department of Agriculture
	Pesticides Inspection Program Agrological	
	Laboratory	
Ms. Dilcia Barros	Director	PR Department of Agriculture
	Agrological Laboratory	
Mr. Raúl Santini	Environmental Coordinator II	Department of Natural and
	Coastal Zone Division	Environmental Resources
Mr. Farel Velázquez Cancel	Acting Assistant Secretary, Auxiliary Secretary for	Department of Natural and
	Conservation and Research	Environmental Resources
	Coastal Zone Division Program	
Ms. Aitza Pabón	Director	Jobos Bay Natural Estuarine
	Jobos Bay Natural Estuarine Research Reserve	Research Reserve
Dr. Jorge Bauzá	Science Director	San Juan Bay Estuary Program
Ms. Darilyn Amador Cosme	Director	PR Planning Board
	Geology and Hydrogeology	
Mr. Wilfredo Mass Arroyo	Flood Unit Planning Analyst	PR Planning Board
Ms. Rose A. Ortiz Díaz	Coastal Zone Unit Coordinator	PR Planning Board
Dr. Yazdel Martínez	Dean	Pontifical Catholic University of PR
	Academic Affairs	<ul> <li>Arecibo Campus</li> </ul>
Ms. Jackeline Rosas Negrón	Director	Pontifical Catholic University of PR
	College of Science	<ul> <li>– Mayagüez Campus</li> </ul>
Prof. Carmen Reyes Colón	Associate Director	Pontifical Catholic University of PR
	Department of Natural Sciences	<ul><li>Ponce Campus</li></ul>
Dr. Graciela I. Ramírez Toro	Director	Interamerican University of PR
	Centro de Educación e Interpretación Ambiental	
	(CECIA)	
Dr. María Plaza	Director	University of PR – Mayagüez
	Crop and Agro-Environmental Sciences	Campus
	Department	
Mr. Roberto Vargas	Department of Agro-Environmental Sciences	University of PR – Mayagüez
D E . W."	D	Campus
Dr. Ernesto Weil	Director	University of PR – Mayagüez
Dr. Luis B. Démor Alamés	Department of Marine Sciences Professor	Campus  University of PR Meyering Compus
Dr. Luis R. Pérez Alegría		University of PR–Mayagüez Campus
Mr. Puparta Chanama Camara	Agricultural Engineering Department Director	University of PR – Mayagüez
Mr. Ruperto Chaparro Serrano	Sea Grant College Program	Campus
Dr. Jorge Rivera Santos	Director	University of PR – Mayagüez
Di. Joige Nivera Santos	Director	Campus
		Campus

Water Plan Monitoring Division Planning Secretariat  Ms. Olga M. Ramos GIS Analyst and Remote Sensing Lab International Institute of Tropical Foresty  Dr. Angel A. Toledo López Rector Metropolitan University	NAME	POSITION	AGENCY			
Dr. Francisco M. Monroig   Agricultural Engineering Department   Campus		PR Water Resources and Environmental Research				
Agricultural Engineering Department   Director   Director   Department of Natural Sciences and Technology   Department of Natural Sciences and Technology   Department of Natural Sciences and Technology   Metropolitan University of PR   Academic Division   Science, Technology and Environment   Dr. Fernando Crastz Peters   Assistant Professor   Assistant Professor   Metropolitan University of PR   School of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Division		Institute				
Agricultural Engineering Department   Director   Director   Department of Natural Sciences and Technology   Department of Natural Sciences and Technology   Department of Natural Sciences and Technology   Metropolitan University of PR   Academic Division   Science, Technology and Environment   Dr. Fernando Crastz Peters   Assistant Professor   Assistant Professor   Metropolitan University of PR   School of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Metropolitan University of PR   Division of Science and Technology   Division	Dr. Francisco M. Monroig	Director	University of PR- Mayagüez			
Dr. Teresa Lipsett   Director   Department of Natural Sciences and Technology   Department of Natural Science and Technology   Department of Science, and Technology   Department of Science and Technology   Department of Caribbean Environmental Protection Division   Director   Division of Science and Technology   Department of Caribbean Environmental Protection Division   Director   Director   Division of Science and Technology   Department of Caribbean Environmental Protection Division   Director		Agricultural Engineering Department				
Dr. Jorge Torres Colón	Dr. Teresa Lipsett		Turabo University			
Dr. Jorge Torres Colón	•	Department of Natural Sciences and Technology	·			
Academic Division   Science, Technology and Environment	Dr. Jorge Torres Colón		Metropolitan University of PR			
Dr. Fernando Crastz Peters School of Science and Technology Mr. Karlos J. Malavé Llamas Project Director Division of Science and Technology Ms. Carmen Guerrero Ms. Carmen Guerrero Caribbean Environmental Protection Division Ms. Yasmin Laguer Dr. Ariel Lugo Dr. Ariel Lugo Tr. Ariel Lugo Dr. Ariel Lugo Mr. Luis A. Cruz Arroyo Mr. Luis A. Cruz Arroyo Director Director Ms. Marelisa Rivera Ms. Marelisa Rivera Deputy Field Supervisor Department of Geology Dr. Lizzette Rodríguez Department of Geology Dr. Lizion Marquez D'Acunti Mr. Mark Martin Bras Director Mr. Mark Martin Bras Director Dr. Roberto Viqueira Dr. Roberto Viqueira Dr. Edwin Hernández Delgado Ms. Aurielee Díaz Conde Ms. Aurielee Díaz Conde Ms. Aurielee Díaz Conde Ms. Aurielee Díaz Conde Ms. Aurielee Díaz Conde Ms. Aurielee Díaz Conde Dr. Lizzetter Rodríguez Dr. Lizion Marguez Dr. L	C	Academic Division				
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Mr. Karlos J. Malavé Llamas Project Director Division of Science and Technology Ms. Carmen Guerrero Director Caribbean Environmental Protection Division Ms. Yasmin Laguer Caribbean Environmental Protection Division Dr. Ariel Lugo Dr. Ariel Lugo Dr. Ariel Lugo Mr. Luis A. Cruz Arroyo Director International Institute of Tropical Forestry USDA Forest Service Mr. Luis A. Cruz Arroyo Director Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. Lizzette Rodríguez Dr. José L. Flores Director Department of Geology Department Director Department of Civil Engineering and Surveying Dr. Service Conservation and Historical Trust Dr. Roberto Viqueira Dr. Roberto Viqueira Dr. Roberto Rodríguez Dr. Department Director Dr. Director Dr. Director Department Director Department Director Department Director Department Director Dr. Director Department Director Department Director Dr. Director Dr. Director Dr. Director Dr. Director Department Director Department Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Department Director Department Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Director Dr. Dir	Dr. Fernando Crastz Peters		Metropolitan University of PR			
Mr. Karlos J. Malavé Llamas  Project Director Division of Science and Technology  Ms. Carmen Guerrero  Caribbean Environmental Protection Division  Ms. Yasmin Laguer Caribbean Environmental Protection Division  Director Director International Institute of Tropical Forestry USDA Forest Service  Mr. Luis A. Cruz Arroyo  Mr. Luis A. Cruz Arroyo  Mr. Luis A. Cruz Arroyo  Director Director Mr. Marelisa Rivera  Deputy Field Supervisor  Director Department of Geology  Dr. Luis A. Ríos Hernández Department of Civil Engineering and Surveying  Mr. Lirio Márquez D'Acunti  Mr. Mark Martin Bras Director Dr. Roberto Viqueira Dr. Edwin Hernández Delgado Dr. Edwin Hernández Delgado Ms. Auriclee Díaz Conde Ms. Auriclee Díaz Conde Mr. Francisco Cátala Miguez Dr. Angel A. Toledo López  Mr. Arroyo  Environmental Protection Division Director Director Director Director Director Department of Civil Engineering and Surveying Director Department of Civil Engineering and Surveying Director Department of Civil Engineering and Surveying Director Department of Civil Engineering and Surveying Director Department of Director Director Department of Civil Engineering and Surveying Director Department of Director Director Department of Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director		School of Science and Technology				
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Ms. Carmen Guerrero Caribbean Environmental Protection Division Ms. Yasmin Laguer Caribbean Environmental Protection Division Director Director International Institute of Tropical Forestry USDA Forest Service  Mr. Luis A. Cruz Arroyo Director Ms. Marelisa Rivera Ms. Marelisa Rivera Deputy Field Supervisor Director Department of Geology Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Department of Civil Engineering and Surveying Director Community Relations Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Director Dire			ı ,			
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Ms. Yasmin Laguer   Caribbean Environmental Protection Division   Director   Director   International Institute of Tropical Forestry USDA   Forest Service   Director   Natural Resources Conservation   Service (NRCS) Caribbean Area   US Fish and Wildlife Service PR   Field Office   Director   Department of Geology   Campus   Director   Di		Caribbean Environmental Protection Division				
Dr. Ariel Lugo    Director   International Institute of Tropical Forestry USDA Forest Service	Ms. Yasmin Laguer		Environmental Protection Agency			
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	Dr. Angel A. Toledo López	Rector	Metropolitan University			
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As result of the water quality data request, the following government agencies and/or non-governmental entities responded and submitted data:

- 1. San Juan Bay Estuary System Program (SJBES)
  - a. The monitoring network consists of twenty-six (26) stations (Figure 5).

- b. Parameters analyzed: Temperature, Dissolved Oxygen, Specific Conductance, Salinity, Turbidity, pH, Secchis Depth, Oil and Grease, Total Nitrate & Nitrite, Total Phosphorus, Enterococci, Total Nitrogen Kjeldahl (TKN), Total Organics Compound (TOC), Chlorophyll a, Total Suspended Solid (TSS), Ammonia, and Fecal Coliform.
- c. The SJBES Program has an approved QAPP by EPA.
- d. This data will be used for the 2024 IR assessment.

## 2. USGS data:

- a. The data was obtained from the following stations: 50048565 and 50048580, located in PREE13A1 AU (San Juan Bay Estuary System).
- b. Parameter analyzed: Discharge, Specific Conductance, Dissolved Oxygen, pH, Temperature, Oil and Grease, Total Nitrogen, Nitrite, Nitrate, Phosphorus, Cyanide, Nitrate plus nitrite, Hardness water, Calcium, Magnesium, Methylene blue active substances (MBAS), Arsenic, Cadmium, Chromium, Copper, Lead, Selenium, Turbidity and Zinc.
- c. This data was used for the 2024 IR assessment.

## 3. University of PR- Mayagüez Campus, Department of Geology

a. Disclaimer: DNER does not know the quality requirements of the sampling and analysis of the water quality data submitted to the agency, thus the quality of the secondary data is unknown and was not used for the 2024 IR assessment.

## 4. NOAA - Bahía de Jobos

- a. The data was obtained of the following site hosted by National Oceanic and Atmospheric Administration (NOAA): National Estuarine Research Reserve System, Centralized Data Management Office <a href="http://cdmo.baruch.sc.edu/">http://cdmo.baruch.sc.edu/</a>.
- b. Monitoring networks consist of four (4) monitoring stations (Figure 6).
- c. Parameters analyzed: Temperature, pH, Dissolved Oxygen and Turbidity.
- d. Disclaimer: PRDNER does not know the quality requirements of the sampling and analysis of the water quality data submitted to the agency, thus the quality of the secondary data is unknown.
- e. This data was used for the 2024 IR assessment.



Figure 5: San Juan Bay Estuary System Monitoring Stations



Figure 6: NOAA - Bahía de Jobos Monitoring Stations

### 2.4 Water's Quality Existing Data - Access Online

Due to the large amount of published information on the Internet and its accessibility, the PRDNER conducted a search for information related to the quality of the coastal water in PR, to evaluate the greater amount of information that is available. To perform a more complete evaluation, the information search is delimited to recognized and reliable sources. The main source of information from which it could access data was the NOAA and its partners in the Caribbean Area. The Caribbean Coastal Ocean Observing System (CariCOOS). CariCOOS has two buoys located on Ponce in the AU PRSC35 and the other on San Juan in the AU PREC12 from which temperature data is obtained (Figure 7). The temperature data will be used to evaluate the corresponding assessment units for these parameters, in addition to the data of the coastal network of PRDNER.

Disclaimer: Note from the web page of CariCOOS: This information is presented as a good faith service to the scientific community, the public in general and to our colleagues and friends. The information, views and opinions herein provided should not be viewed as formally accurate scientific data and/or advice that can be relied upon without proper verification and validation. This service should not be construed as a substitute for specific data that could be obtained through official sources. If any inaccuracy is observed, please inform CaRA as soon as possible for verification and correction, as necessary. Use of and reliance upon the information provided in this web site signifies that its user(s) understands and has accepted the above mentioned caveat and conditions.

Disclaimer: Note from the web page of National Data Buoy Center, NOAA: This operational server maintains a current database of meteorological and hydrological data, historical data, and written information generated by the NWS or received from other official sources. In addition, this server accesses in real time a selection of current official weather observations, forecasts, and warnings from U.S. government sources for use by the national and international community. To enhance the science, experimental products may be accessible on this server and care must be taken when using such products as they are intended for research use.

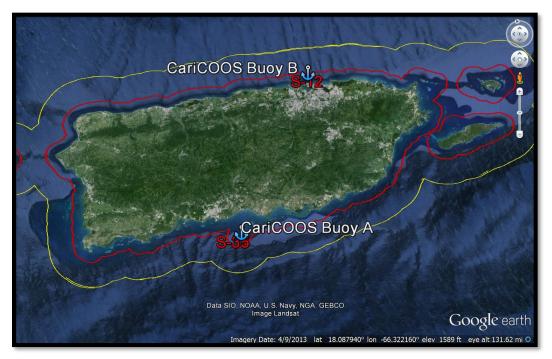


Figure 7: Buoys of CariCoos of NOAA

## 3.0 Designated Uses, and Applicable Water Quality Standards

The PRWQSR, as amended on August 8, 2022, established, as goals preserve, maintain, and enhance the quality of the waters of PR in such manner that they are compatible with the social and economic needs of PR.

The PRWQSR establishes the designated uses to be maintained and protected for all waters in the archipelago of PR. These uses include:

- 1. Propagation and maintenance of desirable species, including threatened or endangered species (Aquatic Life)
- 2. Primary and secondary contact recreation
- 3. Raw source of public water supply (Class SD waters only).

The water body classification established in the PRWQSR are as follows:

**CLASS SA** - Coastal or estuarine waters exceptional quality or exceptional or high ecological or recreational value whose existing conditions shall not be altered, except by natural phenomena, as defined under PRWQSR, to preserve its natural characteristics. Class SA includes bioluminescent lagoons and bays such as La Parguera and Monsio José in the Municipality of Lajas, Laguna Joyudas in the Municipality of Cabo Rojo, Laguna Grande in the Municipality of Fajardo, Bahía Puerto Mosquito in the Municipality of Vieques, and any other coastal or estuarine waters of exceptional quality or high ecological or recreational value which may be designated by the pertinent agency and adopted by the Department through Resolution, requiring this classification for protection of the waters. Except for lagoons, Rule 1303.2 (A) (2) of the PRWQSR will also apply to the water 500 meters (0.31 miles) offshore of the physical and geographical limits of the water bodies under this classification.

**CLASS SB** - Coastal waters and estuarine waters intended for use in primary and secondary contact recreation, and for propagation and maintenance of desirable species, including threatened or endangered species. Class SB includes coastal and estuarine waters not classified as Class SA under Rules 1302.1 (A) of the PRWQSR. Class SB also includes lagoons not classified under any other class. This classification will apply from the zone subject to the ebb and flow of tides (mean sea level) up to a maximum of 10.35 miles (16,656.71 meters) offshore.

**CLASS SD** - Surface waters intended for use as a raw source of public water supply, propagation, and maintenance of desirable species, including threatened or endangered species, as well as primary and secondary contact recreation. All surface waters are classified SD, except those classified SE in accordance with Rule 1302.2 (B).

**CLASS SE** - Laguna Tortuguero, Laguna Cartagena, and any other surface water body of exceptional quality or high ecological or recreational value which may be designated by the pertinent agency and adopted by the Department, through Resolution requiring this classification for protection of the waters. Surface waters and wetlands of exceptional ecological value, whose existing conditions shall not be altered to preserve its natural characteristics.

Table 16 and Table 17 summarize the existing applicable water quality standards that will be used to perform the assessment for the 2024 IR. Here are shown the maximum allowable concentrations for specific substances in coastal and surface waters.

Table 16: Specific Water Quality Standards for Selected Parameters (As established in the PRWQSR)

SUBSTANCE	COASTAL WATERS (ug/l)	RIVERS AND STREAM (ug/l)
Aluminum (Al)&	-	87.0 (AL)
Antimony (Sb)+, &	640.0 (HH)	5.6 (HH)
Arsenic (AS)*, +, &	36.0 (AL)	10.0 (DW)
Cadmium (Cd)+, %, &	7.95 (AL)	Note 1 (AL)
Chlorine	7.5 (AL)	11.0 (AL)
Cyanide (Free CN) +	1.0 (AL)	-
Cyanide +, &	-	4.0 (HH)
Copper (Cu)+, &	3.73 (AL)	Note 3 (AL)
Chromium III (Cr <sup>+3</sup> ) +, &	-	Note 2 (AL)
Chromium VI (Cr <sup>+6</sup> ) +, &	50.4 (AL)	11.4 (AL)
Fluoride (F)	-	4,000 (DW)
Lead (Pb)+, %, &	8.52 (AL)	Note 6 (AL)
Mercury (Hg)+, &	0.051 (HH)	0.050 (HH)
Nickel (Ni)+, &	8.28 (AL)	Note 4 (AL)
Selenium (Se) <sup>+, &amp;</sup>	71.14 (AL)	5.0 (AL)
Silver (Ag) <sup>+, &amp;</sup>	2.24 (AL)	Note 5 (AL)
Sulfide (Undissociated H <sub>2</sub> S)	2.0 (AL)	2.0 (AL)
Thallium (Tl) <sup>+, &amp;</sup>	0.47 (HH)	0.24 (HH)
Zinc (Zn) <sup>+, &amp;</sup>	85.62 (AL)	Note 7 (AL)

Note 1 - Concentration in ug/l must not exceed the numerical value given by e (0.7977 [Ln Hardness] –3.909)

Note 2 - Concentration in ug/l must not exceed the numerical value given by  $e^{(0.8190\,[Ln\,Hardness]\,+0.6848)}$ 

- Note 3 Concentration in ug/l must not exceed the numerical value given by e (0.8545 [Ln Hardness] -1.70)
- Note 4 Concentration in ug/l must not exceed the numerical value given by e (0.8460 [Ln Hardness] + 0.0584)
- Note 5 Concentration in ug/l must not exceed the numerical value given by e (1.72 [Ln Hardness] 6.59)
- **Note 6** Concentration in ug/l must not exceed the numerical value given by e (1.273 [Ln Hardness] 4.705)
- Note 7 Concentration in ug/l must not exceed the numerical value given by e (0.8473 [Ln Hardness] + 0.884)

Hardness (as CaCO3 in mg/L) of the water body

- **AL** Protection of the water body for the propagation and preservation of aquatic species or species dependent on the waterbody.
- **DW** Protection of the water body for use as source of drinking water supply.
- **HH** Protection of the water body or aquatic life for reasons of human health.
- \* Identifies a substance that may be a carcinogen. The HH criteria is based on a carcinogenicity risk of 10<sup>-5</sup>
- + Identifies a priority pollutant.
- % In cases where the surface water body is used as a source of drinking water supply, the water quality standard for the indicated substance shall not exceed the drinking water standard upstream from the water intake.
- & The number represents a total recoverable value.

**Table 17: Water Quality Standard for Specific Classifications** 

PARAMETER	SA	SB	SD	SE	
Chlorides	Note 1	-	230 mg/L	Note 1	
Color	Note 1	Shall not be altered except by natural phenomena, as defined under this regulation	15 Pt-Co.	Note 1	
Dissolved Oxygen	Note 1	Not less than 5 mg/L	Not less than Not less than 5		
Enterococci	Note 1	Note 2	Note 2	Note 1	
Fecal Coliforms	Note 1	Note 3	Note 3	Note 1	
Other Pathogenic Organisms	Note 1	Shall not contain other pathogenic organisms.			
pН	Note 1	7.3 - 8.5 units	6.0 - 9.0 units	Note 1	
Sulfates	Note 1	2,800 mg/L	250 mg/L	Note 1	
Surfactants as MBAS	Note 1	500 ug/L	100 ug/L	Note 1	
Taste and odor producing substances	Note 1	Shall not be present	Shall not be present	Note 1	
Total Dissolved Solids	Note 1	-	500 mg/L	Note 1	
Total, Ammonia Nitrogen (TAN)	Note 1	-	Note 6	Note 1	
Total, Nitrogen	Note 1	5,000ug/L	Note 4	Note 1	
Total, Phosphorous	Note 1	1,000 ug/L	Note 5	Note 1	
Temperature	86°F	86°F (30°C)	86°F (30°C)	86°F	
	(30°C)			(30°C)	
Turbidity	Note 1	10 NTU	50 NTU	Note 1	

- Note 1 The concentration of any parameter, whether or not considered in this Rule, shall not be altered, except by natural phenomena as defined under this regulation. Substances reactive with methylene blue shall not be present.
- Note 2- For Class SB and Class SD, the Enterococcus density, in terms of geometric mean shall not exceed 35 colonies/100mL in any 90-day interval: neither the 90th Percentile of the samples taken shall exceed 130 colonies/100mL in the same 90-day interval.
- Note 3- In shellfish growing area or harvesting areas, designated by the pertinent agency, and adopted by the Department, through Resolution; the median fecal coliform concentration of a series representative samples of the water taken sequentially, shall not exceed 14 MPN/100mL, and not more than 10 percent of the samples shall exceed 43 MPN/100mL
- Note 4 Shall not exceed 1,700 ug/L in any stream nor exceed 400 ug/L in any reservoir or lake.
- Note 5 Total Phosphorus shall not exceed 160 ug/L in any river and stream nor exceed 26 ug/L in any reservoir or lake.
- Note 6 Shall not exceed the concentration in mg/L calculated using the following equation:

$$TAN = 0.8876 \times \left(\frac{0.0278}{1+10^{7.688-pH}} + \frac{1.1994}{1+10^{pH-7.688}}\right) \times \left(2.126 \times 10^{0.028 \times (20-T)}\right)$$
 Where: T = temperature in °C.

## 4.0 Water Quality Assessment by Designated Uses

The surface waters (rivers, reservoirs, lagoons, estuaries, and coasts) for which data are available are assessed for the following designated uses in accordance with the requirements of the CWA and the PRWQSR: primary contact recreation (swimming), secondary contact recreation, raw source of public water supply and propagation and maintenance of desirable species, including threatened and endangered species (Aquatic Life).

## 1. Primary and Secondary Contact Recreation

Class SB and Class SD

The use support evaluation will be based on the enterococci density, in terms of geometric mean shall not exceed 35 colonies/100mL in any 90-day interval: neither the 90<sup>th</sup> Percentile of the samples taken shall exceed 130 colonies/100mL in the same 90-day interval.

## 2. Raw Source of Public Water Supply (rivers and lakes):

Class SD

The assessment of the drinking water use will be based on monitored contaminants listed in the PRWQSR. The additional criterion used to assess raw source of public water supply use is the presence of a water intake in the assessment unit. To assess the Raw Sources of Public Water Supply use, will be considered the compliance of water quality standards of any of the parameters indicated below:

Aldrin	Endrin Aldahyda
Alum	Endrin Aldehyde
Alpha-BHC	Fluoride
Arsenic	Heptachlor
Beta-BHC	Heptachlor Epoxide
Chlorides	Lindane (Gamma BHC)
Cyanide	Mercury
4,4'-DDT	Thallium
Dieldrin	Total, Ammonia Nitrogen
Endosulfan Sulfate	Total, Nitrogen
Endrin	Total, Phosphorus
	Turbidity

In all cases, each parameter considered is evaluated strictly in accordance with the applicable standard. If a single data point exceeds the water quality standard, it is sufficient to classify the AU not in compliance with the raw source of public water supply use.

3. Propagation and maintenance of desirable species, including threatened and endangered species (Aquatic Life):

Currently, the aquatic life use is based on the physical /chemical data collected on sampling incursions during key periods (wet and dry seasons) for all parameters applicable to this use as indicated in the PRWQSR.

In all cases, each parameter considered will be evaluated strictly in accordance with the applicable standard. The parameters taken into consideration are:

Arsenic	Le	ad	Sulfide (Undissociated H <sub>2</sub> S)						
Cadmium	Mercury		Mercury		Mercury		Mercury		Surfactants
Chromium (Cr <sup>+3</sup> )	Nic	kel	Thallium						
Chromium (Cr <sup>+6</sup> )	Pesticides (Org	ganochlorides)	Total, Ammonia Nitrogen						
Copper	Selei	nium	Total, Nitrogen						
Cyanide	Sil	ver	Total, Phosphorus						
Cyanide (Fr	ee CN)	Zinc							

The conventional parameters used for the assessment of aquatic life use support were:

Dissolved Oxygen (DO)	Temperature
рН	Turbidity

If a single data point exceeds the water quality standard, it is sufficient to classify the AU not in compliance with the propagation and maintenance of desirable species including threatened and endangered species (aquatic life use).

#### **5.0** Assessment Categories

The assessment of the water quality in PR is performed taking into consideration the five (5) attainment categories currently required by EPA assessment guideline. These attainment categories are:

- **Category 1:** Waters that are attaining the applicable water quality standards for all designated uses.
- Category 2: Waters that are attaining some of the designated uses, but no data is available to make attainment determinations for the remaining designated uses.
- **Category 3:** Waters for which insufficient available data and/ or information to determine if any designated uses are being attained.
- **Category 4:** Waters in which particular designated uses are impaired or threatened and it is expected that they will meet the water quality standard with implementation of the adequate and corresponding control measure without the development of TMDLs.

- 4a A state developed TMDL has been approved by EPA or a TMDL has been established by USEPA for any AU /pollutant combination.
- 4b Other required control measures are expected to result in the attainment of an applicable water quality standard in a reasonable period of time.
- 4c Water where a designated use is impaired or threatened by a cause that is not a pollutant (eg. hydrological and habitat alterations).

**Category 5:** Waters where at least one water quality standard was not attained. The nonattainment of water quality standards requires the development and implementation of a TMDL. Waters identified as impaired in this category are included in the 303(d) List.

Table 18 shows size of waters assigned to reporting categories, including the impairments from previous cycles and the description of the health of PR waters.

**Table 18: Size of Waters Assigned to Reporting Categories** 

WATERDARY TYPE				TOTAL IN	TOTAL					
WATERBODY TYPE	1	2	3	4a	4b	4c	5	STATE	ASSESSED	
Rivers and Streams – miles	0	0	102.8	1,677.2	0	0	3,620.5	5,403.5 *	5,400.5**	
Reservoirs – acres	0	0	0	0	0	0	7,323	7,323	7,323	
Estuaries – sq. mi.	0	0	0.4572	3.6652	0	0	1.2378	5.3602	5.3602	
Coastal Waters- miles	67.6	0	33.62	0	0	0	445.41	546.63	546.63	
Lagoons- sq. mi.	0	0	0.4688	0	0	0	3.8781	4.3469	4.3469	
San Juan Bay Estuary- sq. mi.,	0	0	0	0	0	0	3.8340 sq. mi.,	3.8340 sq. mi.,	3.8340 sq. mi,	
miles							18.8 mi	18.8 mi	18.8 mi	

Total miles of rivers, creek and streams assessed with monitoring station Total miles of rivers, creek and streams assessed without monitoring station 2,689.5 <u>2,711.0</u> 5,400.5\*

# 6.0 Description of Puerto Rico waters by designated uses, including the impairments from previous cycles

Table 19 to Table 40 include the information related with the description of the health of PR waters, including the impairments from previous cycles.

**Table 19: Primary Contact Use Summary** 

WATERBODY TYPE				TOTAL IN	TOTAL				
WAIEKBODY TYPE	1	2	3	4a	4b	4c	5	STATE	ASSESSED
Rivers and Streams - miles	0	0	75.9	2,733.7	0	0	2,555.1	5,403.5	5,364.7
Reservoirs – acres	0	0	0	7,288	0	0	35	7,323	7,323
Estuaries – sq. mi	0	0	0.2228	4.8410	0	0	0	5.3602	5.0638
Coastal Waters- miles	174.25	0	33.62	0	0	0	338.76	546.63	546.63
Lagoons- sq. mi.	0	0	3.2922	0.5297	0	0	0.5250	4.3469	4.3469
San Juan Bay Estuary- sq. mi,	0	0	0	0	0	0	3.8340 sq. mi,	3.8340 sq. mi.,	3.8340 sq. mi.,
miles							18.8 mi.	18.8 mi.	18.8 mi.

<sup>\*</sup> The total miles do not include 18.8 miles that corresponds to PREE13A1 AU, since they are water classified as SB.

<sup>\*\*</sup> Does not include 3.0 miles that correspond to PRSR39A AU, since it had no flow for this evaluation cycle.

**Table 20: Secondary Contact Use Summary** 

WATERBODY TYPE				TOTAL IN	TOTAL					
WATERBODY TYPE	1	2	3	4a	4b	4c	5	STATE	ASSESSED	
Rivers and Streams - miles	0	0	75.9	2,733.7	0	0	2,555.1	5,403.5	5,364.7	
Reservoirs – acres	0	0	0	7,288	0	0	35	7,323	7,323	
Estuaries – sq. mi.	0	0	0.2228	4.8410	0	0	0	5.3602	5.0638	
Coastal Waters- miles	174.25		33.62	0	0	0	338.76	546.63	546.63	
Lagoons- sq. mi.	0	0	3.2922	0.5297	0	0	0.5250	4.3469	4.3469	
San Juan Bay Estuary- sq. mi.,	0	0	0	0	0	0	3.8340 sq. mi,	3.8340 sq. mi,	3.8340 sq. mi,	
miles							18.8 mi.	18.8 mi.	18.8 mi	

**Table 21: Aquatic Life Use Summary** 

WATERBODY TYPE				TOTAL IN	TOTAL				
		2	3	4a	4b	4c	5	STATE	ASSESSED
Rivers and Streams - miles	0	0	1,780	0	0	0	3,620.5	5,403.5	5,400.5
Reservoirs – acres	0	0	0	0	0	0	7,323	7,323	7,323
Estuaries – sq. mi.	0	0	4.1224	0	0	0	1.2378	5.3602	5.3602
Coastal Waters- miles	0	0	101.22	0	0	0	445.41	546.63	546.63
Lagoons- sq. mi.	0	0	0.4688	0	0	0	3.8781	4.3469	4.3469
San Juan Bay Estuary- sq. mi.,	0	0	0	0	0	0	3.8340 sq. mi.,	3.8340 sq. mi,	3.8340sq. mi.,
miles							18.8 mi.	18.8 mi.	18.8 mi.

**Table 22: Drinking Water Use Summary** 

WATERDODY TYPE			C	ATEGO	ORY			TOTAL IN STATE  5,403.5  7,323  3.8340 sq. mi,	TOTAL
WATERBODY TYPE	WATERBODT THE 1 2						5	STATE	ASSESSED
Rivers and Streams - miles	237.7	0	2,318.7	0	0	0	2,796.2	5,403.5	5,352.6
Reservoirs – acres	0	0	0	0	0	0	7,323	7,323	7,323
San Juan Bay Estuary- sq. mi, miles	0	0	0	0	0	0	0.1009	3.8340 sq. mi, 18.8 mi.	0.1009 mi <sup>2</sup>

## Rivers, Streams, and Creeks

Table 23: Size of Waters Impaired by Causes (Monitored Miles for Rivers, Streams, and Creeks)  $^{\ast}$ 

Causes 202	Causes of Impairments Summary	
<b>Causes of Impairments</b>	Size of Waters Impaired* (miles)	Size of Waters Impaired (miles)
Ammonia	53.9	128.5
Arsenic	0	25.4
Chromium VI	0	2,555.1
Copper	397.4	600.9
Cyanide	1,144.4	1,144.4
Dissolved Oxygen	551.3	1,139.1
Enterococci	2,555.1	2,555.1
Lead	168.6	259.5
Mercury	141.9	141.9
Oil and Grease	103.8	103.8

	Causes of Impairments 2021-2023 Cycle										
<b>Causes of Impairments</b>	Size of Waters Impaired* (miles)	Size of Waters Impaired (miles)									
Pesticides	0	544.3									
pН	299.9	573.8									
Silver	0	14.6									
Surfactants	286.3	347.1									
Temperature	1,618.3	2,075.1									
Total, Nitrogen	1,003.4	1,477.4									
Total, Phosphorus	1,443.4	2,291.5									
Turbidity	1,603.9	1,959.4									

<sup>\*</sup> It includes rivers, stream or creek miles that are part of the lakes, estuaries, and San Juan Bay Estuary except 18.8 miles from PREE13A1 AU

Table 24: Size of Waters Impaired by Sources (Monitored and Unmonitored Rivers and Streams)

Strains												
Potential Sources 2021-2023		Potential Sources of Pollution Summary										
<b>Potential Sources of Pollution</b>	Size of Water Impaired (miles)	Size of Water Impaired (miles)										
Agriculture	2,716.3	2,716.3										
Collection System Failure	3,238.9	3,238.9										
Confined Animal Feeding Operations	3,876.5	3,876.5										
Landfill	2,159.7	2,159.7										
Major Industrial Point Sources	382.7	382.7										
Major Municipal Point Sources	1,220.5	1,220.5										
Minor Industrial Point Sources	2,913.9	2,913.9										
Minor Municipal Point Sources	634.1	634.1										
Onsite Wastewater Systems	5,322.6	5,322.6										
Package Plants (Small Flows)	42.2	42.2										
Surface Mining	615.8	615.8										
Unknown Source	2.7	2.7										
Urban Runoff/Storm Sewers	3,214.8	3,253.5										

**Table 25: Rivers and Streams Assessment (Monitored and Unmonitored)** 

	1452 20	THE VOIS WILL		2024	Ove	rall D	esigr	ated			
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Monitoring Stations NS = Network	R1	R2	AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
QUEBRADA DE LOS CEDROS	QUEBRADA DE LOS CEDROS PRNQ1A	12.0	SD		4a	4a	3	3	H J L	Collection System Failure Onsite Wastewater Systems Urban Runoff/Storm Sewers	
QUEBRADA DEL TORO	QUEBRADA DEL TORO PRNQ2A	1.0	SD		3	3	3	3	Н	Confined Animal Feeding Operations Onsite Wastewater Systems	
RÍO GUAJATACA	RÍO GUAJATACA PRNR3A1	9.9	SD	NS 50011400	5	5	5	5		Collection System Failure Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Cyanide Dissolved Oxygen Enterococci Total, Nitrogen Surfactants
	RÍO GUAJATACA PRNR3A2	22.0	SD	NS 50010600	5	5	5	5	F	Agriculture Collection System Failure Confined Animal Feeding Operations Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Total, Nitrogen Cyanide pH Total, Phosphorus Turbidity
	QUEBRADA LAS SEQUÍAS PRNQ3B	3.5	SD		4a	4a	5	5	D F H, L	Confined Animal Feeding Operations Onsite Wastewater Systems	Arsenic Dissolved Oxygen
QUEBRADA BELLACA	QUEBRADA BELLACA PRNQ4A	1.7	SD		3	3	3	3	Н	Confined Animal Feeding Operations Onsite Wastewater Systems	
RÍO CAMUY	RÍO CAMUY PRNR5A	48.6	SD		4a	4a	3	3	F H	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	
QUEBRADA SECA	QUEBRADA SECA PRNQ6A	2.0	SD		3	3	3	3	Н	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	

	Waterbody Name	Waterbody	SS	2024 Monitoring		rall E e Att		nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
RÍO GRANDE DE ARECIBO	RÍO GRANDE DE ARECIBO PRNR7A1	22.4	SD	NS 50029000	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Turbidity
	RÍO SANTIAGO PRNR7A1a	9.0	SD		4a	4a	3	3	H K	Onsite Wastewater Systems	
	RÍO GRANDE DE ARECIBO PRNR7A2	122.8	SD	NS 50025000	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Pesticides Temperature Total, Nitrogen Total, Phosphorus Turbidity
	TÚNEL PRNR7A3	28.9	SD	NS 50020500	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci pH Total, Phosphorus Cyanide

	Watashada Nama	Waterbody	SS	2024 Monitoring		rall E e Att		nated ent		Potential Sources of	
Basin	Waterbody Name (AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
	RÍO CAONILLAS PRNR7C1	87.0	SD	NS 50026000	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Surface Mining Urban Runoff/Storm Sewers	Chromium VI Enterococci Total, Phosphorus
	RÍO LIMÓN PRNR7C2	40.7	SD	NS 50026350	5	5	5	5	K	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococci Temperature
	RÍO YUNES PRNR7C3	32.7	SD	NS 50026950	5	5	5	5	K	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Temperature
	RÍO TANAMÁ PRNR7B1	16.2	SD		N/A	N/A	3	3	H K	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	
	RÍO TANAMÁ PRNR7B2	43.5	SD	NS 50028000	5	5	5	5	K		Chromium VI Enterococci Total, Phosphorus Turbidity Copper Lead
RÍO GRANDE DE MANATÍ	RÍO GRANDE DE MANATÍ PRNR8A1	31.0	SD	NS 50038100	5	5	5	5	K	Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Temperature Total, Phosphorus Turbidity pH

			S	2024 Monitoring		Overall Designated Use Attainment			Potential Sources of		
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2		DW	Notes	Pollution	Causes of Impairment
	RÍO GRANDE DE MANATÍ PRNR8A2	38.1	SD	NS 50035500	5	5	5	5	K	Collection System Failure Confined Animal Feeding Operations Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Copper Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity Cyanide Lead Mercury
	RÍO GRANDE DE MANATÍ PRNR8A3	27.0	SD		4a	4a	3	3	H K	Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	
	RÍO CIALITO PRNR8B	25.8	SD	NS 50035950	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Turbidity Total, Phosphorus
	RÍO TORO NEGRO PRNR8C1	41.5	SD		4a	4a	3	3	H K	Agriculture Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	
	RÍO BAUTA PRNR8C2	27.6	SD		4a	4a	3	3	H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO SANA MUERTOS PRNR8D	16.0	SD		4a	4a	3	3	H K	Agriculture Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems	

	Wetankadu Nama	Watarkada	S	2024 Monitoring		Overall Designated Use Attainment			Potential Sources of		
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Network	NS =		DW	Notes	Pollution	Causes of Impairment	
	RÍO OROCOVIS PRNR8E1	19.8	SD	NS 50030700	5	5	5	5	K	Collection System Failure Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Total, Phosphorus Cyanide
	RÍO BOTIJAS PRNR8E2	19.1	SD		4a	4a	5	3	D H K	Confined Animal Feeding Operations Onsite Wastewater Systems	pН
RÍO CIBUCO	RÍO CIBUCO PRNR9A	31.1	SD	NS 50039500	5	5	5	5	A	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Industrial Point Sources Major Municipal Point Sources Onsite Wastewater Systems	Chromium VI Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity Lead
	RÍO INDIO PRNR9B1	12.5	SD		4a	4a	3	3	A H	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO MOROVIS PRNR9B2	25.5	SD		4a	4a	5	3	A D H	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen

	Waterbody Name	Waterbody	S	2024 Monitoring		Overall Designated Use Attainment			Potential Sources of		
Basin	(AU ID)	Size (miles)	Class	Network	R1			DW		Pollution	Causes of Impairment
	RÍO UNIBÓN PRNR9B3	17.4	SD		4a	4a	3	3	A H	Collection System Failure Confined Animal Feeding Operations Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO MAVILLAS PRNR9C	34.0	SD		4a	4a	3	3	A H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO DE LOS NEGROS PRNR9D	24.1	SD		4a	4a	3	3	A H	Agriculture Collection System Failure Confined Animal Feeding Operations Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RIO DE LA PLATA	RÍO DE LA PLATA PRER10A1	21.0	SD	50046000	5	5	5	5	В	Collection System Failure Confined Animal Feeding Operations Major Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Surfaces Mining	Chromium VI Dissolved Oxygen Enterococci Temperature Surfactants Total, Phosphorus Turbidity
	RÍO DE LA PLATA PRER10A2	14.3	SD		4a	4a	3	3	B H	Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO DE LA PLATA PRER10A3	55.7	SD	NS 50044000	5	5	5	5	В	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Onsite Wastewater Systems	Chromium VI Enterococci Total, Phosphorus Temperature

	Waterbody Name	Waterbody	SS	2024 Monitoring	ring Use Attainment				Potential Sources of		
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
	RÍO DE LA PLATA PRER10A4		SD	50043000	5	5	5	5	В	Agriculture Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococci pH Temperature Total, Phosphorus Turbidity Cyanide
	RÍO DE LA PLATA PRER10A5	92.7	SD	NS 50042500	5	5	5	5	В	Collection System Failure Confined Animal Feeding Operations Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban/Runoff/Storm Sewers	Chromium VI Enterococci Total, Phosphorus Cyanide Temperature Total, Nitrogen Turbidity
	RÍO LAJAS PRER10B	16.6	SD		4a	4a	3	3	В	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Surface Mining	
	RÍO BUCARABONES PRER10C	19.2	SD		4a	4a	3	3	B H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO CAÑAS PRER10D	10.4	SD		4a	4a	3	3	В	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO GUADIANA PRER10E	21.8	SD	NS 50044850	5	5	5	5	В	Collection System Failure Confined Animal Feeding Operations Minor Municipal Point Sources Onsite Wastewater Systems	Chromium VI Enterococci Total, Nitrogen Total, Phosphorus Cyanide Temperature

	Waterbody Name	Waterbody	S	2024 Monitoring		Overall Designated Use Attainment		SS.	Potential Sources of		
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
	RÍO CUESTA ARRIBA PRER10F	10.6	SD		4a	4a	1	3	B D H	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	
	RÍO ARROYATA PRER10G	36.8	SD	NS 50043998	5	5	5	5	В	Agriculture Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	Chromium VI Enterococci Total, Phosphorus Cyanide
	RÍO HONDO PRER10H	25.6	SD		4a	4a	3	3	В	Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	
	RÍO USABÓN PRER10I1	54.6	SD		4a	4a	3	3	ВН	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO AIBONITO PRER10I2	18.7	SD		4a	4a	3	3	В	Confined Animal Feeding Operations Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO MATÓN PRER10J	15.8	SD	NS 50042800	5	5	5	5	В	Confined Animal Feeding Operations Onsite Wastewater Systems	Chromium VI Enterococci Total, Nitrogen Cyanide

	Waterbody Name	Waterbody	SS	2024 Monitoring		rall E e Att		nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
	RÍO GUAVATE PRER10K	19.8	SD		4a	4a	5	3	B D H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	pH
RÍO HONDO	RÍO HONDO PRER11A	22.0	SD		4a	4a	5	3	D F, H	Collection System Failure Urban Runoff/Storm Sewers	Dissolved Oxygen Surfactants
RÍO BAYAMÓN	RÍO BAYAMÓN PRER12A1	33.6	SD	50048510	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci pH Temperature Total, Nitrogen Cyanide
	RÍO BAYAMÓN PRER12A2	83.7	SD	NS 50047820	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci
	RÍO GUAYNABO PRER12B	50.7	SD	NS 50047990	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Landfill Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Total, Nitrogen Total, Phosphorus pH Temperature
	RÍO MINILLAS PRER12C	8.7	SD		4a	4a	3	3	F H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	

			S	2024 Monitoring		rall E e Att		nated ent		D	
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2		DW	Notes	Potential Sources of Pollution	Causes of Impairment
RÍO GRANDE DE LOIZA	RÍO GRANDE DE LOIZA PRER14A1	31.0	SD	NS 50059100	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Major Industrial Point Sources Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Chromium VI Enterococci Temperature Turbidity Surfactants Total, Nitrogen
	RÍO GRANDE DE LOIZA PRER14A2	86.6	SD	NS 50055000	5	5	5	5	C E G	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Chromium VI Enterococci Pesticides Temperature Total, Phosphorus Turbidity
	RÍO CANÓVANAS PRER14B	32.6	SD		4a	4a	5	3	D F H	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen
	RÍO CANOVANILLAS PRER14C	27.9	SD		4a	4a	5	3	D F H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen
	QUEBRADA MARACUTO PREQ14D	22.9	SD		4a	4a	1	3	D F H	Confined Animal Feeding Operations Minor Municipal Point Sources Onsite Wastewater Systems	
	QUEBRADA GRANDE PREQ14E	17.7	SD		4a	4a	1	3	F H	Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	

	Waterbody Name	Waterbody	SS	2024 Monitoring		rall D e Att		nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
	RÍO CAÑAS PRER14F	9.4	SD		4a	4a	1	3	C H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO GURABO PRER14G1	124.3	SD	NS 50057025	5	5	5	5	C E	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Surfaces Mining	Chromium VI Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity
	RÍO VALENCIANO PRER14G2	42.8	SD	50056500	5	5	5	5	С	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Total, Nitrogen Total, Phosphorus Turbidity
	RÍO BAIROA PRER14H	16.3	SD	50055410	5	5	5	5	C E G I	Collection System Failure Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Total, Nitrogen Total, Phosphorus
	RÍO CAGÜITAS PRER14I	33.9	SD	NS 50055250	5	5	5	5	C E G I	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Chromium VI Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity

	Waterbody Name	Waterbody	SS	2024 Monitoring		rall E e Att		nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
	RÍO TURABO PRER14J	54.7	SD	NS 50054500	5	5	5	5	С	Agriculture Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Copper Enterococci Lead Temperature Total, Phosphorus Turbidity
	RÍO CAYAGUAS PRER14K	38.5	SD	NS 50051500	5	5	5	5	С	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Chromium VI Copper Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity
	RÍO EMAJAGUA PRER14L	8.5	SD		4a	4a	3	3	C H	Minor Industrial Point Sources Onsite Wastewater Systems	Ž
RÍO HERRERA	RÍO HERRERA PRER15A	17.0	SD		4a	4a	5	5	D F H	Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Turbidity
RÍO ESPÍRITU SANTO	RÍO ESPÍRITU SANTO PRER16A	53.9	SD	NS 50063800	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococci Ammonia
	RÍO ESPÍRITU SANTO PRER16A1	4.5	SD		4a	4a	3	3	F H	Confined Animal Feeding Operations Major Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems	

	Waterbody Name	Waterbody	S	2024 Monitoring		rall E e Att		nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
RÍO MAMEYES	RÍO MAMEYES PRER17A	35.6	SD		4a	4a	3	3	F H	Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	
	RIO MAMEYES PRER17A1	3.3	SD		4a	4a	3	3	F H	Onsite Wastewater Systems	
QUEBRADA MATA DE PLÁTANO	QUEBRADA MATA DE PLÁTANO PREQ18A	4.0	SD		4a	4a	5	3	D F H	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Surfactants
RÍO SÁBANA	RÍO SÁBANA PRER19A	15.1	SD		4a	4a	1	3	D H J	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Surfaces Mining	
	RÍO SÁBANA PRER19A1	18.0	SD		4a	4a	3	3	D H J	Confined Animal Feeding Operations Onsite Wastewater Systems	
RÍO JUAN MARTÍN	RÍO JUAN MARTÍN PRER20A	7.8	SD		4a	4a	3	3	D H, J	Onsite Wastewater Systems	
QUEBRADA FAJARDO	QUEBRADA FAJARDO PREQ21A	10.0	SD		4a	4a	5	3	D H J	Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen pH Temperature
RÍO FAJARDO	RÍO FAJARDO PRER22A	59.0	SD	NS 50072500	5	5	5	5	J	Confined Animal Feeding Operations Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity
RÍO DEMAJAGUA	RÍO DEMAJAGUA PRER23A	2.8	SD		4a	4a	5	3	D H, J	Onsite Wastewater Systems	Dissolved Oxygen
QUEBRADA CEIBA	QUEBRADA CEIBA PREQ24A	5.0	SD		4a	4a	5	3	D H, J	Onsite Wastewater Systems	Dissolved Oxygen Surfactants

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Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
QUEBRADA AGUAS CLARAS	QUEBRADA AGUAS CLARAS PREQ25A	4.8	SD		4a	4a	5	3	D H J	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen
RÍO DAGUAO	RÍO DAGUAO PRER26A	13.8	SD		4a	4a	5	3	D H J	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen
QUEBRADA PALMA	QUEBRADA PALMA PREQ27A	11.8	SD		4a	4a	3	3	H J	Confined Animal Feeding Operations Onsite Wastewater Systems	
QUEBRADA BOTIJAS	QUEBRADA BOTIJAS PREQ28A	7.4	SD		4a	4a	5	3	D H J	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen
RÍO SANTIAGO	RÍO SANTIAGO PRER29A	12.7	SD		4a	4a	3	3	D H J	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO SANTIAGO PRER29A1	2.6	SD		4a	4a	3	3	H J	Confined Animal Feeding Operations Onsite Wastewater Systems	
RÍO BLANCO	RÍO BLANCO PRER30A	45.0	SD		4a	4a	5	5	D H J	Agriculture Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity
	QUEBRADA PEÑA POBRE PREQ30B	13.4	SD		4a	4a	5	3	D H J	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen

	Waterly a der Name	Waterbody	S	2024 Monitoring		rall E se Att		nated ent		Potential Sources of	
Basin	Waterbody Name (AU ID)	Size (miles)	Class	Network		R2	AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
RÍO ANTÓN RUIZ	RÍO ANTÓN RUIZ PRER31A	16.9	SD		4a	4a	5	3	D H J	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen Temperature
	QUEBRADA MULAS PREQ31A1	3.5	SD		4a	4a	3	3	H J	Confined Animal Feeding Operations Onsite Wastewater Systems	
QUEBRADA FRONTERA	QUEBRADA FRONTERA PREQ32A	8.5	SD		4a	4a	5	3	D H J	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen
RÍO HUMACAO	RÍO HUMACAO PRER33A	55.8	SD	NS 50082000	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Copper Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity Surfactants
RÍO CANDELERO	RÍO CANDELERO PRER34A	10.4	SD		4a	4a	5	3	D F H	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen
RÍO GUAYANÉS	RÍO GUAYANÉS PRER35A	62.0	SD	NS 50085000	5	5	5	5	F	Agriculture Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Copper Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity
	RÍO INGENIO PRER35A1	32.6	SD		4a	4a	3	3	F H	Confined Animal Feeding Operations Onsite Wastewater Systems	
QUEBRADA EMAJAGUA	QUEBRADA EMAJAGUA PREQ36A	2.5	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	

	Waterbody Name	Waterbody	SS	2024 Monitoring		rall I se Att		nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
RÍO MAUNABO	RÍO MAUNABO PRER37A	36.0	SD	NS 50091000	5	5	5	5	F	Agriculture Collection System Failure Landfill Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Temperature Total, Nitrogen Total, Phosphorus Turbidity Copper Cyanide
QUEBRADA MANGLILLO	QUEBRADA MANGLILLO PRSQ38A	1.0	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	
QUEBRADA FLORIDA	QUEBRADA FLORIDA PRSQ39A	3.0	SD		N/A	N/A	N/A	N/A	H L		
RÍO JACABOA	RÍO JACABOA PRSR40A	13.0	SD		4a	4a	3	3	H J L	Confined Animal Feeding Operations Onsite Wastewater Systems	
QUEBRADA PALENQUE	QUEBRADA PALENQUE PRSQ41A	1.0	SD		4a	4a	5	3	D, H J, L		Dissolved Oxygen
RÍO CHICO	RÍO CHICO PRSR42A	14.6	SD		4a	4a	5	5	D H J L	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Ammonia Copper Dissolved Oxygen Silver Surfactants Total, Phosphorus
RÍO GRANDE DE PATILLAS	RÍO GRANDE DE PATILLAS PRSR43A1	4.0	SD		4a	4a	3	3	H J	Major Municipal Point Sources Onsite Wastewater Systems	
	RÍO GRANDE DE PATILLAS PRSR43A2	35.9	SD	NS 50092000	5	5	5	1	J	Onsite Wastewater Systems	Chromium VI Enterococci Copper Cyanide
	RÍO MARÍN PRSR43B	8.7	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	

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Basin	Waterbody Name (AU ID)		Class	Stations NS = Network	R1	R2	AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
QUEBRADA YAUREL	QUEBRADA YAUREL PRSQ44A	6.0	SD		4a	4a	3	3	H J, L	Onsite Wastewater Systems	
RÍO NIGUAS DE ARROYO	RÍO NIGUAS DE ARROYO PRSR45A	21.0	SD		4a	4a	3	3	J D	Confined Animal Feeding Operations Onsite Wastewater Systems Package Plants (Small Flow) Urban Runoff/Storm Sewers	
QUEBRADA SALADA	QUEBRADA SALADA PRSQ46A	1.7	SD		4a	4a	3	3	H J, L	Onsite Wastewater Systems Surface Mining	
QUEBRADA CORAZÓN	QUEBRADA CORAZÓN PRSQ47A	9.7	SD		4a	4a	3	3	H J L	Confined Animal Feeding Operations Onsite Wastewater Systems	
QUEBRADA BRANDERI	QUEBRADA BRANDERI PRSQ48A	4.5	SD		4a	4a	3	3	H J, L	Collection System Failure Onsite Wastewater Systems	
RÍO GUAMANÍ	RÍO GUAMANÍ PRSR49A	22.0	SD		4a	4a	5	3	D H J L	Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Temperature
QUEBRADA MELANÍA	QUEBRADA MELANÍA PRSQ50A	7.0	SD		4a	4a	5	3	D H J, L	Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen
RÍO SECO	RÍO SECO PRSR51A	24.7	SD		4a	4a	5	3	D, H J, L	Agriculture Onsite Wastewater Systems	Dissolved Oxygen
QUEBRADA AMORÓS	QUEBRADA AMORÓS PRSQ52A	0.7	SD		4a	4a	5	3	D H J, L	Agriculture Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen pH
QUEBRADA AGUAS VERDES	QUEBRADA AGUAS VERDES PRSQ53A	15.0	SD		4a	4a	5	3	D F H, L	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen

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Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
RÍO NIGUAS DE SALINAS	RÍO NIGUAS DE SALINAS PRSR54A	102.5	SD		4a	4a	5	3	D F H L	Confined Animal Feeding Operations Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Dissolved Oxygen
RÍO JUEYES	RÍO JUEYES PRSR55A	11.0	SD		4a	4a	3	3	H J L	Agriculture Confined Animal Feeding Operations Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO CAYURES	RÍO CAYURES PRSR56A	5.0	SD		4a	4a	5	3	D, H J, L	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Surfactants
RÍO COAMO	RÍO COAMO PRSR57A1	7.5	SD		4a	4a	3	3	H J L	Agriculture Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RIO COAMO PRSR57A2	59.0	SD	NS 50106500	5	5	5	5	J	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Cyanide Enterococci Temperature Total, Nitrogen Surfactants Total, Phosphorus
	RÍO CUYÓN PRSR57B	49.2	SD		4a	4a	5	3	D H J	Agriculture Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Temperature

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Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1			DW	Notes	Potential Sources of Pollution	Causes of Impairment
RÍO DESCALABRADO	RÍO DESCALABRADO PRSR58A	18.8	SD		4a	4a	3	3	D H J L	Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO CAÑAS	RÍO CAÑAS PRSR59A	8.0	SD		4a	4a	3	3	H J, L	Agriculture Onsite Wastewater Systems	
RÍO JACAGUAS	RÍO JACAGUAS PRSR60A1	22.8	SD		4a	4a	3	3	F H L	Agriculture Collection System Failure Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO JACAGUAS PRSR60A2	29.3	SD		4a	4a	3	3	F H L	Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO INABÓN	RÍO INABÓN PRSR61A	66.7	SD		4a	4a	3	3	F H	Agriculture	
RÍO BUCANÁ- CERRILLOS	RIO BUCANÁ- CERRILLOS PRSR62A1	27.8	SD	NS 50114400	5	5	5	5	J	Collection System Failure Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen Enterococci Cyanide
	RIO BUCANÁ- CERRILLOS PRSR62A2	32.6	SD	NS 50113800	5	5	5	5	J	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococci Cyanide Surfactants
RIO PORTUGUÉS	RIO PORTUGUÉS PRSR63A	54.0	SD	NS 50114900 50116200	5	5	5	5	J	Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Cyanide Dissolved Oxygen

	Waterbody Name	Waterbody	SS	2024 Monitoring			esigr ainm	nated ent		Potential Sources of	
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment
RÍO MATILDE – PASTILLO	RÍO MATILDE- PASTILLO PRSR64A	43.2	SD		4a	4a	5	3	D H J L	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Industrial Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Temperature
	QUEBRADA DEL AGUA PRSQ64A1	8.0	SD		4a	4a	3	3	H J, L	Onsite Wastewater Systems	
RÍO TALLABOA	RÍO TALLABOA PRSR65A	59.6	SD		4a	4a	5	1	D H J L	Agriculture Collection System Failure Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	pH Temperature
RÍO MACANÁ	RÍO MACANÁ PRSR66A	21.7	SD		4a	4a	3	3	H J L	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO GUAYANILLA	RÍO GUAYANILLA PRSR67A	60.0	SD	NS 50124700	5	5	5	5	F		Ammonia Chromium VI Dissolved Oxygen Enterococci Temperature Total, Nitrogen Total, Phosphorus Cyanide

	Watashada Nama	Watarbada	2024 Monitoring		rall D e Att		nated ent		Potential Sources of		
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network		R2			Notes	Potential Sources of Pollution	Causes of Impairment
RÍO YAUCO	RÍO YAUCO PRSR68A1	61.4	SD		4a	4a	5	5	D F H L	Agriculture Collection System Failure Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Total, Phosphorus
	RÍO YAUCO PRSR68A2	18.3	SD		4a	4a	3	3	F H, L	Agriculture Onsite Wastewater Systems	
RÍO LOCO	RÍO LOCO PRSR69A1	92.4	SD		4a	4a	5	5	D F H	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Temperature Turbidity
	RÍO LOCO PRSR69A2	19.5	SD		4a	4a	3	3	F H	Agriculture Onsite Wastewater Systems	
RÍO ARROYO CAJUL	RÍO ARROYO CAJUL PRSR70A	7.4	SD		4a	4a	3	3	H J, L	Onsite Wastewater Systems	
QUEBRADA BOQUERÓN	QUEBRADA BOQUERÓN RWQ71A	11.7	SD		4a	4a	3	3	H J	Minor Industrial Point Sources Onsite Wastewater Systems	
QUEBRADA ZUMBÓN	QUEBRADA ZUMBÓN PRWQ72A	1.7	SD		4a	4a	5	3	D, H J, L	Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen Surfactants
QUEBRADA GONZÁLEZ	QUEBRADA GONZÁLEZ PRWQ73A	1.8	SD		4a	4a	5	3	D, H J, L	Onsite Wastewater Systems	Dissolved Oxygen
QUEBRADA LOS PAJARITOS	QUEBRADA LOS PAJARITOS PRWQ74A	2.7	SD		4a	4a	5	3	D H J, L	Onsite Wastewater Systems	Dissolved Oxygen
CAÑO CONDE ÁVILA	CAÑO CONDE ÁVILA PRWK75A	4.0	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	

	W-4-d- d- N	XX - 4 1 - 1 - 1	Š	2024 Monitoring		rall E e Att		nated ent		D-4	
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
QUEBRADA IRIZARRY	QUEBRADA IRIZARRY PRWQ76A	2.0	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	
RIO GUANAJIBO	RIO GUANAJIBO PRWR77A	119.3	SD	NS 50138000	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen Enterococci Total, Phosphorus Cyanide Tubidity
	RIO HONDO PRWR77B	17.2	SD		4a	4a	3	3	F H	Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO ROSARIO PRWR77C	58.3	SD	NS 50136700	5	5	5	5	F	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Pesticides Total, Phosphorus Turbidity Cyanide
	RÍO VIEJO PRWR77D	21.1	SD	50135625	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Cyanide Dissolved Oxygen Enterococci Total, Phosphorus Surfactants Temperature
	RÍO DUEY Y RÍO HOCONUCO PRWR77E	39.9	SD		4a	4a	3	3	F H	Agriculture Onsite Wastewater Systems	
	RÍO CAÍN PRWR77F	24.5	SD		4a	4a	3	3	F H	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	

			70	2024 Monitoring		rall E e Att		nated ent			
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1		AL	DW	Notes	Potential Sources of Pollution	Causes of Impairment
	RÍO CUPEYES PRWR77G	8.0	SD		4a	4a	5	5	D F H	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Pesticides
	RÍO CRUCES PRWR77H	13.8	SD		4a	4a	3	3	F H	Collection System Failure Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	RÍO GRANDE PRWR77I	22.5	SD		4a	4a	3	3	F H	Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
CAÑO MERLE	CAÑO MERLE PRWK78A	1.6	SD		4a	4a	5	3	D H J L	Collection System Failure Onsite Wastewater Systems Surface Mining Urban Runoff/Storm Sewers	Dissolved Oxygen Surfactants
	QUEBRADA SÁBALO PRWQ78A1	9.5	SD		4a	4a	3	3	H J, L	Onsite Wastewater Systems	
RÍO YAGÜEZ	RÍO YAGÜEZ PRWR79A	42.2	SD	NS 50139000	5	5	5	1	J	Agriculture Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Package Plants (Small Flow) Urban Runoff/Storm Sewers	Chromium VI Enterococci Cyanide Temperature Total, Nitrogen, Total, Phosphorus Turbidity
QUEBRADA DEL ORO	QUEBRADA DEL ORO PRWQ80A	10.0	SD		4a	4a	3	3	H J	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	
CAÑO MANÍ	CAÑO MANÍ PRWK81A	3.0	SD		3	3	3	3	Н	Onsite Wastewater Systems	
CAÑO BOQUILLA	CAÑO BOQUILLA PRWK82A	5.4	SD		3	3	3	3	H L	Landfill Onsite Wastewater Systems	
	CAÑO BOQUILLA PRWK82A1	3.0	SD		3	3	3	3	H L	Onsite Wastewater Systems	

	Waterbody Name	Waterbody				rall E e Att		nated ent		Potential Sources of		
Basin	(AU ID)	Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution	Causes of Impairment	
	CAÑO BOQUILLA PRWK82A2	3.9	SD		3	3	3	3	H L	Major Industrial Point Sources Onsite Wastewater Systems		
RÍO GRANDE DE AÑASCO	RÍO GRANDE DE AÑASCO PRWR83A	126.0	SD	NS 50144000 50146000	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci pH Turbidity Copper Cyanide Temperature Total, Phosphorus	
	RÍO CAÑAS PRWR83B	54.4	SD		4a	4a	3	3	H K	Agriculture Onsite Wastewater Systems		
	RÍO CASEY PRWR83C	38.1	SD		4a	4a	3	3	H K	Agriculture Onsite Wastewater Systems		
	RÍO HUMATA PRWR83D	13.3	SD		4a	4a	1	1	D H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems		
	RÍO ARENAS PRWR83E	18.3	SD		4a	4a	3	3	H K	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers		
	RÍO MAYAGUECILLO PRWR83F	18.0	SD		4a	4a	3	3	H K	Agriculture Onsite Wastewater Systems		
	RÍO GUABA PRWR83G	68.1	SD		4a	4a	3	3	H K	Agriculture Onsite Wastewater Systems		
	RÍO BLANCO PRWR83H	79.9	SD		4a	4a	3	3	H K	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems		

	Waterbody Name	Waterbody	S			rall D e Att		nated ent		Potential Sources of	
Basin	asin (AU ID) Size		Class	Stations NS = Network	R1	R2		DW	Notes	Pollution	Causes of Impairment
	RÍO PRIETO PRWR83I	59.8	SD		4a	4a	5	5	D H K	Agriculture Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	Pesticides
QUEBRADA JUSTO	QUEBRADA JUSTO PRWQ84A	1.0	SD		3	3	3	3	H L	Onsite Wastewater Systems	
	QUEBRADA ICACOS PRWQ85A	1.4	SD		3	3	3	3	H L	Onsite Wastewater Systems	
QUEBRADA CAGUABO	QUEBRADA CAGUABO PRWQ86A	1.0	SD		3	3	3	3	H L	Onsite Wastewater Systems	
CAÑO GARCÍA	CAÑO GARCÍA PRWK87A	2.0	SD		3	3	3	3	H L	Onsite Wastewater Systems	
QUEBRADA GRANDE DE CALVACHE	QUEBRADA GRANDE DE CALVACHE PRWQ88A	14.8	SD		3	3	3	3	D H L	Onsite Wastewater Systems	
QUEBRADA LOS RAMOS	QUEBRADA LOS RAMOS PRWQ89A	6.9	SD		3	3	5	3	D H L	Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	Dissolved Oxygen
QUEBRADA PUNTA ENSENADA	QUEBRADA PUNTA ENSENADA PRWQ90A	5.0	SD		3	3	3	3	H L	Onsite Wastewater Systems	
QUEBRADA PILETAS	QUEBRADA PILETAS PRWQ91A	2.0	SD		3	3	5	3	D H, L	Onsite Wastewater Systems	Dissolved Oxygen
RÍO GRANDE	RÍO GRANDE RWR92A	21.8	SD		3	3	3	3	H L	Onsite Wastewater Systems	
CAÑO DE SANTI PONCE	CAÑO DE SANTI PONCE PRWK93A	4.8	SD		4a	4a	3	3	H J, L	Collection System Failure Onsite Wastewater Systems	
RÍO GUAYABO	RÍO GUAYABO PRWR94A	43.1	SD		4a	4a	3	3	H J	Collection System Failure Onsite Wastewater Systems Urban Runoff/Storm Sewers	

			S	2024 Monitoring		rall D e Att		nated ent		D	
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2		DW	Notes	Potential Sources of Pollution	Causes of Impairment
RIO CULEBRINAS	RIO CULEBRINAS PRWR95A	142.6	SD	NS 50149100	5	5	5	5	K	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococci Pesticides Total, Nitrogen Total, Phosphorus Turbidity Cyanide Temperature
	RIO CAÑO (RÍO CAÑAS) PRWR95B	33.3	SD		4a	4a	3	3	H K	Onsite Wastewater Systems Urban Runoff/Storm Sewers	
	QUEBRADA GRANDE (SECTOR CUCHILLAS) PRWQ95C	11.4	SD		4a	4a	3	3	H K	Agriculture Onsite Wastewater Systems	
	QUEBRADA LAS MARIAS PRWQ95D	9.8	SD		4a	4a	3	3	H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	
	QUEBRADA YAGRUMA PRWQ95E	20.6	SD		4a	4a	3	3	H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	
	QUEBRADA LA SALLE PRWQ95F	11.8	SD		4a	4a	5	5	D H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen Pesticides
	QUEBRADA EL SALTO PRWQ95G	7.8	SD		4a	4a	5	3	D H. K	Agriculture Onsite Wastewater Systems	Dissolved Oxygen
	QUEBRADA GRANDE DE LA MAJAGUA PRWQ95H	5.6	SD		4a	4a	5	5	D H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Pesticides

	Watashada Nama	Watanhadu		3.5		rall D e Att		ated ent		Potential Sources of	
Basin	Waterbody Name (AU ID)	Waterbody Size (miles)	Class	Stations NS = Network	R1	R2	AL	DW	Notes	Pollution Pollution	Causes of Impairment
	QUEBRADA SALADA	7.9	SD		4a	4a	1	3	D	Confined Animal Feeding	
	PRWQ95I								Н	Operations	
									K	Onsite Wastewater Systems	
	RÍO SONADOR	37.7	SD		4a	4a	3	3	Н	Agriculture	
	PRWR95J								K	Confined Animal Feeding	
										Operations	
	PÉC CILLERA I	20.2	9.0			_			**	Onsite Wastewater Systems	
	RÍO GUATEMALA	20.3	SD		4a	4a	3	3	H	Collection System Failure	
	PRWR95K								K	Confined Animal Feeding	
										Operations	
										Landfill	
										Onsite Wastewater Systems	
CAÑO CODAZONES	CAÑO CODAZONES	1.2	CD		4.	4.	2	2	TT	Urban Runoff/Storm Sewers	
CAÑO CORAZONES	CAÑO CORAZONES	1.3	SD		4a	4a	3	3	Н	Collection System Failure	
	PRWK96A								J	Onsite Wastewater Systems	
										Urban Runoff/Storm Sewers	

#### **Notes:**

#### Bold and Red causes were listed into 2024 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2024 Cycle. (Old causes)

- A Watershed that has an approved TMDL for Río Cibuco, the TMDL was approved in September 2002, the pollutant was Fecal Coliform.
- B Watershed that has an approved TMDL for Río de la Plata, the TMDL was approved in September 2003, the pollutant was Fecal Coliform.
- C Watershed that has an approved TMDL for Río Grande de Loíza, the TMDL was approved in September 2007, the pollutant was Fecal Coliform.
- D Watershed and subwatershed that do not have a permanent monitoring station but were included in prior cycles as part of the 303(d) List by a synoptic study or special monitoring project.
- E Watershed that has an approved TMDL for Río Grande de Loíza a TMDL was approved in August 2007, the pollutant was Dissolved Oxygen.
- F Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliform.
- G Watershed that has an approved TMDL. Río Grande de Loíza, the TMDL was approved in August 2007, the pollutant was Copper.
- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle.
- I Watershed that has approved TMDL from Río Grande de Loíza, a TMDL was approved in August 2007, the pollutant was Ammonia.
- J Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- K Watersheds that have an approved TMDL in September 2010, the pollutant was Fecal Coliform. The watersheds are Río Grande de Arecibo, Río Grande de Manatí, Río Grande de Añasco, Río Culebrinas
- L Watershed and subwatersheds, are waterbodies that lack adequate flow, which impaired some of the designated uses.
- **R1** Primary Contact Recreation
- R2 Secondary Contact Recreation
- AL Aquatic Life
- DW Raw Source for Drinking Water

## **Estuaries**

**Table 26: Size of Waters Impaired by Causes (Monitored squares miles for Estuaries)** 

	Impairments 023 Cycle	Causes of Impairments Summary			
<b>Causes of Impairments</b>	Size of Waters Impaired (sq. mi)	Size of Waters Impaired (sq. mi.)			
Arsenic	0	0.0364			
Dissolved Oxygen	0	0.8618			
Surfactants	0	1.0130			
Temperature	0	0.0780			
Turbidity	0	0.2932			

**Table 27: Size of Waters Impaired by Sources (Monitored and Unmonitored Estuaries)** 

Potential Sources of 2021-2023 Cy		Potential Sources of Pollution Summary
Potential Sources of Pollution	Size of Waters Impaired (sq. mi.)	Size of Waters Impaired (sq. mi.)
Agriculture	0.263	0.263
Collection System Failure	3.226	3.226
Confined Animal Feeding Operations	2.283	2.283
Landfill	0.930	0.930
Major Industrial Point Sources	0.296	0.296
Major Municipal Point Sources	1.529	1.529
Minor Industrial Point Sources	0.223	0.223
Onsite Wastewater Systems	4.308	4.308
Surface Mining	0.229	0.229
Upstream Impoundment	0.459	0.459
Urban Runoff/Storm Sewers	3.067	3.067

**Table 28: Estuaries Assessment (Except San Juan Estuary System)** 

Basin	Waterbody Name	Waterbody Size	Class	2024 Monitoring	Overall A	Desigr ttainm		d Use	Notes	Potential Sources of	Causes of
24611	(AU ID)	(sq. mi.)	ت ا	Stations	R1	R2	AL	DW	Ž	Pollution	Impairment
RÍO GUAJATACA PRNR3A	RÍO GUAJATACA PRNE3A	0.048	SB		3	3	3	N/A	Н	Onsite Wastewater Systems Surface Mining Urban Runoff/Storm Sewers	
QUEBRADA BELLACA PRNQ4A	QUEBRADA BELLACA PRNE4A	0.0042	SB		3	3	3	N/A	Н	Onsite Wastewater Systems	
RÍO CAMUY PRNR5A	RÍO CAMUY PRNE5A	0.042	SB		4a	4a	3	N/A	F H	Onsite Wastewater Systems	
RÍO GRANDE DE ARECIBO PRNR7A	RÍO GRANDE DE ARECIBO PRNE7A	0.0847	SB		4a	4a	3	N/A	H K	Agriculture Urban Runoff/Storm Sewers	
CAÑO TIBURONES PRNE7.1	CAÑO TIBURONES PRNE7.1	0.2924	SB		4a	4a	3	N/A	H J	Confined Animal Feeding Operations Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO GRANDE DE MANATÍ PRNR8A	RÍO GRANDE DE MANATÍ PRNE8A	0.2576	SB		4a	4a	3	N/A	H K	Urban Runoff/Storm Sewers	
RÍO CIBUCO PRNR9A	RÍO CIBUCO PRNE9A	0.2964	SB		N/A	N/A	3	N/A	A H	Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO DE LA PLATA PRER10A	RÍO DE LA PLATA PREE10A	0.8256	SB		4a	4a	3	N/A	B H	Collection System Failure Confined Animal Feeding Operations Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	

Basin	Waterbody Name	Waterbody Size (sq. mi.)	Class	2024 Monitoring	Overall At	Desigr tainm		l Use	Notes	Potential Sources of	Causes of
	(AU ID)	(sq. mi.)	C	Stations	R1	R2	AL	DW	Ž	Pollution	Impairment
RÍO GRANDE DE LOIZA PRER14A	RÍO GRANDE DE LOIZA PREE14A	0.8685	SB		4a	4a	3	N/A	F H	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO HERRERA PRER15A	RÍO HERRERA PREE15A	0.102	SB		4a	4a	5	N/A	D F, H	Landfill Onsite Wastewater Systems	Surfactants
RÍO ESPÍRITU SANTO PRER16A	RÍO ESPÍRITU SANTO PREE16A	0.5758	SB		4a	4a	5	N/A	D F H	Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen Surfactants
CAÑO RODRÍGUEZ PREK16.1	CAÑO RODRÍGUEZ PREE16.1	0.108	SB		3	3	3	N/A	Н	Minor Industrial Point Sources Onsite Wastewater Systems	
RÍO MAMEYES PRER17A	RÍO MAMEYES PREE17A	0.1674	SB		4a	4a	3	N/A	F H	Onsite Wastewater Systems Surface Mining	
RÍO SABANA PRER19A	RÍO SABANA PREE19A	0.0288 mi <sup>2</sup>	SB		4a	4a	3	N/A	H J	Urban Runoff/Storm Sewers	
RÍO JUAN MARTÍN PRER20A	RÍO JUAN MARTÍN PREE20A	0.0028	SB		4a	4a	3	N/A	H J	Urban Runoff/Storm Sewers	
RÍO FAJARDO PRER22A	RÍO FAJARDO PREE22A	0.068	SB		4a	4a	3	N/A	H J	Collection System Failure Urban Runoff/Storm Sewers	
RÍO DEMAJAGUA PRER23A	RÍO DEMAJAGUA PREE23A	0.0028	SB		4a	4a	5		D H, J	Collection System Failure Urban Runoff/Storm Sewers	Turbidity
QUEBRADA AGUAS CLARAS PREQ25A	QUEBRADA AGUAS CLARAS PREE25A	0.0024	SB		4a	4a	3	N/A	H J	Upstream Impoundment	
RÍO DAGUAO PRER26A	RÍO DAGUAO PREE26A	0.0672	SB		4a	4a	3	N/A	H J	Upstream Impoundment	
QUEBRADA PALMA PREQ27A	QUEBRADA PALMA PREE27A	0.005	SB		4a	4a	3	N/A	H J	Upstream Impoundment	

Basin	Waterbody Name (AU ID)	Waterbody Size	Class	2024 Monitoring	Overall A	Desigi ttainm		l Use	Notes	Potential Sources of	Causes of
	(AU ID)	(sq. mi.)	C	Stations	R1	R2	AL	DW	Z	Pollution	Impairment
QUEBRADA BOTIJAS PREQ28A	QUEBRADA BOTIJAS PREE28A	0.0192	SB		4a	4a	3	N/A	H J	Upstream Impoundment	
RÍO SANTIAGO PRER29A	RÍO SANTIAGO PREE29A	0.0252	SB		4a	4a	3	N/A	H J	Onsite Wastewater Systems	
RÍO BLANCO PRER30A	RÍO BLANCO PREE30A	0.0512	SB		4a	4a	3	N/A	H J	Upstream Impoundment	
RÍO ANTON RUIZ PRER31A	RÍO ANTÓN RUIZ PREE31A	0.1296	SB		4a	4a	3	N/A	H J	Upstream Impoundment	
RÍO HUMACAO PRER33A	RÍO HUMACAO PREE33A	0.124	SB		4a	4a	3	N/A	F H	Collection System Failure Landfill Onsite Wastewater Systems	
RÍO CANDELERO PRER34A	RÍO CANDELERO PREE34A	0.078	SB		4a	4a	5	N/A	D F, H	Collection System Failure	Dissolved Oxygen Temperature
RÍO GUAYANÉS PRER35A	RÍO GUAYANÉS PREE35A	0.0364	SB		4a	4a	5	N/A	F H	Agriculture Collection System Failure Onsite Wastewater Systems	Arsenic Turbidity
CAÑO SANTIAGO PREK35.1	CAÑO SANTIAGO PREE35.1	0.1152	SB		4a	4a	5	N/A	D F H	Agriculture Collection System Failure Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Surfactants Turbidity
RÍO CHICO PRSR42A	RÍO CHICO PRSE42A	0.008	SB		4a	4a	3	N/A	H J, L	Onsite Wastewater Systems	
RÍO GRANDE DE PATILLAS PRSR43A	RÍO GRANDE DE PATILLAS PRSE43A	0.0136	SB		4a	4a	3	N/A	H J	Upstream Impoundment Urban Runoff/Storm Sewers	
QUEBRADA SALADA PRSQ46A	QUEBRADA SALADA PRSE46A	0.006	SB		4a	4a	3	N/A	H J L	Onsite Wastewater Systems Surface Mining	

Basin	Waterbody Name	Waterbody Size	Class	2024 Monitoring	Overall At	Desigi tainm		d Use	Notes	Potential Sources of	Causes of
<b>Du</b> Sin	(AU ID)	(sq. mi.)	C	Stations	R1	R2	AL	DW	Ž	Pollution	Impairment
QUEBRADA	QUEBRADA	0.0054	SB		4a	4a	3	N/A	Н	Onsite Wastewater Systems	
CORAZÓN	CORAZÓN								J		
PRSQ47A	PRSE47A								L		
QUEBRADA	QUEBRADA	0.012	SB		4a	4a	3	N/A	Н	Onsite Wastewater Systems	
BRANDERI	BRANDERI								J		
PRSQ48A	PRSE48A								L		
QUEBRADA	QUEBRADA	0.012	SB		4a	4a	3	N/A		Onsite Wastewater Systems	
MELANÍA PROSOSA	MELANÍA PRSE50A								J		
PRSQ50A RÍO SECO	PRSE50A RÍO SECO	0.0036	SB		4a	4a	3	N/A	L H	Urban Runoff/Storm Sewers	
PRSR51A	PRSE51A	0.0030	ъъ		<del>4</del> a	<del>4</del> a	3	1 <b>V</b> //A	J, L	Ciban Kunon/Storm Sewers	
		0.0042	CD		4 -	4.	2	NT/A		Urban Runoff/Storm Sewers	
QUEBRADA AMORÓS	QUEBRADA AMORÓS	0.0042	SB		4a	4a	3	N/A		Urban Runoff/Storm Sewers	
PRSQ52A	PRSE52A								J L		
OUEBRADA	QUEBRADA AGUAS	0.0036	SB		4a	4a	3	N/A	-	Upstream Impoundment	
AGUAS VERDES	VERDES	0.0050	SB		14	14		1 1/2 1	Н	Urban Runoff/Storm Sewers	
PRSQ53A	PRSE53A								L		
RÍO NIGUAS DE	RÍO NIGUAS DE	0.011	SB		4a	4a	3	N/A	F	Onsite Wastewater Systems	
SALINAS	SALINAS								Н	Upstream Impoundment	
PRSR54A	PRSE54A								L		
RÍO COAMO	RÍO COAMO	0.0114	SB		4a	4a	3	N/A	Н	Agriculture	
PRSR57A	PRSE57A								J, L	Upstream Impoundment	
RÍO	RÍO	0.0048	SB		4a	4a	3	N/A	Н	Agriculture	
DESCALABRADO									J		
PRSR58A	PRSE58A										
RÍO JACAGUAS	RÍO JACAGUAS	0.011	SB		4a	4a	3	N/A		Agriculture	
PRSR60A	PRSE60A	0.0025	a D				_		H, I	~	
RÍO INABÓN	RÍO INABÓN	0.0036	SB		4a	4a	3	N/A		Urban Runoff/Storm Sewers	
PRSR61A RÍO MATILDE-	PRSE61A RÍO MATILDE-	0.0422	SB		1 -	4 -	-	NT/A	H	Oneita Westsman C.	T
PASTILLO	PASTILLO	0.0432	SB		4a	4a	5	N/A		Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity
PASTILLO PRSR64A	PASTILLO PRSE64A								H J, L	Urban Kunon/Storm Sewers	
FK3K04A	rkse04A								J, L		

Basin	Waterbody Name	Waterbody Size	Class	2024 Monitoring		Overall Designated Use Attainment		Notes	Potential Sources of	Causes of	
24611	(AU ID)	(sq. mi.)	כ	Stations	R1	R2	AL	DW	Ž	Pollution	Impairment
RÍO TALLABOA	RÍO TALLABOA	0.0336	SB		4a	4a	5	N/A	D,	Onsite Wastewater Systems	Turbidity
PRSR65A	PRSE65A								H J, L	Urban Runoff/Storm Sewers	
RÍO MACANÁ PRSR66A	RÍO MACANÁ PRSE66A	0.0036	SB		4a	4a	3	N/A	H J, L	Urban Runoff/Storm Sewers	
RÍO YAUCO PRSR68A	RÍO YAUCO PRSE68A	0.003	SB		4a	4a	3	N/A	F H, L	Upstream Impoundment	
RÍO LOCO PRSR69A	RÍO LOCO PRSE69A	0.0084	SB		4a	4a	3	N/A	F H	Onsite Wastewater Systems Surface Mining Urban Runoff/Storm Sewers	
QUEBRADA BOQUERÓN PRWQ71A	QUEBRADA BOQUERÓN PRWE71A	0.0096	SB		4a	4a	3	N/A	H J	Urban Runoff/Storm Sewers	
QUEBRADA ZUMBÓN PRWQ72A	QUEBRADA ZUMBÓN PRWE72A	0.003	SB		4a	4a	3	N/A	H J L	Onsite Wastewater Systems	
QUEBRADA GONZÁLEZ PRWQ73A	QUEBRADA GONZÁLEZ PRWE73A	0.008	SB		4a	4a	3	N/A	H J L	Upstream Impoundment	
QUEBRADA LOS PAJARITOS PRWQ74A	QUEBRADA LOS PAJARITOS PRWE74A	0.003	SB		4a	4a	3	N/A	H J L		
RIO GUANAJIBO PRWR77A	RIO GUANAJIBO PRWE77A	0.0576	SB		4a	4a	3	N/A	H J	Collection System Failure Onsite Wastewater Systems	
CAÑO MERLE PRWK78A	CAÑO MERLE PRWE78A	0.158	SB		4a	4a	5	N/A	D, H J, L	Collection System Failure	Surfactants
RIO YAGÜEZ PRWR79A	RIO YAGÜEZ PRWE79A	0.0192	SB		4a	4a	3	N/A	H J	Collection System Failure Urban Runoff/Storm Sewers	
CAÑO BOQUILLA PRWK82A	CAÑO BOQUILLA PRWE82A	0.062	SB		3	3	5	N/A	D H L	Onsite Wastewater Systems	Dissolved Oxygen Surfactants Turbidity

Basin	Waterbody Name	Waterbody Size	Class	2024 Monitoring	Overall At	Desigr tainm		l Use	Notes	Potential Sources of	Causes of
	(AU ID)	(sq. mi.)	S	Stations	R1	R2	AL	DW	Ž	Pollution	Impairment
RÍO GRANDE DE AÑASCO PRWR83A	RÍO GRANDE DE AÑASCO PRWE83A	0.2376	SB		4a	4a	3	N/A	H K	Onsite Wastewater Systems	
QUEBRADA GRANDE CALVACHE PRWQ88A	QUEBRADA GRANDE CALVACHE PRWE88A	0.002	SB		4a	4a	5	N/A	D H L	Urban Runoff/Storm Sewers	Dissolved Oxygen
QUEBRADA LOS RAMOS PRWQ89A	QUEBRADA LOS RAMOS PRWE89A	0.0006	SB		3	3	3	N/A	H L	Collection System Failure	
RÍO GRANDE PRWR92A	RÍO GRANDE PRWE92A	0.0028	SB		4a	4a	3	N/A	H J, L		
CAÑO DE SANTI PONCE PRWK93A	CAÑO DE SANTI PONCE PRWE93A	0.0032	SB		4a	4a	3	N/A	H J L	Onsite Wastewater Systems	
RÍO GUAYABO PRWR94A	RÍO GUAYABO PRWE94A	0.0288	SB		4a	4a	5	N/A	D H, J	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen
RÍO CULEBRINAS PRWR95A	RÍO CULEBRINAS PRWE95A	0.1344	SB		4a	4a	3	N/A	H K	Onsite Wastewater Systems Upstream Impoundment	

#### Notes:

#### Bold and Red causes were listed into 2024 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2024 Cycle. (Old causes)

- A Watershed that has an approved TMDL for Río Cibuco, the TMDL was approved in September 2002, the pollutant was Fecal Coliform.
- B Watershed that has an approved TMDL for Río de la Plata, the TMDL was approved in September 2003, the pollutant was Fecal Coliform.
- **D** Watershed and subwatershed that do not have a permanent monitoring station but were included in prior cycles as part of the 303(d) List by a synoptic study or special monitoring project.
- F Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliform.
- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle
- J Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform
- K Watersheds that have an approved TMDL in September 2010, the pollutant was Fecal Coliform. The watersheds are Río Grande de Arecibo, Río Grande de Manatí, Río Grande de Añasco and Río Culebrinas.
- L Watershed and subwatersheds, are waterbodies that lack adequate flow, which impaired some of the designated uses.
- R1 Primary Contact Recreation
- R2 Secondary Contact Recreation
- AL Aquatic Life

**DW** - Raw Source for Drinking Water **N/A** - Not applicable

### San Juan Bay Estuary System

Table 29: Size of Waters Impaired by Causes San Juan Bay Estuary System

	of Impairments 1-2023 Cycle	Causes of Impairments Summary
Causes of Impairments	Size of Waters Impaired (sq. mi., miles)	Size of Waters Impaired (sq. mi., miles)
Ammonia	0	0
Chromium VI	0	3.8340 sq. mi.
Copper	0.1009 sq. mi.	0.1009 sq. mi., 18.8 mi.
Dissolved Oxygen	3.8340 sq. mi., 18.8 mi.	3.8340 sq. mi., 18.8 mi.
Enterococci	3.8340 sq. mi.	3.8340 sq. mi., 18.8 mi.
Lead	0.1009 sq. mi.	0.1009 sq. mi.
Mercury	3.8340 sq. mi.	3.8340
Oil and Grease	3.8340 sq. mi.,18.8 mi	3.8340 sq. mi. 18.8 mi.
рН	3.7331 sq. mi., 18.8 mi.	3.7331 sq. mi., 18.8 mi.
Surfactants	0.1009 sq. mi.	0.1009 sq. mi.
Temperature	3.8340 sq. mi., 18.8 mi.	3.8340 sq. mi., 18.8 mi.
Total, Nitrogen	3.8340 sq. mi.	3.8340 sq. mi.
Total, Phosphorus	3.8340 sq. mi.	3.8340 sq. mi.
Turbidity	3.8340 sq. mi., 18.8 mi.	3.8340 sq. mi., 18.8 mi.

Table 30: Size of Waters Impaired by Sources San Juan Bay Estuary System

	Potential Sources of Pollution Potential Sources of Pollution									
	Potential Sources of Pollution									
2021-2023	2021-2023 Cycle									
Potential Sources of Pollution	Size of Waters Impaired	Size of Waters Impaired								
1 otential Sources of 1 onution	(sq. mi., miles)	(sq. mi., miles)								
Collection System Failure	3.8340 sq. mi., 18.8 mi	3.8340 sq. mi., 18.8 mi								
Confined Animal Feeding Operations	3.8340 sq. mi, 18.8 mi	3.8340 sq. mi., 18.8 mi								
Landfill	0.1009 sq. mi.	0.1009 sq. mi.								
Major Industrial Point Sources	18.8 mi	18.8 mi								
Major Municipal Point Sources	18.8 mi	18.8 mi								
Marinas and Recreational Boating	18.8 mi	18.8 mi								
Onsite Wastewater Systems	3.7331 sq. mi., 18.8 mi	3.7331 sq. mi., 18.8 mi								
Urban Runoff/Storm Sewers	3.8340 sq. mi., 18.8 mi	3.8340 sq. mi., 18.8 mi								

**Table 31: San Juan Bay Estuary System Assessment** 

Basin	Waterbody Name	•	2024 Monitoring Stations NS = Network		Ove signa Attair	ted	Use	Notes	Potential Sources of Pollution	Causes of Impairment
	(AU ID)	(sq. mi., miles)	ED = External Data					Z	Ponution	
ESTUARY SYSTEM	PREE13A1 - Caño Control de La Malaria - Bahía de San Juan - Caño San Antonio - Laguna Del Condado - Península La Esperanza		NS ED – BSJ 1, 2, 3 LC 1, 2 CSA La Malaria PLE	5	5	5	N/A	F M	Collection System Failure Confined Animal Feeding Operations Major Industrial Point Sources Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater System Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Enterococci Oil & Grease pH Temperature Turbidity
ESTUARY SYSTEM	PREE13A2 - Río Piedras - Lago Las Curías	0.1009 sq. mi.	NS 89027 50049100 ED – RP 01, 02, 03 RPN Lago Las Curías	5	5	5	5	F M	Collection System Failure Confined Animal Feeding Operations Landfill Urban Runoff/Storm Sewers	Chromium VI Copper Dissolved Oxygen Enterococci Lead Surfactants Temperature Total, Nitrogen Total, Phosphorus Turbidity Mercury Oil and Grease
ESTUARY SYSTEM	PREE13A3 - Caño Martín Peña - Quebrada Juan Méndez - Quebrada San Antón - Quebrada Blasina - Canal Machicote	3.7331 sq. mi.	NS 50050300 ED – CS 1, 2 CMP LSJ 1, 2 Blasina San Antón Laguna Los Corozos	5	5	5	N/A	M	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater System Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen Enterococci pH Temperature Total, Nitrogen Total, Phosphorus Turbidity

Basin	Waterbody Name (AU ID)	Waterbody Size (sq. mi., miles)			ttair	ted ime	Use nt	Notes	Potential Sources of Pollution	Causes of Impairment
			ED = External Data	R1	R2	$\mathbf{AL}$	DW			
	- Canal Suárez		LagunaTorrecilla 1,							Mercury
	- Laguna San José		2, 3							Oil and Grease
	- Laguna									
	Torrecillas									
	- Laguna de									
	Piñones									
	- Laguna Los									
	Corozos									

#### **Notes:**

#### Bold and Red causes were listed into 2024 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2024 Cycle. (Old causes)

**F** - Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliform.

M - External Data

R1 - Primary Contact Recreation

**R2** - Secondary Contact Recreation

**AL** - Aquatic Life

DW - Raw Source for Drinking Water

N/A - Not applicable

#### Lagoons

<u>Table 32: Size of Waters Impaired by Causes (Monitored square miles for Lagoons)</u>

Causes of Impa 2021-2023 C	Causes of Impairments Summary	
Causes of Impairments	Size of Waters Impaired (sq. mi.)	Size of Waters Impaired (sq. mi.)
Copper	0	2.6172
Dissolved Oxygen	0	3.8781
Enterococci	0	0.5250
pH	0	1.2703
Temperature	0	0.4016
Turbidity	0	1.4344

Table 33: Size of Waters Impaired by Sources (Monitored and Unmonitored square miles for Lagoons)

Potential Sources 2021-2023	Potential Sources of Pollution Summary	
Potential Sources of Pollution	Size of Waters Impaired (sq. mi.)	Size of Waters Impaired (sq. mi.)
Landfill	0.0219	0.0219
Marinas and Recreational Boating	0.6234	0.6234
Minor Industrial Point Sources	0.2859	0.2859
Onsite Wastewater Systems	2.3125	2.3125
Unknown Source	2.3657	2.3657
Urban Runoff/Storm Sewers	2.6328	2.6328

**Table 34: Lagoons Assessment (Monitored and Unmonitored)** 

Municipality	Waterbody Name (AU ID)	Class	2024 Monitoring Stations	WB Size (sq. mi.)	Overa	all Desi Uses an	ignated nd ries		Potential Sources of Pollution	Causes of Impairment
MAYAGÜEZ	Laguna Joyudas	SB		0.5297	<b>R1</b> 4a	<b>R2</b> 4a	<b>AL</b> 5	Н	Onsite Wastewater Systems	Copper
	PRWN0005							J	Unknown Source Urban Runoff/Storm Sewers	Dissolved Oxygen
VEGA BAJA- MANATÍ	Laguna Tortuguero PRNN0006	SE		0.8656	3	3	5	Н	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen
DORADO	Laguna Mata Redonda PRNN0007	SB		0.0234	3	3	5	Н	Urban Runoff/Storm Sewers	Dissolved Oxygen pH
FAJARDO	Laguna Aguas Prietas PREN0011	SB		0.2	3	3	5	Н	Unknown Source	Copper Dissolved Oxygen Turbidity
FAJARDO	Laguna Grande PREN0012	SB		0.3375	5	5	5	Н	Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Enterococci pH
CEIBA	Laguna Ceiba PREN0013	SB		0.1875	5	5	5	Н	Unknown Source	Copper Dissolved Oxygen Enterococci pH
GUAYAMA	Laguna Pozuelo PRSN0014	SB		0.0547	3	3	5	Н	Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen pH Temperature
SALINAS	Laguna Mar Negro PRSN0015	SB		0.325	3	3	5	Н	Urban Runoff/Storm Sewers Unknown Source	Copper Dissolved Oxygen pH
SALINAS	Laguna Punta Arenas PRSN0016	SB		0.0281	3	3	5	Н	Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Temperature Turbidity

Municipality	Waterbody Name (AU ID)	Class	2024 Monitoring Stations	WB Size (sq. mi.)	1	Overall Designated Uses and Categories		Overall Designated Uses and Categories		Overall Designated Uses and Categories		Uses and		Overall Designated Uses and Categories		Overall Designated Uses and Categories		Overall Designated Uses and Categories		Overall Designated Uses and Categories		Overall Designated Uses and Categories		Overall Designated Uses and Categories		Uses and		Uses and		Uses and		Uses and		Uses and		Uses and		Uses and		Uses and		Uses and		Uses and		Uses and				Uses and		Uses and		Uses and		Uses and		Uses and		Notes	Potential Sources of Pollution	Causes of Impairment
					R1	R2	AL																																																							
SALINAS	Laguna Tiburones PRSN0017	SB		0.0219	3	3	5	Н	Landfill Unknown Source	Copper Dissolved Oxygen pH Temperature Turbidity																																																				
PONCE	Laguna Salinas PRSN0018	SB		0.1203	3	3	5	Н	Onsite Wastewater Systems Unknown Source	Copper Dissolved Oxygen																																																				
CABO ROJO	Laguna Salinas I (Fraternidad) PRSN0019	SB		0.4594	3	3	5	Н	Onsite Wastewater Systems Unknown Source	Copper Dissolved Oxygen Turbidity																																																				
CABO ROJO	Laguna Cabo Rojo 2 (Candelaria) PRSN0020	SB		0.2969	3	3	5	Н	Unknown Source	Copper Dissolved Oxygen Temperature Turbidity																																																				
CABO ROJO	Laguna Cabo Rojo 3 (El Faro) PRSN0021	SB		0.1078	3	3	5	Н	Unknown Source	Copper Dissolved Oxygen Turbidity																																																				
CABO ROJO	Caño Boquerón PRSN0022	SB		0.2859	3	3	5	Н	Marinas and Recreational Boating Minor Industrial Point Sources Unknown Source	Copper Dissolved Oxygen pH Turbidity																																																				
CABO ROJO	Laguna Guaniquilla PRSN0023	SB		0.0344	3	3	5	Н	Unknown Source	Dissolved Oxygen pH Turbidity																																																				
LAJAS	Laguna Cartagena PRSN0024	SE		0.4688	3	3	3	Н	Urban Runoff/Storm Sewers																																																					

#### Notes:

#### Bold and Red causes were listed into 2024 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2024 Cycle. (Old causes)

- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle.
- **J** Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- **R1** Primary Contact Recreation
- R2 Secondary Contact Recreation
- AL Aquatic Life

Lakes

Table 35: Size of waters Impaired by Causes (Monitored Acres for Lakes)

	Causes of Impairments 2021-2023 Cycle							
Causes of Impairments	Size of Waters Impaired (acres)	Size of Waters Impaired (acres)						
Arsenic	0	1,194						
Copper	0	2,500						
Dissolved Oxygen	7,269	7,323						
Enterococci	0	35						
Lead	0	1,726						
Mercury	0	35						
Pesticides	0	2,133						
pН	3,888	6,301						
Surfactants	0	634						
Temperature	4,090	4,790						
Total, Nitrogen	5,772	6,849						
Total, Phosphorus	4,365	7,269						
Turbidity	4,446	5,080						

**Table 36: Size of waters Impaired by Sources (Monitored Acres for Lakes)** 

	Potential Sources of Pollution 2021-2023 Cycle									
Potential Sources of Pollution	Size of Waters Impaired (acres)	Size of Waters Impaired (acres)								
Agriculture	3,680	3,680								
Collection System Failure	1,914	1,914								
Confined Animal Feeding Operations	3,870	3,870								
Landfill	560	560								
Major Industrial Point Sources	285	285								
Minor Industrial Point Sources	2,949	2,949								
Onsite Wastewater Systems	6,623	6,623								
Unknown Source	108	1,232								
Urban Runoff/Storm Sewers	1,413	1,413								

**Table 37: Lakes Assessment** 

				abic 57. La			101	IV			
Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2024 Monitoring Stations NS = Network	D	ttai	na se nm	ted ent	_	Potential Sources of Pollution	Causes of Impairment
RIO GUAJATACA	LAGO GUAJATACA PRNL3A1	1000	SD	NS 10720 10790 10790C	4a	4a	5	5		F Confined Animal Feeding Operations Minor industrial Point Sources Onsite Wastewater Systems	Dissolved Oxygen pH Temperature Total, Nitrogen Total, Phosphorus
RIO GRANDE DE ARECIBO	LAGO DOS BOCAS PRNL <sub>1</sub> 7A1	634	SD	NS 25110 27090 27090E	4a	4a	5	5		K Agriculture N Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Unknown Source (9000)	Arsenic Copper Dissolved Oxygen pH Surfactants Temperature Total, Nitrogen Total, Phosphorus Turbidity
RIO GRANDE DE ARECIBO	LAGO CAONILLAS PRNL <sub>2</sub> 7C1	700	SD	NS 89001 89002 89003	4a	4a	5	5		K Agriculture Onsite Wastewater Systems	Copper Dissolved Oxygen Pesticides Total, Nitrogen Total, Phosphorus Turbidity
RIO GRANDE DE ARECIBO	LAGO GARZAS PRNL₃7A3	108	SD	NS 20050	4a	4a	5	5		K Agriculture Onsite Wastewater Systems	Copper Dissolved Oxygen Lead Pesticides Total, Phosphorus pH
RIO GRANDE DE MANATÍ	LAGO GUINEO PRNL <sub>1</sub> 8C1	54	SD		4a	4a	5	5		H Agriculture K Onsite Wastewater Systems	Dissolved Oxygen Pesticides

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2024 Monitoring Stations NS = Network	Do At	esig U ttai	eral gnat se nmo	ed	Notes	Potential Sources of Pollution	Causes of Impairment
RIO GRANDE DE MANATÍ	LAGO MATRULLAS PRNL₂8C1	77	SD	NS 89009 89010	4a	4a	5	5	K	Agriculture Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	Copper Dissolved Oxygen Lead pH Total, Nitrogen Total, Phosphorus Turbidity
RIO DE LA PLATA	LAGO DE LA PLATA PREL <sub>1</sub> 10A1	560	SD	NS 44400 44950 44950C	4a	4a	5	5	B N	Collection System Failure Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	Arsenic Dissolved Oxygen Lead pH Temperature Total, Nitrogen Total, Phosphorus Turbidity
RIO DE LA PLATA	LAGO CARITE PREL <sub>2</sub> 10A5	333	SD	NS 39900 39950 39950C	4a	4a	5	5	В	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen pH Total, Phosphorus Total, Nitrogen Turbidity
RIO BAYAMON	LAGO CIDRA PREL12A2	268	SD	NS 89029 89030 89031	4a	4a	5	5	F	Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	Copper Dissolved Oxygen Lead Total, Nitrogen Total, Phosphorus Turbidity

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2024 Monitoring Stations NS = Network	Do	tair	nat se ime	ed ent	Notes	Potential Sources of Pollution	Causes of Impairment
RIO GRANDE DE LOIZA	LAGO LOIZA PREL14A1	713	SD	NS 57500 58800 58800D	4a	4a	5	5	С	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Lead pH Temperature Total, Nitrogen Total, Phosphorus Turbidity
RIO GRANDE DE PATILLAS	LAGO PATILLAS PRSL43A1	312	SD	NS 89022 89023 89024	4a	4a	5	5	J	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH Temperature Total, Phosphorus
QUEBRADA MELANIA	LAGO MELANIA PRSL50A	35	SD	NS 89026	4a			5	J	Agriculture Onsite Wastewater Systems	Enterococci Mercury Pesticides Temperature Total, Nitrogen Total, Phosphorus Dissolved Oxygen pH Turbidity
RIO JACAGUAS	LAGO GUAYABAL PRSL <sub>1</sub> 60A1	373	SD	NS 89011 89012 89013	4a	4a	5	5	F	Agriculture Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH Total, Nitrogen Total, Phosphorus Turbidity

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2024 Monitoring Stations NS = Network	D <sub>1</sub>	ttai	nat se	ed	Notes	Potential Sources of Pollution	Causes of Impairment
RIO JACAGUAS	LAGO TOA VACA PRSL₂60A1	836	SD	NS 89014 89015 89016	4a	4a	5	5	F	Agriculture Onsite Wastewater Systems	Dissolved Oxygen pH Total, Nitrogen Total, Phosphorus Temperature Turbidity
RIO BUCANA- CERRILLOS	LAGO CERRILLOS PRSL62A1	700	SD	NS 89032 89033 89034	4a	4a	5	5	J	Urban Runoff/Storm Sewers	Dissolved Oxygen pH Temperature Total, Nitrogen Total, Phosphorus
RIO YAUCO	LAGO LUCHETTI PRSL68A1	266	SD	NS 89017 89018 89019	4a	4a	5	5	F	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH Total, Nitrogen Total, Phosphorus Turbidity
RIO LOCO	LAGO LOCO PRSL69A	69	SD	NS 89021C	4a	4a	5	5	F	Onsite Wastewater Systems	Dissolved Oxygen pH Total, Nitrogen Total, Phosphorus
RIO GRANDE DE AÑASCO	LAGO GUAYO PRWL83H	285	SD	NS 89004 89005 89006	4a	4a	5	5	K	Agriculture Confined Animal Feeding Operations Major Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH Total, Nitrogen Total, Phosphorus Turbidity

#### **Notes:**

Bold and Red causes were listed into 2024 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2024 Cycle. (Old causes)

- B Watershed that has an approved TMDL for Río de la Plata, the TMDL was approved in September 2003, the pollutant was Fecal Coliform.
- C Watershed that has an approved TMDL for Río Grande de Loíza, the TMDL was approved in September 2007, the pollutant was Fecal Coliform.
- **F** Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliform.

- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle.
- J Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- K Watersheds that have an approved TMDL in September 2010, the pollutant was Fecal Coliform. The watersheds are Río Grande de Arecibo, Río Grande de Manatí, Río Grande de Añasco, Río Culebrinas.
- **N** Remains in 2020 303(d) list due to old segmentation evaluation.
- **R1** Primary Contact Recreation
- **R2** Secondary Contact Recreation
- **AL** Aquatic Life
- **DW** Raw Source for Drinking Water

### **Coastal Shoreline**

**Table 38: Size of Waters Impaired by Causes (Monitored Miles for Coastal Waters)** 

	Impairments 2023 Cycle	Causes of Impairments Summary		
Causes of Impairments	Size of Waters Impaired (miles)	Size of Waters Impaired (miles)		
Arsenic	0	49.19		
Copper	0	380.83		
Dissolved Oxygen	43.9	92.65		
Enterococci	212.8	331.0		
Fecal Coliforms	0	7.79		
Lead	0	152.17		
Mercury	0	213.37		
Nickel	0	170.90		
Oil and Grease	0	82.42		
pН	50.5	190.52		
Temperature	196.9	280.8		
Thallium	0	203.74		
Turbidity	248.3	434.94		
Zinc	0	43.80		

**Table 39: Size of Waters Impaired by Sources (Monitored and Unmonitored Coastal waters)** 

Potential Sources of 2021-2023 Cy		Potential Sources of Pollution Summary		
Potential Sources of Pollution	Size of Waters Impaired (miles)	Size of Waters Impaired (miles)		
Agriculture	40.96	40.96		
Collection System Failure	39.80	39.80		
Debris and bottom deposits	100.30	100.30		
Hazardous wastes	100.30	100.30		
Highway/Road/Bridge Construction	4.20	4.20		
Landfills	7.00	7.0		
Major Industrial Point Sources	107.27	107.27		
Major Municipal Point Sources	74.22	74.22		
Marinas and Recreational Boating	211.13	211.13		
Minor Municipal Point Sources	98.19	98.19		
Onsite Wastewater Systems	436.49	436.49		
Surface Mining	7.50	7.50		
Unknown Source	91.29	91.29		
Upstream Impoundment	138.01	138.01		
Urban Runoff/Storm Sewer	373.14	373.14		

**Table 40: Coastal Shoreline Waters Assessment (Monitored and Unmonitored waters)** 

	)								
Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Designated Use Attainment			Overall gnated Use tainment Potential Sources of Pollution		Causes of Impairment
			ED - External Data	R1	R2	AL			
PRNC01 (Punta Borinquén to Punta Sardina)	11.75	SB	NS MAC-044 SBZ-003 SBZ-004 SBZ-005	1	1	5		Onsite Wastewater Systems	Copper Thallium
PRNC02 (Punta Sardina to Punta Manglillo)	14.1	SB	NS MAC-047 MAC-086 SBZ-006	5	5	5		Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Lead Thallium Turbidity
PRNC03 (Punta Manglillo to Punta Morrillos)	9.65	SB	NS SBZ-007 SEG3-01	5	5	5		Collection System Failure Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Temperature Turbidity
PRNC04 (Punta Morrillos to Punta Manatí)	13.66	SB	NS MAC-049 MAC-055 SBZ-008	5	5	5		Collection System Failure Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Mercury Nickel pH Thallium Turbidity
PRNC05 (Punta Manatí to Punta Chivato)	7.46	SB	NS SBZ-010 SEG5-01	5	5	5		Unknown Source	Copper Enterococci Mercury pH Thallium Turbidity Temperature
PRNC06 (Punta Chivato to Punta Puerto Nuevo)	3.23	SB	NS MAC-087 RW-23	5	5	5		Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Enterococci Mercury Temperature Turbidity

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Overall Designated Use Attainment		Designated Use Attainment			Designated Use Attainment		Use	Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL								
PRNC07 (Punta Puerto Nuevo to Punta Cerro Gordo)	5.05	SB	NS MAC-088 SEG7-01 RW-17	1	1	5		Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Mercury pH Temperature Turbidity					
PRNC08 (Punta Cerro Gordo to Punta Boca Juana)	7.32	SB	NS SBZ-013 SBZ-014 RW-18	5	5	5		Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Arsenic Copper Enterococci Lead Nickel Turbidity Zinc					
PREC09 (Punta Boca Juana to Punta Salinas)	5.78	SB	NS MAC-077 SEG9-01 RW-19	5	5	5		Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Arsenic Copper Enterococci Lead Nickel Turbidity pH					
PREC10B (Punta Salinas to Río Bayamón Mouth)	2.91	SB	NS MAC-063	5	5	5		Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Nickel Turbidity					
PREC10C (Río Bayamon Mouth to Isla de Cabras)	6.63	SB	NS SEG10C-01 SEG10C-02	5	5	5		Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Nickel pH Temperature Thallium Turbidity Zinc					

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Desi At	Overall Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		esignated Use Attainment		Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL															
PREC11 (Isla de Cabras to Punta del Morro)	7.79	SB		5	5	5	Н	Major Industrial Point Sources Major Municipal Point Sources Marinas and Recreational Boating Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Copper Dissolved Oxygen Fecal Coliforms												
PREC12 (Punta del Morro to West side of Condado Bridge)	3.5	SB	NS SBZ-018, SBZ-019, RW-20B, RW-20A, ED- CariCoos Buoy	5	5	1	M		Enterococci pH Turbidity <b>Temperature</b>												
PREC13 (East side of Condado Bridge to Punta Las Marías)	4.31	SB	NS B-1 B-2 RW-26 RW-27	5	5	5		Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Temperature Thallium Turbidity												
PREC14 (Punta Las Marías to Punta Cangrejos)	4.19	SB	NS EB-40 B-3 SEG14-01 SEG14-02 RW-21C	1	1	5		Marinas and Recreational Boating Urban Runoff/Storm Sewers	Arsenic Copper Lead Temperature Thallium Turbidity												
PREC15 (Punta Cangrejos to Punta Vacía Talega)	6.23	SB	NS SBZ-024 SBZ-026	5	5	5		Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Copper Enterococci Mercury Nickel Thallium Temperature Turbidity												

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Overall Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL									
PREC16 (Punta Vacía Talega to Punta Miquillo)	9.46	SB	NS SBZ-027 SBZ-028	5	5	5		Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Copper Enterococci Lead Mercury Nickel Temperature Thallium Turbidity Zinc						
PREC17 (Punta Miquillo to Punta La Bandera)	8.41	SB	NS MAC-009 SEG17-01 RW-1A RW-1C	1	1	5		Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Mercury Temperature Turbidity						
PREC18 (Punta La Bandera to Cabezas de San Juan)	10.46	SB	NS MAC-010 SBZ-030 RW-2	1	1	5		Unknown Source	Copper pH Temperature Thallium Turbidity						
PREC19 (Cabezas de San Juan to Punta Barrancas)	7.08	SB	NS MAC-078	5	5	5		Marinas and Recreational Boating Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Enterococci Oil & Grease Temperature Turbidity						
PREC20 (Punta Barrancas to Punta Medio Mundo)	5.33	SB	NS SEG20-01 SEG20-02	5	5	5		Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Enterococci Temperature Thallium Turbidity						
PREC21 (Punta Medio Mundo to Punta Puerca)	3.0	SB		3	3	3	Н								

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Desi At	Overall Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL											
PREC22 (Punta Puerca to Isla Cabras)	3.3	SB		3	3	3	Н										
PREC23 (Isla Cabras to Punta Cascajo)	8.83	SB	NS SEG23-01	1	1	5		Major Industrial Point Sources Marinas and Recreational Boating	Copper Turbidity								
PREC24 (Punta Cascajo to Punta Lima)	9.07	SB	SEG24-02	5	5	5		Major Industrial Point Sources Upstream Impoundment	Copper Dissolved Oxygen Enterococci Temperature Turbidity								
PREC25 (Punta Lima to Morro de Humacao)	9.83	SB	NS MAC-080 MAC-081 SEG25-01 RW-4 RW-31	5	5	5		Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Mercury Temperature Turbidity								
PREC26 (Morro de Humacao to Punta Candelero)	1.84	SB	NS SEG26-01	5	5	5		Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Temperature Turbidity								
PREC27 (Punta Candelero to Punta Guayanés)	3.74	SB	NS SEG27-01	5	5	5		Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Copper Enterococci Thallium Turbidity								
PREC28B (Punta Quebrada Honda to Punta Yeguas)	0.74	SB	NS SBZ-038	5	5	5		Onsite Wastewater Systems Unknown Source	Copper Enterococci Thallium Turbidity								

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Overall Designated Use Attainment		Notes	Potential Sources of Pollution	Causes of Impairment	
PREC28C	4.68	SB	ED - External Data NS	<b>R1</b> 5	<b>R2</b> 5	<b>AL</b> 5		Major Industrial Point Sources	Arsenic
(Punta Guayanés to Punta Quebrada Honda)			MAC-012 SBZ-037					Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Mercury Oil & Grease Temperature Thallium Turbidity
PREC29 (Punta Yeguas to Punta Tuna)	4.35	SB	NS SEG29-01 SEG29-02	5	5	5		Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Enterococci Lead pH Thallium Turbidity Temperature
PREC30 (Punta Tuna to Cabo Mala Pascua)	2.65	SB	NS MAC-082	5	5	5		Unknown Source	Copper Enterococci Turbidity
PRSC31 (Cabo Mala Pascua to Punta Viento)	4.06	SB	SEG31-01	5	5	5		Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Temperature Thallium Turbidity
PRSC32 (Punta Viento to Punta Figuras)	6.16	SB	NS MAC-083 SBZ-040 RW-6 RW-7	5	5	5		Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Enterococci Mercury Temperature Thallium Turbidity

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Desi At	Overall gnated tainme	Use	Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL			
PRSC33 (Punta Figuras to Punta Ola Grande)	8.1	SB	NS MAC-017 SEG33-01	5	5	5		Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Temperature Turbidity
PRSC34 (Punta Ola Grande to Punta Petrona)	40.96	SB	NS MAC-019 SEG34-01 SEG34-02 ED - Stations 09, 10, 19 and 20 from Natural Reserve of Jobos Bay	5	5	5	M	Agriculture Major Industrial Point Sources Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Enterococci Lead Mercury Nickel Oil & Grease pH Temperature Turbidity
PRSC35 (Punta Petrona to Punta Cabullones)	16.19	SB	NS MAC-020 SEG35-01 SEG35-02 ED - CariCoos Buoy	5	5	5	M	Major Municipal Point Sources Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Nickel Thallium Turbidity Zinc
PRSC36B (Punta Cabullones to Punta Carenero)	2.53	SB	NS SEG36B-01	1	1	5		Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococcus Mercury pH Temperature Turbidity
PRSC36C (Punta Carenero to Punta Cuchara)	6.70	SB	NS MAC-022 MAC-023	5	5	5		Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Mercury Oil & Grease Turbidity

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Overall Designated Use Attainment			Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL			
PRSC37B (Punta Cuchara to Cayo Parguera)	3.3	SB	NS MAC-084	5	5	5		Surface Mining Unknown Source Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Mercury Nickel pH Turbidity
PRSC37C (Cayo Parguera to Punta Guayanilla)	4.2	SB	NS MAC-024 MAC-025	5	5	5		Major Industrial Point Sources Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Surface Mining Upstream Impoundment Urban Runoff/Storm Sewers	Copper Lead Mercury Nickel Oil & Grease Thallium Turbidity Zinc
PRSC38 (Punta Guayanilla to Punta Verraco)	13.2	SB	NS MAC-027 MAC-028 MAC-089	5	5	5		Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Mercury Enterococci Oil & Grease Temperature Thallium Turbidity
PRSC39 (Punta Verraco to Punta Ballena)	6.41	SB	NS MAC-030 SEG39-01 G1	1	1	5		Unknown Source	Copper Thallium Turbidity
PRSC40 (Punta Ballena to Punta Brea)	13.26	SB	NS MAC-034 MAC-085 RW-9	1	1	5		Marinas and Recreational Boating Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Nickel pH Temperature Turbidity

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Desi At	Overall gnated tainme	Use	Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL			
PRSC41B1 (Punta Brea to Bahía Fosforescente La Parguera)	10.93	SB	NS SBZ-045 SEG41B1-01 RW-10	1	1	5		Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci pH Temperature Thallium Turbidity
PRSC41A1 (Bahía Fosforescente La Parguera)	2.0	SA		3	3	3	Н		
PRSC41B2 (Bahía Fosforescente La Parguera to Punta Cueva de Ayala)	7.0	SB	NS SBZ-046 SEG41B2-01 RW-33	1	1	5	M	Landfill Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Enterococci pH Temperature Thallium Turbidity
PRSC41A2 (Bahía Monsio José)	3.72	SA		3	3	3	Н		,
PRSC41B3 (Bahía Monsio José to Faro de Cabo Rojo)	13.45	SB	NS SEG41B3-01 SEG41B3-02	5	5	5		Unknown Source	Dissolved Oxygen Enterococci Mercury Nickel Temperature Thallium Turbidity
PRWC42 (Faro de Cabo Rojo to Punta Águila)	2.89	SB	NS SEG42-01	1	1	5		Unknown Source	Dissolved Oxygen Enterococci pH Temperature Turbidity

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network ED - External Data	Desi	Overall gnated tainme R2	Use	Notes	Potential Sources of Pollution	Causes of Impairment
PRWC43 (Punta Águila to Punta Guaniquilla)	9.54	SB	NS MAC-037 SBZ-047, SBZ-048 RW-12A RW-12B RW-13 RW-14A	1	1	5		Collection System Failure Marinas and Recreational Boating Minor Municipal Point Sources Onsite Wastewater Systems	Enterococci Temperature Turbidity
PRWC44 (Punta Guaniquilla to Punta La Mela)	2.5	SB	NS SBZ-050 SBZ-051, RW-8	1	1	5		Onsite Wastewater Systems	Enterococci pH Temperature Thallium Turbidity
PRWC45 (Punta La Mela to Punta Carenero)	2.95	SB	NS SEG45-01	5	5	5		Collection System Failure Marinas and Recreational Boating Onsite Wastewater Systems	Copper Enterococci Lead Thallium Turbidity
PRWC46 (Punta Carenero to front of Cayo Ratones)	4.0	SB	NS SBZ-052	5	5	5		Collection System Failure Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Lead Temperature Thallium Turbidity
PRWC47 (In front of Cayo Ratones to Punta Guanajibo)	3.85	SB	NS SEG47-01	1	1	5		Onsite Wastewater Systems	Copper Nickel Turbidity Temperature
PRWC48 (Punta Guanajibo to Punta Algarrobo)	5.6	SB	NS MAC-038 MAC-040	5	5	5		Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Nickel Oil & Grease pH Thallium Turbidity Temperature

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Desi At	Overall gnated tainme	Use nt	Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL			
PRWC49 (Punta Algarrobo to Punta Cadena)	6.98	SB	NS MAC-041 SEG49-01 RW-15	5	5	5		Major Municipal Point Sources Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Nickel pH Temperature Turbidity
PRWC50 (Punta Cadena to Punta Higüero)	4.98	SB	NS SBZ-054 SBZ-055 RW-5	5	5	5		Onsite Wastewater Systems Unknown Source Upstream Impoundment	Copper Enterococci Lead Mercury Nickel Turbidity pH Temperature
PRWC51 (Punta Higüero to Punta del Boquerón)	6.14	SB	NS SEG51-01 SEG51-02 RW-22	5	5	5		Onsite Wastewater Systems Unknown Source	Copper Enterococci Lead Mercury Nickel Turbidity
PRWC52 (Punta del Boquerón to Punta Borinquén)	6.8	SB	NS MAC-043 SBZ-002 SBZ-003 SBZ004 RW-16 RW-16A	1	1	5		Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Turbidity
PRCC53 (Culebra Island)	32.7	SB	NS RW-3	2	2	5	Н	Debris and bottom deposits Hazardous Wastes Marinas and Recreational Boating Onsite Wastewater Systems	pH Turbidity
PRVC54A (Bahía Mosquito)	3.0	SA		3	3	3	Н		

Waterbody Name (AU ID)	Size of AU (miles)	Class	2024 Monitoring Station NS - Network	Desi	Overall gnated tainme	Use	Notes	Potential Sources of Pollution	Causes of Impairment
			ED - External Data	R1	R2	AL			
PRVC54B (Vieques Island)	67.6	SB		1	1	2		Debris and bottom deposits Hazardous Wastes Marinas and Recreational Boating	
								Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
PRMC55 (Mona Island)	18.6	SB		3	3	3	Н		

**Notes:** 

Bold and Red causes were listed into 2024 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2024 Cycle. (Old causes)

H - If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle.

M – External Data

R1 - Primary Contact Recreation

R2 - Secondary Contact Recreation

**AL** - Aquatic Life

### PART C. CWA Section 314 (Clean Lakes Program)

The reservoirs in PR were constructed in the main rivers basins to store water for domestic and industrial consumption, irrigation, production of electrical power, floods control, and recreation. The recreational activities performed in the reservoirs include direct contact (swimming), indirect contact (recreational fishing and strolls in boats). Also, and more important is that lakes are mostly used as raw sources of drinking water supply and for protection and propagation of fish, shellfish, and wildlife (aquatic life).

The Clean Lakes Monitoring Network operated by DNRE monitors the water quality in the 18 major lakes or reservoirs that are mostly used as raw sources of drinking water (Table 12). Water quality monitoring is also used to identify trends in lake water quality improvement or contamination and to update lake trophic status.

Lakes trophic status is determined as follows. Table 41 to

Table 43 show the criteria for the determination of the trophic status.

**Oligotrophic** (O) - Low levels of nutrients in lakes, poor primary production, and sunlight.

**Mesotrophic** (M) - Moderate levels of nutrients in lakes, primary production, and moderate penetration of sunlight.

**Eutrophic** (E) - High levels of nutrients, high primary production, dense aquatic plants growth, low sunlight penetration.

Table 41: OPSI/CEPIS Criteria for the Determination of the Trophic Status

Trophic Status	Phosphorus concentration (mg/L)
Oligotrophic (O)	< 0.03
Mesotrophic (M)	0.03 - 0.05
Eutrophic (E)	> 0.05

Table 42: Trophic Status of Significant Lakes/Reservoirs

Description	Number of Lakes/Reservoirs	Acres of Lakes/Reservoirs
Total in State	19 *	7,378
Assessed	18 **	7,324
Oligotrophic	7	3,688
Mesotrophic	3	220
Eutrophic	8	3,416

<sup>\*</sup> Including Las Curias Lake (55 acres) (SJBES)

<sup>\*\*</sup> Lago Guineo (54 acres) not assess for this cycle

**Table 43: Puerto Rico Lakes Trophic Status** 

	Lake Size AU (acres)		Trophic Status <sup>1</sup> [P mg/L] <sup>2</sup>				
Lake			2022 Cycle (Oct.2019-Sept. 2021)	2024 Cycle (Oct.2021-Sept.2023)			
Guajataca	1000	PRNL3A1	(0.08) E	0.01 O			
Dos Bocas	634	PRNL <sub>1</sub> 7A1	(0.13) E	0.14 E			
Caonillas	700	PRNL <sub>2</sub> 7C1	(0.06) E	0.02 O			
Garzas	108	PRNL <sub>3</sub> 7A3	(0.38) E	0.04 M			
Matrullas	77	PRNL <sub>2</sub> 8C1	(0.04) M	0.07 M			
La Plata	560	PREL <sub>1</sub> 10A1	(0.04) M	0.14 E			
Carite	333	PREL <sub>2</sub> 10A5	(0.03) M	0.01 O			
Cidra	268	PREL12A2	(0.10) E	0.02 O			
Las Curias	55	PREE13A2	(0.10) E	0.11 E			
Loíza	713	PREL14A1	(0.18) E	0.18 E			
Patillas	312	PRSL43A1	(0.04) M	0.11 E			
Melanía	35	PRSL50A	(0.10) E	0.03 M			
Guayabal	373	PRSL <sub>1</sub> 60A	(0.08) E	0.07 E			
Toa Vaca	836	PRSL <sub>2</sub> 60A	(0.04) M	0.02 O			
Cerrillos	700	PRSL62A	(0.06) E	0.07 E			
Luchetti	266	PRSL68A1	(0.09) E	0.02 O			
Loco	69	PRSL69A	(0.02) O	0.18 E			
Guayo	285	PRWL83H	Not assessed	0.02 O			

#### (1) LAKES TROPHIC STATUS:

Oligotrophic (O) - Low levels of nutrients in lakes, poor primary production, and sunlight.

**Mesotrophic** (M) - Moderate levels of nutrients in lakes, primary production, and moderate penetration of sunlight. **Eutrophic** (E) - High levels of nutrients, high primary production, dense aquatic plants growth, low sunlight penetration.

(2) Phosphorous value corresponds to the average data during two-year period.

Following is the trend analysis for low dissolved oxygen (DO) for each monitored lake (Table 44). This trend analysis was based on *Oficina Panamericana de la Salud e Ingeniería / Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente* (OPSI/CEPIS, in spanish) criteria.

Table 44: Trend Analysis for Low Dissolve Oxygen Parameter in Puerto Rico Lakes

			DO* (mg/L)		
Lakes	Lake Size	2020	2022	2024	Trend
	(acres)	Cycle	Cycle	Cycle	
Caonillas	700	4.4	4.2	4.5	Improved
Guayo	285	3.8	4.1	4.4	Stable
Matrullas	77	4.4	5.2	4.3	Degraded
Guayabal	373	5.4	5.9	5.3	Degraded
Toa Vaca	836	3.5	5.1	4.9	Stable
Luchetti	266	4.9	7.6	4.9	Degraded
Loco	69	5.4	3.7	5.4	Improved
Patillas	312	4.6	4.4	4.3	Stable
Las Curias	55	1.8	2.4	2.5	Stable
Cidra	268	4.9	3.9	4.3	Improved
Cerrillos	700	5.2	4.7	3.6	Degraded
Loíza	713	4.0	4.9	4.2	Degraded
Guajataca	1000	5.7	4.8	4.4	Degraded

			DO* (mg/L)		
Lakes	Lake Size (acres)	2020 Cycle	2022 Cycle	2024 Cycle	Trend
Dos Bocas	634	5.3	5.2	5.0	Stable
Carite	333	4.3	5.2	5.1	Stable
La Plata	560	4.3	4.4	3.8	Degraded
Garzas	108	3.6	3.5	3.8	Stable
Melanía	35	7.1	7.7	6.5	Degraded

<sup>\*</sup> Dissolved oxygen value corresponds to the average data during two-year period.

#### PART D. Wetlands and Coral Reefs

#### 1.0 Wetlands

Public policy on wetlands in PR defines wetlands as those saturated by surface and groundwater systems, in an interval and duration, sufficient to support vegetation typically adapted to saturated soil conditions, flooding or engulf. For the protection of wetlands, there are no specific parameters of water quality, however in the PRWQSR, as amendment on August 8, 2022, in order to be consistent with the anti-degradation policy, classification SE of waters: "surface water and wetlands of exceptional ecological value, whose existing conditions shall be altered in order to preserve its natural characteristics". The concentration of any parameter, whether considered in Rule 1303.2(E), shall not be altered, except by natural phenomena, as defined in PRWQSR. In PR the protection and conservation of wetlands is the result of the efforts of several local and federal agencies, namely PRDRNA, Corps of Engineers (COE), United States Fish and Wildlife Service (USFWS) and the USEPA, as well as community groups and environmental organizations.

Wetlands are the coastal ecosystems that are most abundant in PR. Examples of estuarine wetlands are those close to coastal rivers, salt flats and mangroves. Freshwater wetlands comprise about 24% of the total area of wetlands. Freshwater wetlands include swamps, ponds, marshes, and humid grasslands (Figure 8). Other wetlands categories comprise 11% of the total area of wetlands. Estuarine and freshwater wetlands are most abundant in the eastern, 2/3 of the north coast of the island, and all along the south coast, although examples are found on all coasts of the main island Vieques and Culebra have no freshwater wetlands (Figure 9). The estuarine wetlands comprise about 65% of the total area of wetlands. Examples of estuarine wetlands are those close to coastal rivers, salt flats and mangroves.

Wetlands provide habitat for thousands of species of fish, wildlife and plants, and act as nurseries for many saltwater and freshwater fishes and shellfish of commercial significance. They also provide important ecological services such as flood control, water filtration and the supply of groundwater, and they provide recreational and wildlife viewing opportunities for millions of people. Wetlands are facing numerous, ongoing challenges, such as agriculture, development, and resource extraction, as well as sea level rise, increasing storm severity and drought due to climate change.

The factors that most influence coastal wetlands are drainage, channelization and filling, disposal of industrial, agricultural, and domestic waste, civil constructions, tourism expansion, storms and hurricanes, global climate change. The value of wetlands in PR for wildlife is well documented. For example, the salt flats of Cabo Rojo, on the southwest coast, provide areas for rest and feeding of hundreds of migratory birds en route between North and South America. This area is one of the most valuable wetlands of the island. Before the drainage of coastal wetlands for agricultural purposes, freshwater marshes such as the Laguna Cartagena, Guánica Lagoon and swamp supplied water-logged habitat for hundreds of species of resident and migratory birds.

The wetlands of the highlands of central area are the last refuge of the Puerto Rican parrot, an endangered species. Even wetlands of metropolitan San Juan (Laguna La Torrecilla, Torrecilla Baja, Laguna de Piñones to Vacía Talega) provide excellent habitats for wildlife, fish hatcheries maintain high economic value and provide recreational and educational opportunities to population.

Thirty-eight (38) species of vertebrates, mollusks and crustaceans and forty-six (46) species of birds, some rare or endangered species, such as the ladybug, the gannet, the Dominican duck, duck, and pigeon-headed Warbler have been seen in these areas. Beaches, also associated with these urban wetlands provide nesting sites for Hawksbill turtles and leatherback shell, both endangered species (Del Llano et al, 1986). In PR, each acre impacted is mitigated by 0.79 acres instead of 1.01 acres as required by public policy of zero losses; indeed, the practice adopted by proponents of creating wetlands followed by the improvement, restoration, and preservation, represents a threat to these systems by the time it takes to reach its former productivity and functionality (Perez, 2003).

U.S. Fish and Wildlife Service completed the most comprehensive and detailed U.S. wetland data set ever produced, capping a thirty- five (35) year effort by the Service to map the extent of the nation's wetlands. The Wetlands Inventory Mapper has digitally mapped and made publicly available wetlands in the lower forty-eight (48) states, including PR. It is an invaluable aid to landowners, developers, government planners and permitting authorities, conservation organizations and academic institutions in their collective efforts to ensure wetland conservation and inform economic development.

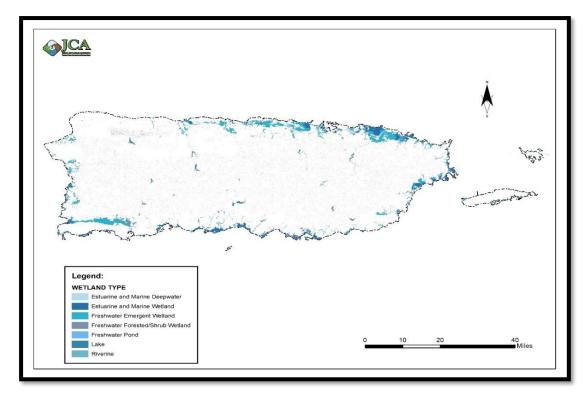


Figure 8: Puerto Rico Wetlands Type

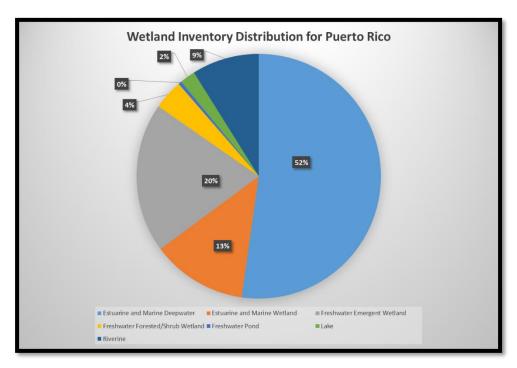


Figure 9: Puerto Rico Wetlands Distribution

#### 2.0 Coral Reef Ecosystem

Coral reefs are the most productive ecosystems in the marine environment. They are closely related to other terrestrial and marine ecosystems. Some of these associated ecosystems are coastal wetlands, which include mangroves, marine wetlands, such as seagrasses, beaches among others. Coral reefs provide an extraordinary amount of goods and services, such as: protection of the coast, habitats for fishing craft, commercial and recreational fishing, spaces for education, research, recreation and tourism, food (Alvarez-Filip L., 2009; Barbier, E.B., 2011; Kennedy, E.V et al., 2013; Ferrario, F., et al. 2014). Furthermore, are a source of natural products of high pharmacological value in food production and in biomedical investigation (Goenaga and Boulon, 1992).

However, the coral reefs in PR are significantly degraded due to a variety of anthropogenic factors that exacerbate the impacts of natural factors (e.g., hurricanes, diseases, syndromes in corals) (Hernandez-Delgado, 2005). The anthropogenic factors that could affect the coral reef ecosystem are the following: deforestation, and sedimentation. The deterioration of the water quality is mainly associated with a combination of precise and dispersed sources of pollution. Indiscriminate extraction and overfishing could destabilize the ecosystem.

PR is surrounded by approximately 500,000 hectares of coral reef ecosystems of easy access, whose depth does not exceed 20 meters (PMZC, 2009). The biodiversity at the coral reefs of P R is representative of this region of the Caribbean. The most extensive development of coral reefs is observed in the Southwest and northeast of the insular shelf of PR. The northeast coast is partially protected from wave action by a string of emerging reefs that provide protection, (DNER-PMZC 2011). The natural reserve, in Fajardo and La Reserve Natural of Luis Peña Channel in Culebra contain the most diverse coral reefs in this region. (Hernández - Delgado E.A. 2005; Schärer-M.T., M.I. Németh, C. ten 2009; García - Sais, et al.2008a). The importance of coral reefs and their status in PR is not different to what happens elsewhere. Coral reefs, according to the Management Plan for the Conservation and Protection of Coral Reefs of PR of 2009, present conditions of lower coral cover, increased disease, significant algal colonization of all kinds, species invasion exotic and overall loss of biodiversity in the ecosystem (Strategic Management Plan of the Coral Reefs in PR, DNER, 2014).

In PR the Law 147, Ley para la Protección, Conservación y Manejo de los Arrecifes de Coral en PR, to develop a conservation program, management, and protection of coral reefs, and it promotes the development of a sustainable management plan. The act defines a coral reef as the ecosystem of coral, skeleton of this and other marine species associated with the same, such as seagrass and marine herbs.

The PRDNER in collaboration with NOAA developed a Benthic Habitat of PR and the U.S. Virgin Island (Figure 10). These images were used to create maps of the region's coral reefs, seagrass beds, mangrove forests, and other important marine habitats that are related with the coral reef ecosystem (Figure 11 thru Figure 13).

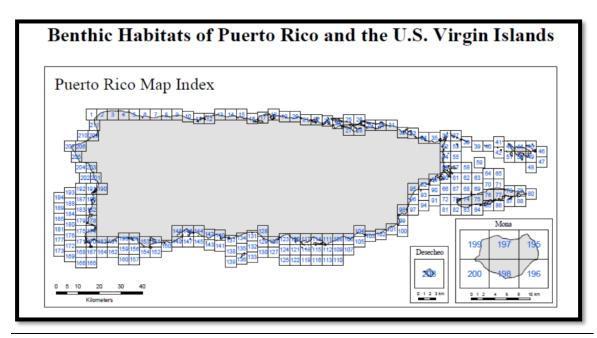


Figure 10: Benthic Habitats of Puerto Rico and the U.S. Virgin Islands

On the other hand, the PRDNER are conducting inspections at different basins throughout all PR with the purpose of maintain an inventories of the discharging of points and non points sources of contamination. These inspections are intended to identify all possible sources of contamination and lead to fulfillment of the facilities that represent potential sources of pollution. These actions improve the water quality of the water body and will protect the marine ecosystems including the coral reef ecosystem.

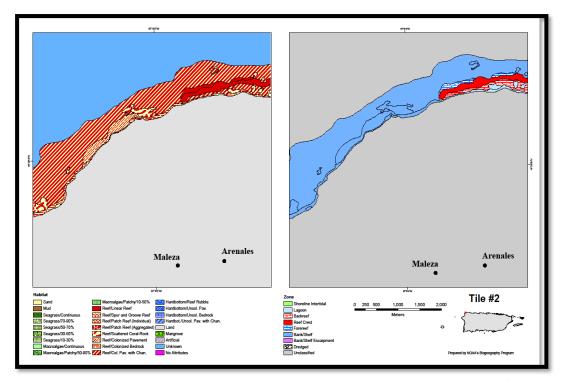


Figure 11: Example of one tile of the Benthic Map and the habitat classification

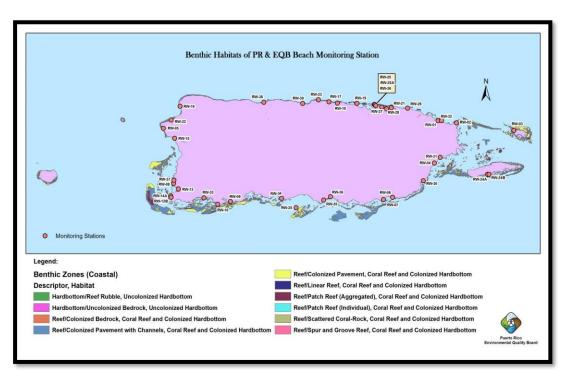


Figure 12: Benthic Habitats of PR and the Location of the PREQB Beach Monitoring Station

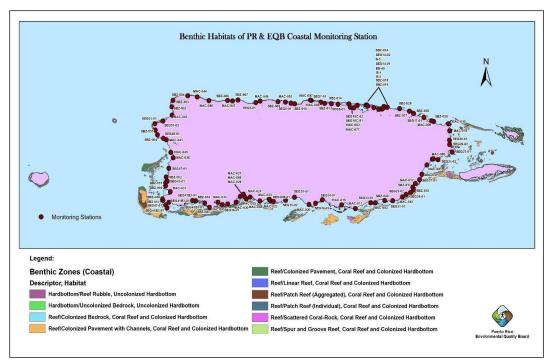


Figure 13: Benthic Habitats of PR and the Location of the PREQB Coastal Monitoring Station

#### PART E. 303(d) List

### 1.0 Listing Criteria

The PR 2024 List of Impaired Waters (303(d) List) is based on the water quality data generated through the water quality monitoring networks, as explained in Section 2.0 Monitoring Program. In the case of the 2024 303(d) List, we considered the most recent available water quality data for each parameter in each AU (either new data or collected during October 1, 2021, to September 30, 2023). In this assessment, the AU will be assessed as established in Section V. Five – Part Categorization of Water of the Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of Clean Water Act.

A segment (AU) is considered impaired when WQS are not being supported and/or met and is considered threatened when WQS are not expected to be fully supported and/or met in the next listing cycle. In classifying the status of water quality in 2006, states have the option to report each AU in one or more categories (multiple categories option).

When monitoring results are below the detection level, half of the detection level will be used to determine compliance with the applicable standard. In cases where the detection level is above the water quality standard, DNER will not include the parameter on the 303(d) list unless definitive data above the detection level is available.

In the case of Oils and Grease parameter, the applicable water quality narrative standard establishes that: "The waters of Puerto Rico will be substantially free of floating oils and grease not derived from petroleum, as well as oils and grease derived from petroleum". This narrative standard is interpreted as zero concentration to reflect the absence of oils and grease. Since the lowest possible detection level for the analysis of oils and grease is 5 mg/L, the DRNA will not include this parameter in list 303(d) unless definitive data are available above the detection level.

The waters considered to be impaired have been included in Category 5 and it is necessary to develop and implement a TMDL for the parameter not in compliance. In the case of basin for which TMDLs have been developed, the AU will continue to be listed for those parameters that were not addressed in the TMDL. Those parameters addressed in the TMDL are delisted from the respective AU.

If any of the parameters listed in the 2022 cycle exceed the applicable water quality standard at least once in 2024 Cycle, the parameter continues to appear as an impairment cause and the AU continues to be listed in Category 5. The 303(d) List 2024 will be included in Appendix I of this Integrated Report.

### 2.0 Delisting Criteria

If a previously listed parameter complied fully with the applicable water quality standard during the 2022 (October 1, 2019, to September 30, 2021) and 2024 (October 1, 2021, to September 30, 2023) cycles, that specific parameter will be delisted from 303(d) List.

PRDNER will remove a specific parameter from the list when the TMDL for the corresponding AU has been approved by USEPA. Among other valid delisting reasons are change in water quality standard, original basis for listing was incorrect, hydrological and habitat alteration (4c).

During this cycle it is proposed to remove forty-six (46) parameter/assessment unit's combination from the 303(d) List (Table 45).

Table 45: Parameter/AU Combinations to be delisted

AU ID	TYPE OF	PARAMETER	REASON FOR DELISTING
AU ID	WATER	TAKAMETEK	REAGON FOR DELIGITING
1. PRNR7A1	River	Temperature	Water Quality Standard met
2. PRNR7A1	River	Total, Phosphorus	Water Quality Standard met
3. PRNR7C1	River	Total, Nitrogen	Water Quality Standard met
4. PRNR7C1	River	Turbidity	Water Quality Standard met
5. PRNR7C2	River	Total, Nitrogen	Water Quality Standard met
6. PRNR7C2	River	Turbidity	Water Quality Standard met
7. PRNR7C3	River	Total, Nitrogen	Water Quality Standard met
8. PRNR7C3	River	Total, Phosphorus	Water Quality Standard met
9. PRNR7C3	River	Turbidity	Water Quality Standard met
10. PRNR8E1	River	Total, Nitrogen	Water Quality Standard met
11. PRNR8E1	River	Turbidity	Water Quality Standard met
12. PRER10A3	River	рН	Water Quality Standard met
13. PRER10A5	River	Copper	Water Quality Standard met
14. PRER10A5	River	Lead	Water Quality Standard met
15. PRER10A5	River	рН	Water Quality Standard met
16. PRER10J	River	рН	Water Quality Standard met
17. PRER10J	River	Total, Phosphorus	Water Quality Standard met
18. PRER12A1	River	Ammonia	Water Quality Standard met
19. PRER12B	River	Dissolved Oxygen	Water Quality Standard met
20. PRER14A1	River	Total, Phosphorus	Water Quality Standard met
21. PRER14G2	River	Ammonia	Water Quality Standard met
22. PRER14G2	River	рН	Water Quality Standard met
23. PRER14G2	River	Surfactants	Water Quality Standard met
24. PRER14I	River	Surfactants	Water Quality Standard met
25. PRER33A	River	Ammonia	Water Quality Standard met
26. PRER33A	River	Mercury	Water Quality Standard met
27. PRER33A	River	рН	Water Quality Standard met
28. PRER35A	River	рН	Water Quality Standard met
29. PRER35A	River	Lead	Water Quality Standard met
30. PRSR43A2	River	рН	Water Quality Standard met
31. PRSR57A2	River	pН	Water Quality Standard met

AU ID	TYPE OF WATER	PARAMETER	REASON FOR DELISTING
32. PRSR62A1	River	Temperature	Water Quality Standard met
33. PRSR62A2	River	pН	Water Quality Standard met
34. PRSR62A2	River	Total, Phosphorus	Water Quality Standard met
35. PRSR62A2	River	Turbidity	Water Quality Standard met
36. PRSR63A	River	Temperature	Water Quality Standard met
37. PRSR63A	River	Total, Nitrogen	Water Quality Standard met
38. PRSR63A	River	Total, Phosphorus	Water Quality Standard met
39. PRSR63A	River	Turbidity	Water Quality Standard met
40. PRSR67A	River	Turbidity	Water Quality Standard met
41. PRWR77D	River	Turbidity	Water Quality Standard met
42. PRWR95A	River	Copper	Water Quality Standard met
43. PREE13A2	SJBES	Ammonia	Water Quality Standard met
44. PREE13A3	SJBES	Ammonia	Water Quality Standard met
45. PREE13A3	SJBES	Surfactants Water Quality Standard met	
46. PRNL27C1	Lake	pH Water Quality Standard met	

### 3.0 Priority Ranking and TMDL Development Status

As result of the development of PR Unified Watershed Assessment and Restoration Activities (PRUWARA), eighteen (18) main basins, which correspond to one hundred – fifteen (115) AU were identified as high priority where the PRDNER would implement restoration activities including developing TMDLs. The criteria used to establish the priority ranking and selection of basins appear in the document PRUWARA. Table 46 identifies the priority basins according to the corresponding regions.

**Table 46: Priority Basins** 

BASIN	REGION	AU PER BASIN
Quebrada Blasina	East	1
Río Bayamón	East	5
Río Blanco	East	2
Río Grande de Loíza	East	15
Río Hondo	East	1
Río De La Plata	East	18
Río Piedras	East	1
Río Cibuco	North	6
Río Grande de Arecibo	North	12
Río Grande de Manatí	North	11
Río Guajataca	North	4
Río Coamo	South	3
Río Grande de Patillas	South	4
Río Guayanilla	South	1
Río Culebrinas	West	11
Río Grande de Añasco	West	10
Río Guanajibo	West	9
Río Yagüez	West	1

In the 2002 303 (d) List, the PRDNER established a priority ranking to determine the sequence of development for restoration activities, including the development and implementation of the TMDL. This priority ranking considered the priority of basins restoration and established three levels of priority:

- ✓ **High Priority**: basins including in the PRUWARA as basins of priority due to the high pollution level related to all the designated uses.
- ✓ **Intermediate (moderate) Priority**: basins that were not included in the PRUWARA and have 50% or more of its waters as impaired for some designated use.
- ✓ **Low Priority**: basins that were not included in the PRUWARA and have less than 50% of its waters listed as impaired for some designated use.

In determining the priority for the development of TMDLs for listings watersheds ranking priorities, pollution severity, and changes in regulations applicable to water quality standards are taken into consideration. For the 2024 cycle, three hundred forty-eight (348) AU / parameter is evaluated as a high priority for the development of the TMDLs (Table 47) and five hundred thirty (530) with intermediate (moderate) and low priority (Table 48).

Table 47: Basin Assessment Units/Parameter Combination with high priority to

development of TMDL

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
1. Río Guajataca	Río Guajataca	PRNR3A1	Chromium VI	Н
2. Río Guajataca	Río Guajataca	PRNR3A1	Cyanide	Н
3. Río Guajataca	Río Guajataca	PRNR3A1	Dissolved Oxygen	Н
4. Río Guajataca	Río Guajataca	PRNR3A1	Enterococci	Н
5. Río Guajataca	Río Guajataca	PRNR3A1	Surfactants	Н
6. Río Guajataca	Río Guajataca	PRNR3A1	Total, Nitrogen	Н
7. Río Guajataca	Río Guajataca	PRNR3A2	Chromium VI	Н
8. Río Guajataca	Río Guajataca	PRNR3A2	Cyanide	Н
9. Río Guajataca	Río Guajataca	PRNR3A2	Enterococci	Н
10. Río Guajataca	Río Guajataca	PRNR3A2	pН	Н
11. Río Guajataca	Río Guajataca	PRNR3A2	Total, Nitrogen	Н
12. Río Guajataca	Río Guajataca	PRNR3A2	Total, Phosphorus	Н
13. Río Guajataca	Río Guajataca	PRNR3A2	Turbidity	Н
14. Río Guajataca	Quebrada Las Sequías	PRNQ3B	Arsenic	Н
<ol><li>15. Río Guajataca</li></ol>	Quebrada Las Sequías	PRNQ3B	Dissolved Oxygen	Н
16. Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Chromium VI	Н
17. Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Enterococci	Н
18. Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Turbidity	Н
19. Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Chromium VI	Н
20. Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Enterococci	Н
21. Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Pesticides	Н

22. Río Grande de AreciboRío Grande de AreciboPRNR7A2Temperature23. Río Grande de AreciboRío Grande de AreciboPRNR7A2Total, Nitrogen24. Río Grande de AreciboRío Grande de AreciboPRNR7A2Total, Phosphorus25. Río Grande de AreciboRío Grande de AreciboPRNR7A2Turbidity26. Río Grande de AreciboTúnelPRNR7A3Chromium VI27. Río Grande de AreciboTúnelPRNR7A3Cyanide28. Río Grande de AreciboTúnelPRNR7A3Enterococci29. Río Grande de AreciboTúnelPRNR7A3pH30. Río Grande de AreciboTúnelPRNR7A3Total, Phosphorus31. Río Grande de AreciboRío CaonillasPRNR7C1Chromium VI32. Río Grande de AreciboRío CaonillasPRNR7C1Enterococci33. Río Grande de AreciboRío CaonillasPRNR7C1Total, Phosphorus34. Río Grande de AreciboRío LimónPRNR7C2Chromium VI35. Río Grande de AreciboRío LimónPRNR7C2Enterococci36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	H H H H H H H H
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30. Río Grande de Arecibo  Túnel  PRNR7A3  Total, Phosphorus  Río Caonillas  PRNR7C1  Chromium VI  Río Grande de Arecibo  Río Caonillas  PRNR7C1  Enterococci  Río Grande de Arecibo  Río Caonillas  PRNR7C1  Total, Phosphorus  PRNR7C1  Total, Phosphorus  Al Río Grande de Arecibo  Río Limón  PRNR7C2  Chromium VI  St. Río Grande de Arecibo  Río Limón  PRNR7C2  Enterococci  Río Limón  PRNR7C2  Temperature  Río Grande de Arecibo  Río Limón  PRNR7C3  Chromium VI  Río Grande de Arecibo  Río Limón  PRNR7C3  Chromium VI	H H
31. Río Grande de AreciboRío CaonillasPRNR7C1Chromium VI32. Río Grande de AreciboRío CaonillasPRNR7C1Enterococci33. Río Grande de AreciboRío CaonillasPRNR7C1Total, Phosphorus34. Río Grande de AreciboRío LimónPRNR7C2Chromium VI35. Río Grande de AreciboRío LimónPRNR7C2Enterococci36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	Н
32. Río Grande de AreciboRío CaonillasPRNR7C1Enterococci33. Río Grande de AreciboRío CaonillasPRNR7C1Total, Phosphorus34. Río Grande de AreciboRío LimónPRNR7C2Chromium VI35. Río Grande de AreciboRío LimónPRNR7C2Enterococci36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	
33. Río Grande de AreciboRío CaonillasPRNR7C1Total, Phosphorus34. Río Grande de AreciboRío LimónPRNR7C2Chromium VI35. Río Grande de AreciboRío LimónPRNR7C2Enterococci36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	Н
34. Río Grande de AreciboRío LimónPRNR7C2Chromium VI35. Río Grande de AreciboRío LimónPRNR7C2Enterococci36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	
34. Río Grande de AreciboRío LimónPRNR7C2Chromium VI35. Río Grande de AreciboRío LimónPRNR7C2Enterococci36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	Н
36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	Н
36. Río Grande de AreciboRío LimónPRNR7C2Temperature37. Río Grande de AreciboRío YunesPRNR7C3Chromium VI	Н
37. Río Grande de Arecibo Río Yunes PRNR7C3 Chromium VI	Н
	Н
38. Río Grande de Arecibo Río Yunes PRNR7C3 Enterococci	Н
39. Río Grande de Arecibo Río Yunes PRNR7C3 Temperature	Н
40. Río Grande de Arecibo Río Tanamá PRNR7B2 Chromium VI	H
41. Río Grande de Arecibo Río Tanamá PRNR7B2 Copper	H
42. Río Grande de Arecibo Río Tanamá PRNR7B2 Enterococci	H
43. Río Grande de Arecibo Río Tanamá PRNR7B2 Lead	H
44. Río Grande de Arecibo Río Tanamá PRNR7B2 Total, Phosphorus	H
45. Río Grande de Arecibo Río Tanamá PRNR7B2 Turbidity	H
46. Río Grande de Manatí Río Grande de Manatí PRNR8A1 Chromium VI	H
47. Río Grande de Manatí Río Grande de Manatí PRNR8A1 Enterococci	H
48. Río Grande de Manatí Río Grande de Manatí PRNR8A1 pH	H
49. Río Grande de Manatí Río Grande de Manatí PRNR8A1 Temperature	H
50. Río Grande de Manatí Río Grande de Manatí PRNR8A1 Total, Phosphorus	H
51. Río Grande de Manatí Río Grande de Manatí PRNR8A1 Turbidity	H
52. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Chromium VI	H
53. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Copper	H
54. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Cyanide	H
55. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Enterococci	H
56. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Lead	Н
57. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Mercury	H
58. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Temperature	H
59. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Total, Nitrogen	H
60. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Total, Phosphorus	H
61. Río Grande de Manatí Río Grande de Manatí PRNR8A2 Turbidity	H
62. Río Grande de Manatí Río Cialito PRNR8B Chromium VI	Н
63. Río Grande de Manatí Río Cialito PRNR8B Enterococci	H
64. Río Grande de Manatí Río Cialito PRNR8B Total, Phosphorus	H
65. Río Grande de Manatí Río Cialito PRNR8B Turbidity	**

66. Río Grande de Manatí   Río Orocovis   PRNRSE1   Cyanide   H     68. Río Grande de Manatí   Río Orocovis   PRNRSE1   Cyanide   H     69. Río Grande de Manatí   Río Orocovis   PRNRSE1   Total, Phosphorus   H     70. Río Grande de Manatí   Río Orocovis   PRNRSE1   Total, Phosphorus   H     71. Río Grande de Manatí   Río Botijas   PRNRSE2   pH   H     71. Río Cibuco   Río Cibuco   PRNR9A   Chromium VI   H     72. Río Cibuco   Río Cibuco   PRNR9A   Enterococci   H     73. Río Cibuco   Río Cibuco   PRNR9A   Enterococci   H     74. Río Cibuco   Río Cibuco   PRNR9A   Enterococci   H     75. Río Cibuco   Río Cibuco   PRNR9A   Enterococci   H     75. Río Cibuco   Río Cibuco   PRNR9A   Total, Nitrogen   H     76. Río Cibuco   Río Cibuco   PRNR9A   Total, Nitrogen   H     77. Río Cibuco   Río Cibuco   PRNR9A   Total, Phosphorus   H     77. Río Cibuco   Río Cibuco   PRNR9A   Total, Phosphorus   H     77. Río Cibuco   Río Cibuco   PRNR9A   Turbidity   H     78. Río Cibuco   Río Cibuco   PRNR9A   Turbidity   H     79. Río De La Plata   Río De La Plata   PRERIOA1   Chromium VI   H     80. Río De La Plata   Río De La Plata   PRERIOA1   Dissolved Oxygen   H     81. Río De La Plata   Río De La Plata   PRERIOA1   Dissolved Oxygen   H     82. Río De La Plata   Río De La Plata   PRERIOA1   Enterococci   H     83. Río De La Plata   Río De La Plata   PRERIOA1   Enterococci   H     84. Río De La Plata   Río De La Plata   PRERIOA1   Enterococci   H     85. Río De La Plata   Río De La Plata   PRERIOA1   Enterococci   H     85. Río De La Plata   Río De La Plata   PRERIOA1   Total, Prosphorus   H     86. Río De La Plata   Río De La Plata   PRERIOA1   Total, Prosphorus   H     87. Río De La Plata   Río De La Plata   PRERIOA1   Total, Prosphorus   H     88. Río De La Plata   Río De La Plata   PRERIOA3   Enterococci   H     89. Río De La Plata   Río De La Plata   PRERIOA3   Enterococci   H     89. Río De La Plata   Río De La Plata   PRERIOA3   Enterococci   H     99. Río De La Plata   Río De La Plata   PRERIOA4   Chromium VI   H     91.	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
68. Río Grande de Manatí Río Orocovis PRNR8E1 Enterococci H 69. Río Grande de Manatí Río Orocovis PRNR8E1 Total, Phosphorus H 70. Río Grande de Manatí Río Botijas PRNR8E2 71. Río Cibuco Río Cibuco PRNR9A Chromium VI H 71. Río Cibuco Río Cibuco PRNR9A Enterococci H 72. Río Cibuco Río Cibuco PRNR9A Enterococci H 73. Río Cibuco Río Cibuco PRNR9A Enterococci H 74. Río Cibuco Río Cibuco PRNR9A Chromium VI H 75. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 76. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 76. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 77. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 78. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 79. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 79. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 80. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 81. Río De La Plata Río De La Plata PRR810A1 Chromium VI H 80. Río De La Plata Río De La Plata PRR810A1 Dissolved Oxygen H 81. Río De La Plata Río De La Plata PRR810A1 Dissolved Oxygen H 82. Río De La Plata Río De La Plata PRR810A1 Dissolved Oxygen H 83. Río De La Plata Río De La Plata PRR810A1 Dissolved Oxygen H 84. Río De La Plata Río De La Plata PRR810A1 Dissolved Oxygen H 85. Río De La Plata Río De La Plata PRR810A1 Dissolved Oxygen H 86. Río De La Plata Río De La Plata PRR810A1 Temperature H 87. Río De La Plata Río De La Plata PRR810A1 Total, Phosphorus H 88. Río De La Plata Río De La Plata PRR810A1 Total, Phosphorus H 88. Río De La Plata Río De La Plata PRR810A1 Total, Phosphorus H 88. Río De La Plata Río De La Plata PRR810A3 Turbidity H 89. Río De La Plata Río De La Plata PRR810A3 Turbidity H 80. Río De La Plata Río De La Plata PRR810A3 Turbidity H 80. Río De La Plata Río De La Plata PRR810A3 Total, Phosphorus H 80. Río De La Plata Río De La Plata PRR810A3 Total, Phosphorus H 80. Río De La Plata Río De La Plata PRR810A4 Cyanide H 80. Río De La Plata Río De La Plata PRR810A4 Turbidity H 80. Río De La Plata Río De La Plata PRR810A5 Total, Phosphorus H 80. Río De La Plata Río De La Plata PRR810A	66. Río Grande de Manatí	Río Orocovis		Chromium VI	Н
69. Río Grande de Manatí 70. Río Grande de Manatí 70. Río Grande de Manatí 70. Río Grande de Manatí 71. Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco PRNR9A Enterococci H 72. Río Cibuco Río Cibuco Río Cibuco PRNR9A Enterococci H 73. Río Cibuco Río Cibuco Río Cibuco PRNR9A Enterococci H 74. Río Cibuco Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 75. Río Cibuco Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 76. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 76. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 77. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 78. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 78. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 78. Río Cibuco Río Morovis PRNR9B Total, Phosphorus H 79. Río De La Plata Río De La Plata PRERIOA1 Total, Dissolved Oxygen H 81. Río De La Plata Río De La Plata Río De La Plata PRERIOA1 Dissolved Oxygen H 82. Río De La Plata Río De La Plata Río De La Plata PRERIOA1 Enterococci H 83. Río De La Plata Río De La Plata Río De La Plata PRERIOA1 Surfactants H 84. Río De La Plata Río De La Plata PRERIOA1 Total, Phosphorus H 85. Río De La Plata Río De La Plata PRERIOA1 Total, Phosphorus H 85. Río De La Plata Río De La Plata PRERIOA1 Total, Phosphorus H 85. Río De La Plata Río De La Plata PRERIOA1 Total, Phosphorus H 87. Río De La Plata Río De La Plata PRERIOA1 Total, Phosphorus H 88. Río De La Plata Río De La Plata PRERIOA3 Total, Phosphorus H 89. Río De La Plata Río De La Plata PRERIOA3 Total, Phosphorus H 90. Río De La Plata Río De La Plata PRERIOA3 Total, Phosphorus H 90. Río De La Plata Río De La Plata PRERIOA3 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRERIOA3 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRERIOA4 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRERIOA5 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRERIOA5 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRERIOA5 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRERIOA5 Total, Phosphorus H 910. Río De La Plata Río De La	67. Río Grande de Manatí	Río Orocovis	PRNR8E1	Cyanide	Н
70. Río Grande de Manatí  71. Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río De La Plata  Río De La Plata  Rí	68. Río Grande de Manatí	Río Orocovis	PRNR8E1	Enterococci	Н
71. Río Cibuco Río Cibuco PRNR9A Chromium VI H 72. Río Cibuco Río Cibuco PRNR9A Enterococci H 73. Río Cibuco Río Cibuco PRNR9A Enterococci H 73. Río Cibuco Río Cibuco PRNR9A Lead H 74. Río Cibuco Río Cibuco PRNR9A Temperature H 75. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 75. Río Cibuco Río Cibuco PRNR9A Total, Nitrogen H 76. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 77. Río Cibuco Río Cibuco PRNR9A Total, Phosphorus H 78. Río Cibuco Río Cibuco PRNR9A Turbidity H 78. Río Cibuco Río Morovis PRNR9B2 Dissolved Oxygen H 79. Río De La Plata Río De La Plata PRER10A1 Chromium VI H 80. Río De La Plata Río De La Plata PRER10A1 Chromium VI H 81. Río De La Plata Río De La Plata PRER10A1 Dissolved Oxygen H 81. Río De La Plata Río De La Plata PRER10A1 Dissolved Oxygen H 83. Río De La Plata Río De La Plata PRER10A1 Dissolved Oxygen H 84. Río De La Plata Río De La Plata PRER10A1 Temperature H 85. Río De La Plata Río De La Plata PRER10A1 Temperature H 84. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 85. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 86. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 87. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 88. Río De La Plata Río De La Plata PRER10A3 Chromium VI H 88. Río De La Plata Río De La Plata PRER10A3 Chromium VI H 89. Río De La Plata Río De La Plata PRER10A3 Chromium VI H 90. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 92. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 93. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 94. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 95. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 96. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 97. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 98. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 99. Río	69. Río Grande de Manatí	Río Orocovis	PRNR8E1	Total, Phosphorus	Н
72. Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Morovis  PRNR9A  Turbidity  H  77. Río Cibuco  Río Morovis  PRNR9B2  Dissolved Oxygen  H  88. Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río	70. Río Grande de Manatí	Río Botijas	PRNR8E2	pН	Н
73. Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Morovis  PRNR9A  Turbidity  H  80. Río La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De	71. Río Cibuco	Río Cibuco	PRNR9A	Chromium VI	Н
74. Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Cibuco  Río Morovis  PRNR9A  Turbidity  H  Río De La Plata  Río	72. Río Cibuco	Río Cibuco	PRNR9A	Enterococci	Н
75. Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Cibuco Río Morovis PRNR9A Turbidity H T8. Río Cibuco Río Morovis PRNR9B2 Dissolved Oxygen H 79. Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata R	73. Río Cibuco	Río Cibuco	PRNR9A	Lead	Н
76. Río Cibuco         Río Cibuco         PRNR9A         Total, Phosphorus         H           77. Río Cibuco         Río Cibuco         PRNR9A         Turbidity         H           78. Río Cibuco         Río Morovis         PRNR9B2         Dissolved Oxygen         H           79. Río De La Plata         Río De La Plata         PRER10A1         Chromium VI         H           80. Río De La Plata         Río De La Plata         PRER10A1         Dissolved Oxygen         H           81. Río De La Plata         Río De La Plata         PRER10A1         Enterococci         H           82. Río De La Plata         Río De La Plata         PRER10A1         Enterococci         H           83. Río De La Plata         Río De La Plata         PRER10A1         Surfactants         H           84. Río De La Plata         Río De La Plata         PRER10A1         Total, Phosphorus         H           85. Río De La Plata         Río De La Plata         PRER10A1         Total, Phosphorus         H           86. Río De La Plata         Río De La Plata         PRER10A1         Turbidity         H           87. Río De La Plata         Río De La Plata         PRER10A3         Enterococci         H           88. Río De La Plata         Río De La Plata         PRER10A	74. Río Cibuco	Río Cibuco	PRNR9A	Temperature	Н
77. Río Cibuco Río Cibuco PRNR9A Turbidity H 78. Río Cibuco Río Morovis PRNR9B2 Dissolved Oxygen H 79. Río De La Plata Río De La Plata PRER10A1 Chromium VI H 80. Río De La Plata Río De La Plata PRER10A1 Dissolved Oxygen H 81. Río De La Plata Río De La Plata PRER10A1 Enterococci H 82. Río De La Plata Río De La Plata PRER10A1 Enterococci H 83. Río De La Plata Río De La Plata PRER10A1 Surfactants H 83. Río De La Plata Río De La Plata PRER10A1 Temperature H 84. Río De La Plata Río De La Plata PRER10A1 Temperature H 85. Río De La Plata Río De La Plata PRER10A1 Turbidity H 86. Río De La Plata Río De La Plata PRER10A1 Turbidity H 87. Río De La Plata Río De La Plata PRER10A1 Turbidity H 88. Río De La Plata Río De La Plata PRER10A3 Chromium VI H 89. Río De La Plata Río De La Plata PRER10A3 Temperature H 89. Río De La Plata Río De La Plata PRER10A3 Temperature H 89. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 90. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 91. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 92. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 93. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 94. Río De La Plata Río De La Plata PRER10A4 DH 95. Río De La Plata Río De La Plata PRER10A4 Turbidity H 96. Río De La Plata Río De La Plata PRER10A4 DH 97. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 98. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 100. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 101. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 102. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 103. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 104. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 105. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 106. Río De La P	75. Río Cibuco	Río Cibuco	PRNR9A	•	Н
77. Río Cibuco  Río Cibuco  Río Morovis  PRNR9B2  Dissolved Oxygen  H  79. Río Cibuco  Río Morovis  PRNR9B2  Dissolved Oxygen  H  80. Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De L	76. Río Cibuco	Río Cibuco	PRNR9A		Н
78. Río Cibuco Río Morovis PRNR9B2 Dissolved Oxygen H 79. Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río	77. Río Cibuco	Río Cibuco	PRNR9A	•	Н
79. Río De La Plata         Río De La Plata         PRERIOAI         Chromium VI         H           80. Río De La Plata         Río De La Plata         PRERIOAI         Dissolved Oxygen         H           81. Río De La Plata         Río De La Plata         PRERIOAI         Enterococci         H           82. Río De La Plata         Río De La Plata         PRERIOAI         Enterococci         H           83. Río De La Plata         Río De La Plata         PRERIOAI         Temperature         H           84. Río De La Plata         Río De La Plata         PRERIOAI         Total, Phosphorus         H           85. Río De La Plata         Río De La Plata         PRERIOA3         Chromium VI         H           86. Río De La Plata         Río De La Plata         PRERIOA3         Enterococci         H           87. Río De La Plata         Río De La Plata         PRERIOA3         Enterococci         H           88. Río De La Plata         Río De La Plata         PRERIOA3         Enterococci         H           89. Río De La Plata         Río De La Plata         PRERIOA3         Total, Phosphorus         H           90. Río De La Plata         Río De La Plata         PRERIOA4         Chromium VI         H           91. Río De La Plata         Río De La Pla	78. Río Cibuco	Río Morovis	PRNR9B2	•	Н
81. Río De La Plata Río De La Plata PRER10A1 Enterococci H 82. Río De La Plata Río De La Plata PRER10A1 Surfactants H 83. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 84. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 85. Río De La Plata Río De La Plata PRER10A1 Turbidity H 86. Río De La Plata Río De La Plata PRER10A3 Chromium VI H 87. Río De La Plata Río De La Plata PRER10A3 Enterococci H 88. Río De La Plata Río De La Plata PRER10A3 Enterococci H 88. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 89. Río De La Plata Río De La Plata PRER10A3 Temperature H 89. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 90. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 91. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 92. Río De La Plata Río De La Plata PRER10A4 Cyanide H 93. Río De La Plata Río De La Plata PRER10A4 Enterococci H 93. Río De La Plata Río De La Plata PRER10A4 PRER10A4 Enterococci H 94. Río De La Plata Río De La Plata PRER10A4 PRER10A4 PH H 95. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 96. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 97. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 98. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 100. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 100. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 101. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 102. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 103. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 104. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 105. Río De La Plata Río Guadiana PRER10A5 Total, Nitrogen H 106. Río De La Plata Río Guadiana PRER10A5 Total, Nitrogen H 107. Río De La Plata Río Guadiana PRER10A5 Total, Nitrogen H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen H	79. Río De La Plata	Río De La Plata	PRER10A1	1	Н
81. Río De La Plata Río De La Plata PRER10A1 Enterococci H 82. Río De La Plata Río De La Plata PRER10A1 Surfactants H 83. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 84. Río De La Plata Río De La Plata PRER10A1 Total, Phosphorus H 85. Río De La Plata Río De La Plata PRER10A1 Turbidity H 86. Río De La Plata Río De La Plata PRER10A3 Chromium VI H 87. Río De La Plata Río De La Plata PRER10A3 Enterococci H 88. Río De La Plata Río De La Plata PRER10A3 Enterococci H 88. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 89. Río De La Plata Río De La Plata PRER10A3 Temperature H 89. Río De La Plata Río De La Plata PRER10A3 Total, Phosphorus H 90. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 91. Río De La Plata Río De La Plata PRER10A4 Chromium VI H 92. Río De La Plata Río De La Plata PRER10A4 Cyanide H 93. Río De La Plata Río De La Plata PRER10A4 Enterococci H 93. Río De La Plata Río De La Plata PRER10A4 PRER10A4 Enterococci H 94. Río De La Plata Río De La Plata PRER10A4 PRER10A4 PH H 95. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 96. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 97. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 98. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 99. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 100. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 100. Río De La Plata Río De La Plata PRER10A5 Chromium VI H 101. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 102. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 103. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 104. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 105. Río De La Plata Río Guadiana PRER10A5 Total, Nitrogen H 106. Río De La Plata Río Guadiana PRER10A5 Total, Nitrogen H 107. Río De La Plata Río Guadiana PRER10A5 Total, Nitrogen H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen H	80. Río De La Plata	Río De La Plata	PRER10A1	Dissolved Oxygen	Н
83. Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río Guadia	81. Río De La Plata	Río De La Plata	PRER10A1		Н
83. Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La	82. Río De La Plata	Río De La Plata	PRER10A1	Surfactants	Н
Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plat	83. Río De La Plata	Río De La Plata	PRER10A1		Н
Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río Guadiana PRERIOE Chromium VI H				•	
86. Río De La PlataRío De La PlataPRER10A3Chromium VIH87. Río De La PlataRío De La PlataPRER10A3EnterococciH88. Río De La PlataRío De La PlataPRER10A3TemperatureH89. Río De La PlataRío De La PlataPRER10A3Total, PhosphorusH90. Río De La PlataRío De La PlataPRER10A4Chromium VIH91. Río De La PlataRío De La PlataPRER10A4CyanideH92. Río De La PlataRío De La PlataPRER10A4EnterococciH93. Río De La PlataRío De La PlataPRER10A4PHH94. Río De La PlataRío De La PlataPRER10A4PRER10A4PHH95. Río De La PlataRío De La PlataPRER10A4Total, PhosphorusH96. Río De La PlataRío De La PlataPRER10A4TurbidityH97. Río De La PlataRío De La PlataPRER10A5Chromium VIH98. Río De La PlataRío De La PlataPRER10A5Chromium VIH99. Río De La PlataRío De La PlataPRER10A5Chromium VIH99. Río De La PlataRío De La PlataPRER10A5TemperatureH101. Río De La PlataRío De La PlataPRER10A5Total, NitrogenH102. Río De La PlataRío De La PlataPRER10A5Total, PhosphorusH103. Río De La PlataRío GuadianaPRER10A5TurbidityH104. Río De La PlataRío GuadianaPRER10EChromiu				_	
87. Río De La PlataRío De La PlataPRER10A3EnterococciH88. Río De La PlataRío De La PlataPRER10A3TemperatureH89. Río De La PlataRío De La PlataPRER10A3Total, PhosphorusH90. Río De La PlataRío De La PlataPRER10A4Chromium VIH91. Río De La PlataRío De La PlataPRER10A4Chromium VIH91. Río De La PlataRío De La PlataPRER10A4CyanideH92. Río De La PlataRío De La PlataPRER10A4EnterococciH93. Río De La PlataRío De La PlataPRER10A4PHH94. Río De La PlataRío De La PlataPRER10A4PRER10A4PHH95. Río De La PlataRío De La PlataPRER10A4Total, PhosphorusH96. Río De La PlataRío De La PlataPRER10A4TurbidityH97. Río De La PlataRío De La PlataPRER10A5Chromium VIH98. Río De La PlataRío De La PlataPRER10A5CyanideH99. Río De La PlataRío De La PlataPRER10A5EnterococciH100. Río De La PlataRío De La PlataPRER10A5Total, NitrogenH101. Río De La PlataRío De La PlataPRER10A5Total, PhosphorusH102. Río De La PlataRío GuadianaPRER10A5TurbidityH104. Río De La PlataRío GuadianaPRER10EChromium VIH105. Río De La PlataRío GuadianaPRER10EEnterococci <td></td> <td></td> <td></td> <td>1</td> <td></td>				1	
Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plat					
Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río Guadiana RRER10E Chromium VI H RIOS. Río De La Plata Río Guadiana RRER10E RER10E Temperature H Río De La Plata Río Guadiana RRER10E Temperature H Río De La Plata Río De La Plata Río Guadiana RRER10E Temperature			_	1	
90. Río De La PlataRío De La PlataPRER10A4Chromium VIH91. Río De La PlataRío De La PlataPRER10A4CyanideH92. Río De La PlataRío De La PlataPRER10A4EnterococciH93. Río De La PlataRío De La PlataPRER10A4pHH94. Río De La PlataRío De La PlataPRER10A4TemperatureH95. Río De La PlataRío De La PlataPRER10A4Total, PhosphorusH96. Río De La PlataRío De La PlataPRER10A4TurbidityH97. Río De La PlataRío De La PlataPRER10A5Chromium VIH98. Río De La PlataRío De La PlataPRER10A5CyanideH99. Río De La PlataRío De La PlataPRER10A5EnterococciH100. Río De La PlataRío De La PlataPRER10A5TemperatureH101. Río De La PlataRío De La PlataPRER10A5Total, NitrogenH102. Río De La PlataRío De La PlataPRER10A5Total, PhosphorusH103. Río De La PlataRío De La PlataPRER10A5TurbidityH104. Río De La PlataRío GuadianaPRER10EChromium VIH105. Río De La PlataRío GuadianaPRER10EChromium VIH106. Río De La PlataRío GuadianaPRER10EEnterococciH107. Río De La PlataRío GuadianaPRER10ETemperatureH108. Río De La PlataRío GuadianaPRER10ETemperatureH </td <td></td> <td></td> <td></td> <td>*</td> <td></td>				*	
91. Río De La Plata Río De La Plata PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PH PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A4 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10B5 PRER10B5 PRER10B5 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10B6 PRER10					
92. Río De La PlataRío De La PlataPRER10A4EnterococciH93. Río De La PlataRío De La PlataPRER10A4pHH94. Río De La PlataRío De La PlataPRER10A4TemperatureH95. Río De La PlataRío De La PlataPRER10A4Total, PhosphorusH96. Río De La PlataRío De La PlataPRER10A4TurbidityH97. Río De La PlataRío De La PlataPRER10A5Chromium VIH98. Río De La PlataRío De La PlataPRER10A5CyanideH99. Río De La PlataRío De La PlataPRER10A5EnterococciH100. Río De La PlataRío De La PlataPRER10A5TemperatureH101. Río De La PlataRío De La PlataPRER10A5Total, NitrogenH102. Río De La PlataRío De La PlataPRER10A5Total, PhosphorusH103. Río De La PlataRío De La PlataPRER10A5TurbidityH104. Río De La PlataRío GuadianaPRER10EChromium VIH105. Río De La PlataRío GuadianaPRER10EChromium VIH106. Río De La PlataRío GuadianaPRER10EEnterococciH107. Río De La PlataRío GuadianaPRER10ETemperatureH108. Río De La PlataRío GuadianaPRER10ETotal, NitrogenH	91. Río De La Plata	Río De La Plata		Cyanide	Н
94. Río De La Plata Río De La Plata PRER10A4 PRER10A4 Total, Phosphorus H PRER10A4 PRER10A4 Total, Phosphorus H PRER10A4 PRER10A4 Total, Phosphorus H PRER10A4 PRER10A4 Total, Phosphorus H PRER10A5 PRER10A5 Chromium VI H PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B P	92. Río De La Plata	Río De La Plata		•	Н
94. Río De La Plata Río De La Plata PRER10A4 PRER10A4 Total, Phosphorus H PRER10A4 PRER10A4 Total, Phosphorus H PRER10A4 PRER10A4 Total, Phosphorus H PRER10A4 PRER10A4 Total, Phosphorus H PRER10A5 PRER10A5 Chromium VI H PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10A5 PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B PRER10B P	93. Río De La Plata	Río De La Plata	PRER10A4	рН	Н
95. Río De La Plata Río De La Plata PRER10A4 Total, Phosphorus H 96. Río De La Plata Río De La Plata PRER10A4 Turbidity H 97. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Chromium VI H 98. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Cyanide H 99. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Enterococci H 100. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 101. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 103. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 104. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 105. Río De La Plata Río Guadiana PRER10A5 Turbidity H 106. Río De La Plata Río Guadiana PRER10E Cyanide H 107. Río De La Plata Río Guadiana PRER10E Temperature H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen	94. Río De La Plata	Río De La Plata			Н
96. Río De La PlataRío De La PlataPRER10A4TurbidityH97. Río De La PlataRío De La PlataPRER10A5Chromium VIH98. Río De La PlataRío De La PlataPRER10A5CyanideH99. Río De La PlataRío De La PlataPRER10A5EnterococciH100. Río De La PlataRío De La PlataPRER10A5TemperatureH101. Río De La PlataRío De La PlataPRER10A5Total, NitrogenH102. Río De La PlataRío De La PlataPRER10A5Total, PhosphorusH103. Río De La PlataRío De La PlataPRER10A5TurbidityH104. Río De La PlataRío GuadianaPRER10EChromium VIH105. Río De La PlataRío GuadianaPRER10ECyanideH106. Río De La PlataRío GuadianaPRER10EEnterococciH107. Río De La PlataRío GuadianaPRER10ETemperatureH108. Río De La PlataRío GuadianaPRER10ETotal, NitrogenH					
97. Río De La Plata Río De La Plata Río De La Plata Río De La Plata Río De La Plata PRER10A5 Cyanide H  98. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Enterococci H  100. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Temperature H  101. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H  102. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H  103. Río De La Plata Río De La Plata PRER10A5 Turbidity H  104. Río De La Plata Río Guadiana PRER10E Chromium VI H  105. Río De La Plata Río Guadiana PRER10E Cyanide H  106. Río De La Plata Río Guadiana PRER10E Temperature H  108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen					Н
98. Río De La Plata Río De La Plata PRER10A5 PRER10A5 Enterococci H  100. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Temperature H  101. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H  102. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H  103. Río De La Plata Río De La Plata PRER10A5 Turbidity H  104. Río De La Plata Río Guadiana PRER10E Chromium VI H  105. Río De La Plata Río Guadiana PRER10E Cyanide H  106. Río De La Plata Río Guadiana PRER10E Temperature H  108. Río De La Plata Río Guadiana PRER10E Temperature H	97. Río De La Plata	Río De La Plata	PRER10A5	•	Н
99. Río De La Plata Río De La Plata PRER10A5 Enterococci H  100. Río De La Plata Río De La Plata PRER10A5 Temperature H  101. Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H  102. Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H  103. Río De La Plata Río De La Plata PRER10A5 Turbidity H  104. Río De La Plata Río Guadiana PRER10E Chromium VI H  105. Río De La Plata Río Guadiana PRER10E Cyanide H  106. Río De La Plata Río Guadiana PRER10E Enterococci H  107. Río De La Plata Río Guadiana PRER10E Temperature H  108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen					Н
100. Río De La PlataRío De La PlataPRER10A5TemperatureH101. Río De La PlataRío De La PlataPRER10A5Total, NitrogenH102. Río De La PlataRío De La PlataPRER10A5Total, PhosphorusH103. Río De La PlataRío De La PlataPRER10A5TurbidityH104. Río De La PlataRío GuadianaPRER10EChromium VIH105. Río De La PlataRío GuadianaPRER10ECyanideH106. Río De La PlataRío GuadianaPRER10EEnterococciH107. Río De La PlataRío GuadianaPRER10ETemperatureH108. Río De La PlataRío GuadianaPRER10ETotal, NitrogenH				<u> </u>	
101. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Total, Nitrogen H 102. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Total, Phosphorus H 103. Río De La Plata Río De La Plata Río De La Plata PRER10A5 Turbidity H 104. Río De La Plata Río Guadiana PRER10E Chromium VI H 105. Río De La Plata Río Guadiana PRER10E Cyanide H 106. Río De La Plata Río Guadiana PRER10E Enterococci H 107. Río De La Plata Río Guadiana PRER10E Temperature H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen					_
102. Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  Río De La Plata  PRER10A5  Total, Phosphorus  H  103. Río De La Plata  Río De La Plata  Río Guadiana  PRER10E  Chromium VI  H  105. Río De La Plata  Río Guadiana  PRER10E  Cyanide  H  106. Río De La Plata  Río Guadiana  PRER10E  Enterococci  H  107. Río De La Plata  Río Guadiana  PRER10E  Temperature  H  108. Río De La Plata  Río Guadiana  PRER10E  Total, Nitrogen  H				*	
103. Río De La Plata Río De La Plata PRER10A5 Turbidity H 104. Río De La Plata Río Guadiana PRER10E Chromium VI H 105. Río De La Plata Río Guadiana PRER10E Cyanide H 106. Río De La Plata Río Guadiana PRER10E Enterococci H 107. Río De La Plata Río Guadiana PRER10E Temperature H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen H					
104. Río De La Plata Río Guadiana PRER10E Chromium VI H 105. Río De La Plata Río Guadiana PRER10E Cyanide H 106. Río De La Plata Río Guadiana PRER10E Enterococci H 107. Río De La Plata Río Guadiana PRER10E Temperature H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen H				•	
105. Río De La PlataRío GuadianaPRER10ECyanideH106. Río De La PlataRío GuadianaPRER10EEnterococciH107. Río De La PlataRío GuadianaPRER10ETemperatureH108. Río De La PlataRío GuadianaPRER10ETotal, NitrogenH				<u> </u>	_
106. Río De La Plata Río Guadiana PRER10E Enterococci H 107. Río De La Plata Río Guadiana PRER10E Temperature H 108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen H					
107. Río De La PlataRío GuadianaPRER10ETemperatureH108. Río De La PlataRío GuadianaPRER10ETotal, NitrogenH				<u> </u>	_
108. Río De La Plata Río Guadiana PRER10E Total, Nitrogen H					
				•	
TO A PIO CHE LA PIARA TRIO CHIAMBANA LERER TO HELLE LE LOTAL PROCENOMICE LE HELLE	109. Río De La Plata	Río Guadiana	PRER10E	Total, Phosphorus	Н

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
110. Río De La Plata	Río Arroyata	PRER10G	Chromium VI	Н
111. Río De La Plata	Río Arroyata	PRER10G	Cyanide	Н
112. Río De La Plata	Río Arroyata	PRER10G	Enterococci	Н
113. Río De La Plata	Río Arroyata	PRER10G	Total, Phosphorus	Н
114. Río De La Plata	Río Matón	PRER10J	Chromium VI	Н
115. Río De La Plata	Río Matón	PRER10J	Cyanide	Н
116. Río De La Plata	Río Matón	PRER10J	Enterococci	Н
117. Río De La Plata	Río Matón	PRER10J	Total, Nitrogen	Н
118. Río De La Plata	Río Guavate	PRER10K	pН	Н
119. Río Hondo	Río Hondo	PRER11A	Dissolved Oxygen	Н
120. Río Hondo	Río Hondo	PRER11A	Surfactants	Н
121. Río Bayamón	Río Bayamón	PRER12A1	Chromium VI	Н
122. Río Bayamón	Río Bayamón	PRER12A1	Cyanide	Н
123. Río Bayamón	Río Bayamón	PRER12A1	Enterococci	Н
124. Río Bayamón	Río Bayamón	PRER12A1	рН	Н
125. Río Bayamón	Río Bayamón	PRER12A1	Temperature	Н
126. Río Bayamón	Río Bayamón	PRER12A1	Total, Nitrogen	Н
127. Río Bayamón	Río Bayamón	PRER12A2	Chromium VI	Н
128. Río Bayamón	Río Bayamón	PRER12A2	Enterococci	Н
129. Río Bayamón	Rio Guaynabo	PRER12B	Chromium VI	Н
130. Río Bayamón	Rio Guaynabo	PRER12B	Enterococci	Н
131. Río Bayamón	Rio Guaynabo	PRER12B	pН	Н
132. Río Bayamón	Rio Guaynabo	PRER12B	Temperature	Н
133. Río Bayamón	Rio Guaynabo	PRER12B	Total, Nitrogen	Н
134. Río Bayamón	Río Guaynabo	PRER12B	Total, Phosphorus	Н
135. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Chromium VI	Н
136. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Enterococci	Н
137. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Surfactants	Н
138. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Temperature	Н
139. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Total, Nitrogen	Н
140. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Turbidity	Н
141. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Chromium VI	Н
142. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Enterococci	Н
143. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Pesticides	Н
144. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Temperature	Н
145. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Total, Phosphorus	Н
146. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Turbidity	Н
147. Río Grande de Loíza	Río Canóvanas	PRER14B	Dissolved Oxygen	Н
148. Río Grande de Loíza	Río Canovanillas	PRER14C	Dissolved Oxygen	Н
149. Río Grande de Loíza	Río Gurabo	PRER14G1	Chromium VI	Н
150. Río Grande de Loíza	Río Gurabo	PRER14G1	Enterococci	Н
151. Río Grande de Loíza	Río Gurabo	PRER14G1	Temperature	Н
152. Río Grande de Loíza	Río Gurabo	PRER14G1	Total, Nitrogen	Н
153. Río Grande de Loíza	Río Gurabo	PRER14G1	Total, Phosphorus	Н

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
154. Río Grande de Loíza	Río Gurabo	PRER14G1	Turbidity	Н
155. Río Grande de Loíza	Río Valenciano	PRER14G2	Chromium VI	Н
156. Río Grande de Loíza	Río Valenciano	PRER14G2	Enterococci	Н
157. Río Grande de Loíza	Río Valenciano	PRER14G2	Total, Nitrogen	Н
158. Río Grande de Loíza	Río Valenciano	PRER14G2	Total, Phosphorus	Н
159. Río Grande de Loíza	Río Valenciano	PRER14G2	Turbidity	Н
160. Río Grande de Loíza	Río Bairoa	PRER14H	Chromium VI	Н
161. Río Grande de Loíza	Río Bairoa	PRER14H	Enterococci	Н
162. Río Grande de Loíza	Río Bairoa	PRER14H	Total, Nitrogen	Н
163. Río Grande de Loíza	Río Bairoa	PRER14H	Total, Phosphorus	Н
164. Río Grande de Loíza	Río Cagüitas	PRER14I	Chromium VI	Н
165. Río Grande de Loíza	Río Cagūitas	PRER14I	Enterococci	Н
166. Río Grande de Loíza	Río Cagüitas	PRER14I	Temperature	Н
167. Río Grande de Loíza	Río Cagüitas	PRER14I	Total, Nitrogen	Н
168. Río Grande de Loíza	Río Cagüitas	PRER14I	Total, Phosphorus	Н
169. Río Grande de Loíza	Río Cagüitas	PRER14I	Turbidity	Н
170. Río Grande de Loíza	Rio Turabo	PRER14J	Chromium VI	Н
171. Río Grande de Loíza	Rio Turabo	PRER14J	Copper	Н
172. Río Grande de Loíza	Rio Turabo	PRER14J	Enterococci	Н
173. Río Grande de Loíza	Rio Turabo	PRER14J	Lead	Н
174. Río Grande de Loíza	Rio Turabo	PRER14J	Temperature	Н
175. Río Grande de Loíza	Rio Turabo	PRER14J	Total, Phosphorus	Н
176. Río Grande de Loíza	Rio Turabo	PRER14J	Turbidity	Н
177. Río Grande de Loíza	Río Cayaguas	PRER14K	Chromium VI	Н
178. Río Grande de Loíza	Río Cayaguas	PRER14K	Copper	Н
179. Río Grande de Loíza	Río Cayaguas	PRER14K	Enterococci	Н
180. Río Grande de Loíza	Río Cayaguas	PRER14K	Temperature	Н
181. Río Grande de Loíza	Río Cayaguas	PRER14K	Total, Nitrogen	Н
182. Río Grande de Loíza	Río Cayaguas	PRER14K	Total, Phosphorus	Н
183. Río Grande de Loíza	Río Cayaguas	PRER14K	Turbidity	Н
184. Río Blanco	Río Blanco	PRER30A	Turbidity	Н
185. Río Blanco	Quebrada Peña Pobre	PREQ30B	Dissolved Oxygen	Н
186. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	Chromium VI	Н
187. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	Copper	Н
188. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	Cyanide	Н
189. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	Enterococci	Н
190. Río Coamo	Río Coamo	PRSR57A2	Chromium VI	Н
191. Río Coamo	Río Coamo	PRSR57A2	Cyanide	Н
192. Río Coamo	Río Coamo	PRSR57A2	Enterococci	Н
193. Río Coamo	Río Coamo	PRSR57A2	Surfactants	Н
194. Río Coamo	Río Coamo	PRSR57A2	Temperature	Н
195. Río Coamo	Río Coamo	PRSR57A2	Total, Nitrogen	Н
196. Río Coamo	Río Coamo	PRSR57A2	Total, Phosphorus	Н
197. Río Coamo	Río Cuyón	PRSR57B	Temperature	Н

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
198. Río Guayanilla	Río Guayanilla	PRSR67A	Ammonia	Н
199. Río Guayanilla	Río Guayanilla	PRSR67A	Chromium VI	Н
200. Río Guayanilla	Río Guayanilla	PRSR67A	Cyanide	Н
201. Río Guayanilla	Río Guayanilla	PRSR67A	Dissolved Oxygen	Н
202. Río Guayanilla	Río Guayanilla	PRSR67A	Enterococci	Н
203. Río Guayanilla	Río Guayanilla	PRSR67A	Temperature	Н
204. Río Guayanilla	Río Guayanilla	PRSR67A	Total, Nitrogen	Н
205. Río Guayanilla	Río Guayanilla	PRSR67A	Total, Phosphorus	Н
206. Río Guanajibo	Río Guanajibo	PRWR77A	Chromium VI	Н
207. Río Guanajibo	Río Guanajibo	PRWR77A	Cyanide	Н
208. Río Guanajibo	Río Guanajibo	PRWR77A	Dissolved Oxygen	Н
209. Río Guanajibo	Río Guanajibo	PRWR77A	Enterococci	Н
210. Río Guanajibo	Río Guanajibo	PRWR77A	Total, Phosphorus	Н
211. Río Guanajibo	Río Guanajibo	PRWR77A	Turbidity	Н
212. Río Guanajibo	Río Rosario	PRWR77C	Chromium VI	Н
213. Río Guanajibo	Río Rosario	PRWR77C	Cyanide	Н
214. Río Guanajibo	Río Rosario	PRWR77C	Enterococci	Н
215. Río Guanajibo	Río Rosario	PRWR77C	Pesticides	Н
216. Río Guanajibo	Río Rosario	PRWR77C	Total, Phosphorus	Н
217. Río Guanajibo	Río Rosario	PRWR77C	Turbidity	Н
218. Río Guanajibo	Río Viejo	PRWR77D	Chromium VI	Н
219. Río Guanajibo	Río Viejo	PRWR77D	Cyanide	Н
220. Río Guanajibo	Río Viejo	PRWR77D	Dissolved Oxygen	Н
221. Río Guanajibo	Río Viejo	PRWR77D	Enterococci	Н
222. Río Guanajibo	Río Viejo	PRWR77D	Surfactants	Н
223. Río Guanajibo	Río Viejo	PRWR77D	Temperature	Н
224. Río Guanajibo	Río Viejo	PRWR77D	Total, Phosphorus	Н
225. Río Guanajibo	Río Cupeyes	PRWR77G	Pesticides	Н
226. Río Yagüez	Río Yagüez	PRWR79A	Chromium VI	Н
227. Río Yagüez	Río Yagüez	PRWR79A	Cyanide	Н
228. Río Yagüez	Río Yagüez	PRWR79A	Enterococci	Н
229. Río Yagüez	Río Yagüez	PRWR79A	Temperature	Н
230. Río Yagüez	Río Yagüez	PRWR79A	Total, Nitrogen	Н
231. Río Yagüez	Río Yagüez	PRWR79A	Total Phosphorus	Н
232. Río Yagüez	Río Yagüez	PRWR79A	Turbidity	Н
233. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Chromium VI	Н
234. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Copper	Н
235. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Cyanide	Н
236. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Enterococci	Н
237. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	pН	Н
238. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Temperature	Н
239. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Total Phosphorus	Н
240. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Turbidity	Н
241. Río Grande de Añasco	Río Prieto	PRWR83I	Pesticides	Н

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
242. Río Culebrinas	Río Culebrinas	PRWR95A	Chromium VI	Н
243. Río Culebrinas	Río Culebrinas	PRWR95A	Cyanide	Н
244. Río Culebrinas	Río Culebrinas	PRWR95A	Enterococci	Н
245. Río Culebrinas	Río Culebrinas	PRWR95A	Pesticides	Н
246. Río Culebrinas	Río Culebrinas	PRWR95A	Temperature	Н
247. Río Culebrinas	Río Culebrinas	PRWR95A	Total, Nitrogen	Н
248. Río Culebrinas	Río Culebrinas	PRWR95A	Total, Phosphorus	Н
249. Río Culebrinas	Río Culebrinas	PRWR95A	Turbidity	Н
250. Río Culebrinas	Quebrada La Salle	PRWQ95F	Dissolved Oxygen	Н
251. Río Culebrinas	Quebrada La Salle	PRWQ95F	Pesticides	Н
252. Río Culebrinas	Quebrada El Salto	PRWQ95G	Dissolved Oxygen	Н
253. Río Culebrinas	Quebrada Grande De La Majagua	PRWQ95H	Pesticides	Н
254. Río Guajataca	Lago Guajataca	PRNL3A1	Dissolved Oxygen	Н
255. Río Guajataca	Lago Guajataca	PRNL3A1	pН	Н
256. Río Guajataca	Lago Guajataca	PRNL3A1	Temperature	Н
257. Río Guajataca	Lago Guajataca	PRNL3A1	Total, Nitrogen	Н
258. Río Guajataca	Lago Guajataca	PRNL3A1	Total, Phosphorus	Н
259. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Arsenic	Н
260. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Copper	Н
261. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Dissolved Oxygen	Н
262. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	pН	Н
263. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Surfactants	Н
264. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Temperature	Н
265. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Total, Nitrogen	Н
266. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Total, Phosphorus	Н
267. Río Grande de Arecibo	Lago Dos Bocas	PRNL <sub>1</sub> 7A1	Turbidity	Н
268. Río Grande de Arecibo	Lago Caonillas	PRNL <sub>2</sub> 7C1	Copper	Н
269. Río Grande de Arecibo	Lago Caonillas	PRNL <sub>2</sub> 7C1	Dissolved Oxygen	Н
270. Río Grande de Arecibo	Lago Caonillas	PRNL <sub>2</sub> 7C1	Pesticides	Н
271. Río Grande de Arecibo	Lago Caonillas	PRNL <sub>2</sub> 7C1	Total, Nitrogen	Н
272. Río Grande de Arecibo	Lago Caonillas	PRNL <sub>2</sub> 7C1	Total, Phosphorus	Н
273. Río Grande de Arecibo	Lago Caonillas	PRNL <sub>2</sub> 7C1	Turbidity	Н
274. Río Grande de Arecibo	Lago Garzas	PRNL <sub>3</sub> 7A3	Copper	Н
275. Río Grande de Arecibo	Lago Garzas	PRNL <sub>3</sub> 7A3	Dissolved Oxygen	Н
276. Río Grande de Arecibo	Lago Garzas	PRNL <sub>3</sub> 7A3	Lead	Н
277. Río Grande de Arecibo	Lago Garzas	PRNL <sub>3</sub> 7A3	pН	Н
278. Río Grande de Arecibo	Lago Garzas	PRNL <sub>3</sub> 7A3	Pesticides	Н
279. Río Grande de Arecibo	Lago Garzas	PRNL <sub>3</sub> 7A3	Total, Phosphorus	Н
280. Río Grande de Manatí	Lago Guineo	PRNL <sub>1</sub> 8C1	Dissolved Oxygen	Н
281. Río Grande de Manatí	Lago Guineo	PRNL <sub>1</sub> 8C1	Pesticides	Н
282. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	Copper	Н
283. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	Dissolved Oxygen	Н
284. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	Lead	Н

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
285. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	pH	Н
286. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	Total, Nitrogen	Н
287. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	Total, Phosphorus	Н
288. Río Grande de Manatí	Lago Matrullas	PRNL <sub>2</sub> 8C1	Turbidity	Н
289. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Arsenic	Н
290. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Dissolved Oxygen	Н
291. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Lead	Н
292. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	pН	Н
293. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Temperature	Н
294. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Total, Nitrogen	Н
295. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Total, Phosphorus	Н
296. Río De La Plata	Lago La Plata	PREL <sub>1</sub> 10A1	Turbidity	Н
297. Río De La Plata	Lago Carite	PREL <sub>2</sub> 10A5	Dissolved Oxygen	Н
298. Río De La Plata	Lago Carite	PREL <sub>2</sub> 10A5	pН	Н
299. Río De La Plata	Lago Carite	PREL <sub>2</sub> 10A5	Total, Nitrogen	Н
300. Río De La Plata	Lago Carite	PREL <sub>2</sub> 10A5	Total, Phosphorus	Н
301. Río De La Plata	Lago Carite	PREL <sub>2</sub> 10A5	Turbidity	Н
302. Río Bayamón	Lago Cidra	PREL12A2	Copper	Н
303. Río Bayamón	Lago Cidra	PREL12A2	Dissolved Oxygen	Н
304. Río Bayamón	Lago Cidra	PREL12A2	Lead	Н
305. Río Bayamón	Lago Cidra	PREL12A2	Total, Nitrogen	Н
306. Río Bayamón	Lago Cidra	PREL12A2	Total, Phosphorus	Н
307. Río Bayamón	Lago Cidra	PREL12A2	Turbidity	Н
308. Río Grande de Loíza	Lago Loíza	PREL14A1	Copper	Н
309. Río Grande de Loíza	Lago Loíza	PREL14A1	Dissolved Oxygen	Н
310. Río Grande de Loíza	Lago Loíza	PREL14A1	Lead	Н
311. Río Grande de Loíza	Lago Loíza	PREL14A1	pН	Н
312. Río Grande de Loíza	Lago Loíza	PREL14A1	Temperature	Н
313. Río Grande de Loíza	Lago Loíza	PREL14A1	Total, Nitrogen	Н
314. Río Grande de Loíza	Lago Loíza	PREL14A1	Total, Phosphorus	Н
315. Río Grande de Loíza	Lago Loíza	PREL14A1	Turbidity	Н
316. Río Grande de Patillas	Lago Patillas	PRSL43A1	Dissolved Oxygen	Н
317. Río Grande de Patillas	Lago Patillas	PRSL43A1	Pesticides	Н
318. Río Grande de Patillas	Lago Patillas	PRSL43A1	pН	Н
319. Río Grande de Patillas	Lago Patillas	PRSL43A1	Temperature	Н
320. Río Grande de Patillas	Lago Patillas	PRSL43A1	Total, Phosphorus	Н
321. Río Grande de Añasco	Lago Guayo	PRWL83H	Dissolved Oxygen	Н
322. Río Grande de Añasco	Lago Guayo	PRWL83H	Pesticides	Н
323. Río Grande de Añasco	Lago Guayo	PRWL83H	pН	Н
324. Río Grande de Añasco	Lago Guayo	PRWL83H	Total, Nitrogen	Н
325. Río Grande de Añasco	Lago Guayo	PRWL83H	Total, Phosphorus	Н
326. Río Grande de Añasco	Lago Guayo	PRWL83H	Turbidity	Н
327. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Chromium VI	Н
328. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Copper	Н

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
329. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Dissolved Oxygen	Н
330. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Enterococci	Н
331. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Mercury	Н
332. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Lead	Н
333. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Oil and Grease	Н
334. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Surfactants	Н
335. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Temperature	Н
336. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Total, Nitrogen	Н
337. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Total, Phosphorus	Н
338. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Turbidity	Н
339. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Chromium VI	Н
340. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Dissolved Oxygen	Н
341. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Enterococci	Н
342. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Mercury	Н
343. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Oil and Grease	Н
344. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	pН	Н
345. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Temperature	Н
346. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Total, Nitrogen	Н
347. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Total, Phosphorus	Н
348. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Turbidity	Н

Table 48: AU/ Parameter Combination with intermediate (moderate) and low priority to development of TMDL

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
1. Río Herrera	Río Herrera	PRER15A	Dissolved Oxygen	M
2. Río Herrera	Río Herrera	PRER15A	Turbidity	M
3. Río Espíritu Santo	Río Espíritu Santo	PRER16A	Ammonia	M
4. Río Espíritu Santo	Río Espíritu Santo	PRER16A	Chromium VI	M
5. Río Espíritu Santo	Río Espíritu Santo	PRER16A	Enterococci	M
6. Quebrada Mata de Plátano	Quebrada Mata de Plátano	PREQ18A	Dissolved Oxygen	M
7. Quebrada Mata de Plátano	Quebrada Mata de Plátano	PREQ18A	Surfactants	M
8. Quebrada Fajardo	Quebrada Fajardo	PREQ21A	Dissolved Oxygen	M
9. Quebrada Fajardo	Quebrada Fajardo	PREQ21A	pН	M
10. Quebrada Fajardo	Quebrada Fajardo	PREQ21A	Temperature	M
11. Río Fajardo	Río Fajardo	PRER22A	Chromium VI	M
12. Río Fajardo	Río Fajardo	PRER22A	Enterococci	M
13. Río Fajardo	Río Fajardo	PRER22A	Temperature	M
14. Río Fajardo	Río Fajardo	PRER22A	Total, Nitrogen	M
15. Río Fajardo	Río Fajardo	PRER22A	Total, Phosphorus	M
16. Río Fajardo	Río Fajardo	PRER22A	Turbidity	M
17. Río Demajagua	Río Demajagua	PRER23A	Dissolved Oxygen	M
18. Quebrada Ceiba	Quebrada Ceiba	PREQ24A	Dissolved Oxygen	M
19. Quebrada Ceiba	Quebrada Ceiba	PREQ24A	Surfactants	M
20. Quebrada Aguas Claras	Quebrada Aguas Claras	PREQ25A	Dissolved Oxygen	M

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
21. Río Daguao	Río Daguao	PRER26A	Dissolved Oxygen	M
22. Quebrada Botijas	Quebrada Botijas	PREQ28A	Dissolved Oxygen	M
23. Río Antón Ruiz	Río Antón Ruiz	PRER31A	Dissolved Oxygen	M
24. Río Antón Ruiz	Río Antón Ruiz	PRER31A	Temperature	M
25. Quebrada Frontera	Quebrada Frontera	PREQ32A	Dissolved Oxygen	M
26. Río Humacao	Río Humacao	PRER33A	Chromium VI	M
27. Río Humacao	Río Humacao	PRER33A	Copper	M
28. Río Humacao	Río Humacao	PRER33A	Enterococci	M
29. Río Humacao	Río Humacao	PRER33A	Surfactants	M
30. Río Humacao	Río Humacao	PRER33A	Temperature	M
31. Río Humacao	Río Humacao	PRER33A	Total, Nitrogen	M
32. Río Humacao	Río Humacao	PRER33A	Total, Phosphorus	M
33. Río Humacao	Río Humacao	PRER33A	Turbidity	M
34. Río Candelero	Río Candelero	PRER34A	Dissolved Oxygen	M
35. Río Guayanés	Río Guayanés	PRER35A	Chromium VI	M
36. Río Guayanés	Río Guayanés	PRER35A	Copper	M
37. Río Guayanés	Río Guayanés	PRER35A	Enterococci	M
38. Río Guayanés	Río Guayanés	PRER35A	Temperature	M
39. Río Guayanés	Río Guayanés	PRER35A	Total, Nitrogen	M
40. Río Guayanés	Río Guayanés	PRER35A	Total, Phosphorus	M
41. Río Guayanés	Río Guayanés	PRER35A	Turbidity	M
42. Río Maunabo	Río Maunabo	PRER37A	Chromium VI	M
43. Río Maunabo	Río Maunabo	PRER37A	Copper	M
44. Río Maunabo	Río Maunabo	PRER37A	Cyanide	M
45. Río Maunabo	Río Maunabo	PRER37A	Enterococci	M
46. Río Maunabo	Río Maunabo	PRER37A	Temperature	M
47. Río Maunabo	Río Maunabo	PRER37A	Total, Nitrogen	M
48. Río Maunabo	Río Maunabo	PRER37A	Total, Phosphorus	M
49. Río Maunabo	Río Maunabo	PRER37A	Turbidity	M
50. Quebrada Palenque	Quebrada Palenque	PRSQ41A	Dissolved Oxygen	M
51. Río Chico	Río Chico	PRSR42A	Ammonia	M
52. Río Chico	Río Chico	PRSR42A	Copper	M
53. Río Chico	Río Chico	PRSR42A	Dissolved Oxygen	M
54. Río Chico	Río Chico	PRSR42A	Silver	M
55. Río Chico	Río Chico	PRSR42A	Surfactants	M
56. Río Chico	Río Chico	PRSR42A	Total, Phosphorus	M
57. Río Guamaní	Río Guamaní	PRSR49A	Temperature	M
58. Quebrada Melanía	Quebrada Melanía	PRSQ50A	Dissolved Oxygen	M
59. Río Seco	Río Seco	PRSR51A	Dissolved Oxygen	M
60. Quebrada Amorós	Quebrada Amorós	PRSQ52A	Dissolved Oxygen	M
61. Quebrada Amorós	Quebrada Amorós	PRSQ52A	pН	M
62. Quebrada Aguas Verdes	Quebrada Aguas Verdes	PRSQ53A	Dissolved Oxygen	M
63. Río Niguas de Salinas	Río Niguas de Salinas	PRSR54A	Dissolved Oxygen	M
64. Río Cayures	Río Cayures	PRSR56A	Dissolved Oxygen	M

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
65. Río Cayures	Río Cayures	PRSR56A	Surfactants	M
66. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A1	Chromium VI	M
67. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A1	Cyanide	M
68. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A1	Dissolved Oxygen	M
69. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A1	Enterococci	M
70. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Chromium VI	M
71. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Cyanide	M
72. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Enterococci	M
73. Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Surfactants	M
74. Río Portugués	Río Portugués	PRSR63A	Chromium VI	M
75. Río Portugués	Río Portugués	PRSR63A	Cyanide	M
76. Río Portugués	Río Portugués	PRSR63A	Dissolved Oxygen	M
77. Río Portugués	Río Portugués	PRSR63A	Enterococci	M
78. Río Matilde-Pastillo	Río Matilde-Pastillo	PRSR64A	Temperature	M
79. Río Tallaboa	Río Tallaboa	PRSR65A	pH	M
80. Río Tallaboa	Río Tallaboa	PRSR65A	Temperature	M
81. Río Yauco	Río Yauco	PRSR68A1	Dissolved Oxygen	M
82. Río Yauco	Río Yauco	PRSR68A1	Total, Phosphorus	M
83. Río Loco	Río Loco	PRSR69A1	Dissolved Oxygen	M
84. Río Loco	Río Loco	PRSR69A1	Temperature	M
85. Río Loco	Río Loco	PRSR69A1	Turbidity	M
86. Quebrada Zumbón	Quebrada Zumbón	PRWQ72A	Dissolved Oxygen	M
87. Quebrada Zumbón	Quebrada Zumbón	PRWQ72A	Surfactants	M
88. Quebrada González	Quebrada González	PRWQ73A	Dissolved Oxygen	M
89. Quebrada Los Pajaritos	Quebrada Los Pajaritos	PRWQ74A	Dissolved Oxygen	M
90. Caño Merle	Caño Merle	PRWK78A	Dissolved Oxygen	M
91. Caño Merle	Caño Merle	PRWK78A	Surfactants	M
92. Río Herrera	Río Herrera	PREE15A	Surfactants	M
93. Río Espíritu Santo	Río Espíritu Santo	PREE16A	Dissolved Oxygen	M
94. Río Espíritu Santo	Río Espíritu Santo	PREE16A	Surfactants	M
95. Río Demajagua	Río Demajagua	PREE23A	Turbidity	M
96. Río Candelero	Río Candelero	PREE34A	Dissolved Oxygen	M
97. Río Candelero	Río Candelero	PREE34A	Temperature	M
98. Río Guayanés	Río Guayanés	PREE35A	Arsenic	M
99. Río Guayanés	Río Guayanés	PREE35A	Turbidity	M
100. Caño Santiago	Caño Santiago	PREE35.1	Dissolved Oxygen	M
101. Caño Santiago	Caño Santiago	PREE35.1	Surfactants	M
102. Caño Santiago	Caño Santiago	PREE35.1	Turbidity	M
103. Río Matilde-Pastillo	Río Matilde-Pastillo	PRSE64A	Turbidity	M
104. Río Tallaboa	Río Tallaboa	PRSE65A	Turbidity	M
105. Caño Merle	Caño Merle	PRWE78A	Surfactants	M
106. Quebrada Grande de Calvache	Quebrada Grande de Calvache	PRWE88A	Dissolved Oxygen	M
107. Río Guayabo	Río Guayabo	PRWE94A	Dissolved Oxygen	M

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
108. Quebrada Melanía	Lago Melanía	PRSL50A	Dissolved Oxygen	M
109. Quebrada Melanía	Lago Melanía	PRSL50A	Enterococci	M
110. Quebrada Melanía	Lago Melanía	PRSL50A	Mercury	M
111. Quebrada Melanía	Lago Melanía	PRSL50A	Pesticides	M
112. Quebrada Melanía	Lago Melanía	PRSL50A	pH	M
113. Quebrada Melanía	Lago Melanía	PRSL50A	Temperature	M
114. Quebrada Melanía	Lago Melanía	PRSL50A	Total, Nitrogen	M
115. Quebrada Melanía	Lago Melanía	PRSL50A	Total, Phosphorus	M
116. Quebrada Melanía	Lago Melanía	PRSL50A	Turbidity	M
117. Río Jacaguas	Lago Guayabal	PRSL <sub>1</sub> 60A1	Dissolved Oxygen	M
118. Río Jacaguas	Lago Guayabal	PRSL <sub>1</sub> 60A1	Pesticides	M
119. Río Jacaguas	Lago Guayabal	PRSL <sub>1</sub> 60A1	pН	M
120. Río Jacaguas	Lago Guayabal	PRSL <sub>1</sub> 60A1	Total, Nitrogen	M
121. Río Jacaguas	Lago Guayabal	PRSL <sub>1</sub> 60A1	Total, Phosphorus	M
122. Río Jacaguas	Lago Guayabal	PRSL <sub>1</sub> 60A1	Turbidity	M
123. Río Jacaguas	Lago Toa vaca	PRSL <sub>2</sub> 60A1	Dissolved Oxygen	M
124. Río Jacaguas	Lago Toa vaca	PRSL <sub>2</sub> 60A1	pH	M
125. Río Jacaguas	Lago Toa vaca	PRSL <sub>2</sub> 60A1	Temperature	M
126. Río Jacaguas	Lago Toa vaca	PRSL <sub>2</sub> 60A1	Total, Nitrogen	M
127. Río Jacaguas	Lago Toa vaca	PRSL <sub>2</sub> 60A1	Total, Phosphorus	M
128. Río Jacaguas	Lago Toa vaca	PRSL <sub>2</sub> 60A1	Turbidity	M
129. Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Dissolved Oxygen	M
130. Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	pН	M
131. Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Temperature	M
132. Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Total, Nitrogen	M
133. Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Total, Phosphorus	M
134. Río Yauco	Lago Luchetti	PRSL68A1	Dissolved Oxygen	M
135. Río Yauco	Lago Luchetti	PRSL68A1	Pesticides	M
136. Río Yauco	Lago Luchetti	PRSL68A1	pH	M
137. Río Yauco	Lago Luchetti	PRSL68A1	Total, Nitrogen	M
138. Río Yauco	Lago Luchetti	PRSL68A1	Total, Phosphorus	M
139. Río Yauco	Lago Luchetti	PRSL68A1	Turbidity	M
140. Río Loco	Lago Loco	PRSL69A	Dissolved Oxygen	M
141. Río Loco	Lago Loco	PRSL69A	pH	M
142. Río Loco	Lago Loco	PRSL69A	Total, Nitrogen	M
143. Río Loco	Lago Loco	PRSL69A	Total, Phosphorus	M
144. Quebrada Los Ramos	Quebrada Los Ramos	PRWQ89A	Dissolved Oxygen	L
145. Quebrada Piletas	Quebrada Piletas	PRWQ91A	Dissolved Oxygen	L
146. Caño Boquilla	Caño Boquilla	PRWE82A	Dissolved Oxygen	L
147. Caño Boquilla	Caño Boquilla	PRWE82A	Surfactants	L
148. Caño Boquilla	Caño Boquilla	PRWE82A	Turbidity	L
149. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	Copper	L
150. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	Dissolved Oxygen	L
151. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	Enterococci	L

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
152. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	Oil and Grease	L
153. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	pH	L
154. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	Temperature	L
155. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A1	Turbidity	L
156. Laguna Joyudas	Laguna Joyudas	PRWN0005	Copper	L
157. Laguna Joyudas	Laguna Joyudas	PRWN0005	Dissolved Oxygen	L
158. Laguna Tortuguero	Laguna Tortuguero	PRNN0006	Dissolved Oxygen	L
159. Laguna Mata Redonda	Laguna Mata Redonda	PRNN0007	Dissolved Oxygen	L
160. Laguna Mata Redonda	Laguna Mata Redonda	PRNN0007	рН	L
161. Laguna Aguas Prieta	Laguna Aguas Prieta	PREN0011	Copper	L
162. Laguna Aguas Prieta	Laguna Aguas Prieta	PREN0011	Dissolved Oxygen	L
163. Laguna Aguas Prieta	Laguna Aguas Prieta	PREN0011	Turbidity	L
164. Laguna Grande	Laguna Grande	PREN0012	Dissolved Oxygen	L
165. Laguna Grande	Laguna Grande	PREN0012	Enterococci	L
			pH	L
166. Laguna Grande	Laguna Grande	PREN0012	•	
167. Laguna Ceiba	Laguna Ceiba	PRENO013	Copper	L
168. Laguna Ceiba	Laguna Ceiba	PREN0013	Dissolved Oxygen	L
169. Laguna Ceiba	Laguna Ceiba	PREN0013	Enterococci	L
170. Laguna Ceiba	Laguna Ceiba	PREN0013	pH	L
171. Laguna Pozuelo	Laguna Pozuelo	PRSN0014	Copper	L
172. Laguna Pozuelo	Laguna Pozuelo	PRSN0014	Dissolved Oxygen	L
173. Laguna Pozuelo	Laguna Pozuelo	PRSN0014	pН	L
174. Laguna Pozuelo	Laguna Pozuelo	PRSN0014	Temperature	L
175. Laguna Mar Negro	Laguna Mar Negro	PRSN0015	Copper	L
176. Laguna Mar Negro	Laguna Mar Negro	PRSN0015	Dissolved Oxygen	L
177. Laguna Mar Negro	Laguna Mar Negro	PRSN0015	pН	L
178. Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Copper	L
179. Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Dissolved Oxygen	L
180. Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Temperature	L
181. Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Turbidity	L
182. Laguna Tiburones	Laguna Tiburones	PRSN0017	Copper	L
183. Laguna Tiburones	Laguna Tiburones	PRSN0017	Dissolved Oxygen	L
184. Laguna Tiburones	Laguna Tiburones	PRSN0017	pH	L
185. Laguna Tiburones	Laguna Tiburones	PRSN0017	Temperature	L
186. Laguna Tiburones 187. Laguna Salinas	Laguna Tiburones  Laguna Salinas	PRSN0017 PRSN0018	Turbidity	L L
187. Laguna Salinas 188. Laguna Salinas	Laguna Salinas  Laguna Salinas	PRSN0018 PRSN0018	Copper Dissolved Oxygen	L
189. Laguna Salinas 1	Fraternidad	PRSN0019	Copper	L
190. Laguna Salinas 1	Fraternidad	PRSN0019	Dissolved Oxygen	L
191. Laguna Salinas 1	Fraternidad	PRSN0019	Turbidity	L
192. Laguna Cabo Rojo 2	Candelaria	PRSN0020	Copper	L
193. Laguna Cabo Rojo 2	Candelaria	PRSN0020	Dissolved Oxygen	L
194. Laguna Cabo Rojo 2	Candelaria	PRSN0020	Temperature	L
195. Laguna Cabo Rojo 2	Candelaria	PRSN0020	Turbidity	L
196. Laguna Cabo Rojo 3	El Faro	PRSN0021	Copper	L
197. Laguna Cabo Rojo 3	El Faro	PRSN0021	Dissolved Oxygen	L

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
198. Laguna Cabo Rojo 3	El Faro	PRSN0021	Turbidity	L
199. Caño Boquerón	Caño Boquerón	PRSN0022	Copper	L
200. Caño Boquerón	Caño Boquerón	PRSN0022	Dissolved Oxygen	L
201. Caño Boquerón	Caño Boquerón	PRSN0022	pН	L
202. Caño Boquerón	Caño Boquerón	PRSN0022	Turbidity	L
203. Laguna Guaniquilla	Laguna Guaniquilla	PRSN0023	Dissolved Oxygen	L
204. Laguna Guaniquilla	Laguna Guaniquilla	PRSN0023	pН	L
205. Laguna Guaniquilla	Laguna Guaniquilla	PRSN0023	Turbidity	L
206. Punta Borinquén to Punta Sardina	Punta Borinquén to Punta Sardina	PRNC01	Copper	L
207. Punta Borinquén to Punta Sardina	Punta Borinquén to Punta Sardina	PRNC01	Thallium	L
208. Punta Sardina to Punta Manglillo	Punta Sardina to Punta Manglillo	PRNC02	Copper	L
209. Punta Sardina to Punta Manglillo	Punta Sardina to Punta Manglillo	PRNC02	Enterococci	L
210. Punta Sardina to Punta Manglillo	Punta Sardina to Punta Manglillo	PRNC02	Lead	L
211. Punta Sardina to Punta Manglillo	Punta Sardina to Punta Manglillo	PRNC02	Thallium	L
212. Punta Sardina to Punta Manglillo	Punta Sardina to Punta Manglillo	PRNC02	Turbidity	L
213. Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Copper	L
214. Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Enterococci	L
215. Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Temperature	L
216. Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Turbidity	L
217. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Copper	L
218. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Enterococci	L
219. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Mercury	L
220. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Nickel	L
221. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	pН	L
222. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Thallium	L
223. Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Turbidity	L
224. Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Copper	L
225. Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Enterococci	L
226. Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Mercury	L

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
227. Punta Manatí to Punta	Punta Manatí to Punta	PRNC05	pН	L
Chivato	Chivato			
228. Punta Manatí to Punta	Punta Manatí to Punta	PRNC05	Temperature	L
Chivato	Chivato			
229. Punta Manatí to Punta	Punta Manatí to Punta	PRNC05	Thallium	L
Chivato	Chivato			
230. Punta Manatí to Punta	Punta Manatí to Punta	PRNC05	Turbidity	L
Chivato	Chivato			
231. Punta Chivato to Punta	Punta Chivato to Punta	PRNC06	Copper	L
Cerro Gordo	Cerro Gordo			
232. Punta Chivato to Punta	Punta Chivato to Punta	PRNC06	Enterococci	L
Cerro Gordo	Cerro Gordo			_
233. Punta Chivato to Punta	Punta Chivato to Punta	PRNC06	Mercury	L
Cerro Gordo	Cerro Gordo		_	_
234. Punta Chivato to Punta	Punta Chivato to Punta	PRNC06	Temperature	L
Cerro Gordo	Cerro Gordo	PD11G0 C	m 1111	
235. Punta Chivato to Punta	Punta Chivato to Punta	PRNC06	Turbidity	L
Cerro Gordo	Cerro Gordo	PD11G05		
236. Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Copper	L
Punta Cerro Gordo	Punta Cerro Gordo	PD11G05	2.6	•
237. Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Mercury	L
Punta Cerro Gordo	Punta Cerro Gordo	PDMC07	**	
238. Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	pН	L
Punta Cerro Gordo	Punta Cerro Gordo	DDNIG07	TD .	T T
239. Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Temperature	L
Punta Cerro Gordo	Punta Cerro Gordo	DDNIG07	TD 1:1:	T T
240. Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Turbidity	L
Punta Cerro Gordo	Punta Cerro Gordo	PRNC08	Arsenic	L
241. Punta Cerro Gordo to	Punta Cerro Gordo to	PRINCUS	Arsenic	L
Punta Boca Juana 242. Punta Cerro Gordo to	Punta Boca Juana Punta Cerro Gordo to	PRNC08	Common	L
Punta Boca Juana	Punta Cerro Gordo to Punta Boca Juana	PRINCUS	Copper	L
243. Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Enterococci	L
Punta Boca Juana	Punta Cerro Gordo to Punta Boca Juana	PRINCUS	Enterococci	L
244. Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Lead	L
Punta Boca Juana	Punta Boca Juana	FRINCUO	Leau	L
245. Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Nickel	L
Punta Boca Juana	Punta Boca Juana	FRINCUO	NICKEI	L
246. Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Turbidity	L
Punta Boca Juana	Punta Boca Juana	TRIVEOS	Turbidity	L
247. Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Zinc	L
Punta Boca Juana	Punta Boca Juana	TRIVEOS	Zilic	L
248. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	Arsenic	L
Salinas	Punta Salinas	112207		
249. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	Copper	L
Salinas	Punta Salinas	112200	- 344.	
250. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	Enterococci	L
Salinas	Punta Salinas			
251. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	Lead	L
Salinas	Punta Salinas			

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
252. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	Nickel	L
Salinas	Punta Salinas			
253. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	pН	L
Salinas	Punta Salinas			
254. Punta Boca Juana to Punta	Punta Boca Juana to	PREC09	Turbidity	L
Salinas	Punta Salinas			
255. Punta Salinas to Río	Punta Salinas to Río	PREC10B	Copper	L
Bayamón Mouth	Bayamón Mouth			
256. Punta Salinas to Río	Punta Salinas to Río	PREC10B	Enterococci	L
Bayamón Mouth	Bayamón Mouth			
257. Punta Salinas to Río	Punta Salinas to Río	PREC10B	Lead	L
Bayamón Mouth	Bayamón Mouth			
258. Punta Salinas to Río	Punta Salinas to Río	PREC10B	Mercury	L
Bayamón Mouth	Bayamón Mouth			
259. Punta Salinas to Río	Punta Salinas to Río	PREC10B	Nickel	L
Bayamón Mouth	Bayamón Mouth			
260. Punta Salinas to Río	Punta Salinas to Río	PREC10B	Turbidity	L
Bayamón Mouth	Bayamón Mouth			
261. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Copper	L
Isla de Cabras	Isla de Cabras			
262. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Enterococci	L
Isla de Cabras	Isla de Cabras			
263. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Lead	L
Isla de Cabras	Isla de Cabras			
264. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Mercury	L
Isla de Cabras	Isla de Cabras			
265. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Nickel	L
Isla de Cabras	Isla de Cabras			
266. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	pН	L
Isla de Cabras	Isla de Cabras			
267. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Temperature	L
Isla de Cabras	Isla de Cabras			
268. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Thallium	L
Isla de Cabras	Isla de Cabras			
269. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Turbidity	L
Isla de Cabras	Isla de Cabras			
270. Rio Bayamón Mouth to	Rio Bayamón Mouth to	PREC10C	Zinc	L
Isla de Cabras	Isla de Cabras			
271. Isla de Cabras to Punta Del	Isla de Cabras to Punta	PREC11	Arsenic	L
Morro	Del Morro			
272. Isla de Cabras to Punta Del	Isla de Cabras to Punta	PREC11	Copper	L
Morro	Del Morro			
273. Isla de Cabras to Punta Del	Isla de Cabras to Punta	PREC11	Dissolved Oxygen	L
Morro	Del Morro			
274. Isla de Cabras to Punta Del	Isla de Cabras to Punta	PREC11	Fecal Coliform	L
Morro	Del Morro			
275. Punta Del Morro to West	Punta Del Morro to West	PREC12	Enterococci	L
Side of Condado Bridge	Side of Condado Bridge			
276. Punta Del Morro to West	Punta Del Morro to West	PREC12	pН	L
Side of Condado Bridge	Side of Condado Bridge			

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
277. Punta Del Morro to West	Punta Del Morro to West	PREC12	Temperature	L
Side of Condado Bridge 278. Punta Del Morro to West Side of Condado Bridge	Side of Condado Bridge Punta Del Morro to West Side of Condado Bridge	PREC12	Turbidity	L
279. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Copper	L
280. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Enterococci	L
281. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Lead	L
282. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Mercury	L
283. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Temperature	L
284. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Thallium	L
285. East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Turbidity	L
286. Punta Las Marías to Punta Cangrejos	Punta Las Marías to Punta Cangrejos	PREC14	Arsenic	L
287. Punta Las Marías to Punta Cangrejos	Punta Las Marías to Punta Cangrejos	PREC14	Copper	L
288. Punta Las Marías to Punta Cangrejos	Punta Las Marías to Punta Cangrejos	PREC14	Lead	L
289. Punta Las Marías to Punta Cangrejos	Punta Las Marías to Punta Cangrejos	PREC14	Temperature	L
290. Punta Las Marías to Punta Cangrejos	Punta Las Marías to Punta Cangrejos	PREC14	Thallium	L
291. Punta Las Marías to Punta Cangrejos	Punta Las Marías to Punta Cangrejos	PREC14	Turbidity	L
292. Punta Cangrejos to Punta Vacía Talega	Punta Cangrejos to Punta Vacía Talega	PREC15	Arsenic	L
293. Punta Cangrejos to Punta Vacía Talega	Punta Cangrejos to Punta Vacía Talega	PREC15	Copper	L
294. Punta Cangrejos to Punta Vacía Talega	Punta Cangrejos to Punta Vacía Talega	PREC15	Enterococci	L
295. Punta Cangrejos to Punta Vacía Talega	Punta Cangrejos to Punta Vacía Talega	PREC15	Mercury	L
296. Punta Cangrejos to Punta Vacía Talega	Punta Cangrejos to Punta Vacía Talega	PREC15	Nickel	L
297. Punta Cangrejos to Punta Vacía Talega	Punta Cangrejos to Punta Vacía Talega	PREC15	Temperature	L

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
298. Punta Cangrejos to Punta	Punta Cangrejos to Punta	PREC15	Thallium	L
Vacía Talega	Vacía Talega			
299. Punta Cangrejos to Punta	Punta Cangrejos to Punta	PREC15	Turbidity	L
Vacía Talega	Vacía Talega			
300. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Arsenic	L
Punta Miquillo	Punta Miquillo			
301. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Copper	L
Punta Miquillo	Punta Miquillo			
302. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Enterococci	L
Punta Miquillo	Punta Miquillo			
303. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Lead	L
Punta Miquillo	Punta Miquillo			
304. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Mercury	L
Punta Miquillo	Punta Miquillo			
305. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Nickel	L
Punta Miquillo	Punta Miquillo			
306. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Temperature	L
Punta Miquillo	Punta Miquillo		1	
307. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Thallium	L
Punta Miquillo	Punta Miquillo			_
308. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Turbidity	L
Punta Miquillo	Punta Miquillo	1112010		_
309. Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Zinc	L
Punta Miquillo	Punta Miquillo	1112010	2\$	_
310. Punta Miquillo to Punta La	Punta Miquillo to Punta	PREC17	Copper	L
Bandera	La Bandera	1112017	Соррег	_
311. Punta Miquillo to Punta La	Punta Miquillo to Punta	PREC17	Mercury	L
Bandera	La Bandera			_
312. Punta Miquillo to Punta La	Punta Miquillo to Punta	PREC17	Temperature	L
Bandera	La Bandera		r	
313. Punta Miquillo to Punta La	Punta Miquillo to Punta	PREC17	Turbidity	L
Bandera	La Bandera			_
314. Punta La Bandera to	Punta La Bandera to	PREC18	Copper	L
Cabezas de San Juan	Cabezas de San Juan			_
315. Punta La Bandera to	Punta La Bandera to	PREC18	pН	L
Cabezas de San Juan	Cabezas de San Juan			
316. Punta La Bandera to	Punta La Bandera to	PREC18	Temperature	L
Cabezas de San Juan	Cabezas de San Juan			_
317. Punta La Bandera to	Punta La Bandera to	PREC18	Thallium	L
Cabezas de San Juan	Cabezas de San Juan	1112010		_
318. Punta La Bandera to	Punta La Bandera to	PREC18	Turbidity	L
Cabezas de San Juan	Cabezas de San Juan	1112010		_
319. Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Copper	L
Punta Barrancas	Punta Barrancas		TT	_
320. Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Enterococci	L
Punta Barrancas	Punta Barrancas			
321. Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Oil and Grease	L
Punta Barrancas	Punta Barrancas	112017		
322. Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Temperature	L
Punta Barrancas	Punta Barrancas	112017	_ 5p 0	

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
323. Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Turbidity	L
Punta Barrancas	Punta Barrancas			
324. Punta Barrancas to Punta	Punta Barrancas to Punta	PREC20	Copper	L
Medio Mundo	Medio Mundo			
325. Punta Barrancas to Punta	Punta Barrancas to Punta	PREC20	Dissolved Oxygen	L
Medio Mundo	Medio Mundo			
326. Punta Barrancas to Punta	Punta Barrancas to Punta	PREC20	Enterococci	L
Medio Mundo	Medio Mundo			
327. Punta Barrancas to Punta	Punta Barrancas to Punta	PREC20	Temperature	L
Medio Mundo	Medio Mundo			
328. Punta Barrancas to Punta	Punta Barrancas to Punta	PREC20	Thallium	L
Medio Mundo	Medio Mundo			
329. Punta Barrancas to Punta	Punta Barrancas to Punta	PREC20	Turbidity	L
Medio Mundo	Medio Mundo			
330. Isla Cabras to Punta	Isla Cabras to Punta	PREC23	Copper	L
Cascajo	Cascajo			
331. Isla Cabras to Punta	Isla Cabras to Punta	PREC23	Turbidity	L
Cascajo	Cascajo			
332. Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Copper	L
Lima	Lima			
333. Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Dissolved Oxygen	L
Lima	Lima			
334. Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Enterococci	L
Lima	Lima			
335. Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Temperature	L
Lima	Lima			_
336. Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Turbidity	L
Lima	Lima	DD E CO. 5		<u> </u>
337. Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Copper	L
Humacao	Humacao	DD E C 2 4	-	<u> </u>
338. Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Enterococci	L
Humacao	Humacao	PRECOS	3.6	*
339. Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Mercury	L
Humacao	Humacao	DDECO	TD.	т
340. Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Temperature	L
Humacao	Humacao	DDEC25	TP1.114	т
341. Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Turbidity	L
Humacao	Humacao  Morro de Humacao to	DDEC26	Comment	т
342. Morro de Humacao to		PREC26	Copper	L
Punta Candelero	Punta Candelero	DDEC26	Entangasai	т
343. Morro de Humacao to	Morro de Humacao to	PREC26	Enterococci	L
Punta Candelero  344. Morro de Humacao to	Punta Candelero  Morro de Humacao to	PREC26	Tomporeture	L
Punta Candelero	Punta Candelero	FREC20	Temperature	L
345. Morro de Humacao to	Morro de Humacao to	PREC26	Turbidity	L
Punta Candelero	Punta Candelero	r NEC20	ruivialty	L
346. Punta Candelero to Punta	Punta Candelero to Punta	PREC27	Arsenic	L
Guayanés	Guayanés	I KEC21	AISCIIC	L
347. Punta Candelero to Punta	Punta Candelero to Punta	PREC27	Copper	L
Guayanés	Guayanés	I KEC21	Соррсі	L
Guayanes	Guayanes	1		

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
348. Punta Candelero to Punta	Punta Candelero to Punta	PREC27	Enterococci	L
Guayanés	Guayanés			
349. Punta Candelero to Punta	Punta Candelero to Punta	PREC27	Thallium	L
Guayanés	Guayanés			
350. Punta Candelero to Punta	Punta Candelero to Punta	PREC27	Turbidity	L
Guayanés	Guayanés			
351. Punta Quebrada Honda to	Punta Quebrada Honda to	PREC28B	Copper	L
Punta Yeguas	Punta Yeguas			
352. Punta Quebrada Honda to	Punta Quebrada Honda to	PREC28B	Enterococci	L
Punta Yeguas	Punta Yeguas			
353. Punta Quebrada Honda to	Punta Quebrada Honda to	PREC28B	Thallium	L
Punta Yeguas	Punta Yeguas			
354. Punta Quebrada Honda to	Punta Quebrada Honda to	PREC28B	Turbidity	L
Punta Yeguas	Punta Yeguas			
355. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Arsenic	L
Quebrada Honda	Quebrada Honda			
356. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Copper	L
Quebrada Honda	Quebrada Honda			
357. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Enterococci	L
Quebrada Honda	Quebrada Honda			
358. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Mercury	L
Quebrada Honda	Quebrada Honda			
359. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Oil and Grease	L
Quebrada Honda	Quebrada Honda			
360. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Temperature	L
Quebrada Honda	Quebrada Honda			
361. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Thallium	L
Quebrada Honda	Quebrada Honda			
362. Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Turbidity	L
Quebrada Honda	Quebrada Honda			
363. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Copper	L
Tuna	Tuna			
364. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Enterococci	L
Tuna	Tuna			
365. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Lead	L
Tuna	Tuna			
366. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	pH	L
Tuna	Tuna			
367. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Temperature	L
Tuna	Tuna			
368. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Thallium	L
Tuna	Tuna			
369. Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Turbidity	L
Tuna	Tuna			
370. Punta Tuna to Cabo Mala	Punta Tuna to Cabo Mala	PREC30	Copper	L
Pascua	Pascua			
371. Punta Tuna to Cabo Mala	Punta Tuna to Cabo Mala	PREC30	Enterococci	L
Pascua	Pascua			
372. Punta Tuna to Cabo Mala	Punta Tuna to Cabo Mala	PREC30	Turbidity	L
Pascua	Pascua			

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
373. Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Copper	L
Punta Viento	Punta Viento			
374. Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Enterococci	L
Punta Viento	Punta Viento			
375. Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Temperature	L
Punta Viento	Punta Viento			_
376. Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Thallium	L
Punta Viento	Punta Viento	116551		
377. Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Turbidity	L
Punta Viento	Punta Viento	TRBEST	Turbianty	L
378. Punta Viento to Punta	Punta Viento to Punta	PRSC32	Copper	L
Figuras	Figuras	T KSC32	Соррсі	L
379. Punta Viento to Punta	Punta Viento to Punta	PRSC32	Dissolved Oxygen	L
		FRSC32	Dissolved Oxygen	L
Figuras Posts Visited A Posts	Figuras Punta Viento to Punta	PRSC32	E-t	Τ.
380. Punta Viento to Punta		PRSC32	Enterococci	L
Figuras	Figuras	PD CC22		T .
381. Punta Viento to Punta	Punta Viento to Punta	PRSC32	Mercury	L
Figuras	Figuras			_
382. Punta Viento to Punta	Punta Viento to Punta	PRSC32	Temperature	L
Figuras	Figuras			
383. Punta Viento to Punta	Punta Viento to Punta	PRSC32	Thallium	L
Figuras	Figuras			
384. Punta Viento to Punta	Punta Viento to Punta	PRSC32	Turbidity	L
Figuras	Figuras			
385. Punta Figuras to Punta Ola	Punta Figuras to Punta	PRSC33	Copper	L
Grande	Ola Grande			
386. Punta Figuras to Punta Ola	Punta Figuras to Punta	PRSC33	Enterococci	L
Grande	Ola Grande			
387. Punta Figuras to Punta Ola	Punta Figuras to Punta	PRSC33	Lead	L
Grande	Ola Grande			
388. Punta Figuras to Punta Ola	Punta Figuras to Punta	PRSC33	Mercury	L
Grande	Ola Grande			
389. Punta Figuras to Punta Ola	Punta Figuras to Punta	PRSC33	Temperature	L
Grande	Ola Grande		r · · · · · ·	
390. Punta Figuras to Punta Ola	Punta Figuras to Punta	PRSC33	Turbidity	L
Grande	Ola Grande			_
391. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	Copper	L
Petrona	Punta Petrona	116500	Copper	_
392. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	Dissolved Oxygen	L
Petrona	Punta Petrona	TRBEST	Dissorved Oxygen	L
393. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	Enterococci	L
Petrona	Punta Petrona	TROCOT	Litterococci	
394. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	Lead	L
Petrona	Punta Petrona	1 NSC34	Lau	L
395. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	Mercury	L
Petrona	Punta Oia Grande to Punta Petrona	r NSC34	ivicicui y	L
		DDCC24	Nickel	L
396. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	INICKEI	L
Petrona	Punta Petrona	DDCC24	Oil and Course	7
397. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	Oil and Grease	L
Petrona	Punta Petrona			

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
398. Punta Ola Grande to Punta	Punta Ola Grande to	PRSC34	pН	L
Petrona	Punta Petrona			
399. Punta Ola Grande to Punta Petrona	Punta Ola Grande to Punta Petrona	PRSC34	Temperature	L
400. Punta Ola Grande to Punta Petrona	Punta Ola Grande to Punta Petrona	PRSC34	Turbidity	L
401. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Copper	L
402. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Enterococci	L
403. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Lead	L
404. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Mercury	L
405. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Nickel	L
406. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Thallium	L
407. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Turbidity	L
408. Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Zinc	L
409. Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Copper	L
410. Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Enterococci	L
411. Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Mercury	L
412. Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	pН	L
413. Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Temperature	L
414. Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Turbidity	L
415. Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Copper	L
416. Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Enterococci	L
417. Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Mercury	L
418. Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Oil and Grease	L
419. Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Turbidity	L
420. Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Copper	L
421. Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Enterococci	L
422. Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Mercury	L

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
423. Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Nickel	L
424. Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	рН	L
425. Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Turbidity	L
426. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Copper	L
427. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Mercury	L
428. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Lead	L
429. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Nickel	L
430. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Oil and Grease	L
431. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Thallium	L
432. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Turbidity	L
433. Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Zinc	L
434. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Copper	L
435. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Enterococci	L
436. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Mercury	L
437. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Oil and Grease	L
438. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Temperature	L
439. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Thallium	L
440. Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Turbidity	L
441. Punta Verraco to Punta Ballena	Punta Verraco to Punta Ballena	PRSC39	Copper	L
442. Punta Verraco to Punta Ballena	Punta Verraco to Punta Ballena	PRSC39	Thallium	L
443. Punta Verraco to Punta Ballena	Punta Verraco to Punta Ballena	PRSC39	Turbidity	L
444. Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Copper	L
445. Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Enterococci	L
446. Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Nickel	L
447. Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	pH	L

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority		
448. Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Temperature	L		
449. Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Turbidity	L		
450. Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Copper	L		
451. Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Enterococci	L		
452. Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	pН	L		
453. Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Temperature	L		
454. Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Thallium	L		
455. Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Turbidity	L		
456. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	ahía Fosforescente La PRSC41B2 Copper arguera to Punta Cueva				
457. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Dissolved Oxygen	L		
458. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Enterococci	L		
459. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	рН	L		
460. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Temperature	L		
461. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Thallium	L		
462. Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Turbidity	L		
463. Bahía Monsio José to Faro de Cabo Rojo	Bahía Monsio José to Faro de Cabo Rojo	PRSC41B3	Dissolved Oxygen	L		
464. Bahía Monsio José to Faro de Cabo Rojo	Bahía Monsio José to Faro de Cabo Rojo	PRSC41B3	Enterococci	L		
465. Bahía Monsio José to Faro de Cabo Rojo	Bahía Monsio José to Faro de Cabo Rojo	PRSC41B3	Mercury	L		

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
466. Bahía Monsio José to Faro	Bahía Monsio José to	PRSC41B3	Nickel	L
de Cabo Rojo	Faro de Cabo Rojo			
467. Bahía Monsio José to Faro	Bahía Monsio José to	PRSC41B3	Temperature	L
de Cabo Rojo	Faro de Cabo Rojo			
468. Bahía Monsio José to Faro	Bahía Monsio José to	PRSC41B3	Thallium	L
de Cabo Rojo	Faro de Cabo Rojo			
469. Bahía Monsio José to Faro	Bahía Monsio José to	PRSC41B3	Turbidity	L
de Cabo Rojo	Faro de Cabo Rojo			
470. Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Dissolved Oxygen	L
Punta Águila	Punta Águila			
471. Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Enterococci	L
Punta Águila	Punta Águila			
472. Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	pН	L
Punta Águila	Punta Águila		1	
473. Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Temperature	L
Punta Águila	Punta Águila			
474. Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Turbidity	L
Punta Águila	Punta Águila			
475. Punta Águila to Punta	Punta Águila to Punta	PRWC43	Enterococci	L
Guaniquilla	Guaniquilla			
476. Punta Águila to Punta	Punta Águila to Punta	PRWC43	Temperature	L
Guaniquilla	Guaniquilla		F	
477. Punta Águila to Punta	Punta Águila to Punta	PRWC43	Turbidity	L
Guaniquilla	Guaniquilla			
478. Punta Guaniquilla to Punta	Punta Guaniquilla to	PRWC44	Enterococci	L
La Mela	Punta La Mela			
479. Punta Guaniquilla to Punta	Punta Guaniquilla to	PRWC44	рН	L
La Mela	Punta La Mela			
480. Punta Guaniquilla to Punta	Punta Guaniquilla to	PRWC44	Temperature	L
La Mela	Punta La Mela		1	
481. Punta Guaniquilla to Punta	Punta Guaniquilla to	PRWC44	Thallium	L
La Mela	Punta La Mela			
482. Punta Guaniquilla to Punta	Punta Guaniquilla to	PRWC44	Turbidity	L
La Mela	Punta La Mela			
483. Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Copper	L
Carenero	Carenero			
484. Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Enterococci	L
Carenero	Carenero			
485. Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Lead	L
Carenero	Carenero			
486. Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Thallium	L
Carenero	Carenero			
487. Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Turbidity	L
Carenero	Carenero		,	
488. Punta Carenero to front of	Punta Carenero to front of	PRWC46	Copper	L
Cayo Ratones	Cayo Ratones		11	
489. Punta Carenero to front of	Punta Carenero to front of	PRWC46	Lead	L
Cayo Ratones	Cayo Ratones	-		
490. Punta Carenero to front of	Punta Carenero to front of	PRWC46	Temperature	L
Cayo Ratones	Cayo Ratones			

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
491. Punta Carenero to front of	Punta Carenero to front of	PRWC46	Thallium	L
Cayo Ratones	Cayo Ratones			
492. Punta Carenero to front of	Punta Carenero to front of	PRWC46	Turbidity	L
Cayo Ratones	Cayo Ratones			
493. In front of Cayo Ratones to	In front of Cayo Ratones	PRWC47	Copper	L
Punta Guanajibo	to Punta Guanajibo			
494. In front of Cayo Ratones to	In front of Cayo Ratones	PRWC47	Nickel	L
Punta Guanajibo	to Punta Guanajibo			
495. In front of Cayo Ratones to	In front of Cayo Ratones	PRWC47	Temperature	L
Punta Guanajibo	to Punta Guanajibo			
496. In front of Cayo Ratones to	In front of Cayo Ratones	PRWC47	Turbidity	L
Punta Guanajibo	to Punta Guanajibo			
497. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Copper	L
Algarrobo	Algarrobo			
498. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Enterococci	L
Algarrobo	Algarrobo			
499. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Lead	L
Algarrobo	Algarrobo			
500. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Mercury	L
Algarrobo	Algarrobo			
501. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Nickel	L
Algarrobo	Algarrobo			
502. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Oil and Grease	L
Algarrobo	Algarrobo			
503. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	pН	L
Algarrobo	Algarrobo			
504. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Temperature	L
Algarrobo	Algarrobo			
505. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Thallium	L
Algarrobo	Algarrobo			
506. Punta Guanajibo to Punta	Punta Guanajibo to Punta	PRWC48	Turbidity	L
Algarrobo	Algarrobo			
507. Punta Algarrobo to Punta	Punta Algarrobo to Punta	PRWC49	Copper	L
Cadena	Cadena			
508. Punta Algarrobo to Punta	Punta Algarrobo to Punta	PRWC49	Enterococci	L
Cadena	Cadena			
509. Punta Algarrobo to Punta	Punta Algarrobo to Punta	PRWC49	Nickel	L
Cadena	Cadena			
510. Punta Algarrobo to Punta	Punta Algarrobo to Punta	PRWC49	pН	L
Cadena	Cadena			
511. Punta Algarrobo to Punta	Punta Algarrobo to Punta	PRWC49	Temperature	L
Cadena	Cadena			
512. Punta Algarrobo to Punta	Punta Algarrobo to Punta	PRWC49	Turbidity	L
Cadena	Cadena			
513. Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Copper	L
Higüero	Higüero			
514. Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Enterococci	L
Higüero	Higüero			
515. Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Lead	L
Higüero	Higüero			

Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
516. Punta Cadena to Punta Higüero	Punta Cadena to Punta Higüero	PRWC50	Mercury	L
517. Punta Cadena to Punta Higüero	Punta Cadena to Punta Higüero	PRWC50	Nickel	L
518. Punta Cadena to Punta Higüero	Punta Cadena to Punta Higüero	PRWC50	рН	L
519. Punta Cadena to Punta Higüero	Punta Cadena to Punta Higüero	PRWC50	Temperature	L
520. Punta Cadena to Punta Higüero	Punta Cadena to Punta Higüero	PRWC50	Turbidity	L
521. Punta Higüero to Punta del Boquerón	Punta Higüero to Punta del Boquerón	PRWC51	Copper	L
522. Punta Higüero to Punta del Boquerón	Punta Higüero to Punta del Boquerón	PRWC51	Enterococci	L
523. Punta Higüero to Punta del Boquerón	Punta Higüero to Punta del Boquerón	PRWC51	Lead	L
524. Punta Higüero to Punta del Boquerón	Punta Higüero to Punta del Boquerón	PRWC51	Mercury	L
525. Punta Higüero to Punta del Boquerón	Punta Higüero to Punta del Boquerón	PRWC51	Nickel	L
526. Punta Higüero to Punta del Boquerón	Punta Higüero to Punta del Boquerón	PRWC51	Turbidity	L
527. Punta del Boquerón to Punta Borinquén	Punta del Boquerón to Punta Borinquén	PRWC52	Copper	L
528. Punta del Boquerón to Punta Borinquén	Punta del Boquerón to Punta Borinquén	PRWC52	Turbidity	L
529. Culebra Island	Culebra Island	PRCC53	pН	L
530. Culebra Island	Culebra Island	PRCC53	Turbidity	L

The following table lists TMDLs for specific segment/pollutant combination which will be developed in the next two years. (Table 49).

**Table 49: TMDL Development Status** 

Table 49: TMDL Development Status									
AU/POLLUTANT	AU ID	PROJECT STATUS							
1. RÍO BAIROA/TOTAL, PHOSPHORUS	PRER14H	FINAL DRAFT							
2. RÍO BAIROA/TOTAL, NITROGEN	PRER14H	FINAL DRAFT							
3. RÍO GUAYANILLA/TOTAL, PHOSPHORUS	PRSR67A	FINAL DRAFT							
4. RÍO GUAYANILLA/TOTAL, NITROGEN	PRSR67A	FINAL DRAFT							
5. RÍO YAUCO/TOTAL, PHOSPHORUS	PRSR68A1	FINAL DRAFT							
6. RÍO YAUCO/TOTAL, NITROGEN	PRSR68A1	FINAL DRAFT							
7. RÍO GUAYABO/TOTAL, NITROGEN	PRWR94A	FINAL DRAFT							
8. LAGO LA PLATA/TOTAL, PHOSPHORUS	PREL <sub>1</sub> 10A1	FINAL DRAFT							
9. LAGO LA PLATA/TOTAL, NITROGEN	PREL <sub>1</sub> 10A1	FINAL DRAFT							
10. LAGO LOIZA/TOTAL, PHOSPHORUS	PREL14A	FINAL DRAFT							
11. LAGO LOIZA/TOTAL, NITROGEN	PREL14A	FINAL DRAFT							
12. RÍO GRANDE DE MANATI/COPPER	PRNR8A3	FINAL DRAFT							
13. RÍO GRANDE DE ARECIBO/COPPER	PRNR7A2	FINAL DRAFT							
14. RÍO BAUTA/COPPER	PRNR8C2	FINAL DRAFT							
15. RÍO GUAYNABO/COPPER	PRER12B	FINAL DRAFT							
16. RÍO GUAYNABO/LEAD	PRER12B	FINAL DRAFT							
17. RÍO GRANDE DE LOIZA/COPPER	PRER14A1	FINAL DRAFT							
18. RÍO GURABO/COPPER	PRER14G1	FINAL DRAFT							
19. RÍO TURABO/COPPER	PRER14J	FINAL DRAFT							
20. RÍO GRANDE DE AÑASCO/COPPER	PRWR83A	FINAL DRAFT							
21. RÍO VALENCIANO/COPPER	PRER14G2	FINAL DRAFT							
22. RÍO VALENCIANO/LEAD	PRER14G2	FINAL DRAFT							
23. RÍO CULEBRINAS/COPPER	PRWR95A	FINAL DRAFT							
24. RÍO DE LA PLATA/COPPER	PRER10A5	FINAL DRAFT							

### 4.0 Clean Water Act 303(d) Program Vision Long – Term Vision

The 2022-2032 Vision for the CWA Section 303(d) Program ("2022 Vision") communicated the expectation that states, territories, and authorized tribes would engage in a long-term planning process and document their decisions in a Prioritization Framework. The Prioritization Framework is a planning document that serves two key objectives: (1) to describe long-term Vision priorities and a rationale for selecting those Vision priorities; and (2) outline a general strategy for implementing the Goals of the 2022 Vision over the next decade. This 2022 – 2032 Long – Term Vision is under development.

# **PART F. Public Participation**

The List of Impacted Water Bodies draft for the 2024 cycle and the Assessment Methodology will be available to the public for examination, at the request of the interested party by sending an email to the following address: <a href="waterquality@drna.pr.gov">waterquality@drna.pr.gov</a>, no later than thirty (30) days from the publication of the notice. The deadline for submitting comments may be extended if deemed necessary or appropriate in the public interest. All interested or affected parties may request a public hearing. Said request must be submitted in writing to the Secretary of the PRDNER through the Secretary's Office at the following email address: <a href="ayudaciudadano@drna.pr.gov">ayudaciudadano@drna.pr.gov</a>, no later than thirty (30) days from the date of publication of this notice and the reason or reasons that in the opinion of the applicant merit the holding of the public hearing must be indicated.

The public notice was appropriated published in two local newspaper of island wide circulation, PRIMERA HORA and EL VOCERO on May 6, 2024, (Public Notice in Spanish and English, Appendix III).

The Public participation element serves to encourage the involvement of universities, private institutions, government agencies, non-government entities and the public in water quality issues.

Enclosed in Appendix IV you will find the determination of the Governing Board of PRDNER.

APPENDIX I – 2024 Cycle 303(d) List

# RIVERS, STREAMS AND CREEKS

Size of waters Impaired by Causes all cycles (Monitored Miles for Rivers and Streams)									
Causes of Impairments	Size of Waters Impaired (miles)								
Ammonia	128.5								
Arsenic	25.4								
Chromium VI	2,555.1								
Copper	600.9								
Cyanide	1, 144.4								
Dissolved Oxygen	1,139.1								
Enterococcus	2,555.1								
Lead	259.5								
Mercury	141.9								
Oil and Grease	103.8								
Pesticides	544.3								
pH	573.8								
Silver	14.6								
Surfactants	347.1								
Temperature	2,075.1								
Total, Nitrogen	1,477.4								
Total, Phosphorus	2,291.5								
Turbidity	1,959.4								

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary Basin** Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R1 R2 A DW **Network** L RÍO RÍO 5 5 Collection System 9.9 SD NS 5 5 Н 2022, 2020 Chromium VI **GUAJATACA GUAJATACA** 50011400 Failure Cvanide 2024, 2022 Landfill PRNR3A1 Dissolved 2024, 2022 Minor Industrial Oxygen **Point Sources** Enterococci 2024, 2022, Onsite Wastewater 2020, 2018 **Systems** Surfactants 2024 Total, 2024, 2022, Nitrogen 2020, 2018, 2016 22 SD NS 5 5 RÍO 5 5 F Η Agriculture Chromium VI 2022, 2020 50010600 **GUAJATACA** Collection System Cyanide 2024 PRNR3A2 Failure 2024, 2022, Enterococci Confined Animal 2020, 2018 Feeding Operations рН 2024 Major Municipal 2024 Total, Point Sources Phosphorus Minor Industrial Total, 2024, 2022, Point Sources 2020, 2018, Nitrogen Onsite Wastewater 2016 Systems **Turbidity** 2024 Urban Runoff/Storm Sewers 2006 3.5 SD 5 5 **OUEBRADA** 4a 4a D Η Confined Animal Arsenic LAS SEQUÍAS **Feeding Operations** F Dissolved 2006 PRNQ3B H.L Onsite Wastewater Oxygen Systems **RÍO GRANDE** Agriculture **RIO GRANDE** 22.4 SD NS 5 5 5 5 K Η Chromium VI 2022, 2020 Collection System **DE ARECIBO DE ARECIBO** 50027600 Enterococci 2024, 2022, Failure PRNR7A1 2020, 2018 Confined Animal **Turbidity** 2024, 2020, Feeding Operations 2018, 2014,

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and Priority** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired Summary Basin** Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Major Industrial 2012, 2010, Point Sources 2006 Onsite Wastewater Systems Urban Runoff/Storm Sewers 2022, 2020 **RÍO GRANDE** 122.8 SD NS 5 5 5 5 K Η Agriculture Chromium VI DE ARECIBO 50025000 Collection System 2024, 2022, Enterococci PRNR7A2 Failure 2020, 2018 Confined Animal Pesticide 2008 **Feeding Operations** Temperature 2024, 2020 Landfill Total, 2022 Minor Industrial Nitrogen Point Sources Total, 2022, 2020 Major Municipal Phosphorus Point Sources **Turbidity** 2024, 2022, Onsite Wastewater 2020, 2018, Systems 2014, 2012, Urban Runoff/Storm 2008 Sewers TÚNEL NS 5 5 Agriculture 28.9 SD 5 5 K Η Chromium VI 2022, 2020 PRNR7A3 50020500 Collection System Cyanide 2024 Failure 2024, 2022, Enterococci Confined Animal 2020, 2018 **Feeding Operations** рH 2022 Minor Industrial Total, 2022 Point Sources Phosphorus Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and Priority** Categories Notes Waterbody **Monitoring** Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R1 R2 A DW **Network** L RÍO 5 5 87.0 SD NS 5 5 K H Agriculture 2022, 2020 Chromium VI CAONILLAS 50026000 Collection System Enterococci 2024, 2022, PRNR7C1 Failure 2020, 2018 Confined Animal Total, 2022, 2020 **Feeding Operations** Phosphorus Landfill Major Municipal Point Sources Minor Industrial **Point Sources** Onsite Wastewater Systems Surface Mining Urban Runoff/Storm Sewers RÍO LIMÓN 40.7 SD NS 5 5 5 1 K Η Agriculture Chromium VI 2022, 2020 PRNR7C2 Minor Industrial 50026350 2024, 2022, Enterococci Point Sources 2020, 2018 Onsite Wastewater Temperature 2024 Systems RÍO YUNES NS 5 Agriculture 2022, 2020 32.7 SD 5 5 K Η Chromium VI PRNR7C3 50026950 Minor Industrial 2024, 2022, Enterococci Point Sources 2020, 2018 Onsite Wastewater Temperature 2024, 2020 Systems Urban Runoff/Storm Sewers 2022, 2020 RÍO TANAMÁ 43.5 SD NS 5 5 5 5 K Η Agriculture Chromium VI PRNR7B2 50028000 Collection System Copper 2024 Failure Enterococci 2024, 2022, Minor Industrial 2020, 2018 Point Sources 2024 Lead

Note: The 202	<b>2024</b> Cycle 303(d) List – List of Rivers and Streams  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.										00 and 2006																																							
Basin	Waterbody Name  Waterbody Size  Size  Waterbody Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size  Size		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories		Designated Uses and Categories		Designated Use Categories		Designated Uses an Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories Summary		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		d Uses and gories mary		ignated Uses and Categories		Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority   Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
	- (w	(miles)	•	NS = Network	R1	R2	A L	DW	Notes	Pı	204100		Cy cics																																					
											Onsite Wastewater Systems	Total, Phosphorus Turbidity	2024, 2022, 2018 2024, 2022, 2018, 2014, 2012, 2008																																					
RÍO GRANDE DE MANATÍ	RÍO GRANDE DE MANATÍ PRNR8A1	31	SD	NS 50038100	5	5	5	5	K	Н	Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI  Enterococci  pH  Temperature  Total, Phosphorus  Turbidity	2022, 2020 2024, 2022, 2018 2024 2024, 2022 2024, 2022, 2018, 2016 2024, 2022, 2018, 2014, 2012, 2010, 2008, 2006																																					
	RÍO GRANDE DE MANATÍ PRNR8A2	38.1	SD	NS 50035500	5	5	5	5	K	Н	Collection System Failure Confined Animal Feeding Operations Landfills Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Copper  Cyanide Enterococci  Lead Mercury Temperature Total, Nitrogen Total, Phosphorus	2022, 2020 2024, 2022, 2018 2024 2024, 2022, 2020, 2018 2024 2024 2024, 2020 2024, 2020 2024, 2022																																					

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and Priority** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired** Size **Summary** Basin **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L **Turbidity** 2024, 2022, 2018, 2014, 2012, 2010, 2008, 2006 RÍO CIALITO NS 2022, 2020 5 5 25.8 SD 5 5 K Η Agriculture Chromium VI Collection System PRNR8B 50035950 Enterococci 2024, 2022, Failure 2020, 2018 Confined Animal Total, 2024 Feeding Phosphorus Operations **Turbidity** 2024, 2022, Minor Industrial 2018, 2014, Point Sources 2012, 2010 Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO OROCOVIS Collection System 2022, 2020 19.8 NS 5 5 5 Chromium VI SD 5 K Η PRNR8E1 50030700 Failure 2024 Cvanide Landfill Enterococci 2024, 2022, Major Municipal 2020, 2018 Point Sources Total. 2024, 2022, Minor Industrial Phosphorus 2020, 2018, Point Sources 2016 Onsite Wastewater Systems Urban Runoff/Storm Sewers Confined Animal RÍO BOTIJAS 19.1 pН SD 5 3 Η 2020 4a 4a D **Feeding Operations** PRNR8E2 Η K Onsite Wastewater Systems RÍO CIBUCO Agriculture 31.1 SD 5 5 5 5 Chromium VI 2022, 2020

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L RÍO CIBUCO Collection System 2024 NS Lead PRNR9A 50039500 Failure Enterococci 2024, 2022, Confined Animal 2020, 2018 **Feeding Operations** Temperature 2022 Landfill Total, 2022, 2020, Major Municipal Nitrogen 2018, 2016 Point Sources Total, 2024, 2022, Onsite Wastewater 2020, 2018 Phosphorus Systems **Turbidity** 2024, 2020, 2018, 2014, 2012, 2010, 2008, 2006 RÍO MOROVIS Collection System 25.5 SD 4a 4a 5 3 Α Η Dissolved 2020, 2014 PRNR9B2 D Failure Oxygen Η Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers Collection System RÍO DE LA RÍO DE LA 21 SD NS 5 5 5 5 В Η Chromium VI 2022, 2020 **PLATA PLATA** 50046000 Failure Dissolved 2024, 2022, PRER10A1 Confined Animal Oxygen 2020, 2018, 2016 Feeding Operations Major Industrial 2024, 2022, Enterococci Point Sources 2020, 2018 Minor Municipal 2024 Surfactants Point Sources 2024, 2020 Temperature

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Onsite Wastewater Total. 2024 Phosphorus Systems **Surfaces Mining Turbidity** 2024 NS 2022, 2020 5 5 RÍO DE LA 55.7 SD 5 5 В Η Agriculture Chromium VI Collection System **PLATA** 50044000 2024, 2022, Enterococci PRER10A3 Failure 2020, 2018 Confined Animal Temperature 2024 Feeding Operations 2022, 2018, Total, Landfill Phosphorus 2016 Major Municipal Point Sources Onsite Wastewater Systems RÍO DE LA 10.2 SD 5 5 NS 5 5 Η Agriculture Chromium VI 2022, 2020 В **PLATA** 50043000 Confined Animal 2024 Cyanide PRER10A4 Feeding Operations 2024, 2022, Enterococci Landfill 2020, 2018 Minor Industrial 2024, 2020 рH Point Sources Temperature 2024, 2020 Onsite Wastewater Total. 2024, 2022, Systems Phosphorus 2020, 2018, 2016 **Turbidity** 2024, 2020, 2018, 2016, 2014, 2010, 2008 Collection System RÍO DE LA 92.7 SD NS 5 5 5 5 В Η Chromium VI 2022, 2020 **PLATA** 50042500 Failure Cyanide 2024 PRER10A5 Confined Animal 2024, 2022, Enterococci Feeding 2020, 2018 Operations Temperature 2024 Major Municipal Total. 2024 Point Sources

Nitrogen

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Total. 2024, 2022, Minor Industrial Point Sources Phosphorus 2020, 2018, Onsite Wastewater 2016 2024 Systems **Turbidity** Urban Runoff/Storm Sewers Collection System RÍO GUADIANA 21.8 SD NS 5 5 5 5 В Η Chromium VI 2022, 2020 PRER10E 50044850 Failure Cyanide 2024 Confined Animal 2024, 2022, Enterococci **Feeding Operations** 2020, 2018 Minor Municipal 2024 Temperature Point Sources Total, 2024, 2022, Onsite Wastewater Nitrogen 2018, 2016 Systems Total, 2024, 2022, 2020, 2018, Phosphorus 2016 Н RÍO 36.8 SD NS 5 5 5 5 В Agriculture Chromium VI 2022, 2020 ARROYATA 50043998 Collection System Cvanide 2024 PRER10G Failure 2024, 2022, Enterococci Confined Animal 2020, 2018 Feeding Operations Total, 2024, 2022, Onsite Wastewater Phosphorus 2020, 2018, **Systems** 2016 RÍO MATÓN NS 5 5 15.8 SD 5 5 В Η Confined Animal Chromium VI 2022, 2020 PRER10J 50042800 Feeding Operations Cvanide 2024 Onsite Wastewater Enterococci 2024, 2022, Systems 2020, 2018 Total, 2024, 2020 Nitrogen RÍO GUAVATE SD Н Collection System 2020, 2012 19.8 4a 5 3 4a В pН PRER10K D Failure Confined Animal Η

Feeding Operations

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Onsite Wastewater Systems Urban Runoff/Storm Sewers Collection System RÍO HONDO RÍO HONDO 22 SD 3 4a 4a 5 D Η Dissolved 2016, 2014, PRER11A F Failure Oxygen 2008, 2006 Η Urban Runoff/Storm Surfactants 2016, 2008, Sewers 2006 RÍO RÍO BAYAMÓN 33.6 SD NS 5 5 5 Collection System 2022, 2020 5 F Η Chromium VI BAYAMÓN PRER12A1 50048510 Failure Cyanide 2024 Confined Animal Enterococci 2024, 2022, **Feeding Operations** 2020, 2018 Onsite Wastewater рН 2024, 2020 Systems 2024, 2022 **Temperature** Urban Runoff/Storm Total. 2024, 2022, Sewers 2020 Nitrogen 2022, 2020 RÍO BAYAMÓN 83.7 SD NS 5 5 5 1 F Η Collection System Chromium VI PRER12A2 50047820 Failure Enterococci 2024, 2022, Confined Animal 2020, 2018 **Feeding Operations** Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO 50.7 SD NS 5 5 Collection System 2022, 2020 5 5 F Η Chromium VI **GUAYNABO** 50047990 Failure Enterococci 2024, 2022, PRER12B Confined Animal 2020, 2018 Feeding Operations 2024 pН Landfill Temperature 2024

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Total. 2024, 2022, Major Industrial Point Sources Nitrogen 2018, 2016 Onsite Wastewater 2024, 2022, Total, Systems 2020, 2018, Phosphorus Urban Runoff/Storm 2016 Sewers RÍO GRANDE Collection System RÍO GRANDE 31 SD NS 5 5 5 5 F Η Chromium VI 2022, 2020 **DE LOIZA** DE LOIZA 50059100 Failure 2024, 2022, Enterococci PRER14A1 Confined Animal 2018 **Feeding Operations** 2024 Surfactants Major Industrial Temperature 2024, 2022 Point Sources 2024 Total. Onsite Wastewater Nitrogen Systems **Turbidity** 2024, 2020, **Surfaces Mining** 2018, 2016, Urban Runoff/Storm 2014, 2010, Sewers 2008, 2006 **RÍO GRANDE** NS 5 5 C 2022, 2020 86.6 SD 5 5 Η Agriculture Chromium VI Collection System DE LOIZA 50055000 Ε Enterococci 2024, 2022, PRER14A2 Failure 2020, 2018 G Confined Animal 2008 Pesticides **Feeding Operations** Temperature 2024, 2022 Landfill Total, 2022, 2018, Minor Industrial Phosphorus 2016 Point Sources **Turbidity** 2024, 2022, Onsite Wastewater 2018 Systems Surfaces Mining Urban Runoff/Storm Sewers Confined Animal RÍO SD 3 32.6 4a 5 D Η Dissolved 2016 4a CANÓVANAS F Feeding Operations Oxygen PRER14B Η

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary Basin** Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers Collection System RÍO 27.9 SD 4a 4a 5 3 D Η Dissolved 2016, 2014 **CANOVANILLA** F Failure Confined Oxygen Animal Feeding Η PRER14C **Operations** Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO GURABO 124.3 SD NS 5 5 5 5 C Η Collection System Chromium VI 2022, 2020 PRER14G1 50057025 Failure Confined Ε Enterococci 2024, 2022, Animal Feeding 2020, 2018 **Operations** 2024, 2022, **Temperature** Landfills 2020 Minor Industrial 2022, 2020, Total, Point Sources Nitrogen 2018 Onsite Wastewater Total. 2022, 2020, Systems Phosphorus 2018, 2016 **Surfaces Mining Turbidity** 2022, 2020, 2018, 2014, 2012, 2010, 2008, 2006 RÍO 42.8 SD NS 5 5 5 5 C Η Agriculture Chromium VI 2022, 2020 **VALENCIANO** 50056500 Collection System Enterococci 2024, 2022, Failure Confined PRER14G2 2020, 2018 Animal Feeding Total, 2024, 2022 **Operations** Nitrogen

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment Cvcles** NS =(miles) R2 R1 A DW Network L Landfills Total. 2024, 2022, Minor Industrial Phosphorus 2020, 2018, Point Sources 2016 2024, 2022, Onsite Wastewater **Turbidity** Systems Urban 2018, 2014, Runoff/Storm Sewers 2010, 2008 RÍO BAIROA 16.3 SD NS 5 5 5 5 C Η Collection System Chromium VI 2022, 2020 PRER14H 50055410 Ε Failure Enterococci 2024, 2022, G Major Municipal 2020, 2018 Point Sources 2024, 2022, Total, 2020, 2018, Minor Industrial Phosphorus Point Sources 2016, 2014, Onsite Wastewater 2012, 2010, Systems 2008 Urban Runoff/Storm Total. 2024, 2022, Sewers Nitrogen 2018, 2016 RÍO CAGÜITAS Collection System 33.9 SD NS 5 5 5 5 $\mathbf{C}$ Η Chromium VI 2022, 2020 PRER14I 50055250 Ε Failure Enterococci 2024, 2022, G Confined Animal 2020, 2018 Feeding Operations I Temperature 2022 Onsite Wastewater 2022, 2020, Total, Systems Nitrogen 2018, 2016 **Surfaces Mining** Total. 2022, 2020, Urban Runoff/Storm Phosphorus 2018, 2016 Sewers 2022, 2018, **Turbidity** 2014, 2010, 2008 Н 2022, 2020 **RÍO TURABO** 54.7 SD NS 5 5 5 5 $\mathbf{C}$ Agriculture Chromium VI 2022, 2018, PRER14J 50054500 Collection System Copper Failure 2014 Confined Animal 2024, 2022, Enterococci 2020, 2018 Feeding Operations

2022, 2018

Lead

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L 2024, 2022, Minor Industrial Temperature Point Sources 2020 Minor Municipal Total, 2022, 2018 Point Sources Phosphorus Onsite Wastewater **Turbidity** 2024, 2022, Systems 2018, 2014, Urban Runoff/Storm 2006 Sewers RÍO SD NS 5 5 5 5 С Н 2022, 2020 38.5 Agriculture Chromium VI **CAYAGUAS** 50051500 Confined Animal 2022, 2018 Copper PRER14K **Feeding Operations** 2024, 2022, Enterococci Onsite Wastewater 2020, 2018 Systems 2022 Temperature 2022 Total, Nitrogen 2022, 2018, Total. Phosphorus 2016 **Turbidity** 2024, 2022, 2018 RÍO RÍO HERRERA 17 SD 4a 4a 5 5 D M Confined Animal Dissolved 2016, 2006 **HERRERA** PRER15A F Feeding Operations Oxygen Onsite Wastewater Η **Turbidity** 2014, 2012 Systems Urban Runoff/Storm Sewers RÍO RÍO ESPÍRITU Collection System 53.9 SD NS 5 5 5 M Ammonia 2024 **ESPIRITU** SANTO 50063800 Failure 2022, 2020 Chromium VI **SANTO** Confined Animal PRER16A Enterococci 2024, 2022, **Feeding Operations** 2020, 2018 Landfill Minor Industrial Point Sources

# 2024 Cycle 303(d) List – List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 Designated Uses and

Basin	Waterbody	Waterbody Size	Class	2024 Monitoring Stations		Designated Uses and Categories Summary		Categories		Categories		Categories		Categories		Categories		Categories		Categories		Categories		Notes	Priority	Potential Pollution	Causes of	Impaired
	Name	(miles)	S	NS = Network	R1	R2	A L	DW	Z	Pri	Sources	Impairment	Cycles															
											Onsite Wastewater Systems																	
QUEBRADA MATA DE PLÁTANO	QUEBRADA MATA DE PLÁTANO PREQ18A	4.0	SD		4a	4a	5	3	D F H	M	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Surfactants	2016, 2014, 2012, 2006 2016, 2012															
QUEBRADA FAJARDO	QUEBRADA FAJARDO PREQ21A	10.0	SD		4a	4a	5	3	D H J	M	Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen pH Temperature	2020, 2006 2020, 2018 2020															
RÍO FAJARDO	RÍO FAJARDO PRER22A	59.0	SD	NS 50072500	5	5	5	5	J	M	Confined Animal Feeding Operations Landfill Major Municipal Point Sources Minor Industrial Point Sources	Chromium VI Enterococci Temperature Total, Nitrogen	2022, 2020 2024, 2022, 2020, 2018 2024, 2022, 2020 2024, 2022, 2020, 2018,															
											Onsite Wastewater Systems Urban Runoff/Storm Sewers	Total, Phosphorus	2016 2024, 2022, 2020, 2018, 2016 2024															
RÍO DEMAJAGUA	RÍO DEMAJAGUA PRER23A	2.8	SD		4a	4a	5	3	D H J	M	Onsite Wastewater Systems	Dissolved Oxygen	2020, 2016, 2012															
QUEBRADA CEIBA	QUEBRADA CEIBA PREQ24A	5.0	SD		4a	4a	5	3	D H J	M	Onsite Wastewater Systems	Dissolved Oxygen Surfactants	2016, 2014, 2012, 2006 2016, 2014, 2012															
QUEBRADA AGUAS CLARAS	QUEBRADA AGUAS CLARAS PREQ25A	4.8	SD		4a	4a	5	3	D H J	M	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen	2020, 2012, 2006															

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and Priority** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R1 R2 A DW Network L RÍO DAGUAO RÍO DAGUAO 5 13.8 SD 4a 3 M | Confined Animal Dissolved 2016, 2012, 4a D PRER26A Η Feeding Operations 2006 Oxygen Onsite Wastewater Systems **OUEBRADA** SD 3 Confined Animal **OUEBRADA** 7.4 4a 4a 5 D M Dissolved 2020, 2018, **BOTIJAS BOTIJAS** Η Feeding Operations Oxygen 2012, 2006 PREQ28A J Onsite Wastewater Systems RÍO BLANCO RÍO BLANCO 45.0 SD 4a 4a 5 5 D Η Agriculture Turbidity 2020, 2012 PRER30A Confined Animal Η J Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers **OUEBRADA** 13.4 SD 4a 4a 5 3 D Η Agriculture Dissolved 2020, 2018, PEÑA POBRE Η Confined Animal Oxygen 2006 Feeding Operations PREQ30B Onsite Wastewater Systems RÍO ANTÓN RÍO ANTÓN 16.9 SD 4a 5 3 M Agriculture Dissolved 2020, 2016, 4a D **RUIZ** RUIZ Η Confined Animal 2014, 2012 Oxygen PRER31A J Feeding Operations 2020 Temperature Onsite Wastewater Systems SD Collection System **OUEBRADA OUEBRADA** 8.5 5 3 M Dissolved 2020, 2012, 4a 4a D **FRONTERA** FRONTERA Η Failure Confined Oxygen 2006 Animal Feeding PREQ32A Operations Onsite Wastewater Systems 55.8 SD M

5

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F

Chromium VI

2022, 2020

5

2024 Cycle 303(d) List – List of Rivers and Streams  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.													
Basin	Waterbody Name	Waterbody Size (miles)	Class	2024 Monitoring Stations NS = Network	Designated Uses and Categories Summary			Notes Notes	Priority 6	Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
					R1	R2	A L	DW	~	Pr	Sources	impan ment	Cycles
RÍO HUMACAO	RÍO HUMACAO PRER33A			NS 50082000							Collection System Failure Confined Animal Feeding Operations	Copper	2022, 2018, 2014
												Enterococci	2024, 2022, 2020, 2018
											Landfill	Surfactants	2024
									Minor Industrial Point Sources Onsite Wastewate Systems Urban Runoff/Sto Sewers	Point Sources	Temperature	2024, 2022, 2020	
											Systems Urban Runoff/Storm	Total, Nitrogen	2022, 2020, 2018
												Total, Phosphorus	2024, 2022, 2020, 2018, 2016
												Turbidity	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2008, 2006
RÍO CANDELERO	RÍO CANDELERO PRER34A	10.4	SD		4a	4a	5	3	D F H	M	Onsite Wastewater Systems Confined Animal Feeding Operations	Dissolved Oxygen	2020, 2018, 2012
RÍO	RÍO	62.0	SD	NS	5	5	5	5	F	M	Agriculture	Chromium VI	2022, 2020
GUAYANÉS	GUAYANÉS PRER35A	32.0		50085000							Confined Animal Feeding Operations Landfill	Copper	2024, 2020, 2016, 2014, 2012, 2006
											Minor Industrial Point Sources	Enterococci	2012, 2000 2024, 2022, 2020, 2018
											Onsite Wastewater	Temperature	2024, 2022
											Systems	Total,	2022
												Nitrogen	
												Total,	2024, 2022,
	1											Phosphorus	2020

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L **Turbidity** 2024, 2022, 2020, 2016, 2014, 2012, 2006 RÍO M Agriculture RÍO MAUNABO 36.0 SD NS 5 5 2022, 2020 5 5 F Chromium VI 50091000 **MAUNABO** PRER37A Collection System Copper 2024 Failure Cvanide 2024 Landfill 2024, 2022, Enterococci Minor Industrial 2020, 2018 **Point Sources** 2024, 2022, Temperature Minor Municipal 2020 Point Sources Total. 2024, 2022, Onsite Wastewater Nitrogen 2020, 2016 Systems 2022, 2020, Total, Urban Runoff/Storm Phosphorus 2016 Sewer Turbidity 2022, 2020 QUEBRADA Onsite Wastewater **OUEBRADA** 1.0 SD 4a 5 3 D M Dissolved 2012 4a **PALENQUE PALENQUE** Η Systems Oxygen PRSO41A J, L RÍO CHICO Agriculture RÍO CHICO 14.6 SD 4a 4a 5 5 D M Ammonia 2016, 2014, PRSR42A Confined Animal 2012, 2006 Η J Feeding Operations 2016, 2006 Copper L Onsite Wastewater 2016, 2012, Dissolved Systems 2006 Oxygen Urban Runoff/Storm Silver 2004 Sewers Surfactants 2016, 2006 Total. 2016, 2006 Phosphorus **RÍO GRANDE RÍO GRANDE** Onsite Wastewater 35.9 SD NS 5 5 5 5 Η Chromium VI 2022, 2020 DE **DE PATILLAS** 50092000 Systems 2024 Copper PRSR43A2 **PATILLAS** Cyanide 2024

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L 2024, 2022, Enterococci 2020, 2018 RÍO RÍO GUAMANÍ SD 22.0 4a 5 3 M Collection System 4a D 2012 Temperature **GUAMANÍ** PRSR49A Η Failure Confined Animal J **Feeding Operations** L Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers **OUEBRADA** Landfill SD **OUEBRADA** 7.0 4a 5 3 D M Dissolved 2020, 2018, 4a MELANÍA MELANÍA Η Onsite Wastewater 2016, 2014, Oxygen PRSQ50A Systems 2012, 2008 J. L Urban Runoff/Storm Sewers RÍO SECO RÍO SECO Agriculture 24.7 SD 4a 4a 5 3 D M Dissolved 2012 PRSR51A Η Onsite Wastewater Oxygen J, L Systems **OUEBRADA OUEBRADA** 0.7 SD 5 3 M Agriculture Dissolved 2020, 2012, 4a 4a D **AMORÓS AMORÓS** Collection System 2008 Oxygen Η PRSQ52A J, L Failure pН 2020 Onsite Wastewater Systems **QUEBRADA** SD 3 Dissolved **QUEBRADA** 15.0 5 M Confined Animal 2020, 2016, 4a 4a D **AGUAS AGUAS** F Feeding Operations Oxygen 2014, 2012 **VERDES** VERDES Η Onsite Wastewater PRSQ53A Systems **RÍO NIGUAS** RÍO NIGUAS DE 102.5 SD 4a 4a 5 3 D M Confined Animal Dissolved 2010 **DE SALINAS SALINAS** F **Feeding Operations** Oxygen Onsite Wastewater PRSR54A Η

Systems

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and Priority** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired** Size **Summary** Basin **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Surfaces Mining Urban Runoff/Storm Sewers RÍO **RÍO CAYURES** 3 5.0 SD 5 D M Agriculture Dissolved 2016, 2014, 4a 4a **CAYURES** Onsite Wastewater PRSR56A Η Oxygen 2012 J Systems Surfactants 2016, 2014, L 2012 RÍO COAMO RÍO COAMO 59.0 SD NS 5 5 5 5 J Η Agriculture Chromium VI 2022, 2020 Collection System PRSR57A2 50106500 2024, 2022 Cvanide Failure Enterococci 2024, 2022, Confined Animal 2020, 2018 Feeding Operations Surfactants 2024 Landfill 2024, 2022 Temperature Minor Industrial 2024, 2020, Total, Point Sources 2016 Nitrogen Onsite Wastewater Total. 2024 Systems Phosphorus Urban Runoff/Storm Sewers RÍO CUYÓN 49.2 SD 5 3 Η Agriculture 2020 4a 4a D **Temperature** Collection System PRSR57B Η J Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO RÍO BUCANÁ-M Collection System 27.8 SD NS 5 5 5 5 2022, 2020 J Chromium VI **BUCANÁ-CERRILLOS** 50114400 Failure Cvanide 2024 **CERRILLOS** Onsite Wastewater PRSR62A1 Dissolved 2024, 2022, Systems 2020, 2018 Oxygen

2024 Cycle 303(d) List – List of Rivers and Streams  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.													
Basin	Waterbody Name	Waterbody Size (miles)	Class	2024 Monitoring Stations NS =	Designated Uses and Categories Summary R1 R2 A DW				Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				Network			L				Surfaces Mining Urban Runoff/Storm Sewers	Enterococci	2024, 2022, 2020, 2018
	RÍO BUCANÁ- CERRILLOS PRSR62A2	32.6	SD	NS 50113800	5	5	5	5	J	M	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Cyanide Enterococci Surfactants	2022, 2020 2024 2024, 2022, 2020, 2018 2024
RÍO PORTUGUÉS	RÍO PORTUGUÉS PRSR63A	54.0	SD	NS 50116200	5	5	5	5	J	M	Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Cyanide Dissolved Oxygen Enterococci	2022, 2020 2024 2024 2024, 2022, 2020, 2018
RÍO MATILDE – PASTILLO	RÍO MATILDE – PASTILLO PRSR64A	43.2	SD		4a	4a	5	3	D H J L	M	Agriculture Collection System Failure Confined Animal Feeding Operations Landfills Major Industrial Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Temperature	2020
	RÍO TALLABOA	59.6	SD		4a	4a	5	1		M	Agriculture	pН	2020

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody **Monitoring** Priority Class Waterbody **Potential Pollution** Causes of **Impaired** Size **Summary Basin Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L RÍO Collection System PRSR65A 2020 D Temperature **TALLABOA** Η Failure Minor Municipal J L Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO RÍO 60.0 SD NS 5 5 5 5 F Н Agriculture 2022, 2020, Ammonia **GUAYANILL GUAYANILLA** Collection System 50124700 2018, 2014 PRSR67A Failure Chromium VI 2022, 2020 Landfill Cyanide 2024 Minor Industrial 2024, 2022, Dissolved Point Sources Oxygen 2020, 2016, Minor Municipal 2014, 2012, Point Sources 2008 Onsite Wastewater 2024, 2022, Enterococci Systems 2020, 2018 Urban Runoff/Storm 2022, 2020 Temperature Sewers Total, 2024, 2022, 2020, 2018, Nitrogen 2016 Total, 2024, 2022, Phosphorus 2020, 2018, 2016, 2012, 2010, 2008 **RÍO YAUCO** RÍO YAUCO 61.4 SD 4a 4a 5 5 D M | Agriculture Dissolved 2014 PRSR68A1 F Oxygen

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Priority Class Waterbody **Potential Pollution** Causes of **Impaired** Size **Stations Summary** Basin Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Collection System Total. 2016, 2012 Η L Failure Phosphorus Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO LOCO RÍO LOCO 92.4 SD 5 Agriculture Dissolved 4a 5 M 2020, 2016, 4a D PRSR69A1 Collection System F 2014, 2012, Oxygen Failure 2006 Η 2020 Confined Animal Temperature Feeding Operation Turbidity 2020 Landfills Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers **OUEBRADA QUEBRADA** 1.7 SD 5 3 M Collection System Dissolved 4a 4a D 2016, 2014 ZUMBÓN **ZUMBÓN** Failure Η Oxygen PRWQ72A J, L Onsite Wastewater Surfactants 2012 Systems **OUEBRADA** Onsite Wastewater SD 3 **OUEBRADA** 1.8 4a 5 D M Dissolved 2020, 2018, 4a GONZÁLEZ GONZÁLEZ Η Systems 2012 Oxygen PRWQ73A

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary Basin** Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L 5 3 **QUEBRADA QUEBRADA** 2.7 SD 4a D M Onsite Wastewater Dissolved 2020, 2012 4a LOS LOS Η Systems Oxygen **PAJARITOS PAJARITOS** J, L PRWQ74A RÍO Collection System RÍO 119.3 SD NS 5 5 5 2022, 2020 5 F Η Chromium VI **GUANAJIBO GUANAJIBO** 50138000 Failure Cvanide 2024 PRWR77A Confined Animal Dissolved 2024, 2020 Feeding Oxygen Operations Enterococci 2024, 2022, Landfill 2020, 2018 Major Municipal 2024, 2022, Total, Point Sources Phosphorus 2020, 2018, Onsite Wastewater 2016 Systems **Turbidity** 2024 Urban Runoff/Storm Sewers RÍO ROSARIO 58.3 SD NS 5 5 5 F Agriculture Chromium VI 2022, 2020 5 Η Collection System 2024 PRWR77C 50136700 Cyanide Failure Enterococci 2024, 2022, Confined Animal 2020, 2018 Feeding Operations Pesticides 2012 Landfills Total. 2022 Minor Industrial Phosphorus Point Sources **Turbidity** 2024, 2022 Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO VIEJO 21.1 SD NS 5 5 5 5 F Η Collection System Chromium VI 2022, 2020 PRWR77D 50135625 Failure Cyanide 2024, 2022

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and** Categories Notes Waterbody Monitoring Priority Class Waterbody **Potential Pollution** Causes of **Impaired Summary Basin** Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Dissolved 2024, 2022, Confined Animal **Feeding Operations** Oxygen 2020, 2018, Onsite Wastewater 2016, 2014, Systems 2012 Urban Runoff/Storm 2024, 2022, Enterococci Sewers 2020, 2018 Surfactants 2024 2024 Temperature 2024, 2022, Total, Phosphorus 2020, 2018, 2016 Agriculture 2012 RÍO CUPEYES 8.0 SD 4a 5 5 Η 4a D Pesticides Minor Municipal PRWR77G F Η Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers CAÑO CAÑO MERLE Collection System 1.6 SD 4a 5 3 M Dissolved 2012 4a D **MERLE** PRWK78A Failure Η Oxygen Surfaces Mining Surfactants 2012 J Onsite Wastewater L Systems Urban Runoff/Storm Sewers RÍO YAGÜEZ RÍO YAGÜEZ 42.2 SD NS 5 5 5 5 Η Agriculture Chromium VI 2022, 2020 PRWR79A 50139000 Collection System 2024 Cyanide Failure Enterococci 2024, 2022, Confined Animal 2020, 2018 **Feeding Operations** 2024 **Temperature** Minor Industrial Total, 2024 Point Sources Nitrogen

#### 2024 Cycle 303(d) List - List of Rivers and Streams Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2024 **Designated Uses and Priority** Categories Notes Waterbody Monitoring Class Waterbody **Potential Pollution** Causes of **Impaired Summary** Basin Size **Stations** Name Sources **Impairment** Cycles NS =(miles) R2 R1 A DW Network L Onsite Wastewater Total. 2024 Systems Phosphorus Urban Runoff/Storm 2024 **Turbidity** Sewers RÍO GRANDE RÍO GRANDE 126.0 SD NS 5 5 5 2022, 2020 5 K Η Agriculture Chromium VI DE AÑASCO DE AÑASCO 50146000 Collection System Copper 2024 PRWR83A Failure Cvanide 2024 Confined Animal Enterococci 2024, 2022, **Feeding Operations** 2020, 2018 Major Municipal рΗ 2022 Point Sources **Temperature** 2024 Minor Industrial 2024 Total. Point Sources Phosphorus Onsite Wastewater **Turbidity** 2024, 2020, Systems 2018, 2016, Urban Runoff/Storm 2014, 2012, Sewers 2010 RÍO PRIETO 59.8 SD 4a 4a 5 5 D Η Agriculture Pesticides 2012 PRWR83I Confined Animal Η K Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems **OUEBRADA OUEBRADA** 6.9 SD 3 3 5 3 Confined Animal Dissolved 2020, 2018, D LOS RAMOS LOS RAMOS Η Feeding Operations Oxygen 2012, 2008 PRWQ89A L Landfill Onsite Wastewater Systems **QUEBRADA** SD 3 3 2012 **QUEBRADA** 2.0 3 5 D Onsite Wastewater Dissolved L **PILETAS PILETAS** Η **Systems** Oxygen PRWQ91A L

5

5

K

Н

Agriculture

Chromium VI

2022, 2020

5

142.6

SD

NS

**2024** Cycle 303(d) List – List of Rivers and Streams

Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.

Basin	Waterbody Name	Waterbody Size	Class	2024 Monitoring Stations		ignate Cate	d Use	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
		(miles)	)	NS = Network	R1	R2	A L	DW		Pr	Sources	Impanment	
RÍO CULEBRINAS	RÍO CULEBRINAS PRWR95A			50149100							Collection System Failure Confined Animal Feeding Operations Landfill Major Industrial Point Sources Major Municipal Point Sources Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Cyanide Enterococci  Pesticides Temperature Total, Nitrogen Total, Phosphorus Turbidity	2024 2024, 2022, 2020, 2018 2012 2024 2024, 2022, 2018 2024, 2022, 2020, 2018 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
	QUEBRADA LA SALLE PRWQ95F	11.8	SD		4a	4a	5	5	D H K	Н	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen Pesticides	2016
	QUEBRADA EL SALTO PRWQ95G	7.8	SD		4a	4a	5	3	D H K	Н	Agriculture Onsite Wastewater Systems	Dissolved Oxygen	2020, 2016
Notos	QUEBRADA GRANDE DE LA MAJAGUA PRWQ95H	5.6	SD		4a	4a	5	5	D H K	Н	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Pesticides	2012

#### **Notes:**

A - Watershed that has an approved TMDL for Río Cibuco, the TMDL was approved in September 2002, the pollutant was Fecal Coliforms.

B - Watershed that has an approved TMDL for Río de la Plata, the TMDL was approved in September 2003, the pollutant was Fecal Coliforms.

- C Watershed that has an approved TMDL for Río Grande de Loíza, the TMDL was approved in September 2007, the pollutant was Fecal Coliforms.
- **D** Watershed and sub watershed that do not have a permanent monitoring station but were included in prior cycles as part of the 303(d) list by a synoptic study or a special monitoring project.
- E Watershed that has an approved TMDL for Río Grande de Loíza a TMDL was approved in August 2007, the pollutant was Dissolved Oxygen.
- **F** Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliforms.
- G Watershed that has an approved TMDL. Río Grande de Loíza, the TMDL was approved in August 2007, the pollutant was Copper.
- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle.
- I Watershed that has approved TMDL from Río Grande de Loíza, a TMDL was approved in August 2007, the pollutant was Ammonia.
- **J** Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- K Watersheds that have an approved TMDL in September 2010, the pollutant was Fecal Coliforms. The watersheds are Río Grande de Arecibo, Río Grande de Manatí, Río Grande de Añasco and Río Culebrinas.
- L Watershed and sub watersheds who are or have been under Category 4c, are waterbodies that lack adequate flow, which impaired some of the designated uses.
- **R1** Primary Contact Recreation
- R2 Secondary Contact Recreation
- AL Aquatic Life
- **DW** Raw Sources for Drinking Water
- **N/A** Not applicable

#### **Priority:**

H: High Priority: basins including in the Puerto Rico Unified Watershed Assessment and Restoration Activities (PRUWARA), as basins of priority due to the high pollution level related to all the designated uses.

M: Intermediate Priority: basins that were not included in the PRUWARA and have 50% or more of its waters as impaired for some designated use.

L: Low Priority: basins that were not included in the PRUWARA and have less than 50% of its waters as impaired for some designated use.

# **ESTUARY**

Size of waters Impaired by Causes (Monitored sq. mi. for Estuaries)										
Causes of Impairments	Size of Waters Impaired (sq. mi.)									
Arsenic	0.0364									
Dissolved Oxygen	0.8618									
Surfactants	1.0130									
Temperature	0.0780									
Turbidity	0.2932									

<b>2024</b> Cycle 303(d) List – List of Estuaries  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												
Basin	Waterbody Name	Waterbody Size (sq. miles)	Class	2024 Monitoring Stations  Designated Use and Categories Summary		l Uses gories ary	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
RÍO HERRERA	RÍO	0.102	SB		<b>R1</b> 4a	<b>R2</b> 4a	<b>AL</b> 5	D	M	Landfill	Surfactants	2012
PRER15A	HERRERA PREE15A	0.102	зь		4a	<del>4</del> a	3	F, H	IVI	Onsite Wastewater Systems	Surractants	2012
RÍO ESPÍRITU SANT PRER16A	RÍO ESPÍRITU SANTO PREE16A	0.5758	SB		4a	4a	5	D F, H	M	Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen Surfactants	2012, 2006
RÍO DEMAJAGUA PRER23A	RÍO DEMAJAGUA PREE23A	0.0028	SB		4a	4a	5	D H, J	M	Collection System Failure Urban Runoff/Storm Sewers	Turbidity	2012
RÍO CANDELERO PRER34A	RÍO CANDELERO PREE34A	0.078	SB		4a	4a	5	D F, H	M	Collection System Failure	Dissolved Oxygen Temperature	2006 2012
RÍO GUAYANÉS PRER35A	RÍO GUAYANÉS PREE35A	0.0364	SB		4a	4a	5	F H	M	Agriculture Collection System Failure Onsite Wastewater Systems	Arsenic Turbidity	2010, 2008, 2006 2010
CAÑO SANTIAGO PREK35.1	CAÑO SANTIAGO PREE35.1	0.1152	SB		4a	4a	5	D F H	M	Agriculture Collection System Failure Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Surfactants Turbidity	2012, 2006 2012 2012

Note: The 2024 303(d	<b>2024</b> Cycle 303(d) List – List of Estuaries  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.											
Basin	Waterbody Name	Waterbody Size (sq. miles)	Class	Monitoring Stations		Designated Uses and Categories Summary			Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				Stations	R1	R2	AL					
RÍO MATILDE- PASTILLO PRSR64A	RÍO MATILDE- PASTILLO PRSE64A	0.0432	SB		4a	4a	5	D H J, L	M	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity	2012
RÍO TALLABOA PRSR65A	RÍO TALLABOA PRSE65A	0.0336	SB		4a	4a	5	D, H J, L	M	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity	2012
CAÑO MERLE PRWK78A	CAÑO MERLE PRWE78A	0.158	SB		4a	4a	5	D, H J, L	M	Collection System Failure	Surfactants	2014
CAÑO BOQUILLA PRWK82A	CAÑO BOQUILLA PRWE82A	0.062	SB		3	3	5	D H L	L	Onsite Wastewater Systems	Dissolved Oxygen Surfactants Turbidity	2012 2012 2012
QUEBRADA GRANDE DE CALVACHE PRWQ88A	QUEBRADA GRANDE DE CALVACHE PRWE88A	0.002	SB		4a	4a	5	D H L	M	Urban Runoff/Storm Sewers	Dissolved Oxygen	2016, 2012, 2008
RÍO GUAYABO PRWR94A	RÍO GUAYABO PRWE94A	0.0288	SB		4a	4a	5	D H, J	M	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen	2012, 2008

#### **Notes:**

- D Watershed and sub watershed that do not have a permanent monitoring station but were included in prior cycles as part of the 303(d) list by a synoptic study or a special monitoring project.
- **F** Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliforms.
- **H** If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2022 cycle.
- **J** Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- L Watershed and sub watersheds who are or have been under Category 4c, are waterbodies that lack adequate flow, which impaired some of the designated uses.
- **R1** Primary Contact Recreation
- **R2** Secondary Contact Recreation
- AL Aquatic Life

**Priority:** 

- M: Intermediate Priority: basins that were not including in the Puerto Rico Unified Watershed Assessment and Restoration Activities (PRUWARA) and have 50% or more of its waters as impaired for some designated use.
- L: Low Priority: basins that were not included in the PRUWARA and have less than 50% of its waters as impaired for some designated use.

# SAN JUAN BAY ESTUARY

Size of waters Impaired by Causes San Juan Bay Estuary System										
<b>Causes of Impairments</b>	Size of Waters Impaired (sq. mi., miles)									
Chromium VI	3.8340 sq. mi.									
Copper	0.1009 sq. mi., 18.8 mi.									
Dissolved Oxygen	3.8340 sq. mi., 18.8 mi.									
Enterococci	3.8340 sq. mi., 18.8 mi.									
Lead	0.1009 sq. mi.									
Mercury	3.8340 sq. mi.									
Oil and Grease	3.8340 sq. mi 18.8 mi.									
pН	3.7331 sq. mi., 18.8 mi.									
Surfactants	0.1009 sq. mi.									
Temperature	3.8340 sq. mi., 18.8 mi.									
Total, Nitrogen	3.8340 sq. mi.									
Total, Phosphorous	3.8340 sq. mi.									
Turbidity	3.8340 sq. mi., 18.8 mi									

Ninta	2024 Cycle 303(d) List – List of San Juan Bay Estuary System  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.										2006																						
Basin	Waterbody Name	Waterbody Size (miles/ sq. miles)	Class	2024 Monitoring Stations NS = Network ED = External	De ai	Designate and Cate Summ R R R		and Categories Summary		R R A D		and Categories Summary  R R A D		and Categories Summary  R R A D		Designated Uses and Categories Summary  R R A D		Designated Uses and Categories Summary R R A D		Designated Uses and Categories Summary R R A D		Designated Uses and Categories Summary R R A D		Designated Uses and Categories Summary R R A D		Categories ummary R A D		nated Uses Categories mmary A D		Priority A		Causes of Impairment	Impaired Cycles
				Data																													
ESTUARY SYSTEM	* Caño Control de La Malaria	18.8 miles	SB	ED SJBEP - Bahía de San Juan 1, 2, 3 Laguna Del	5	5	5	N/ A	F M	L	Collection System Failure Confined Animal Feeding Operations Major Industrial Point	Copper Dissolved Oxygen	2006 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006																				
	* Bahía de San Juan			Condado 1, 2 Canal San							Sources Major Municipal Point	Enterococci	2022, 2020, 2018, 2016, 2014, 2012																				
	* Caño San Antonio * Laguna Del			Antonio Canal La Malaria							Sources Marinas and Recreational Boating	Oil & Grease	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010																				
	Condado * Península La Esperanza	ínsula La Esperanza eranza		Onsite Wastewater Systems Urban Runoff/Storm Sewers	рН	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2006																											
				ED USGS – Monitoring Station 50048565 and	oring n							Temperature	2024, 2022, 2020, 2018, 2016, 2014, 2006																				
				50048580 50048580								Turbidity	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010																				
	PREE13A2	0.1009 sq.	SD	NS	5	5	5	5	F	Н	Collection System Failure	Chromium VI	2022, 2020																				
	* Río Piedras	mi		50049100					M		Confined Animal Feeding	Copper	2024, 2020																				
	* Embalse Las Curías	55 miles		89027 <b>ED SJBEP</b> - Río Piedras 01, 02,							Operations Landfill Urban Runoff/Storm Sewers	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006																				
				03 Río Puerto								Enterococci	2024, 2022, 2020, 2018																				
				Nuevo								Mercury	2024																				
				Embalse Las								Lead	2024, 2020																				
				Curias								Oil and Grease	2024																				
												Surfactants	2024, 2020																				

NI	2024 Cycle 303(d) List – List of San Juan Bay Estuary System  Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.									20 1 2006			
Basin	Waterbody Name	Waterbody Size (miles/ sq. miles)	Class	2024 Monitoring Stations NS = Network ED = External Data	D	Designated Uses and Categories Summary R R A I		Jses ries	Notes	Priority		Causes of Impairment	Impaired Cycles
												Temperature  Total, Nitrogen  Total, Phosphorus  Turbidity	2024, 2022, 2018, 2016, 2014 2024, 2022, 2020, 2018, 2016 2024, 2022, 2020, 2018, 2016 2024, 2022, 2020,
	PREE13A3  * Caño Martín Peña  * Quebrada Juan Méndez	3.7331 sq. mi 47.9 miles	SB SD	NS 50050300 ED SJBEP – Canal Suárez 1, 2	5	5	5	N/ A	M	Н	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen  Enterococci	2018, 2014, 2012, 2010, 2008, 2006 2022, 2020 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006 2024, 2022, 2020,
	* Quebrada San Antón * Quebrada Blasina * Canal Machicote			Caño Martín Peña Laguna San José 1, 2 Quebrada Blasina								Mercury Oil and Grease pH	2018, 2014, 2012 2024 2024 2024, 2022, 2020, 2018, 2016, 2014,
	* Canal Suárez * Laguna San José * Laguna Torrecillas * Laguna Piñones * Laguna Los			Quebrada San Antón Laguna Los Corozos Laguna Torrecillas 1, 2, 3								Temperature  Total, Nitrogen  Total, Phosphorus	2012, 2010, 2006 2024, 2022, 2020, 2018, 2016, 2014, 2012 2024, 2020, 2018, 2016 2024, 2022, 2020, 2018, 2016
	Corozos			Laguna Piñones								Turbidity	2018, 2016 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006

#### **Notes:**

**F** - Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliforms.

M- External Data

**ED SJBEP** – External Data of San Juan Bay Estuary Program

**ED USGS** – External Data of US Geological Survey

R1 - Primary Contact Recreation

R2 - Secondary Contact Recreation

**AL** - Aquatic Life

**DW** -Raw Source for Drinking Water

N/A - Not applicable

#### **Priority:**

**H:** High Priority: basins including in the Puerto Rico Unified Watershed Assessment and Restoration Activities (PRUWARA), as basins of priority due to the high pollution level related to all the designated uses.

L: Low Priority: basins that were not included in the PRUWARA and have less than 50% of its waters as impaired for some designated use.

# **LAGOONS**

Size of waters Impaired by Causes (Monitored Acres for Lagoons)											
Causes of Impairments	Size of Waters Impaired (sq. mi.)										
Copper	2.6172										
Dissolved Oxygen	3.8781										
Enterococci	0.5250										
pН	1.2703										
Temperature	0.4016										
Turbidity	1.4344										

Note: The 2024 3	<b>2024</b> Cycle 303(d) List – List of Lagoons  Note: The 2024 303(d) List is comprised of the impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, and 2008.											
Waterbody Name	AU - ID	Waterbod g 2024		2024 Monitoring	Desig and S	gnate Cates umma	d Uses gories ary	Notes	Priority 5	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
		(sq. IIII.)		Stations	R1	R 2	AL		Р			
LAGUNA JOYUDAS	PRWN0005	0.5297	SB		4a	4a	5	H J	L	Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen	2014 2014
LAGUNA TORTUGUERO	PRNN0006	0.8656	SE		3	3	5	Н	L	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen	2014, 2012
LAGUNA MATA REDONDA	PRNN0007	0.0234	SB		3	3	5	Н	L	Urban Runoff/Storm Sewers	Dissolved Oxygen pH	2014 2014
LAGUNA AGUAS PRIETAS	PREN0011	0.2	SB		3	3	5	Н	L	Unknown Source	Copper Dissolved Oxygen Turbidity	2014 2014 2014
LAGUNA GRANDE	PREN0012	0.3375	SB		5	5	5	Н	L	Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Enterococci pH	2014, 2008 2014 2008
LAGUNA CEIBA	PREN0013	0.1875	SB		5	5	5	Н	L	Unknown Source	Copper Dissolved Oxygen Enterococci pH	2014 2014 2014 2014
LAGUNA POZUELO	PRSN0014 PRSN0015	0.0547	SB SB		3	3	5	Н	L	Unknown Source Urban Runoff/Storm Sewers Unknown Source	Copper Dissolved Oxygen pH Temperature Copper	2014 2014 2014 2014 2014

<b>2024</b> Cycle 303(d) List – List of Lagoons  Note: The 2024 303(d) List is comprised of the impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, and 2008.												
Waterbody Name	AU - ID	Waterbod y Size	Class	2024 Monitoring Stations	Desig and So	gnate Cates umma	d Uses gories	Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
		(sq. mi.)		Stations	R1	R 2	AL		Ь			
LAGUNA MAR										Urban Runoff/Storm	Dissolved Oxygen	2014
NEGRO										Sewers	pН	2014
LAGUNA PUNTA	PRSN0016	0.0281	SB		3	3	5	Н	L	Unknown Source	Copper	2014
ARENAS										Urban Runoff/Storm	Dissolved Oxygen	2014
										Sewers	Temperature	2014
											Turbidity	2014
LAGUNA	PRSN0017	0.0219	SB		3	3	5	Н	L	Landfill	Copper	2014
TIBURONES										Unknown Source	Dissolved Oxygen	2014
											pН	2014
											Temperature	2014
											Turbidity	2014
LAGUNA	PRSN0018	0.1203	SB		3	3	5	Н	L	Onsite Wastewater	Copper	2014
SALINAS										Systems Unknown Source	Dissolved Oxygen	2014
LAGUNA	PRSN0019	0.4594	SB		3	3	5	Н	L	Onsite Wastewater	Copper	2014
SALINAS I										Systems	Dissolved Oxygen	2014
(FRATERNIDAD)										Unknown Source	Turbidity	2014
LAGUNA CABO	PRSN0020	0.2969	SB		3	3	5	Н	L	Unknown Source	Copper	2014
ROJO 2											Dissolved Oxygen	2014
(CANDELARIA)											Temperature	2014
											Turbidity	2014
LAGUNA CABO	PRSN0021	0.1078	SB		3	3	5	Н	L	Unknown Source	Copper	2014
ROJO 3 (EL											Dissolved Oxygen	2014
FARO)											Turbidity	2014
CAÑO	PRSN0022	0.2859	SB		3	3	5	Н	L	Marinas and	Copper	2014
BOQUERÓN										Recreational	Dissolved Oxygen	2014
										Boating	рН	2014
										Minor Industrial Point Sources	Turbidity	2014
	PRSN0023	0.0344	SB		3	3	5	Н	L	Unknown Source	Dissolved Oxygen	2014

Note: The 2024 3	<b>2024</b> Cycle 303(d) List – List of Lagoons  Note: The 2024 303(d) List is comprised of the impairments included in assessment cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, and 2008.											
Waterbody Name	AU - ID	Waterbod y Size	Class	2024 Monitoring	and	-	l Uses gories ary	Notes	riority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
		(sq. mi.)		Stations	R1	R 2	AL	I	Pı		Impun ment	oj eles
LAGUNA											pН	2014
GUANIQUILLA											Turbidity	2014

#### Notes:

- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2022 cycle.
- **J** Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- **R1** Primary Contact Recreation
- **R2** Secondary Contact Recreation
- **AL** Aquatic Life

#### **Priority:**

L: Low Priority: basins that were not included in the Puerto Rico Unified Watershed Assessment and Restoration Activities (PRUWARA) and have less than 50% of its waters as impaired for some designated use.

# LAKES

Size of waters Impaired by Causes (Monitored acres/miles for Lak										
Causes of Impairments	Size of Waters Impaired (acres)									
Arsenic	1,194									
Copper	2,500									
Dissolved Oxygen	7,323									
Enterococci	35									
Lead	1,726									
Mercury	35									
Pesticides	2,133									
pН	6,301									
Surfactants	634									
Temperature	4,790									
Total, Nitrogen	6,849									
Total, Phosphorus	7,269									
Turbidity	5,080									

N	<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations	Des	ignate Cate Sun	ed Use egories nmary AL	s and	Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
		, ,		NS = Network	R 1	R 2	AL	שע		I			
RÍO GUAJATAC A	LAGO GUAJATAC A PRNL3A1	1000 acres	SD	NS 10720 10790 10790C	4a	4a	5	5	F	Н	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Unknown Sources	Dissolved Oxygen  pH	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006 2022, 2020, 2016
												Temperature  Total, Nitrogen  Total, Phosphorus	2024, 2022, 2020 2022, 2020 2022, 2020, 2018
RÍO GRANDE DE ARECIBO	LAGO DOS BOCAS PRNL <sub>1</sub> 7A1	634 acres	SD	NS 25110 27090 27090E	4a	4a	5	5	K N	Н	Agriculture Confined Animal Feeding Operations Minor Industrial Point Source Onsite Wastewater Systems Unknown Sources	Arsenic Copper Dissolved Oxygen  pH	2006 2006 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006 2024, 2022,
												Surfactants Temperature Total, Nitrogen Total, Phosphorus	2020, 2018, 2016, 2012 2006 2024, 2022, 2020 2024, 2022, 2020, 2018 2024, 2022, 2020, 2018

<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.													
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations NS = Network		ignate Cate	ed Use egories nmary AL	s and	Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
						_						Turbidity	2022, 2020
RÍO GRANDE DE ARECIBO	LAGO CAONILLAS PRNL <sub>2</sub> 7C1	700 acres	SD	NS 89001 89002 89003	4a	4a	5	5	K	Н	Agriculture Onsite Wastewater Systems	Copper Dissolved Oxygen	2020, 2012 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												Pesticides	2008
												Total, Nitrogen Total, Phosphorus	2024, 2022, 2020 2024, 2022,
												, 1	2020, 2018
												Turbidity	2024
RÍO GRANDE DE ARECIBO	LAGO GARZAS PRNL <sub>3</sub> 7A3	108 acres	SD	NS 20050	4a	4a	5	5	K	Н	Agriculture Onsite Wastewater Systems Unknown Sources	Copper Dissolved Oxygen	2020 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006
												Lead	2020
												Pesticides	2008
												pH Total, Phosphorus	2024 2024, 2022, 2018
RÍO GRANDE DE	LAGO GUINEO PRNL <sub>1</sub> 8C1	54 acres	SD		4a	4a	5	5	H K	Н	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Pesticides	2012, 2010, 2006 2008
MANATÍ			SD		4a	4a	5	5	K	Н	Agriculture	Copper	2020
			טט		+a	+a	J	J	1/	11	Agriculture	Георрег	2020

No	<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.										)6.		
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations NS = Network		ignate Cate	ed Use egories nmary AL	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
RÍO GRANDE DE MANATÍ	LAGO MATRULLA S PRNL <sub>2</sub> 8C1	77 acres		NS 89009 89010		_					Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010
											Unknown Sources	pH	2020 2024, 2020, 2018, 2014, 2012, 2010, 2006
												Total, Nitrogen Total, Phosphorus Turbidity	2022, 2020 2024, 2022, 2020, 2018 2024
RÍO DE LA PLATA	LAGO DE LA PLATA PREL <sub>1</sub> 10A1	560 acres	SD	NS 44400 44950 44950C	4a	4a	5	5	B N	Н	Collection System Failure Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	Arsenic Dissolved Oxygen	2006 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												PH	2020 2024, 2022, 2020, 2018, 2016
												Temperature	2024, 2022, 2020
												Total, Nitrogen	2024, 2022, 2020
												Total, Phosphorus	2024, 2022, 2020, 2018, 2016, 2006
												Turbidity	2024

N	<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												06.
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations NS = Network		Designated Uses and Categories Summary		Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
RÍO DE LA PLATA	LAGO CARITE PREL <sub>2</sub> 10A5	333 acres	SD	NS 39900 39950 39950C	4a	4a	5	5	В	Н	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen pH	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006 2024, 2020
												Total, Phosphorus  Total, Nitrogen  Turbidity	2022, 2020, 2018 2024, 2022 2024
RÍO BAYAMÓN	LAGO CIDRA PREL12A2	268 acres	SD	NS 89029 89030 89031	4a	4a	5	5	F	Н	Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Source Onsite Wastewater Systems	Copper Dissolved Oxygen	2020 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												Lead Total, Nitrogen Total, Phosphorus	2020 2024, 2022, 2020 2024, 2022,
												Turbidity	2020, 2018
RÍO GRANDE DE LOIZA	LAGO LOIZA PREL14A1	713 acres	SD	NS 57500 58800	4a	4a	5	5	С	Н	Collection System Failure Confined Animal Feeding Operations	Copper  Dissolved Oxygen	2020, 2014, 2012 2024, 2022,
DE DOLLA	TRELITAT			58800D							Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008

	<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												
N	ote: The 2024 303	3(d) List is compris	ed of th	e impairments incl					es 20	)24, 20	022, 2020, 2018, 2016, 2014, 201	2, 2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations NS = Network	R 1	Cate	ed Use egories nmary AL	3	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
												Lead	2012
												pН	2022, 2020
												Temperature	2024, 2020
												Total, Nitrogen	2024, 2022,
												, ,	2020, 2018
												Total, Phosphorus	2024, 2022,
													2020, 2018
												Turbidity	2024, 2022,
													2020, 2018,
													2016, 2014,
													2012, 2010,
, .													2008
RÍO	LAGO	312 acres	SD	NS	4a	4a	5	5	J	Н	Agriculture	Dissolved Oxygen	2024, 2022,
GRANDE	PATILLAS			89022							Minor Industrial Point Source		2020, 2018,
DE DATH LAG	PRSL43A1			89023							Onsite Wastewater Systems		2016, 2014,
PATILLAS				89024							Unknown Sources		2012, 2010, 2008, 2006
												pН	2024, 2020
												Pesticides	
													2008
												Temperature	2024, 2022, 2020
												Total, Phosphorus	2024, 2022, 2020, 2018
QUEBRAD	LAGO	35 acres	SD	NS	4a	4a	5	5	J	M	Agriculture	Dissolved Oxygen	2024
Ā	MELANÍA			89026							Onsite Wastewater Systems	Enterococci	2020
MELANÍA	PRSL50A										Unknown Sources	Mercury	2020
												Pesticides	2008
												pН	2024
												Temperature	2024, 2020

<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.													
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations NS = Network		ignat Cate	ed Use egories nmary AL	s and	Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
												Total, Nitrogen  Total, Phosphorus	2024, 2022, 2020 2022, 2020, 2018
RÍO JACAGUAS	LAGO GUAYABAL PRSL <sub>1</sub> 60A1	373 acres	SD	NS 89011 89012 89013	4a	4a	5	5	F	M	Agriculture Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems	Turbidity Dissolved Oxygen	2024 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												Pesticides pH Total, Nitrogen Total, Phosphorus	2008 2024, 2020 2024, 2020 2024, 2022, 2020, 2018
RÍO JACAGUAS	LAGO TOA VACA PRSL <sub>2</sub> 60A1	836 acres	SD	NS 89014 89015 89016	4a	4a	5	5	F	M	Agriculture Onsite Wastewater Systems	Turbidity Dissolved Oxygen pH	2024 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 2024, 2020,
												Temperature Total, Nitrogen Total, Phosphorus Turbidity	2016 2024, 2022 2024, 2022, 2020 2022, 2020, 2018 2024

No	<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												
Basin	Waterbody Name	Waterbody Size (acres/miles)	Class	2024 Monitoring Stations NS = Network		ignate Cate	ed Use egories nmary AL	s and	Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
RÍO BUCANÁ- CERRILLO S	LAGO CERRILLOS PRSL62A1	700 acres	SD	NS 89032 89033 89034	4a	4a	5	5	J	M	Unknown Sources Urban Runoff/Storm Sewers	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												рН	2022
												Temperature	2022
												Total, Nitrogen	2024, 2022, 2020
												Total, Phosphorus	2022, 2020, 2018
RIO YAUCO	LAGO LUCHETTI PRSL68A1	266 acres	SD	NS 89017 89018 89019	4a	4a	5	5	F	M	Agriculture Onsite Wastewater Systems	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												Pesticides	2008
												pН	2024, 2022, 2020, 2018
												Total, Nitrogen	2024, 2022, 2020
												Total, Phosphorus	2024, 2022, 2020, 2018
												Turbidity	2024, 2020
RÍO LOCO	LAGO LOCO PRSL69A	69 acres	SD	NS 89021C	4a	4a	5	5	F	M	Onsite Wastewater Systems	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008
												pН	2024, 2020

N	<b>2024</b> Cycle 303(d) List – List of Lakes  Note: The 2024 303(d) List is comprised of the impairments included in assessments cycles 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												
Basin	Waterbody	Waterbody Size	Class	2024 Monitoring	Designated Uses and Categories Summary					Priority	Potential Pollution Sources	Causes of Impairment	Impaired
	Name	(acres/miles)		Stations NS = Network	R 1	R 2	AL	DW	Notes	Pr		impairment	Cycles
												Total, Nitrogen	2024, 2022, 2020
												Total, Phosphorus	2024, 2020, 2018
RÍO GRANDE DE AÑASCO	LAGO GUAYO PRWL83H	285 acres	SD	NS 89004 89005 89006	4a	4a	5	5	K	Н	Agriculture Confined Animal Feeding Operations Major Industrial Point Sources Minor Municipal Point Source	Dissolved Oxygen	2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
											Onsite Wastewater Systems	Pesticides	2008
												pH	2024, 2022, 2020, 2018
												Total, Nitrogen	2024, 2022, 2020, 2018
												Total, Phosphorus	2024, 2020, 2018
												Turbidity	2024, 2022, 2020

#### Notes:

- **B** Watershed that has an approved TMDL for Río de la Plata, the TMDL was approved in September 2003, the pollutant was Fecal Coliforms.
- C Watershed that has an approved TMDL for Río Grande de Loíza, the TMDL was approved in September 2007, the pollutant was Fecal Coliforms.
- F Watersheds that have approved TMDL in September 2012, the pollutant was Fecal Coliforms.
- H If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2024 cycle.
- **J** Watersheds that have approved TMDL in September 2011, the pollutant was Fecal Coliform.
- K Watersheds that have an approved TMDL in September 2010, the pollutant was Fecal Coliforms. The watersheds are Río Grande de Arecibo, Río Grande de Manatí, Río Grande de Añasco and Río Culebrinas.
- N- Remains in 2024 303 (d) List due to old segmentation evaluation.
- R1 Primary Contact Recreation
- R2 Secondary Contact Recreation
- AL Aquatic Life
- DW Raw Source for Drinking Water

**Priority:** 

- H: High Priority: basins including in the Puerto Rico Unified Watershed Assessment and Restoration Activities (PRUWARA), as basins of priority due to the high pollution level related to all the designated uses.
- M: Intermediate Priority: basins that were not included in the PRUWARA and have 50% or more of its waters as impaired for some designated use.

# **COASTAL SHORELINE**

Size of Waters Impaired	by Causes Coastal Shoreline
Causes of Impairment	Size of Waters Impaired (miles)
Arsenic	49.19
Copper	380.83
Dissolved Oxygen	92.65
Enterococci	390.97
Fecal Coliforms	7.79
Lead	152.17
Mercury	213.37
Nickel	170.90
Oil and Grease	82.42
pН	190.52
Temperature	280.75
Thallium	203.74
Turbidity	434.94
Zinc	43.80

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of AU Years Impaired NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data PRNC01 11.75 SB NS 5 Onsite Wastewater Copper 2020 1 Punta Boringuén to Thallium MAC-044, SBZ-Systems 2020 Punta Sardina 003, SBZ-004, SBZ-005 Major Industrial Point PRNC02 NS Copper 14.10 SB 5 5 5 2020, 2018 Punta Sardina to Punta MAC-047 Sources Thallium 2020 Manglillo MAC-086 Onsite Wastewater Lead 2020 SBZ-006 Systems 2024, 2022, 2020, Enterococci Urban Runoff/Storm 2018 Sewers Turbidity 2024, 2022, 2020, 2018, 2016, 2014, 2012 PRNC03 SB NS 5 5 5 Collection System Copper 2020 9.65 Punta Manglillo to SBZ-007 Failure 2024, 2022, 2020, Enterococci Onsite Wastewater Punta Morrillos SEG3-01 2018 Systems 2020 Temperature Upstream Impoundment 2024, 2020, 2018, **Turbidity** Urban Runoff/Storm 2016 Sewers Collection System PRNC04 13.66 SB NS 1 5 Copper 2020, 2018 Punta Morrillos to MAC-049 Failure Enterococci 2020, 2018 Onsite Wastewater Punta Manatí MAC-055 2020 Mercurv SBZ-008 Systems Nickel 2020 Urban Runoff/Storm pН 2022, 2018 Sewers Upstream Thallium 2020, 2018 Impoundment **Turbidity** 2024, 2022, 2020, 2018, 2016, 2014, 2012 NS 5 PRNC05 7.46 SB Unknown Source 2020, 2018 1 Copper 2022, 2018 SBZ-010 Enterococci

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 **Designated Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of Years Impaired AU NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data 2020 Punta Manatí to Punta SEG5-01 Mercury Chivato Thallium 2020 рH 2022, 2020, 2018 **Turbidity** 2022, 2018 **Temperature** 2024 PRNC06 3.23 NS 5 Onsite Wastewater 2018 SB Copper 2022, 2018 Punta Chivato to MAC-087 Systems Unknown Enterococci Punta Cerro Gordo RW23 Source 2020 Mercury Urban Runoff/Storm 2024, 2022, 2020 **Temperature** Sewers **Turbidity** 2024, 2022, 2018 PRNC07 Copper 5.05 SB NS 5 Onsite Wastewater 2020, 2018 Punta Puerto Nuevo to MAC-088 SEG7-Systems Mercury 2018 Unknown Source Punta Cerro Gordo 01 Нg 2022, 2020 RW-17 Urban Runoff/Storm 2024, 2022, 2020 Temperature Sewers **Turbidity** 2020, 2018 NS PRNC08 7.32 SB 5 5 5 Onsite Wastewater Arsenic 2020 Punta Cerro Gordo to SBZ-013 Systems Enterococci 2024, 2022, 2020, SBZ-014 Unknown Source Punta Boca Juana 2018 RW-18 Urban Runoff/Storm Lead 2020 Sewers 2020, 2018 Copper Nickel 2020 Zinc 2020 2024, 2022, 2020, Turbidity 2018, 2016 PREC09 5.78 SB NS 1 5 Onsite Wastewater 2020a Arsenic Punta Boca Juana to MAC-077 Systems 2020, 2018 Copper SEG9-01 Unknown Source Punta Salinas Enterococci 2022, 2020 RW-19 Urban Runoff/Storm Lead 2020 Sewers Nickel 2020, 2018 Нg 2022

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of AU Years Impaired NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data **Turbidity** 2024, 2022, 2020, 2018, 2016 2020, 2018 PREC10B 2.91 SB NS 5 5 5 Major Industrial Point Copper Punta Salinas to Rio MAC-063 Sources Enterococci 2024, 2022, 2020, Bayamón Mouth Onsite Wastewater 2016, 2014 Systems 2020, 2018 Lead Urban Runoff/Storm Mercury 2020, 2018 Sewers Nickel 2020, 2018 **Turbidity** 2024, 2022, 2020, 2018, 2016, 2014 PREC10C 6.63 SB NS 5 5 5 Major Industrial Point Copper 2020, 2018 Rio Bayamón Mouth SEG10C-01 Sources 2024, 2020, 2018 Enterococci Onsite Wastewater to Isla de Cabras SEG10C-02 Lead 2020, 2018 Systems Mercury 2020, 2018 Urban Runoff/Storm Nickel 2020, 2018 Sewers Zinc 2020 2020 Thallium рН 2022, 2018 Temperature 2024, 2020 **Turbidity** 2024, 2022, 2020, 2018, 2016 PREC11 7.79 SB 5 5 5 Η Major Industrial Point 2010 L Arsenic Sources Isla de Cabras to Punta Copper 2010 Major Municipal Point Del Morro Dissolved Oxygen 2010 Sources Fecal Coliforms 2010 Minor Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems PREC12 3.5 SB NS 1 5 Unknown Sources Enterococci 2022

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of AU **Years Impaired** NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data SBZ-018, SBZ-Turbidity 2022 Punta del Morro to West side of Condado 019, RW-20B, рH 2022 RW-20A, RW-Bridge **Temperature** 2024 25A, ED- CariCoos Buoy Copper PREC13 4.31 NS 5 5 5 Urban Runoff/Storm 2020 East side of Condado SB B-1 Sewers Enterococci 2024, 2022, 2020, Bridge to Punta Las B-2 2018 RW-26 Marías Lead 2020 RW-27 2020 Mercury Thallium 2020 2024, 2022, 2020 Temperature **Turbidity** 2022 2020 PREC14 NS Marinas and 4.19 SB 5 Arsenic Punta Las Marías to EB-40, B-3, Lead 2020 Recreational Boating SEG14-01 Urban Runoff/Storm 2020 Punta Cangrejos Copper SEG14-02, RW-Sewers Thallium 2020 21C Temperature 2024, 2022, 2020 Turbidity 2024, 2022, 2020, 2018, 2016, 2014 PREC15 NS 5 6.23 SB 5 5 Onsite Wastewater Arsenic 2020 Punta Cangrejos to SBZ-024 Systems Copper 2020 Punta Vacía Talega SBZ-026 Urban Runoff/Storm 2024, 2022, 2020, Enterococci Sewers 2018 Mercury 2020 Nickel 2020 2022, 2020 Temperature Thallium 2020 Turbidity 2022, 2020, 2018, 2016

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. Designated 2024 **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of Years Impaired AU NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data PREC16 NS 5 5 5 Onsite Wastewater 2020 9.46 SBArsenic Punta Vacía Talega to SBZ-027 Systems Mercury 2020 Punta Miquillo SBZ-028 Urban Runoff/Storm Copper 2020 Sewers Lead 2020 Nickel 2020 Thallium 2020 Zinc 2020 2024, 2022, 2020, Enterococci 2018 Temperature 2020 2024, 2022, 2020, Turbidity 2018, 2016 PREC17 8.41 SB NS 5 Onsite Wastewater Copper 2020 1 Punta Miquillo to MAC-009, 2020 Systems Mercurv Urban Runoff/Storm Punta La Bandera SEG17-01 Temperature 2022, 2020 RW-1A Sewers Turbidity 2024, 2022, 2018, 2016 PREC18 NS 10.46 SB 1 5 Unknown Source Copper 2020 Punta La Bandera to MAC-010 Thallium 2020 Cabezas de San Juan SBZ-030 рH 2020, 2018 RW-2 2024, 2022, 2020 Temperature 2024, 2022, 2020, **Turbidity** 2018, 2016, 2014, 2012 PREC19 5 7.08 SB NS 5 5 Marinas and 2020, 2018 Copper Cabezas de San Juan MAC-078 Recreational Boating Enterococci 2024, 2022, 2020, to Punta Barrancas Onsite Wastewater 2018, 2016 Systems Unknown Oil & Grease 2014 Source 2024, 2022, 2020 Temperature Urban Runoff/Storm **Turbidity** 2022, 2020, 2018, Sewers 2016, 2014

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated Monitoring Uses and Priority Size of Notes **Assessment Unit ID** Stations Categories **Potential Pollution** Causes of AU Years Impaired NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data PREC20 SB NS 5 Copper 2020 5.33 1 Marinas and Recreational Boating Punta Barrancas to SEG20-01 Thallium 2020 Onsite Wastewater Dissolved Oxygen Punta Medio Mundo SEG20-02 2022, 2018, 2016 Systems Enterococci 2020, 2018 Urban Runoff/Storm 2024, 2022, 2020 **Temperature** Sewers Turbidity 2022, 2020, 2018, 2016 PREC23 8.33 SB NS 1 5 Major Industrial Point Copper 2020 Isla Cabras to Punta SEG23-01 Sources **Turbidity** 2020, 2016 Cascajo Marinas and Recreational Boating PREC24 9.07 SB NS 5 5 5 Major Industrial Point Copper 2020 Punta Cascajo to SEG24-02 Sources Dissolved Oxygen 2018, 2016 Upstream Impoundment Punta Lima Enterococci 2020, 2018 Temperature 2024, 2022, 2020 **Turbidity** 2022, 2020, 2018, 2016 PREC25 9.83 SB NS 5 5 5 Major Municipal Point 2020, 2018 Copper Punta Lima to Morro MAC-080 Sources Onsite Mercury 2020 Wastewater Systems de Humacao MAC-081 Temperature 2024, 2022, 2020 SEG25-01 Urban Runoff/Storm Enterococci 2024, 2022, 2020, RW-4, RW-31 Sewers 2018 Turbidity 2024, 2022, 2020, 2018, 2016, 2014, 2012 PREC26 1.84 SB NS 5 Onsite Wastewater Copper 2020 1 Morro de Humação to SEG26-01 Systems Enterococci 2020, 2018 Urban Runoff/Storm Punta Candelero Temperature 2024, 2022, 2020 Sewers **Turbidity** 2022, 2020, 2018, 2016 PREC27 3.74 SB NS 5 5 5 Arsenic 2020 L

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of AU Years Impaired NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data Onsite Wastewater Copper 2020 Punta Candelero to SEG27-01 Punta Guayanés Systems Thallium 2020 Urban Runoff/Storm 2024, 2022, 2020, Enterococci Sewers 2018, 2008 **Turbidity** 2024, 2022, 2020, 2018, 2016 NS 2020, 2018 PREC28B 0.74 SB 5 5 5 Onsite Wastewater Copper SBZ-038 Thallium Punta Ouebrada Systems 2020 Honda to Punta Unknown Source Enterococci 2020, 2018 Yeguas Turbidity 2022, 2020, 2016 PREC28C Arsenic 4.68 SB NS 5 5 5 Major Industrial Point 2020 Punta Guayanés to MAC-012 Sources Onsite 2020 Mercury Punta Ouebrada Wastewater Systems SBZ-037 Copper 2020, 2018 Honda Urban Runoff/Storm Thallium 2020 Sewers Enterococci 2020, 2018 Oil & Grease 2014 Temperature 2020 **Turbidity** 2022, 2020, 2018, 2016, 2014, 2012 PREC29 5 4.35 SB NS Onsite Wastewater 2020, 2018 1 Copper SEG29-02 Punta Yeguas to Punta Systems Lead 2018 Tuna SEG29-01 Unknown Source Thallium 2020 Urban Runoff/Storm Enterococci 2020 Sewers 2020, 2018 рH Temperature 2024 **Turbidity** 2024, 2022, 2020, 2018, 2016 PREC30 NS 2.65 SB 5 5 5 Unknown Source Copper 2020, 2018 Punta Tuna to Cabo MAC-082 Enterococci 2024, 2022, 2020, Mala Pascua 2018, 2016

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#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of $\mathbf{AU}$ Years Impaired NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data 2024, 2022, 2018, Reserve of Jobos Enterococci Bay 2012, 2010 Oil & Grease 2014 pН 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010 Temperature 2024, 2022, 2020, 2016, 2014 Turbidity 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010 NS 2020, 2018 PRSC35 16.19 SB 5 5 5 M Major Municipal Point Copper Punta Petrona to Punta MAC-020 Sources Lead 2020 Onsite Wastewater Nickel 2020 Cabullones SEG35-01 SEG35-02 Systems 2020 Thallium Upstream Impoundment **ED-CariCoos** Zinc 2020 Urban Runoff/Storm Buoy Enterococci 2024, 2022, 2020, Sewers 2018, 2016 Mercury 2020, 2018 2024, 2022, 2020, **Turbidity** 2018, 2016, 2014 PRSC36B 2.53 SB NS 5 5 5 Major Municipal Point pН 2024, 2022, 2020 Punta Cabullones to SEG36B-01 2024, 2022, 2020 Sources **Temperature** Punta Carenero Marinas and Enterococci 2022 Recreational 2018 Copper **Boating** 2018 Mercury Onsite Wastewater **Turbidity** 2022, 2020, 2018, Systems 2016 Urban Runoff/Storm Sewers PRSC36C Major Municipal Point 2024, 2022, 2020 6.70 SB NS 5 5 5 **Turbidity** MAC-022 2020, 2018 Sources Copper

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#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 **Designated** Monitoring Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of Years Impaired AU NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data 2024, 2022, 2020, Urban Runoff/Storm **Temperature** Sewers 2018, 2016, 2014 PRSC39 6.41 SB NS 1 5 Unknown Source **Turbidity** 2024, 2022, 2020, 2018, 2016, 2014. Punta Verraco to MAC-030. Punta Ballena Seg39-01, G1 2012 Copper 2020 Thallium 2020 2022, 2020, 2012 PRSC40 13.26 SB NS 5 5 5 Marinas and Turbidity Punta Ballena to Punta MAC-034 Recreational Copper 2020 Brea MAC-085 Boating 2020, 2018 Nickel RW-9 Minor Municipal Point рH 2020, 2018, 2016, Sources 2012 Onsite Wastewater 2022, 2020 Enterococci Systems 2022, 2020, 2018, Temperature Urban Runoff/Storm 2012 Sewers PRSC41B1 10.93 SB NS 5 5 5 Marinas and **Turbidity** 2022, 2020, 2018, Punta Brea to Bahía SBZ-045 Recreational Boating 2016, 2014, 2012 Onsite Wastewater Fosforescente La SEG41B1-01 Copper 2020 RW-10 Systems Thallium Parguera 2020 Urban Runoff/Storm 2022 Enterococci Sewers Temperature 2022, 2020 2020 pН PRSC41B2 NS 5 Landfill 2020, 2018 7.00 SB 5 5 Copper SBZ-046 Thallium 2020 Bahía Fosforescente Marinas and Seg41B2-01, Dissolved Oxygen La Parguera to Punta Recreational Boating 2022, 2020, 2016 Cueva de Ayala RW-33 Onsite Wastewater Enterococci 2022, 2020 Systems 2020, 2018 рH Urban Runoff/Storm Temperature 2022, 2020 Sewers Turbidity 2024, 2022, 2018, 2016

#### 2024 Cycle 303(d) List - List of Coastal Shoreline Note: The 2024 303(d) List is comprised of the causes of impairments included in assessment cycles 2024, 2023, 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2024 Designated **Monitoring** Uses and Priority Notes Size of **Assessment Unit ID Stations** Categories **Potential Pollution** Causes of AU Years Impaired NS = Network **Summary Impairment** (AU) Sources (miles) R1 R2 AL ED = External Data Turbidity PRSC41B3 SB NS 5 5 5 2024, 2022, 2020, 13.45 Unknown Source Bahía Monsio José to SEG41B3-01 2018, 2016 Faro de Cabo Rojo SEG41B3-02 Mercury 2020 Thallium 2020 Nickel 2020 Dissolved Oxygen 2020, 2016 2024, 2022, 2020, Enterococci 2018 2024, 2022, 2020 Temperature PRWC42 NS 5 2.89 SB 5 5 Unknown Source **Turbidity** 2022, 2020, 2018, Faro de Cabo Rojo to SEG42-01 2016 Punta Águila 2022 Enterococci 2024, 2022, 2020, Dissolved Oxygen 2018, 2016 2022, 2020, 2018 pН Temperature 2024, 2022, 2020, 2018 PRWC43 2022, 2020 9.54 NS 5 Collection System SB 5 5 Enterococci Punta Águila to Punta MAC-037, SBZ-Failure Turbidity 2024, 2022, 2020, Guaniquilla 047 Marinas and 2018, 2016 SBZ-048 Recreational Temperature 2024, 2022, 2020 RW-12A. RW-Boating 12B. Minor Municipal Point RW-13, RW-14A Sources Onsite Wastewater Systems PRWC44 2.50 SB NS 5 5 5 Onsite Wastewater Enterococci 2022, 2020 Punta Guaniquilla to SBZ-050 **Turbidity** 2020, 2018, 2016 Systems Punta La Mela SBZ-051, RW-8 2024, 2022 **Temperature** На 2020 Thallium 2020

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Note: The 2024 303(d)  Assessment Unit ID (AU)	List is con Size of AU (miles)	Class		pairm De U Ca	ted td ries		oastal Shoreline ent cycles 2024, 2023, 202  Potential Pollution Sources	2, 2020, 2018, 2016,  Causes of Impairment	2014, 2012, 2010, 2008.  Years Impaired
Culebra Island			RW-3				Onsite Wastewater Systems Marinas and Recreational Boating Debris and Bottom Deposits Hazardous Waste	рН	2018

#### **Notes:**

H - If the Monitoring Station column is left blank, the Assessment Unit was not monitored for 2022 cycle.

M - External Data

R1 - Primary Contact Recreation R2 - Secondary Contact Recreation

**AL** – Aquatic Life

#### Priority:

L: Low Priority: basins that were not included in the Puerto Rico Unified Watershed Assessment and Restoration Activities (PRUWARA) and have less than 50% of its waters as impaired for some designated use.

Puerto Rico 2024 305(b) and 303(d) Integrated Report
APPENDIX II - 2024 Integrated Reporting (IR) Memo Comments
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# 2024 INTEGRATED REPORTING (IR) MEMO - COMMENTS ON INFORMATION CONCERNING 2024 CLEAN WATER ACT SECTIONS 303(d), 305(b), AND 314 INTEGRATED REPORTING AND LISTING DECISIONS

The Puerto Rico Department of Natural and Environmental Resources (PRDNER) works continuously and consistently, both on the topics included in this Memorandum, and in compliance with the Clean Water Act (CWA), Sections 303(d), 305(b) and other laws and regulations.

Below is a brief explanation on how the different topics have been addressed on the Island.

#### 1. 2022-2032 Section 303(d) Vision

Consistent with the new EPA's vision, PRDNER identifies those assessment units (AU) for priority restoration and protection activities since the 2018 305(b)/303(d) Integrated Report to present. Long-term Prioritization from 2016 to 2022 provides a framework to focus the location and timing for the development of, alternative restoration, protection plans and total maximum daily load (TMDL). Many alternatives approaches were implemented to achieve the overall water quality goals:

- PRDNER obtained other data and information, of water quality monitoring sampling from different government agencies and nongovernment entities, as part of the effort to increase the information regarding the percentage of monitored waters in PR.
- PRDNER have taken all appropriate enforcement actions against owners of sites where activities are being performed in violation of the Regulation for the Control of Erosion and Prevention of Sedimentation, the Reglamento para el Control de los Desperdicios Fecales de Animales de Empresas Pecuarias and the Underground Injection Control Regulation among others.
- To continue with the compliance and implementation of the applicable regulations, permits evaluation and inspections; compliances inspections, notification of violations and enforcement actions were carried out.
- As part of the water quality information requested from different government agencies, the DRNER is working in the development of a series of workshops to train personnel on land use activities that could impact water bodies.

Continuing the activities and control measures will demonstrate progress over time in achieving protection and restoration of PR watersheds.

# 2. Clarification Regarding Priority Rankings and total maximum daily load (TMDL) Submission Schedules

To comply with the requirements established in CWA Section 305(b), the Department performs the required assessment in terms of the current water

quality in the different water resources throughout Puerto Rico (PR). For water bodies that do not meet the applicable standard for a designated use, the Act requires that the state develop control measures for pollutants. These water bodies will be included in 303(d) List. Each impairment reflected on the 303(d) List requires a calculation of the maximum amount of the impairing pollutant that a water body can receive and still meet water quality standards. This calculation is called the TMDL. TMDL's include reduction of pollution sources impacting the water body which, when achieved, will result in the attainment of the water quality standard in the impaired water body. PRDNER is working with the implementation of the development of TMDL in the impaired basins.

#### 3. Participatory Science

To comply with the *Participatory Science* topics, since May 2016 was approved the **Quality Assurance Project Plan (QAPP) For the Use of Water Quality Existing Data for The Development of the 303(d)/305(b) Integrated Report**. The development of the IR requires the assessment of existing and readily available water quality-related data and information. In addition, PR is required to evaluate and consider any other readily available information. The assessment determination must include all relevant data that is consistent with the QA/QC requirements established in the QAPP for the use of Water Quality Existing Data for the Development of the 303(d)/305(b) IR (revised in March 2021). For the development of the IR in addition to the water quality data obtained by the routine monitoring network, secondary or external data requested from governmental agencies, non-governmental entities and/or reliable sources of the web should be considered.

Existing data will be gathered and used to address the following objectives related to the assessment of the quality of the water bodies:

- **Objective 1**: Determine compliance with the water quality criteria and attainment with the designated uses.
- **Objective 2**: Develop the 303(d) list and the AUs to be delisted.
- **Objective 3**: Develop and publish the 303(d)/305(b) IR.

#### 4. Environmental Justice and Climate Change

PRDNER addresses both *Climate Change and Environmental Justice* in the 2021 revision of the Puerto Rico Nonpoint Sources Management Program and in others Department workplans. Also, since climate change is impacting attainment of multiple water quality uses, including drinking water, recreation, traditional/cultural, navigation, and aquatic life, and attainment of criteria for pollutant, such as temperature, nutrients and sediment is also necessary maintain the existing regulations updated.

# 5. CWA Section 303(d) Assessment/Listing for Nutrient-related Impairments

In 1994, the USEPA established the National Nutrient Criteria Program. The goal of this program is to reduce eutrophication by developing guidelines for the establishment of numeric nutrient criteria at a state (tribal) level. The criteria, which represent conditions of water minimally impacted by human activities, will enable regulatory agencies to identify, prioritize and restore nutrient impaired waters. The development of the Puerto Rico Nutrient Standard Plan (PRNSP) describes the approach to addressing nutrient overenrichment, along with the plan to refine its current nutrient criteria in response to the USEPA requirements that states/territories adopt nutrient criteria for their waterbodies.

Since 2016 Puerto Rico Water Quality Standard Regulation (PRWQSR), has incorporated the new standards for Total Phosphorus (TP) and Total Nitrogen (TN) applicable to the rivers and streams of PR.

The amendment to the Regulation propitiates the moment to develop specific TMDLs for TP, in the assessment that even with the previous standard were exceeding the standard of the parameter of TP. Also, the Regulation amended, leads properly identify the assessment units that are (in the top) in the first place in the priority list to develop TMDLs for TP.

The outcome will be gathering data to identify those AU that accomplished the parameters and therefore support the delist candidate assessment unit from the list 303 (d).

#### 6. CWA Section 303(d) Assessment/Listing for Trash-Related Impairments

PRWQSR provides the narrative criteria to address the concerns of Trash-Related Impairments:

- Regla 1303.1A **Solids and other matter:** "The water of PR should not contain floating debris, scum or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body."
- Regla 1303.1E **Suspended, Colloidal or Settleable Solids:** "Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the water body."
- Regla 1304.3 Requirement for Granting Relief: No relief from complying with the applicable provisions of Rule 1303 of this Regulation shall be granted, unless the following requirements are met:

A. The intermittent stream shall not contain substances or materials, including floating debris, oil, scum, and other matter attributable to point sources, in amounts or concentrations that:

- 1. Form objectionable deposits;
- 2. Create nuisances;
- 3. Produce objectionable color, taste, or odor;
- 4. Produce undesirable aquatic life or result in a dominance of nuisance species;
- 5. Cause injuries to be hazardous to, or produce adverse physiological responses in humans, animals or plants;
- 6. Interfere with or impair existing uses downstream of the water body.

**APPENDIX III - Public Notice** 

#### 20< CLASIFICADOS

UBB VILLA BLANCA PMB 474

EDICTO DE SUBASTA A la Vega y socielos de Javan Fresh.

LAGUAS. PR 00725 Tel 707

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GOVERNMENT OF PUERTO RICO

## **PUBLIC NOTICE**

> LUNES, 6 DE MAYO DE 2024 VOCETO

SUCESIÓN DE
GUILLERMO LEON
CASTILLO Y CARMEN G. RODRIGUEZ
SANTIAGO COMPUESTA POR CARMEN LUISA LEON
RODRIGUEZ, PAULA
LEON RODRIGUEZ, LYSNA ALBERTA
SCRIVEN, MARISSA
NANETTE SCRIVEN,
SUHAIL LEON LUGO
Y WILLIAME, MARQUEZ LEON Y
JUANITA LUGO
JUSTINIANO
OEMANOROGO
CIVE, NUM. MEZOSOCOUSSA

SS-20084 ESTADO LIBRE ASOCIADO DE PUERTO RICO TRIBUNAL DE PRIMERA IN-STANCIA CENTRO JUDICIAL DE ARECIBO SALA SUPERI-OR DE ARECIBO

HECTOR MACHADO MERCADO Demandante EXPARTE Demandado(a)

JACOLIX JOMAYRA

MANUEL ERNESTO ADAMES MENA



GOBIERNO DE PUERTO RICO

#### **AVISO PÚBLICO**



DRNA

# s y subastas



GOVERNMENT OF PUERTO RICO Department of Natural and Environmental Resources

#### **PUBLIC NOTICE**

# 303(D) LIST WATER BODIES THAT EXCEED PUERTO RICO'S WATER QUALITY STANDARDS

Section 303(d) of the Clean Water Act (CWA) of 1972, as amended, requires that the jurisdictions develop and submit a list of water bodies that do not meet the applicable water quality standards for designated uses every two years to EPA. The designated uses for waters of Puerto Rico are: primary contact (fishing and boating), propagation and preservation of desirable species, including threatened and endangered species (aquatic life) and raw source for drinking water. For water bodies that do not meet the applicable standard for a designated use, the Act requires that the state develop control measures for pollutants. Control measures should address the problem that caused the non-compliance of the standard for the designated use. Each impairment reflected on the 303(d) List requires a calculation of the maximum amount of the three pollutant that a water body can receive and still meet water quality standards. This calculation is called the TMDL TMDLS include reduction for pollution sources impacting the water body which, when achieved, will resolut in the attainment of the water quality standard in the impaired water body.

The Puerto Rico Department of Natural and Environmental Resources (PRDNER) has developed the 303(d) draft List, for the 2024 cycle and invites governmental agencies, non-governmental agencies, and the general public to submit their

The List of Impacted Water Bodies draft for the 2024 cycle and the Assessment Methodology will be available to the public for examination, at the request of the interested party by sending an email to the following address: waterquality@dras.pr.gov, interested or affected parties may submit their comments in writing to Mrs. Wanda E. Garcia Hernández, Environmental Programmatic Executive of the Water Quality Area, at the electronic address no later than thirty (30) days from the publication of this notice. The deadline for submitting comments may be extended if deemed necessary or appropriate in the public interest.

All interested or affected parties may request a public hearing. Said request must be submitted in writing to the Secretary of the DRNA through the Secretary's Office at the following email address: avudaalcudadano@drna.pr.gov, no later than thirty (30) days from the date of publication of this notice and the reason or reasons that in the opinion of the applicant merit the holding of the public hearing

In San Juan, Puerto Rico, April 1, 2024.

Authorized by the Office of the Election Comptroller: OCE-SA-2024-05879.





This announcement was published as required by the Law on Environmental Public Policy, Law No. 416 of September 22, 2004, as amended. The cost of the Public Notice is defrayed by the DRNA.

Carr. 8838 Km 6.3 Sector El Cinco, Río Piedras, PR 00926 San José Industrial Park, 1375 Ave Ponce de León, San Juan, PR 00926



GOBIERNO DE PUERTO RICO Departamento de Recursos Naturales y Ambientales

#### **AVISO PÚBLICO**

#### LISTA 303(D) DE CUERPOS DE AGUA QUE EXCEDEN LOS ESTÁNDARES DE CALIDAD DE AGUA DE PUERTO RICO

ESTÁNDARES DE CALIDAD DE AGUA DE PUERTO RICO

La Sección 303(d) de la Ley Federal de Agua Limpia (CWA, por sus siglas en inglés) de
1972, según emmendada, requiere que las jurisdicciones desarrollen y sometan cada
dos años a la Agencia Federal de Protección Ambiental (EPA, por sus siglas en inglés) de
una lista de los cuerpos de agua que no cumplieron con los estándares de calidad
agua aplicables para los usos designados. Los usos designados para los estándares de calidad
agua aplicables para los usos designados. Los usos designados para y paseo en hotes,
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El Departamento de Recursos Naturales y Ambientales de Puerto Rico (DRNA) ha desarrollado el borrador de la Lista 303(d) para el ciclo 2024 e invita a las agencias gubernamentales, entidades no-gubernamentales y público en general a someter sus comentarios y recomendaciones.

El borrador de la Lista de Cuerpos de Agua Impactados para el ciclo 3024 y la Metodologia de Evaluación estarán a la disposición del público para ser examinados, a petición del interesado mediante el envío de un correo electrónico a la siguiente dirección: waterquality@dina.p.csov. Las partes interesadas o afectadas pueden someter sus comentarios por escrito a la Sra. Wanda E. García Hernández, Ejecurio Programático Ambiental del Área de Calidad de Agua, a la dirección electrónica antes mencionada no más de treinta (30) dias a partir de la publicación de este aviso. La fecha límite para someter comentarios puede extenderse si se estima necesario o apropiado para el interés público.

Todas las partes interesadas o afectadas podrán solicitar una vista pública. Dicha solicitud debe someterse por escrito al secretario del DRNA a través de la Oficina de Secretaría a la siguiente dirección electrónica: <u>avudaciudadano@afma.ps.gov.</u> o más tarde de treinta (36) días a partir de la fecha de publicación de este aviso y deberá señalarse la razón o las razones que en la opinión del solicitante ameritan la celebración de la vista pública.

En San Juan, Puerto Rico, hoy 1 de abril de 2024.

Autorizado por la Oficina del Contralor Electoral: OCE-SA-2024-05879.





Este anuncio se publicó conforme a lo requerido por la Ley sobre Política Pública Ambiental, Ley Núm. 416 del 22 de septiembre de 2004, según enmendada. El costo del Aviso Público es sufragado por el DRNA.

Carr. 8838 Km 6.3 Sector El Cinco, Río Piedras, PR 00926 San José Industrial Park, 1375 Ave Ponce de León, San Juan, PR 00926 787.999.2200 • 787.999.2303 • www.drna.pr.gov

Eq. 16

**APPENDIX IV - Department of Natural and Environmental Resources Determination** 



IN RE:

PROMULGACIÓN DE LA LISTA DE CUERPOS DE AGUA IMPACTADOS PARA PUERTO RICO PARA EL CICLO 2024

ÁREA DE CALIDAD DE AGUA

RES. NÚM .: 2024 -06-002

SOBRE LISTA 303(d) DE PUERTO RICO

REF: DIVISIÓN PLANES Y PROYECTOS ESPECIALES

#### RESOLUCIÓN Y NOTIFICACIÓN

Se presentó ante la consideración de la Secretaria del Departamento de Recursos Naturales y Ambientales el 13 de Junio de 2024, el memorando del Ing. Ángel R. Meléndez Aguilar, Gerente Interino del Área de Calidad de Agua, relacionado a la Lista de Cuerpos de Agua Impactados de Puerto Rico propuesta para el ciclo 2024, Lista 303(d), según la Ley Federal de Agua Limpia, 33 U.S.C., secc. 1313(d). La misma fue sometida a comentario público el 6 de mayo de 2024. Las partes interesadas o afectadas podían someter sus comentarios por escrito, no más tarde de treinta (30) a partir de la publicación de los avisos. Pasado el período de comentarios establecido no se recibieron comentarios. Anteriormente, la Agencia de Protección Ambiental (EPA, por sus siglas en inglés) había presentado sus comentarios a la Lista propuesta, los cuales fueron acogidos e incorporados.

#### RESOLUCIÓN

AM

Luego de evaluar la totalidad del expediente administrativo sobre la Lista de Cuerpos de Agua Impactados de Puerto Rico para el ciclo 2024, Lista 303(d), en virtud de los poderes y facultades que concede la Ley 416-2004, según enmendada, conocida como la Ley de Política Pública Ambiental, y los reglamentos promulgados a su amparo se RESUELVE:

- A: Se ACOGEN las recomendaciones del Área de Calidad de Agua, cuya copia se hace formar parte de la presente resolución.
- B: Se APRUEBA la Lista de Cuerpos de Agua Impactados de Puerto Rico para el ciclo 2024, Lista 303(d).
- C: Se ordena a la División de Planes y Proyectos Especiales del Área de Calidad de Agua proceder a tramitar la Lista 303(d), ante la EPA.

#### II. APERCIBIMIENTO

La parte adversamente afectada por una resolución u orden parcial o final podrá, dentro del término veinte (20) días desde la fecha de archivo en autos de la

San José Industrial Park, 1375 Ave Ponce de León, San Juan, PR 00926

昌787.999.2303

🖰 www.drna.pr.gov

1787.999.2200

LISTA DE CUERPOS DE AGUA IMPACTADOS PARA PUERTO RICO CICLO 2024 Página 2

> notificación de la resolución u orden, presentar una moción de reconsideración de la resolución u orden.

La agencia dentro de los quince (15) días de haberse presentado dicha moción deberá considerarla. Si la rechazare de plano o no actuare dentro de los quince (15) días, el término para solicitar revisión comenzará a correr nuevamente desde que se notifique dicha denegatoria o desde que expiren dichos quince (15) días, según sea el caso. Si se tomare alguna determinación en su consideración, el término de solicitar revisión empezará a contarse desde la fecha en que se archive en autos una copia de la notificación de la resolución de la agencia resolviendo definitivamente la moción de reconsideración. Tal resolución deberá ser emitida y archivada en autos dentro de los noventa (90) días siguientes a la radicación de la moción de reconsideración.

Si la agencia acoge la moción de reconsideración pero deja de tomar alguna acción con relación a la moción dentro de los noventa (90) días de ésta haber sido radicada, perderá jurisdicción sobre la misma y el término para solicitar la revisión judicial empezará a partir de la expiración de dicho término de noventa (90) días, salvo que la agencia, y por justa causa y dentro de esos noventa (90) días, prorrogue el término para resolver por un periodo que no excederá de treinta (30) días adicionales.

Si la fecha de archivo en autos de copia de la notificación de la orden o resolución es distinta a la del depósito en el correo de dicha notificación, el término se calculará a partir de la fecha del depósito del correo.

Una parte adversamente afectada por una orden o resolución final de una agencia y que haya agotado todos los remedios provistos por la agencia o por el organismo administrativo apelativo correspondiente podrá presentar una solicitud de revisión ante el Tribunal de Apelaciones, dentro del término de treinta (30) días contados a partir de la fecha del archivo en autos de la copia de la notificación o resolución final de la agencia a partir de la fecha aplicable de las dispuestas en la Sección 3.15 de esta Ley Núm. 38, de junio de 2017, según enmendada, y anteriormente expresada, cuando el término para solicitar la revisión judicial haya sido interrumpido mediante la presentación oportuna de una moción de reconsideración.

NOTIFIQUESE Y ARCHIVESE

En San Juan, Puerto Rico, a 17 de junio de 2024.

Anaïs Rodríguez Vega Secretaria



**Appendix \*:** "USFWS "No Effect" Memo and supporting documentations

Date: May 1, 2025

Applicant ID: PR-ESP-00256

Street Address: 65 Calle Comercio, Yauco PR, 00698

Municipality: Youco

RE: No Effect Determination for PR-ESP-00256

### **Executive Summary**

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

This memo serves to document the proposed project, PR-ESP-00256, located at 65 Calle Comercio, Yauco PR, 00698 (Parcel ID# 361-084-067-07-001) was reviewed in accordance with Section 7 of the Endangered Species Act of 1973 (16 USC 1536) as well as the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 et seq.) by a qualified Biologist, resulting in a 'No Effect' determination.

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

#### **Project Description**

The subject property is a Commercial building located in Yauco, PR. The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof and will be built at Latitude: 18.034439, Longitude: -66.852865 (see Site Map at Appendix A, Figure 1). All improvements will be limited to the roof, floors, and walls of existing commercial buildings. The Field Observation Form and Environmental Screening Checklist depicting and clarifying the extent and location of project activities are included in Appendix B.

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

Species	Status
Puerto Rican Boa (Chilabothrus inornatus)	Endangered

Critical Habitat	
None.	

#### **Existing Conditions:**

The area where the activities will be taking place consists of approximately 0.08-acres of land located at 65 Calle Comercio, Yauco PR, 00698. According to the U.S. Geological Survey National Land Cover Database (NLCD) (Appendix A, Figure 4) the majority of the project area consists of high intensity developed land. A structure matching project orientation and footprint is present on 1977 Earth Explorer. Year built circa 1968. A topographic map is included (see Appendix A, Figure 3). The project is located in Zone X on the FEMA Flood map and ABFE map, panel number 72000C1615H dated 4/19/2005 (see Flood Map Appendix A, Figure 5 and ABFE map Appendix A, Figure 6). A Preliminary FIRM has not been developed for this area. There is a mapped NWI riverine, according to the Wetlands Maps a riverine is 492 feet north where the commercial building is located. The project activities will not occur within a natural or manmade wetlands and no direct or indirect impacts are anticipated as a result of the project activities (see wetlands map Appendix A, Figure 7).

#### **Effect Determination:**

Based on a review of site photos and other information gathered during a site visit on March 6, 2025, none of the species listed above were observed in the vicinity of the proposed project activities and no critical habitat was identified within the proposed project area. Having carefully analyzed the project site and the information available, including the IPaC species list and available Dkey(s), critical habitat data, nature of the project, previous site disturbance, and scope of project activities, the following effect determinations have been made:

Species	Effect Determination	Conservation Measures to be Implemented (if needed)
Puerto Rican Boa (Chilabothrus inornatus)	No Effect	None required

#### **SPECIES ANALYSIS**

#### Puerto Rican Boa (Chilabothrus inornatus)

Considered to be a habitat generalist, the Puerto Rican Boa tolerates a wide variety terrestrial and arboreal habitat, including rocky areas, haystack hill, trees and branches, rotting stumps, caves, plantations, various types of forested areas such as karst and mangrove forests, forested urban and rural areas, and along streams and road edges. The IPaC Determination Key (Dkey) for the Puerto Rican Boa, dated April 30, 2025, was used to evaluate the potential impacts to federally listed species from this project. Based on the Dkey responses, it was determined that the proposed project will have 'No Effect' on the Puerto Rican Boa (Appendix C).

If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask them to relocate the Boa.



	May 1, 2025
Patricia Carmenatty / Senior Biologist	Date

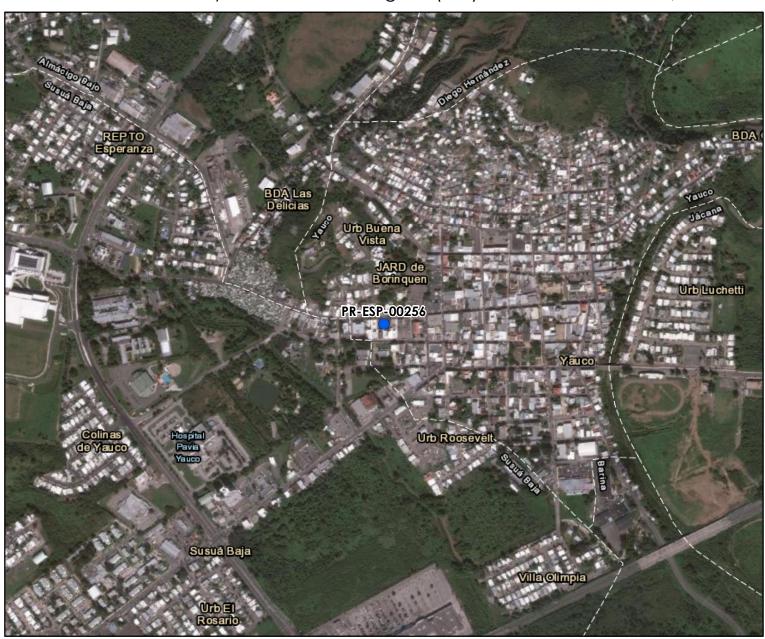


Appendix A: Figures



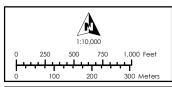
Location: Aerial Map
Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865



## Legend:

PR-ESP-00256





Service Layer Credits:

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

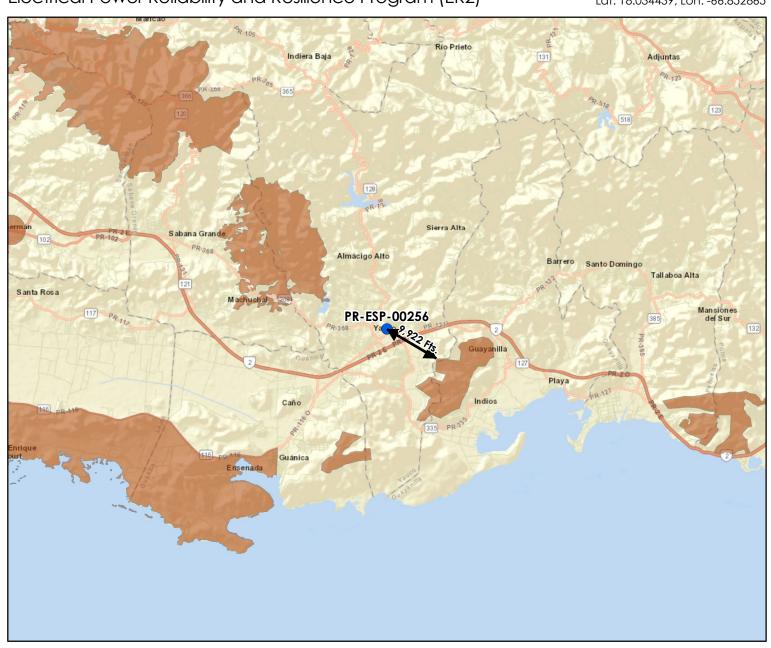
Centro de Recaudación de Ingresos Municipales (CRIM) https://catastro.crimpr.net/cdprpc/

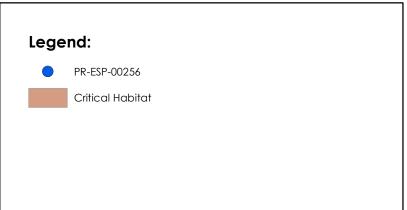


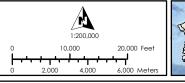
# Threatened and Endangered Species Map

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Layer Credits:

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

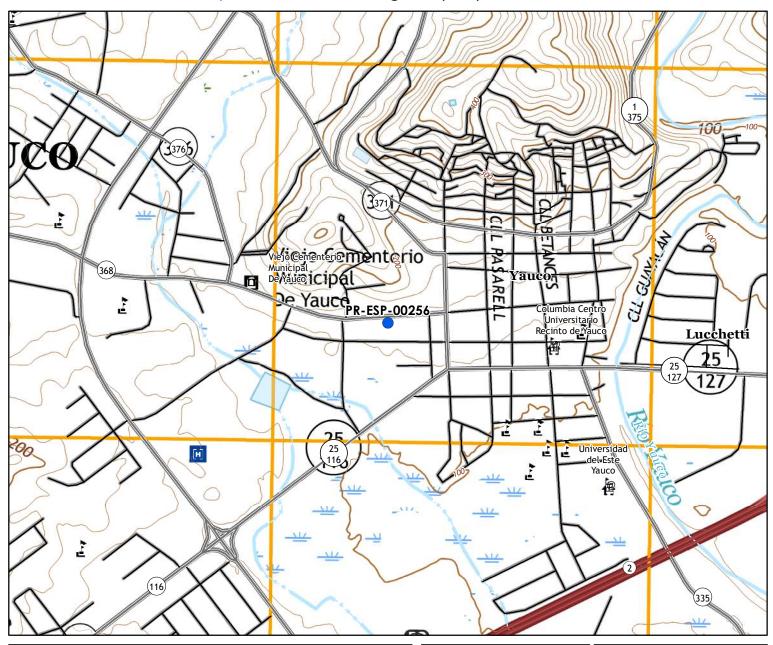
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

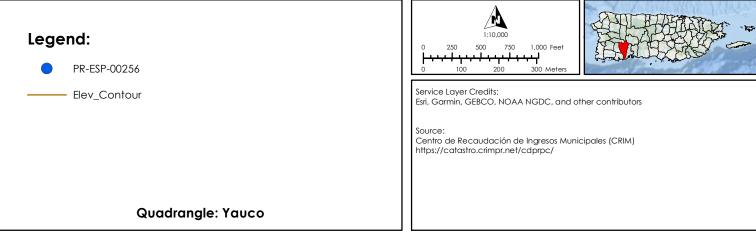
#### Source

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

# Location: Topographic Map Electrical Power Reliability and Resilience Program (ER2)

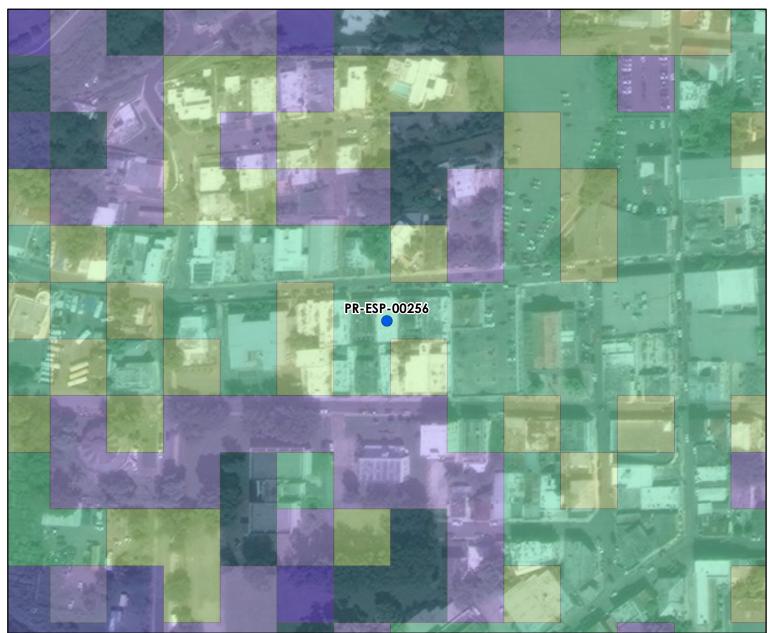
Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865

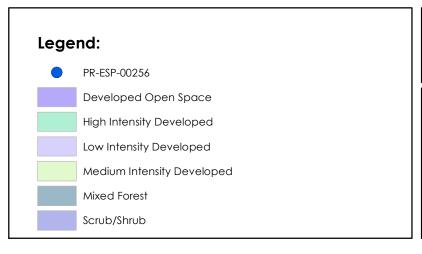


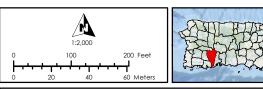


Land Cover Map
Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865







Service Layer Credits:

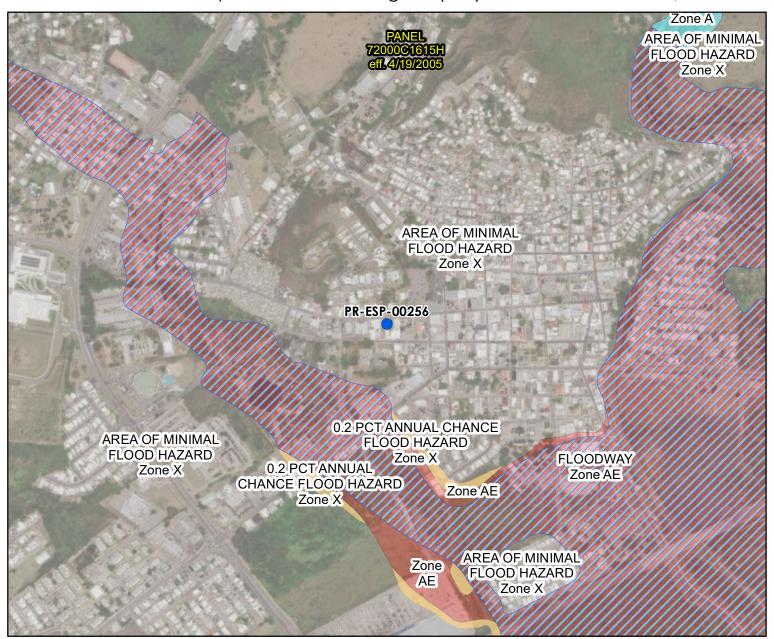
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

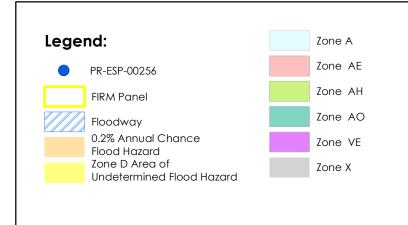
Multi-Resolution Land Characteristics (MRLC) Consortium https://www.mrlc.gov/viewer/

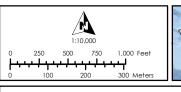


# Flood Insurance Rate Map Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Laver Credits:

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

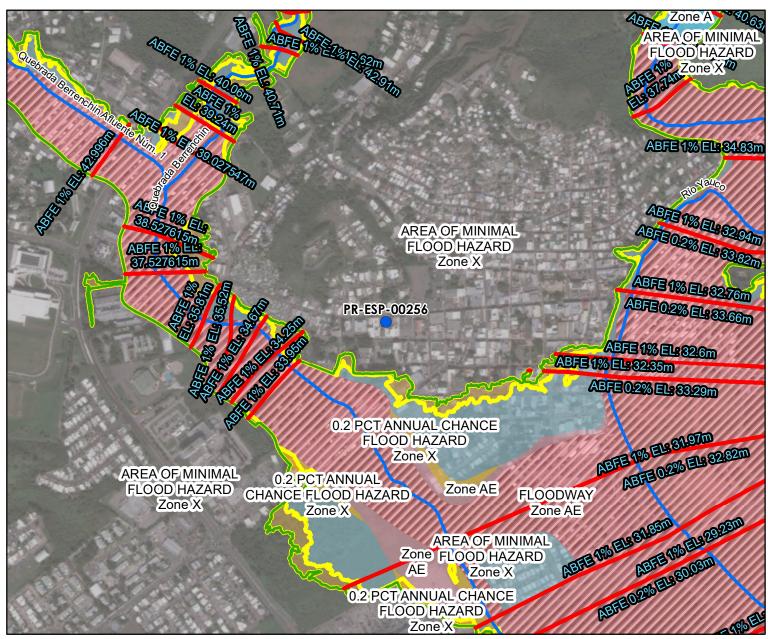
Federal Emergency Management Agency (FEMA) https://msc.fema.gov/portal/home

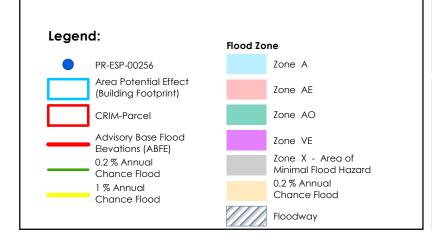


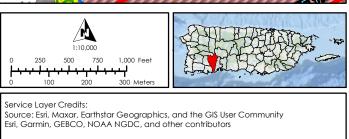
# Advisory Base Flood Elevation Map

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865







#### Source:

Federal Emergency Management Agency (FEMA), https://gis-r2-fema.hub.arcgis.com/

Junta de Planificacion de Puerto Rico (JP), https://maps.jp.pr.gov/

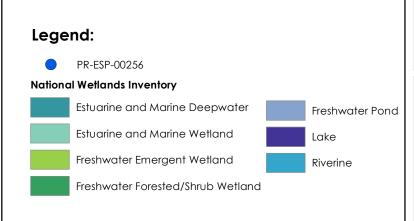
Mapas de Niveles de Inundacion Base Recomendados

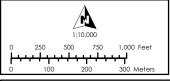


Wetlands Map
Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18.034439, Lon: -66.852865









Service Layer Credits:

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

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



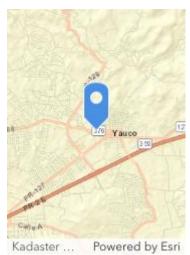
**Appendix B:** Field Observation Form and Environmental Screening Checklist





#### **Environmental Field Assessment Form - PR-ESP-00256**

		APPLICANT/LOCATION INFORMATION
Applicant ID:	PR-ESP-00256	
Applicant Name:	Laboratorio Clínico Tecnolab	The State of the
Parcel ID:	361-084-067-07-001	
Coordinates:	18.034439, -66.852865	
Street Address:	65 Calle Comercio	na sin Yauce
Municipio:	Yauco	300
Zip Code:	00698	
Site Inspector:	Egon Gonzalez	and a
Date of Visit:	March 6, 2025	
Time of Visit:	11:31	Carlos
Year Built:	Circa 1930	Kadaster Powered by





	Building Information				
	Question	Answer	Notes		
1.	Location verified:	Yes	18.034439, -66.852865		
2.	Is the building correct on GIS?	Yes	Building is correct on GIS		
3.	Building Type:	Commercial/Reside ntial			
4.	# of Stories:	2			
5.	Building Foundation:	Concrete Slab			
6.	Is the building in use?	Yes	Building is in use		
7.	Does the building have a detached garage / carport present?	No			
8.	Is the electricity connected?	Yes	Electricity is connected		
9.	Is the water connected?	Yes	Water is connected		
10.	Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, electrical equipment etc.)	No			
11.	Is a septic system present? If Yes report apparent condition.	No			
12.	Are there any obvious signs of animals, birds nesting or burrows near the site?	No			





	Parcel Conditions				
	Question	Answer	Notes		
1)	Are there any 55-gallon drums visible on site? If yes, are they leaking?	No	There are (2) 55gal drums used as trash bins located in front of structure		
2)	Are there any (or signs of any) underground storage tanks on the property?	No			
3)	Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	Yes	100gal Diesel tank for generator located in front of structure		
4)	Is there any stained soil or pavement on the parcel?				
5)	Are there any potentially hazardous trees that could fall?				
6)	Are there any groundwater monitoring wells on the site or adjacent parcel?	No			
7)	Is there distressed vegetation on the parcel?				
8)	Are any additional environmental or non-environmental site hazards observed?				
9)	Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No			
10)	Does the subject property have water frontage?	No			
11)	Is the applicant aware of any significant historical event or persons associated with the structure, or of it being located in a historic district/ area?	No			
12)	Is a historic marker present?	No			
13)	Based on the above finding, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No			





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

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

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

Inspector Signature

Egon Gonzalez

March 6, 2025





#### Front of Structure

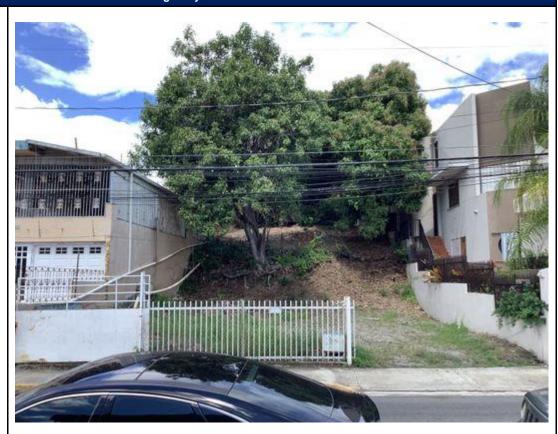
Photo Direction: South

Comments:



### Facing Away from Front

Photo Direction: North







#### Side #1 of Structure

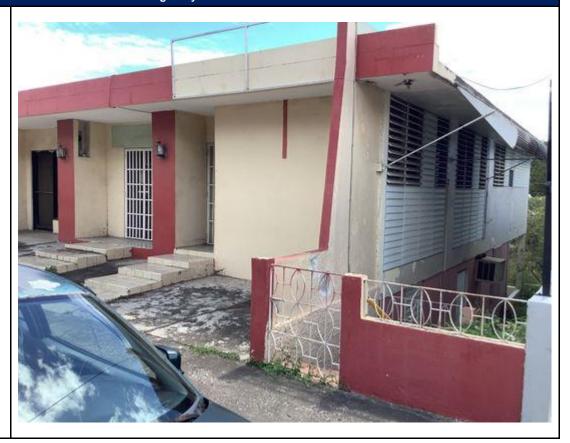
Photo Direction: South

Comments:



### Facing Away From Side #1

Photo Direction: Southeast







#### Back of Structure

Photo Direction: East

Comments:



### Facing Away from Back

Photo Direction: Southeast



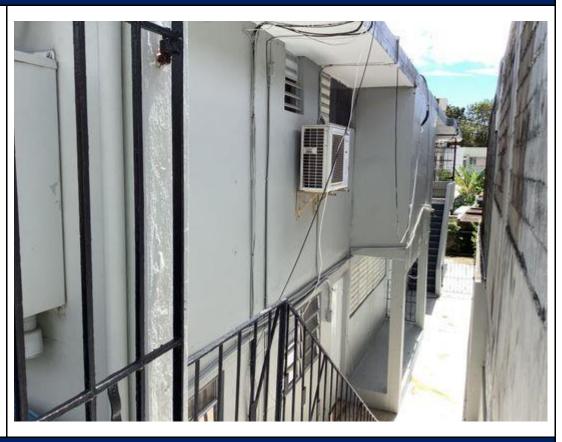




#### Side #2 of Structure

Photo Direction: South

Comments:



### Facing Away from Side #2

Photo Direction: Southwest







# Streetscape #1

Photo Direction: East

Comments:



# Streetscape #2

Photo Direction: West

Comments:







#### Address

Photo Direction: South

Comments:







Photo Direction:

Photo Description: Electricity is connected



# **Architectural Details 2**

Photo Direction:

Photo Description: Water is connected







Photo Direction:

Photo Description: 100gal Diesel tank for generator located infront of structure



# **Architectural Details 4**

Photo Direction:

Photo Description: General interior

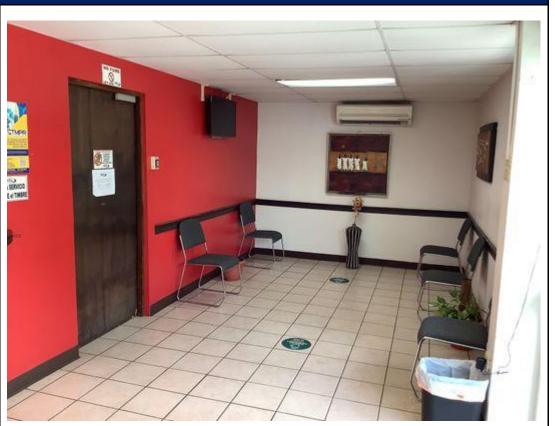






Photo Direction:

Photo Description: General interior view



#### **Architectural Details 6**

Photo Direction:

Photo Description: (2) 55gal Drums used as trash bins located in front of structure

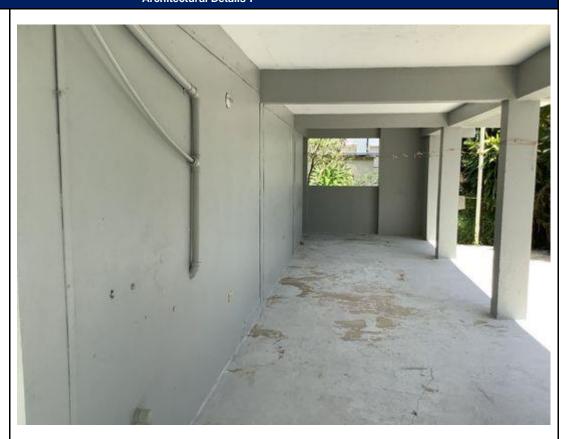






Photo Direction:

Photo Description: Additional back of structure view



# Photo Direction: Photo Description:

**Architectural Details 8** 



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



# United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Caribbean Ecological Services Field Office Post Office Box 491 Boqueron, PR 00622-0491 Phone: (939) 320-3135 Fax: (787) 851-7440

Email Address: <u>CARIBBEAN ES@FWS.GOV</u>

In Reply Refer To: 04/30/2025 18:50:14 UTC

Project Code: 2025-0090548 Project Name: PR-ESP-00256

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

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

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

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

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

to <u>caribbean es@fws.gov</u>. To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

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

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:

Project code: 2025-0090548

Caribbean Ecological Services Field Office caribbean es@fws.gov
Post Office Box 491
Boqueron, PR 00622-0491
(786) 244-0081

#### Attachment(s):

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

# **OFFICIAL SPECIES LIST**

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

This species list is provided by:

Caribbean Ecological Services Field Office Post Office Box 491 Boqueron, PR 00622-0491 (939) 320-3135

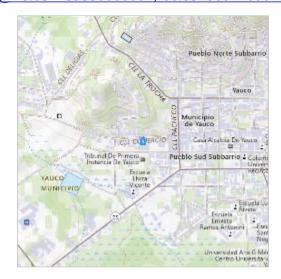
# **PROJECT SUMMARY**

Project Code: 2025-0090548
Project Name: PR-ESP-00256
Project Type: Power Gen - Solar

Project Description: Laboratorio Clínico Tecnolab / Commercial Building

**Project Location:** 

The approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@18.034439550000002,-66.85286012606485,14z">https://www.google.com/maps/@18.034439550000002,-66.85286012606485,14z</a>



Counties: Yauco County, Puerto Rico

# **ENDANGERED SPECIES ACT SPECIES**

Project code: 2025-0090548

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

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

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

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

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Project code: 2025-0090548 04/30/2025 18:50:14 UTC

# **REPTILES**

NAME STATUS

#### Puerto Rican Boa *Chilabothrus inornatus*

Endangered

No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a>

General project design guidelines:

 $\underline{https://ipac.ecosphere.fws.gov/project/BNS6NQAC4FCTRFDC5BFHSTJOQM/documents/generated/7159.pdf}$ 

# **CRITICAL HABITATS**

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

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

# USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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

# **BALD & GOLDEN EAGLES**

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

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

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

# **MIGRATORY BIRDS**

Project code: 2025-0090548

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

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

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

# **WETLANDS**

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

Project code: 2025-0090548 04/30/2025 18:50:14 UTC

# **IPAC USER CONTACT INFORMATION**

Agency: Private Entity

Name: Patricia Carmenatty

Address: Perseo St. 554 Cond. Iberia Suite J-3

City: San Juan

State: PR Zip: 00920

Email patricia.carmenatty@byaea.com

Phone: 7877830290



# United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Caribbean Ecological Services Field Office Post Office Box 491 Boqueron, PR 00622-0491

Phone: (939) 320-3135 Fax: (787) 851-7440 Email Address: <u>CARIBBEAN ES@FWS.GOV</u>

In Reply Refer To: 04/30/2025 18:52:51 UTC

Project code: 2025-0090548 Project Name: PR-ESP-00256

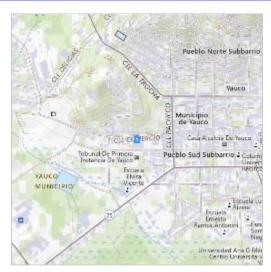
Subject: Technical Assistance letter for the project named 'PR-ESP-00256' for specified

threatened and endangered species, that may occur in your proposed project location, pursuant to the IPaC determination key titled Caribbean Determination Key (DKey).

# Dear Applicant:

Thank you for using the assisted evaluation keys in IPaC. This letter is provided pursuant to the Service's authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.). On April 30, 2025, Patricia Carmenatty used the Caribbean DKey; dated January 03, 2025, in the U.S. Fish and Wildlife Service's online IPaC application to evaluate potential impacts to federally listed species, from a project named 'PR-ESP-00256'. The project is located in Yauco County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@18.034439550000002">https://www.google.com/maps/@18.034439550000002</a>,-66.85286012606485,14z



The following description was provided for the project 'PR-ESP-00256':

# Laboratorio Clínico Tecnolab / Commercial Building

Project code: 2025-0090548

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

SpeciesListing StatusDeterminationPuerto Rican Boa (Chilabothrus inornatus)EndangeredNo effect

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

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

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

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

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

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

#### Project code: 2025-0090548

# **Action Description**

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

# 1. Name

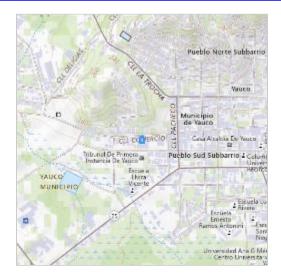
PR-ESP-00256

# 2. Description

The following description was provided for the project 'PR-ESP-00256':

Laboratorio Clínico Tecnolab / Commercial Building

The approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@18.034439550000002">https://www.google.com/maps/@18.034439550000002</a>,-66.85286012606485,14z



# **QUALIFICATION INTERVIEW**

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

No

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

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

Yes

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

Automatically answered

Yes

# **IPAC USER CONTACT INFORMATION**

Agency: Private Entity

Patricia Carmenatty Name:

Address: Perseo St. 554 Cond. Iberia Suite J-3

City: San Juan

State: PR Zip: 00920

Email patricia.carmenatty@byaea.com

Phone: 7877830290



**Appendix D:** USFWS Species Analysis



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

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

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

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



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

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

#### Conservation Measures:

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

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

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

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



**Appendix 7:** SECTION 106 CONSULTATION PACKAGE



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

September 12, 2025

#### **Kristin Sanders**

269 Avenida Ponce de León San Juan, PR 00917

# SHPO-CF-08-19-25-01 - PR-ESP-00256 (Yauco), Laboratorio Clínico **Tecnolab**

Dear Ms. Sanders,

Our Office has received and reviewed the information submitted for the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the National Historic Preservation Act, as amended) and 36 CFR Part 800: Protection of Historic Properties from the Advisory Council on Historic Preservation.

After a review of all the documentation, the SHPO agrees with your finding that the proposed project, with the established condition, will have **no adverse effect** upon historic properties:

1. When installed, the PVS/BSS shall remain not visible or will be minimally visible from the street to be consistent with the related Secretary of the Interior's Standards, Guidelines, and Technical Briefs.

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

Sincerely,

Carlos A. Rubio Cancela

Couls afantis

State Historic Preservation Officer CARC/GMO/MDC





March 24, 2025

Samir El Hage Arocho General Partner, HORNE LLP 269 Juan Ponce de León Ave. Hato Rey, Puerto Rico 00917-00918

Via email: samir.elhage@horne.com

RE: Authorization for Grant Management (GM) to Conduct the Required Environmental Consultations with Federal and Local Agencies on PRDOH's Behalf

Dear Mr. El Hage,

Provisions at 24 C.F.R. Part 58 establish the environmental review procedures for entities assuming the U.S. Department of Housing and Urban Development (HUD) environmental responsibilities under the National Environmental Policy Act (NEPA) and other applicable laws. The Puerto Rico Department of Housing (PRDOH), as the designated CDBG-DR/MIT grantee, has assumed HUD's environmental responsibilities under NEPA and related laws (Responsible Entity) by directly implementing multiple CDBG-DR/MIT projects.

One of the Responsible Entity's many responsibilities under 24 C.F.R. Part 58 is consulting with State, Federal, and non-federal entities in preparing an Environmental Review Record (**ERR**). Regarding a Responsible Entity's interactions with State, Federal, and non-Federal entities, 24 C.F.R. § 58.14 states that:

A responsible entity shall consult with appropriate environmental agencies, State, Federal and non-Federal entities and the public in the preparation of an EIS, EA or other environmental reviews undertaken under the related laws and authorities cited in § 58.5 and § 58.6. [...].

In conducting its role as a Responsible Entity that directly undertakes a project, as per 24 C.F.R. § 58.4(b)(1), PRDOH "must assume the environmental review responsibilities for the State's activities and those of any non-governmental entity that may participate in the project." Accordingly, a Responsible Entity may delegate certain tasks in the preparation of ERRs but retains full legal responsibility for compliance with environmental requirements.

To effectively manage available environmental resources and expedite the preparation of ERRs, PRDOH—as Responsible Entity—wishes to delegate the task of consulting with State, Federal, and non-Federal entities contained in 24 C.F.R. § 58.14. Therefore, PRDOH hereby authorizes Alberto Mercado Vargas, GM Environmental SME, or his authorized representative) to conduct on its behalf the environmental consultations with Federal and local agencies required to prepare ERRs for the implementation of CDBG-DR and CDBG-MIT projects, while still maintaining the ultimate and full legal responsibility for compliance with environmental requirements. This authorization extends to both early and formal consultations before Federal agencies such as the U.S. Fish and Wildlife Service (USFWS) and the State Historic Preservation Office (SHPO), among others required for compliance with applicable laws and regulations as established in 24 C.F.R. § 58.14 and § 58.5. GM should include and copy the PRDOH Environmental Division in all communications with Federal and local agencies for these purposes.

PRDOH appreciates GM's commitment to Puerto Rico's recovery and is confident in its ability to execute this task effectively. Please feel free to contact me with any questions.

Sincerely,

Ciary Pérez Peña

Secretary

Puerto Rico Department of Housing

Cc.

Alberto Mercado Vargas GM Environmental SME

alberto.mercadovargas@horne.com



August 19, 2025

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

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

SECTION 106 NHPA EFFECT DETERMINATION SUBMITTAL – PR-ESP-00256, LABORATORIO CLINICO TECNOLAB PROJECT, YAUCO, PUERTO RICO – NO ADVERSE EFFECT – CONDITIONED

Dear Architect Rubio Cancela,

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, HORNE is providing information for your review and requesting your concurrence regarding the above-referenced projects on behalf of the Puerto Rico Department of Housing (PRDOH) and Electrical Power Reliability and Resilience Program (ER2). On February 9, 2018, an allocation of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional \$8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (Housing) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents.

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

On behalf of PRDOH, we are submitting documentation for the proposed Laboratorio Clinico Tecnolab Project, located within the Yauco Traditional Urban Center. The applicant is



proposing the installation of a Photovoltaic System (PVS) on the roof and a Battery Storage System (BSS) on the right wall of the residence located at 65 Calle Comercio. The full scope of the project is described in the submitted documentation, which includes mapping, photographs, and the site plan.

Based on the provided documentation, the Program requests a concurrence with a determination that **no adverse effect** to historic properties is appropriate for this undertaking, conditioned that, when installed, the solar panels remain not visible or minimally visible from the street to be consistent with the related Secretary of the Interior's standards, guidelines, and technical briefs.

We look forward to your review and concurrence. Please contact me with any questions or concerns by email at <a href="mailto:kristin.sanders@horne.com">kristin.sanders@horne.com</a> or phone at 225-276-2109.

Kindest regards,

Kristin P. Sanders

Historic Preservation Manager

Kristin P. Sonders

**Attachments** 

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM

ENERGY POWER RELIABILITY AND RESILIENCE/DDEC ENERGY SUPPORT PROGRAM (ESP)

Section 106 NHPA Effect Determination - Historic Property Architectural Form

Case ID: PR-ESP-00256

City: Yauco



Applicant Name: Laboratorio Clinico Tecnolab (Laboratorio Clinico Yaucano Inc.)

Project Location (Street Address, City): 65 Calle Comercio, Yauco

Project Coordinates (Lat/Long): 18.034439, -66.852865

Parcel ID: 361-084-067-07-001

Type of Undertaking: Installation of Photovoltaic System (PVS) and a Battery Storage System (BSS)

Construction Date (AH est.): circa 1968 Property Size (acres): 0.09

SOI-Qualified Architect/Architectural Historian: Jorge L Lizardi Pollock, PhD

Date Reviewed: 07/24/2025 Revised 08/04/2025

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the National Register of Historic Places (NRHP) and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties. It has been determined that the proposed undertaking does not meet allowances as outlined in the Programmatic Agreement.

# **Project Description (Undertaking)**

The proposed undertaking is the installation of a Photovoltaic System (PVS) and a Battery Storage System (BSS) on the roof of the residence located at 65 Calle Comercio, within the Puerto Rico Planning Board-designated Historic Zone and Traditional Urban Center boundaries of the municipality of Yauco. According to the project quote, the PVS will be installed on the roof of the structure, and the BSS will be installed on the exterior, on the right-hand wall of the structure. The proposed installation location on the subject property, showing where the PVS and BSS, is illustrated below in Figure 1. The installation of a Photovoltaic System (PVS) will not be visible from the public right-of-way but the BSS system will be minimally visible through the gate.

The subject property is a modern one-story building with a basement level and a rear parking space that is not visible from the street. It features a rectangular floor plan and is constructed entirely of reinforced concrete (walls, partitions, and flat roof) with a short

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overhang eave and short parapet without moldings or any kind of ornamental elements. The property is the result of a renovation of a modern suburban house, as visible in the USGS 1977 imagery (See Illustration 1), and in this sense, it is not more than 50 years old.



Illustration 1. USGS 1977 Aerial Photo of the Area of Potential Effect.

The façade facing Comercio Street in the periphery of Yauco Traditional Urban Center features two pairs of glass and metal doors that serve as the entrance, one in the center and the other to the left side. Two concrete columns flank the center and main entrance, and above it, their owners installed a rectangular signboard bearing the name of their business. In addition, the commerce's diesel electric generator is located on the right side of the façade below the eave overhang. On the same side, owners built an access ramp to comply with ADA requirements. Regarding the

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basement, part appears to be used as an underground parking area, and the other part serves as additional office spaces that can be accessed through concrete stairs with metal railings. Building windows are of two types, Miami-style, with some featuring horizontal metal louvers and others with metal and glass jalousies.

#### **Area of Potential Effects**

As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the Direct APE for this project is the building itself at 65 Calle Comercio. The Indirect/Visual APE is defined as the viewshed of the proposed project which is the surrounding properties in the designated Yauco Historic Zone and Traditional Urban Center.

# **Identification of Historic Properties**

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area the Puerto Rico Planning Board designated Historic Zone and National Register of Historic Places (NRHP)-eligible Yauco Traditional Urban Center. Through this review, the following eligible and listed NRHP properties have been identified within a ¼ mile radius of the project area (see also Aerial and Topographic Maps with recorded historic properties): ç

1. Public Health Unit, reinforced concrete one floor building with Spanish Revival architectural traits, built in 1937 by the Puerto Rico Reconstruction Administration. NRHP registered No. MP1000070780, 0.02 miles E, 18.034500, -66.852472.

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- 2. Plaza de Mercado de Yauco, concrete with a gable wood and metal roof marketplace that shows eclectic modernist traits, built in 1925. NRHP eligible, 0.04 miles E. 18.034476, -66.852074.
- 3. Cementerio Viejo y Cementerio Nuevo de Yauco. Nineteenth century graveyard with Neoclassic arched entrance. NRHP-eligible, 0.19 miles NW, 18.034500, -66.852472.
- 4. Hospital San José (Former Hermanas de la Caridad Hospital. Concrete one floor property with Neoclassic characteristics and a steeped center gable, built in 1917, NRHP-eligible, 0.06miles W, 18.034496, -66.853863.
- 5. Hospital Municipal. 1895-1908, 1956, concrete and masonry building with Beaux Arts characteristics, though several times renovated, NRHP-eligible, 0.03 miles W, 18.034389, -66.853520.
- 6. Césari House, creole neoclassic two floors with extended balcony residence designed by Antonio Mattei Lluberas in 1893, for Angel Cesari Poggi, NRHP registered No. 85000114, 0.12 miles SE, 18.033291, -66.851161.
- 7. Casa Filardi, concrete wood and metal residence designed by Vicente Filardi Ponzi in 1916, in a Beaux Arts fashion, 0.21 miles SE, NRHP registered, No. 85000116, 18.033277, -66.849905.
- 8. Arturo Lluberas Park, nineteenth century public space, renovated several times, NRHP-eligible, 0.21 miles SE, 18.033864, -66.849459.
- 9. Yauco Town Hall. Built in 1864, renovated in 1923, within a neo renascence style. NRHP eligible, 0.21 miles SE, 18.034096, -66.84931.
- Hotel New York, late nineteenth early twentieth century two stories vernacular house made of masonry, wood and metal, NRHP-eligible, 0.24 miles SE, 18.033322, -66.849373
- 11. Challet Amill, residence designed by Tomás Olivari Santoni in 1914, in a Beaux Arts fashion, NRHP registered, No. 85000115, 0.19 miles NE, 18.035622, -66.850116.

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12. Casa Rodríguez Zamora, concrete Spanish Revival residence designed by Pedro Méndez circa 1938, NRHP eligible, 0.17 Miles NE, 18.035684, -66.850529.

Despite being located within the boundaries of Yauco TUC and designated historic zone, none of the adjacent properties to the south, west, or east are deemed historical according to the zoning map and municipal landmark survey. All those edifices are of modern concrete constructions of one or two floors, housing institutional, residential or commercial activities. (See Illustration 2).

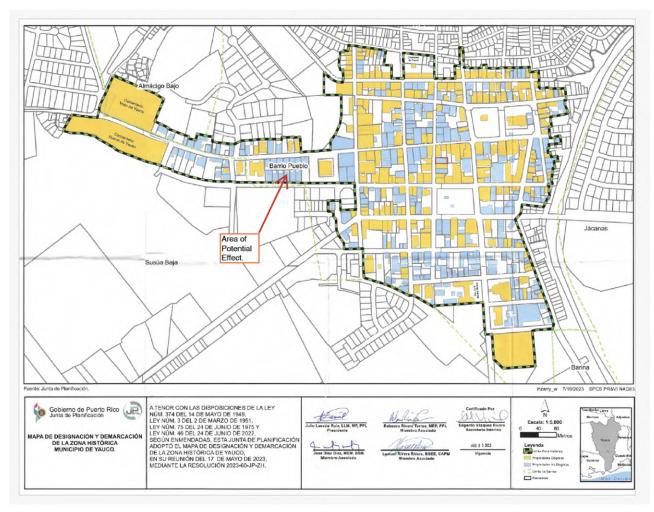


Illustration 2. Yauco Historic Zone and Traditional Urban Center Boundaries with Area of Potential Effect pointed



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#### Determination

The following historic properties have been identified within the APE:

- Direct Effect:
  - "No historic properties are present within the Direct APE"
- Indirect Effect:
  - PVS will not be visible from the street. BSS system will be minimally visible through the gates but will not have a significant impact on the appearance of the street landscape.

Based on the results of our historic property identification efforts, the Program has determined that project actions will not affect the historic properties that compose the Area of Potential Effect. The property for which the installation is proposed is a recently erected modern concrete building that doesn't comply with the criteria of the NRHP for eligibility or registration. It neither represents a significant event (Criterion A), is not associated with an important person (Criterion B), its architecture is austere, modern, and was not conceived by an architectural master (Criterion C), nor yields information relevant to Yauco or national history (Criterion D).



City: Yauco	
Recommendation (Please keep on same page as SHPO Staff Section)	
The Puerto Rico Department of Housing requests that the Pu	erto Rico SHPO concur tha
the following determination is appropriate for the undertaking	g (Choose One):
□ No Historic Properties Affected	
⊠ No Adverse Effect	
Conditioned to systems being not visible or minimally	visible from the street.
□ Adverse Effect	
Proposed Resolution (if appliable)	
This Section is to be Completed by SHPO Staff The Puerto Rico State Historic Preservation Office has review	•
and:	
□ <b>Concurs</b> with the information provided.	
□ <b>Does not concur</b> with the information provided.	
Comments:	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:



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### PROPOSED INSTALLATION LOCATION ON THE SUBJECT PROPERTY





Case ID: PR-ESP-00256

City: Yauco

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



#### Application ID: PR-ESP-00256

# Project (PR-CEWRI-00256) Location: **Area of Potential Effect Map**

Electrical Power Reliability and Resilience Program (ER2)

Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001





Case ID: PR-ESP-00256

City: Yauco





### Application ID: PR-ESP-00256

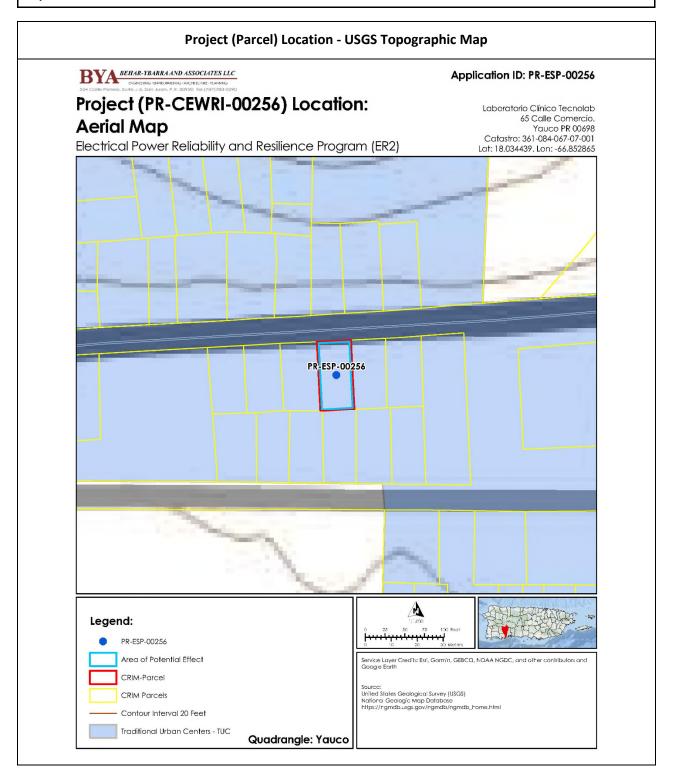
Laboratorio Clínico Tecnolab 65 Calle Comercio, Yauco PR 00698 Catastro: 361-084-067-07-001 Lat: 18 034439 Lon: -66 852865





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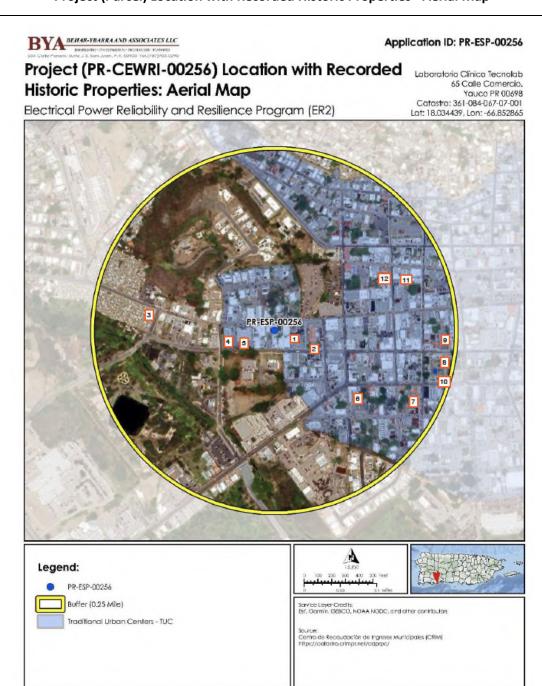




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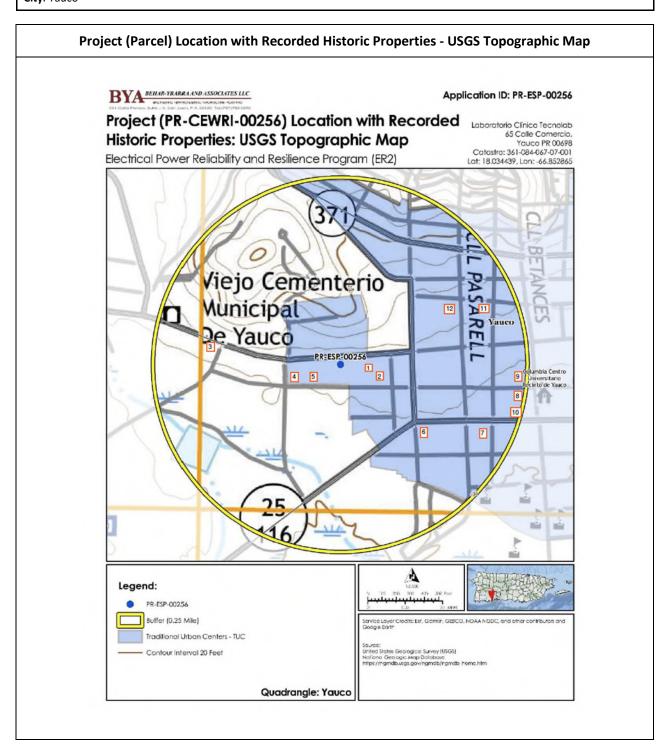
## Project (Parcel) Location with Recorded Historic Properties - Aerial Map





Case ID: PR-ESP-00256

City: Yauco





Case ID: PR-ESP-00256

City: Yauco



Photo #: 001

**Description (include direction):** Front Elevation looking South

Date: 3/6/2025



Photo #: 002

Description (include direction): Left elevation looking South



Case ID: PR-ESP-00256

City: Yauco



Photo #: 003

Description (include direction): Right elevation looking South

Date: 3/6/2025



Photo #: 004

Description (include direction): Rear elevation looking East



Case ID: PR-ESP-00256

City: Yauco



Photo #: 005

**Description (include direction):** Streetscape view looking East

Date: 3/6/2025



Photo #: 006

**Description (include direction):** Streetscape view looking West



Case ID: PR-ESP-00256

City: Yauco



Photo #: 007

**Description (include direction):** Proposed battery storage system and inverter location