

Puerto Rico 2022 - 305(b) and 303(d) Integrated Report

Plans and Special Projects Division Water Quality Area

September 2023

San José Industrial Park, 1375 Ave Ponce de León, San Juan, PR 00926

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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 April 11, 2019) 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. 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 bypasses, implementation of BMPs by non-point sources, fish-kills or spill events, make possible identified potential pollution sources.

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 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.

• Clean Water Act 303(d) Long – Term Vision Program - In December 2013, the United States Environmental Protection Agency (USEPA) announced a new framework 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 new vision, encourage states and territories to develop tailored strategies to implementation CWA 303(d) responsibilities of their overall water quality goals and individual's states priorities.

The time frame for the implementation of Long- Term Vision Program was from 2016 to 2022. Beginning in 2016 Cycle PRDNER identify a total of one hundred twenty – five (125) AU/parameter combination for priority restoration and protection activities under this program (See Appendix II). This prioritization provides a framework to focus the location and timing for the development of alternative restoration, protection plans and TMDLs.

Taking into consideration the development of strategies and alternative approaches, the PRDNER achieved the improvement of seventy-eight (78) AU/parameter combination which corresponds to sixty-two point four (62.4) percent of the total AU/parameters combination of the Long- *Term Vision Program 2016 to 2022* (Table 50). The alternatives approaches included are Identification of specific impairment addressed, planning, development and implement effectiveness monitoring programs and revisions, and amendments to the existing regulations.

This report constitutes the PR 305(b)/303(d) Integrated Report (IR) for fiscal year 2022. For 2022 cycle there are total of three hundred fifty-eight (358) Assessment Units (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 (SJBES) and sixty-four (64) are coastal shoreline.

Rivers & Streams

The water quality assessment for the 2022 cycle indicates that five thousand four hundred three point five (5,403.5) miles of rivers and stream 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 Enterococcus exceeded 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 fourty-five (45) AU/parameter combination were removed from the 2022 303(d) List.

Lakes (reservoirs)

The water quality assessment for the 2022 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. A total of two (2) AU/parameter combination were removed from the 2022 303(d) List.

Coastal Waters

The water quality assessment for the 2022 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 permanet 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 Enterococcus exceeded the applicable standard. For aquatic life designated use Turbidity, Copper and Temperature were the most common causes of impairment. A total of six (6) AU/parameter combination were removed from the 2022 303(d) List for meet the water quality standards.

Estuaries

The assessment of estuaries corresponds to lower reaches of the rivers near the coastal shoreline as defined in the PRWQSR. Islandwide, 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 Sysytem (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 2022 cycle indicates that the three point eight three four zero (3.8340) sq. mi. and eighteen point eight (18.8) miles were assessed. 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 Enterococcus exceeded the standard. Among the most important causes of impairment for aquatic life designated uses were Chromium VI, Dissolved Oxygen, Surfactants, Temperature, Total Nitrogen, Total Phosphorus and Turbidity. A total of nine (9) AU/parameter combination were removed from the 2022 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, between other responsibilities.

This report constitutes the PR 305(b)/303(d) Integrated Report (IR) for fiscal year 2022. For 2022 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 (Figure 1).



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 boat).

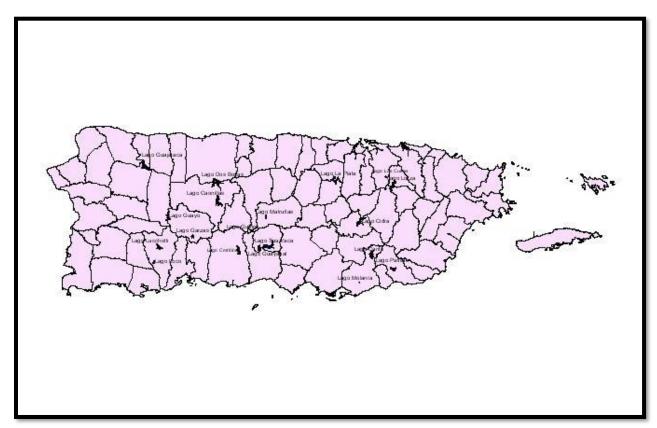


Figure 2: Reservoirs in Puerto Rico

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.

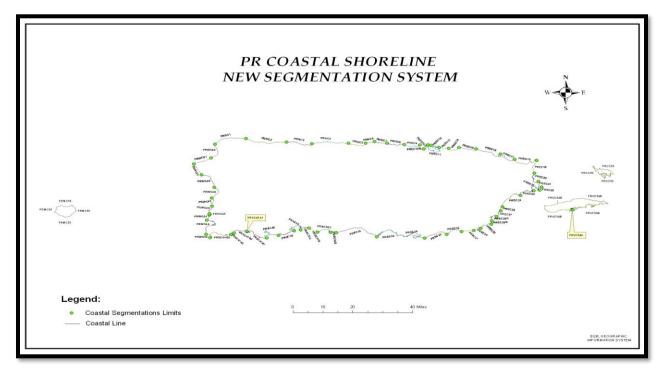


Figure 3: Puerto Rico Coastal Shoreline Segmentation System

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).

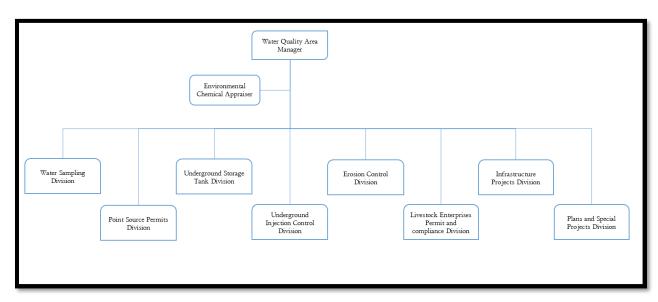


Figure 4: Water Quality Area Organization Chart

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 river, stream, 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 improvements of the water quality, as required by the CWA and the PRWQSR. 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 responsible for implementing the CWA Section 303(d) Program -Along-term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program. This new vision, encourage states and territories to develop tailored strategies to implementation CWA 303(d) responsibilities of their overall water quality goals and each states priority. 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. Monitoring and Public Notification Program also is managing under this Division.

The **Underground Injection Control Division** was created to regulate/control the facilities with underground injection system (UIS) and responds 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 to those where the bad operation of the systems has caused spills to the water or to the subsoil. The USEPA thru 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 are 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 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 responds to of leaking tank that could be affecting the underground water resources. To control this type of systems, permits and authorization are issued, sampling monitoring report are evaluated, and remedial plans are required to those where the bad operations of the systems have cause spills to the water or to the subsoil. USEPA thru 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 to all the permitted projects and presented 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 manage 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 **Livestock Permit and Compliance Division** perform inspections, evaluate 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 (Error! Reference source not found.).

Table 1: Actions Initiated Point Sources Control Units

Actions	NPDES Facilities	UST	UIC	Non-Filer (Illegal Discharges)
Certificates or permits Issued	83	949	376	-
Permits of operation	1	261		-
Total number of inspections	41	820	190	183
Referrals to Legal Affairs	-	1	1	1
Notification of violation	-	248	250	210
Administrative Orders	-	-	4	-
Consent Orders	-	158	-	-

Table 2: Actions Initiated Non-Point Sources Control Units

Actions	SEC Activities	Livestock Enterprises
Certificates or permits Issued	249	116
Total number of inspections	586	678
Referrals to Legal Affairs	-	1
Notification of violation	328	145
Administrative Orders	-	-

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 **Error! Reference source not found.** thru Table 7.

Table 3: Federal and State Funds

Categories	Perfo	ormance Part	nership Grant	(PPG)	and Noti	fication			
	20	20	202	1	2020	d Public tification 2021 Federal \$170,594 \$28,042 \$9,000 \$2,000			
	Federal	State	Federal	State	Federal	Federal			
Salaries	\$1,407,859	\$287,283	\$1,837,675	\$394,838	\$154,506	\$170,594			
Fringe Benefits	\$221,398	\$45,177	\$298,581	\$64,154	\$25,845	\$28,042			
Travel	\$2,719	\$555	\$31,000	\$6,660	\$7,500	\$9,000			
Equipment	\$33,221	\$6,779	\$130,468	\$28,032	\$10,800	\$2,000			
Supplies	\$156,537	\$31,943	\$155,000	\$33,304	\$31,000	\$29,000			
Contractual	\$993,871	\$202,806	\$284,488	\$41,121	\$10,000	\$8,000			
Construction	\$0	\$0	\$0	\$0	\$0	\$0			
Others	\$60,612	\$12,368	\$58,206	\$12,506	\$21,063	\$14,196			

Table 4: Federal and State Funds (Cont.)

Table 4: Federal and State Funds (Cont.)								
Catagorias		Quality ent 604(B)	State Revolving Fund (SRF)					
Categories	2020	2021	202	20	202	21		
	Federal	Federal	Federal	State	Federal	State		
Salaries	\$28,668	\$33,423	\$285,193	\$57,038	\$349,947	\$69,989		
Fringe Benefits	\$4,564	\$5,249	\$50,797	10,159	\$64,165	\$12,833		
Travel	\$0	\$0	\$3,590	\$718	\$4,167	\$833		
Equipment	\$0	\$0	\$129,667	\$25,933	\$4,000	\$800		
Supplies	\$4,500	\$4,500	\$625	\$125	\$2,500	\$500		
Contractual	\$160,914	\$154,770	\$256,995	\$51,399	\$262,043	\$52,408		
Construction	\$0	\$0	\$0	\$0	\$0	\$0		
Others	\$1,441	\$589	\$19,909,920	\$3,981,984	19,926,122	\$3,985226		

Table 5: Federal and State Funds (Cont.)

Tubic 5. Fouch at and State Family (Cond)								
	LUST - Corrective				UST - Preventive			
Categories	2020		2021		2020		2021	
	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
Fringe Benefits	\$40,160	\$4,462	\$40,160	\$4,462	\$31,765	\$10,589	\$31,765	\$10,589
Travel	\$5,600	\$622	\$5,600	\$622	\$5,600	\$1,867	\$5,600	\$1,867
Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Supplies	\$10,000	\$1,112	10,000	1,112	\$7,500	\$2,500	\$7,500	\$2,500
Contractual	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Others	\$5,500	\$611	\$5,500	\$611	\$13,000	\$4,334	\$13,000	\$4,334

Table 6: Federal and State Funds (Cont.)

		UST- Hurr	icane Relief	
Categories	20	20	20	21
	Federal	State	Federal	State
Salaries	\$53,035	\$5,893	\$53,035	\$5,893
Fringe Benefits	\$8,543	\$949	\$8,543	\$949
Travel	\$500	\$56	\$500	\$56
Equipment	\$12,600	\$1,400	\$12,600	\$1,400
Supplies	\$2,000	\$222	\$2,000	\$222
Contractual	\$602,347	\$66,927	\$602,347	\$66,927
Construction	\$0	\$0	\$0	\$0
Others	\$2,440	\$271	\$2440	\$271

Table 7: Total Federal and State Funds

Summary of Federal and State Funds					
Federal	\$50,325,380				
State	\$9,805,001				
Total	\$60,130,381				

4.0 Special State Concerns and Recommendations

[RESERVED]

PART B. Assessment Methodology Used for 305(b)/303(d) Integrated Report for 2022 Cycle and Assessment Results

1.0 Assessment Units (AU)

This report constitutes the PR 305(b)/303(d) Integrated Report (IR) for fiscal year 2022. For 2022 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 AU 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 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

Tubic 6. Dusins for the Intuine Willers Degmentation 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		
RÍO MAMEYES	PRER17A	38.9	Е	2		
QUEBRADA MATA DE PLÁTANO	PREQ18A	4.0	Е	1		
RÍO SABANA	PRER19A	33.1	Е	2		
RÍO JUAN MARTÍN	PRER20A	7.8	Е	1		
QUEBRADA FAJARDO*	PREQ21A	10.0	Е	1		
RÍO FAJARDO	PRER22A	59.0	Е	1		
RÍO DEMAJAGUA	PRER23A	2.8	Е	1		
QUEBRADA CEIBA	PREQ24A	5.0	E	1		
QUEBRADA AGUAS CLARAS	PREQ25A	4.8	Е	1		
RÍO DAGUAO	PRER26A	13.8	Е	1		
QUEBRADA PALMA	PREQ27A	11.8	Е	1		
QUEBRADA BOTIJAS	PREQ28A	7.4	Е	1		
RÍO SANTIAGO	PRER29A	15.3	Е	2		
RÍO BLANCO	PRER30A	58.4	Е	2		
RÍO ANTÓN RUIZ	PRER31A	20.4	Е	2		

Basin name	Basin ID	Basin size (miles)	Region	Sub-basin
QUEBRADA FRONTERA	PREQ32A	8.5	Е	1
RÍO HUMACAO*	PRER33A	55.8	Е	1
RÍO CANDELERO	PRER34A	10.4	Е	1
RÍO GUAYANÉS*	PRER35A	94.6	Е	2
QUEBRADA EMAJAGUA	PREQ36A		Е	1
RÍO MAUNABO*	PRER37A	36.0	Е	1
QUEBRADA MANGLILLO	PRSQ38A	1.0	S	1
QUEBRADA FLORIDA	PRSQ39A	3.0	S	1
RÍO JACABOA	PRSR40A	13.0	S	1
QUEBRADA PALENQUE	PRSQ41A	1.0	S	1
RÍO CHICO	PRSR42A	14.6	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 AMOROS QUEBRADA AGUAS VERDES	PRSQ52A	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		51.2	S	2
RÍO TALLABOA	PRSR64A	59.6	S	1
,	PRSR65A			1
RÍO MACANÁ	PRSR66A	21.7	S S	1
RÍO GUAYANILLA*	PRSR67A	60.0		1
RÍO YAUCO	PRSR68A	93.7	S	3
RÍO LOCO	PRSR69A	113.4	S	3
RÍO ARROYO CAJÚL	PRSR70A	7.4	S	1
QUEBRADA BOQUERÓN	PRWQ71A		W	1
QUEBRADA ZUMBÓN	PRWQ72A		W	1
QUEBRADA GONZÁLEZ	PRWQ73A		W	1
QUEBRADA LOS PAJARITOS	PRWQ74A		W	1
CAÑO CONDE ÁVILA	PRWK75A		W	1
QUEBRADA IRIZARRY	PRWQ76A		W	1
RÍO GUANAJIBO*	PRWR77A		W	9
CAÑO MERLE	PRWK78A	11.1	W	2

Basin name	Basin ID	Basin size (miles)	Region	Sub-basin
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	2.0	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

^{*} Basins with permanent monitoring stations

Of the one hundred ninety-four (194) AU of river, forty-nine (49) AU are monitored routinely. Also, two (2) stations that are routinely monitored are in two (2) AU of the SJBES for a total of fifty-one (51) monitoring stations (Table 9).

Table 9: AU with monitoring stations

	8
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
Río de La Plata	PRER10A4
Río de La Plata	PRER10A5
Río Guadiana	PRER10E
Río Arroyata	PRER10G
Rio Matón	PRER10J

AU Name	AU ID
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 Espiritu 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 shows the AUs that does not have monitoring stations.

Table 10: AU without monitoring stations

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
Río Manatí	PRNR8A3
Río Toro Negro	PRNR8C1
Río Bauta	PRNR8C2
Río Sana Muertos	PRNR8D

AU Name	AU ID
Río Botijas	PRNR8E2
Río Indios	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	PREQ14D
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	PREQ25A
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

AU Name	AU ID	
Quebrada Manglillo	PRSQ38A	
Quebrada Florida*	PRSQ39A	
Río Jacaboa PRSR4		
Quebrada Palenque PRSQ4		
Río Chico	PRSR42A	
Río Grande de Patillas	PRSR43A1	
Río Marín	PRSR43B	
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	PRSR60A2	
Río Inabón	PRSR61A	
Río Matilde-Pastillo	PRSR64A	
Quebrada del Agua	PRSQ64A1	
Río Tallaboa	PRSR65A	
Río Macaná	PRSR66A	
Río Yauco	PRSR68A1	
Río Yauco	PRSR68A2	
Río Loco	PRSR69A1	
Río Loco	PRSR69A2	
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 Hoconuco	PRWR77E	
Río Caín	PRWR77F	
Río Cupeyes	PRWR77G	
Río Cruces	PRWR77H	
Río Grande	PRWR77I	

AU Name	AU ID
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
Río Humata	PRWR83D
Río Arenas	PRWR83E
Río Mayagüecillo	PRWR83F
Rio Guabá	PRWR83G
Río Blanco	PRWR83H
Río Prieto	PRWR83I
Quebrada Justo	PRWQ84A
Quebrada Icacos	PRWQ85A
Quebrada Caguabo	PRWQ86A
Caño García	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 Caños (Río Cañas)	PRWR95B
Quebrada Grande	PRWQ95C
Quebrada Las Marías	PRWQ95D
Quebrada Yagruma	PRWQ95E
Quebrada La Salle	PRWQ95F
Quebrada El Salto	PRWQ95G
Quebrada Grande de La Majagua	PRWQ95H
Quebrada Salada	PRWQ95I
Río Sonador	PRWR95J
Río Guatemala	PRWR95K
Caño Corazones	PRWK96A

^{*} 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 basins into four (4) geographic regions. The Table 11 presents geographic regions with its corresponding basins as part of the monitoring network and AU with existing or secondary data.

Region	Basin	Basins in permanent stream water quality network	Assessment units by water quality data
North	9	4	0
South	33	5	0
East	28*	10	3 (26 monitoring stations)
West	26	4	0

Table 11: Geographic Regions

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.

Supplementary information, such as: 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 (BMPs) by non-point sources, fish-kills or spill events, make possible identified potential pollution sources.

1.2 Assessment Unit for Coastal Shoreline

The Coastal Shoreline consists of 64 AU (Figure 4), from which fifty-five (55) have monitoring stations and nine (9) AU without monitoring stations (The AU that do not have monitoring stations were classified on Category 3: Waters for which insufficient available data and/or information to determine if any designated uses are being attained). PRDNER completed the relocation process of the coastal stations with the purpose that the greater amount of AU is monitored.

With the purpose that the greater amount of AU is monitored, PRDNER performed a relocation of the monitoring network. The following description provides the rationale for setting the number of stations according to the length of the AU:

- AU with a length of eleven (11) miles or greater, generally have three (3) stations.
- AU whose length is less than eleven (11) miles but not greater than or equal to four (4) miles, usually have two (2) stations.
- AU whose length is less than four (4) miles usually has one station.

Due to accessibility, the monitoring network excluded AU of Roosevelt Roads Naval Station in Ceiba (PREC21 and PREC22), Vieques (PRVC54B), Culebra (PRCC53), and Mona Island (PRMC55). Also, AU Isla de Cabra to Punta El Morro (PREC11) was not included.

Nevertheless, the AU that have waters classified as SA are not monitored by the Coastal Monitoring Network. The Class SA waters are defined in the PRWQSR, as coastal and

^{*} Included the San Juan Bay Estuary System

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. The Class SA waters included in the PRWQSR are the following: *Bahía Biolumicente La Parguera, Lajas*, two (2) miles (AU PRSC41A1), *Bahía Monsio José*, Lajas, three point seven two (3.72) miles (AU PRSC41A2) and *Bahía Mosquito*, Vieques, three (3) miles (AU PRVC54A).

The Table 12 summarize the coastal shoreline segmentation; the *AU Description* column indicates where the AU begins and where it ends.

Table 12: Assessment Units for the coastal shoreline

Assesment Unit	Table 12: Assessment Unus for the coastal	AU Size		
(AU) ID	AU Description	(miles)	Region	
PRNC01*	Punta Borinquen to Punta Sardina	11.72	North	
PRNC02*	1		North	
PRNC03*	Punta Manglillo to Punta Morrillos	9.65	North	
PRNC04*			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			
PREC18*	Punta La Bandera to Cabezas de San Juan	10.46	10.46 East	
PREC19*	Cabezas de San Juan to Punta Barrancas	7.08	East	
PREC20*			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	Č .		
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	

Assesment Unit (AU) ID	AU Description	AU Size (miles)	Region
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 La Parguera 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

^{*} AU with monitoring stations

2.0 Monitoring Program

2.1 Permanent Water Quality Monitoring Network

The PRDNER monitoring activities for this reporting cycle (October 1, 2019, to September 30, 2021), 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 use 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.

^{**} AU with monitoring station only from the Beach Monitoring and Public Notification Program Network.

In this cycle the PRDNER generated 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	Specific Conductance *
Enterococcus	Temperature
Flow *	NH ₃ + NH ₄ as N
Hardness*	Total Nitrogen
Nitrate + Nitrite as Nitrogen	Total Phosphorus
рН	Turbidity

^{*} Parameter that does not have numeric standard as establish in PRWQSR.

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, 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 aforementioned remarks were used as a valid result for this assessment cycle.

• Clean Lakes Monitoring Network: Operated by PRDNER, this network monitors water quality in 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. (See Table 13)

Table 13: Lakes Monitoring Network

Basin	Water body (WB) name	WB size (acres)	2022 permanent monitoring station ID
RÍO GUAJATACA	LAGO GUAJATACA PRNL3A1	1000 acres	10720 10790 10790C
RÍO GRANDE DE ARECIBO	LAGO DOS BOCAS PRNL ₁ 7A1	634 acres	25110 27090 27090E
RÍO GRANDE DE ARECIBO	LAGO CAONILLAS PRNL ₂ 7C1	700 acres	89001 89002 89003
RÍO GRANDE DE ARECIBO	LAGO GARZAS PRNL₃7A3	108 acres	20050
RÍO GRANDE DE MANATÍ	LAGO MATRULLAS PRNL ₂ 8C1	77 acres	89009 89010
RÍO DE LA PLATA	LAGO LA PLATA PREL₁10A1	560 acres	44400 44950 44950C
RÍO DE LA PLATA	LAGO CARITE PREL ₂ 10A5	333 acres	39900 39950 39950C
RÍO BAYAMÓN	LAGO CIDRA PREL12A2	268 acres	89029 89030 89031
SAN JUAN BAY ESTUARY	LAGO LAS CURIAS 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 MELANIA PRSL50A	35 acres	89026
RÍO JACAGUAS	LAGO GUAYABAL PRSL ₁ 60A1	373 acres	89011 89012 89013
RÍO JACAGUAS	LAGO TOA VACA PRSL ₂ 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

Basin	Water body (WB) name	WB size (acres)	2022 permanent monitoring station ID
RÍO GRANDE DE AÑASCO	LAGO GUAYO PRWL83H	285 acres	89004 89005
	I KW LOSII		89006

Samples taken at these lakes are analyzed for the following parameters:

Arsenic	Nickel	
Cadmium	Pesticides (organochlorides)	
Copper	рН	
Dissolved Oxygen (profile) Selenium		
Enterococcus	Temperature (profile)	
Hardness* Total Nitrogen		
Lead	Total Phosphorous	
Mercury	Turbidity	
Zinc		

^{*} 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 (See Table 14). The network covers a total of four hundred nineteen-point one (419.01) coastal miles of PR's main island, out of a total 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	
Enterococcus	Temperature	
Turbidity	Total Nitrogen	
***Oil and Grease		

^{***} 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		Classification	Coordinates		Frecuency of
number	AU ID	(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
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	PREC09	SB	18° 28′ 15.66″	66° 14′ 47.38″	Every two months
MAC-077	PREC09	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
1V1/AC-002	TALCOU	טט	11 37 31.07	05 55 40.54	Lvery two monuis

Station	ALLID	Classification	Coordinates		Frecuency of
number	AU ID	(PRWQSR)	Latitude	Longitude	sampling
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
SEG35-02	PRSC35	SB	17° 58′ 30.80″	66° 32′ 09.40″	Every two months
PSEG35-01	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	PRWC42	SB	17° 57′ 05.00″	67° 11′ 47.80″	Every two months
SBZ-047	PRWC43	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-040 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
SDZ-034	LV M C 20	SD	10 10 4/.01	07 14 34.21	Every two months

Station	AU ID	Classification	Coordinates		Frecuency of
number	AUID	(PRWQSR)	Latitude	Longitude	sampling
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 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 Clean Water Act (CWA) as amended by Beaches Environmental Assessment and Coastal Health Act (Beach Act) that requires compliance 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 EPA, 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 the 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 the national STORET database; however the data is available on the Internet through the water quality portal (www.waterqualitydata.us/) or hardcopy files from its Caribbean Field Office.

2.2 Special Monitoring Projects

Surface Water Assessment of Pesticides Sampling Plan 2020-2021

Pesticides are used in agriculture, in homes and businesses, on lawns and gardens, along roads, in recreational areas, and on pets and livestock. Pesticides released into the environment for agricultural and nonagricultural purposes can contaminate surface and groundwater, which are critical sources of drinking water.

As part of the assessment of pesticides under the Endangered Species Act (ESA), the United States Environmental Protection Agency (EPA) has the responsibility of registering a pesticide or reassessing the potential ecological risks from use of a currently registered pesticide. EPA evaluates extensive environmental fate and toxicity data to determine how a pesticide will move through and break down in the environment and whether potential exposure to the pesticide will result in adverse effects to wildlife and vegetation. They routinely assess risks to birds, fish, invertebrates, mammals, and plants to determine whether a pesticide may be licensed for use in the United States and Puerto Rico.

The EPA and the United States Fish and Wildlife Service (USFWS) have 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. At the present time, the presence of these Pesticides was not detected in any of the monitoring stations.

2.3 Water Quality Existing Data

The development of the Integrated Report (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 Quality Assurance and Quality Control (QA/QC) requirements established in the

Quality Assurance Project Plan (QAPP) for the use of Water Quality Existing Data for the Development of the 305(b)/303(d) IR, Rev. 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 AUs to be delisted.
- Objective 3: Develop and publish the 305(b)/303(d) IR.

The data requested and downloaded must be from the previous two federal fiscal years from the even-numbered year that comprises the assessment cycle (October 1, 2019, to September 30, 2021). 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 includes government agencies and non-governmental entities can be found in Table 15.

Table 15: Government Agencies and Non-governmental Entities

Name	Position	Agency
Eng. Umberto Donato	Chairman	Associated General
		Contractors of America
		PR Chapter
Ms. Irma López, Esq.	Executive Director,	PR Aqueduct and Sewer
	Environmental Compliance and Quality	Authority
	Control	
Eng. Alexandra Velázquez	Director Programming and Special Studies	PR Highway and
Delgado		Transportation Authority
Ms. Jeannette Villamil	Chief Environmental Studies Office	PR Highway and
Rivera		Transportation Authority
Eng. Juan F. Alicea Flores	Chairman	College of Engineers and Land
		Surveyors of PR
Mr. Alex R. Muñiz Lasalle	Director	PR Department of Agriculture
	Auxiliary Secretariat of Agrocomercial	
	Integrity	
Mr. Juan C. Muñoz Ruiz	Supervisor Pesticides Inspection Program PR	PR Department of Agriculture
	Agrological Laboratory	
Mr. Raúl Santini	Environmental Coordinator II	Department of Natural and
	Coastal Zone Division	Environmental Resources
Ms. Damaris Delgado	Acting Assistant Secretary, Auxiliary	Department of Natural and
	Secretary for Conservation and Research	Environmental Resources
	Coastal Zone Division Program	
Dr. Jorge Bauzá	Science Director	San Juan Bay Estuary Program

Name	Position	Agency
Mr. Sixto A. Machado Ríos	Director of Geology and Hydrogeology	PR Planning Board
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 of Academic Affairs	Pontifical Catholic University
Ms. Jackeline Rosas Negrón	Director College of Science	of PR – Arecibo Campus Pontifical Catholic University
Wis. Jackenne Rosas Negron	Director Conege of Science	of PR – Mayagüez Campus
Dr. Carlos Lugo Ortiz	Director Biology Department	Pontifical Catholic University
Dr. Carlos Lugo Ortiz	Director Blology Department	of PR – Ponce Campus
Prof. Carmen Reyes Colón	Coordinator Environmental Sciences Program	Pontifical Catholic University
Tion carmen reyes colon	Coordinator Environmental Sciences Program	of PR – Ponce Campus
Dr. Graciela I. Ramírez	Director Centro de Educación e Interpretación	Interamerican University of PR
Toro	Ambiental (CECIA)	2.1.02.11.102.10.11.10
Mr. Roberto Vargas	Director Department of Agro-Environmental	University of PR – Mayagüez
	Sciences	Campus
Dr. Ernesto Weil	Director	University of PR – Mayagüez
	Department of Marine Sciences	Campus
Dr. Luis R. Pérez Alegría	Professor	University of PR–Mayagüez
_	Agricultural Engineering Department	Campus
Mr. Ruperto Chaparro	Director Sea Grant College Program	University of PR – Mayagüez
Serrano		Campus
Dr. Jorge Rivera Santos	Director PR Water Resources and	University of PR – Mayagüez
	Environmental Research Institute	Campus
Dr. Ana Navarro Rodríguez	Associate Investigator Sea Grant College	University of PR– Mayagüez
	Program	Campus
Dr. Francisco M. Monroig	Director Agricultural Engineering Department	University of PR– Mayagüez
Saltar		Campus
Dr. Teresa Lipsett	Director Department of Natural Sciences and	Turabo University
	Technology	D 1 (1 : II : '(CDD
Eng. Héctor J. Cruzado	Director Department of Civil and	Polytechnic University of PR
Ms. María Calixta Ortiz	Environmental Engineering Dean School of Environmental Affairs	Matuanalitan University of DD
Rivera	Dean School of Environmental Affairs	Metropolitan University of PR
Dr. Ángel A. Toledo López	Rector	Metropolitan University of PR
Dr. Fernando Crastz Peters	Associate Dean of School of Science and	Metropolitan University of PR
Di. Ternando Crastz Teters	Technology	Wetropontan Oniversity of TR
Mr. Alex J. Ríos	Laboratory Administrator	Metropolitan University of PR
Mr. Karlos J. Malavé	Dean Academic Division of Science and	Metropolitan University of PR
Llamas	Technology	Wiedoponian emversity of the
Ms. Carmen Guerrero	Director	Environmental Protection
	Caribbean Environmental Protection Division	Agency
Ms. Yasmin Laguer	Caribbean Environmental Protection Division	Environmental Protection
		Agency
Dr. Ariel Lugo	Director International Institute of Tropical	USDA Forest Service
	Forestry USDA Forest Service	
Mr. Luis A. Cruz Arroyo	Director	Natural Resources
		Conservation Service (NRCS)
		Caribbean Area

Name	Position	Agency
Ms. Marelisa Rivera	Deputy Field Supervisor	US Fish and Wildlife Service PR Field Office
Ms. Lizzette Rodríguez	Director Department of Geology	University of PR— Mayagüez Campus
Dr. Luis A. Ríos Hernández	Professor Biology Department	University of PR- Mayagüez Campus
Prof. Ismael Pagán	Director Department of Civil Engineering and Surveying	University of PR- Mayagüez Campus
Ms. Lirio Márquez D'Acunti	Executive Director	Vieques Conservation and Historical Trust
Mr. Mark Martin Bras	Director of Community Relations	Vieques Conservation and Historical Trust
Dr. Roberto Viqueira	Executive Director	Protectores de Cuencas, Inc.
Ms. Deborah Rivera Velázquez	Director Environmental Affairs Department	Autonomous Municipality of Carolina
Ms. Marirosa Molina	Researcher Office of Research and Development (ORD)	Environmental Protection Agency
Ms. Autumn Oczkowski	Researcher Office of Research and Development (ORD)	Environmental Protection Agency
Mr. David Katz	Researcher Office of Research and Development (ORD)	Environmental Protection Agency

As result of the water quality data request, the following government agencies and/or non-governmental entities responded and submitted data:

1. Mrs. Yazmin Laguer-EPA CEPD

a. DMR data (from the past two years 2019 to 2021) The DMR data is used to identify potential sources for water quality impairment.

2. San Juan Bay Estuary System Program

- a. The monitoring network consists of 26 stations. (See Figure 5)
- b. Parameters analyzed: Temperature, Dissolved Oxygen, Specific Conductance, Salinity, Turbidity, pH, Secchis Depth, Oil and Grease, Total Nitrate & Nitrite, Total Phosphorus, Enterococcus, Total Nitrogen Kjeldahl (TKN), TOC, Chlorophyll a, TSS, Ammonia and Fecal Coliform.
- c. The SJBES Program has an approved QAPP by EPA.
- d. This data will be used for the 2022 IR assessment.

3. USGS data:

- a. The data was obtained from the following stations: 50048565 and 50048580, located in PREE13A1 assessment unit (San Juan Bay Estuary System Program).
- b. Evaluated Parameters: Arsenic, Lead, Silver, Surfactants and Selenium.
- c. This data was used for the 2022 IR assessment.

4. NOAA - Bahía de Jobos

- a. The data was obtained from the following site hosted by National Oceanic and Atmospheric Administration (NOAA): National Estuarine Research Reserve System, Centralized Data Management Office http://cdmo.baruch.sc.edu/.
- b. Monitoring networks consist of four (4) monitoring stations (See Figure 6).
- c. Parameters analyzed: Temperature, pH, Dissolved Oxygen and Turbidity.
- d. 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.
- e. This data was used for the 2022 IR assessment.



Figure 5: San Juan Bay Estuary System Monitoring Stations



Figure 6: NOAA - Bahía de Jobos Monitoring Stations

2.4 Water 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. (See 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 have accepted of the abovementioned 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. In an effort 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.

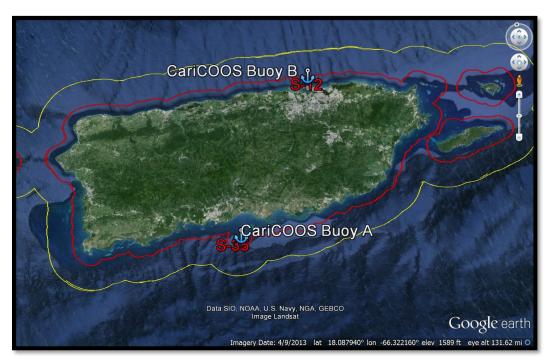


Figure 7: Buoys of CariCoos of NOAA

3.0 Designated Uses, and Applicable Water Quality Standards

The PRWQSR, as amended April 11, 2019, 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 PRWQSR also includes the corresponding standards to protect each of the designated uses. All waters reported in the IR will be evaluated, based on availability of monitoring data and/or other available information to determine if they comply with the different

applicable water quality standards and whether the designated uses were attained. For assessment purposes, where the results of analysis are below the detection level, for the purposes of calculation, one half of the detection level will be used. In cases where the detection level is higher than the water quality standard, the PRDNER will not add the parameter to the 303(d) list unless the PRDNER has definitive data above the detection level. In the case of the Oil and Grease parameter, the applicable narrative water quality standard establishes that "The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases." This narrative standard is interpreted as zero concentration to reflect the absence of Oil and Grease. Since the lowest possible detection level for the analysis of Oil and Grease is 5 mg/L, the PRDNER will not add this parameter to the 303(d) list unless the PRDNER has definitive data above the detection level.

The water body classifications established in the PRWQSR are as follows:

CLASS SA - Coastal or estuarine waters of exceptional quality 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. With the exception of lagoons, Rule 1303.2 (A) (2) of the PRWQSR will also apply to the waters 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 surfaces 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 in order to preserve its natural characteristics.

The Table 16 and Table 17 summarize the existing applicable water quality standards that will be used to perform the assessment for the 2022 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 PRWOSR)

(As established in the I KWQSK)										
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 ⁺³) ^{+, &}	-	Note 2 (AL)								
Chromium VI (Cr ⁺⁶) +, &	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)+, &	71.14 (AL)	5.0 (AL)								
Silver (Ag) ^{+, &}	2.24 (AL)	Note 5 (AL)								
Sulfide (Undissociated H ₂ S)	2.0 (AL)	2.0 (AL)								
Thallium (Tl) ^{+, &}	0.47 (HH)	0.24 (HH)								
Zinc (Zn)+, &	85.62 (AL)	Note 7 (AL)								

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 water body.

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.

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	15 Pt-Co.	Note 1

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] -1.702)

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 $e^{(1.273~[Ln~Hardness]-4.705)}$

 $[\]textbf{Note 7} \text{ - Concentration in ug/l must not exceed the numerical value given by } e^{(0.8473\,[Ln\,Hardness]\,+\,0.884)}$

^{*} Identifies a substance that may be a carcinogen. The HH criteria is based on a carcinogenicity risk of 10⁻⁵

⁺ 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.

[&]amp; Numbers represent a total recoverable value.

Parameter	SA	SB	SD	SE
		phenomena, as defined		
		under this regulation		
Dissolved	Note 1	Not less than	Not less than 5	Note 1
Oxygen	Note 1	5 mg/L	mg/L	Note 1
Enterococcus	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 par	1 not contain other pathogenic organisms 7.3 - 8.5 units 6.0 - 9.0 units	
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 of 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 1,700ug/L in any stream nor exceed 400ug/L in any reservoir or lake.

Note 5 - Total Phosphorus shall not exceed 160 ug/L in any 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: $T = temperature in ^{\circ}C$

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 Clean Water Act 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 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.

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 Aldehyde				
Alpha-BHC	Fluoride				
Arsenic	Heptachlor Epoxide				
Beta-BHC	Heptachlor				
Cyanide	Lindane (Gamma – BHC)				
Chlorides	Mercury				
Dieldrin	Thallium				
4,4'-DDT	Total, Ammonia Nitrogen				
Endosulfan Sulfate	Total, Nitrogen				
Endrin	Total, Phosphorus				
Turb	oidity				

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 sources 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	Cyanide (F	ree CN)	Silver		
Cadmium	Lead	d	Sulfide		
			(Undissociated H ² S)		
Chromium III (Cr ⁺³)	Mercu	ıry	Surfactants		
Chromium VI (Cr ⁺⁶)	Nick	el	Thallium		
Copper	Pestici	des	Total, Ammonia		
	(Organoch)	lorides)	Nitrogen		
Cyanide	Seleni	um	Total, Nitrogen		
Total, Phospho	orus	Zinc			

The conventional parameters used for the assessment of aquatic life use support were:

Dissolved Oxygen	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 perform taking into consideration the five (5) attainment categories currently required by EPA assessment guidelines. 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 standards with the

implementation of the adequate and corresponding control measures 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 (e.g., 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

XX-4h - l4				Categ	T-4-1:4-4-	Total aggagged				
Waterbody type	1	2	3	4a	4b	4c	5	Total in state	Total 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., miles	0	0	0	0	0	0	3.8340 sq. mi., 18.8 mi	3.8340 sq. mi., 18.8 mi	3.8340 sq. 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 2,711.0 5,400.5*

^{*} The total miles do not include 18.8 miles that corresponds to PREE13A1 AU, since they are water classified as SB. ** Does is not included 3.0 miles that correspond to PRSR39A AU, since it had no flow for this evaluation cycle.

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

Wotonko du tumo				Total in state	Total aggregad				
Waterbody type	1	2	3	4a	4b	4c	5	1 otal in state	Total 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, miles	0	0	0	0	0	0	3.8340 sq. mi,	3.8340 sq. mi.,	3.8340 sq. mi.,
							18.8 mi	18.8 mi	18.8 mi

Table 20: Secondary Contact Use Summary

Waterhady type				Total in state	Total aggagged				
Waterbody type	1	2	3	4a	4b	4c	5	Total III State	Total 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., miles	0	0	0	0	0	0	3.8340 sq. mi,	3.8340 sq. mi,	3.8340 sq. mi,
							18.8 mi	18.8 mi	18.8 mi

Table 21: Aquatic Life Use Summary

	1 9 9										
Waterbody type				Total in state	Т-4-1						
	1	2	3	4a	4b	4c	5	Total III State	Total 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	3.50	67.60	33.62	0	0	0	441.91	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., miles	0	0	0	0	0	0	3.8340 sq. mi.,	3.8340 sq. mi,	3.8340sq. mi.,		

Waterbody type Category								Total in state	Total aggagged
waterbody type	1 2 3 4a 4b 4c 5						Total in state	Total assessed	
							18.8 mi	18.8 mi	18.8 mi

Table 22: Drinking Water Use Summary

Weterlander trees				Total in state	Total aggagged				
Waterbody type	1	2	3	4a	4b	4c	5	Total III State	Total assessed
Rivers and Streams - miles	264.5	0	2,378.3	0	0	0	2,709.8	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 ²

6.1 Rivers, Streams and Creeks

Table 23: Size of Waters Impaired by Causes (Monitored Miles for Rivers, Streams, and Creeks) *

	Impairments 021 Cycle	Causes of Impairments Summary			
Causes of Impairments	Size of Waters Impaired* (miles)	Size of Waters Impaired (miles)			
Ammonia	60.0	310.6			
Arsenic	0	25.4			
Chromium VI	2,555.1	2,555.1			
Copper	187.1	594.8			
Cyanide	90.0	90.0			
Dissolved Oxygen	378	1,135.8			
Enterococcus	2,555.1	2,555.1			
Lead	54.7	301.5			
Mercury	0	55.8			
Pesticides	0	544.3			
pН	261.2	931.5			
Silver	0	14.6			
Surfactants	0	241.3			
Temperature	956.3	1,585.8			
Total, Nitrogen	1,182.9	1,545.7			
Total, Phosphorus	1,905.3	2,184.0			
Turbidity	1,127.3	1,864.3			

 $^{^{\}ast}$ 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)

Potential Source 2019-202		Potential Sources of Pollution Summary				
Potential Sources of	Size of Water Impaired	Size of Water Impaired				
Pollution	(miles)	(miles)				
Agriculture	2,716.3	2,716.3				
Collection System Failure	3,238.9	3,238.9				
Confined Animal Feeding	3,876.5	3,876.5				
Operations						
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	634.1	634.1				
Sources						
Onsite Wastewater Systems		5,322.6				
	5,322.6					
Package Plants (Small Flows)	42.2	42.2				

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Potential Source	Potential Sources of Pollution										
2019-202	Summary										
Potential Sources of	·										
Pollution	(miles)	(miles)									
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)

	1000 200			2022 Monitoring		Ove	erall			пиониотеи)	
Basin	Waterbody Name	Waterbody Size (miles)		Stations		ttai			Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	D	NS = Network	R1	R2	AL	DW	N	of Pollution	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 Enterococcus Total, Nitrogen Cyanide Dissolved Oxygen
	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 Enterococcus Total, Nitrogen
	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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)		NS = Network	R1	R2	AL	DW	N	of Pollution	Impairment
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	
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 Enterococcus Temperature Total, Phosphorus 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 Enterococcus Pesticides Temperature Total, Phosphorus Turbidity Total, Nitrogen

Basin	Waterbody Name	Waterbody Size (miles)	2022 Overall Monitoring Designated U Stations Attainment		Use	Notes	Potential Sources	Causes of			
Da on	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
	TÚNEL PRNR7A3		SD	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 Enterococcus pH Total, Phosphorus
	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 Enterococcus Total, Nitrogen Total, Phosphorus Turbidity
	RÍO LIMÓN PRNR7C2	40.7	SD	NS 50026350	5	5	5	5	K	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococcus Total, Nitrogen Turbidity
	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 Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity

Basin				2022 Monitoring Stations		Ove signa ttai	ted	Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	N	of Pollution	Impairment
	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	Agriculture Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococcus Total, Phosphorus Turbidity
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 Enterococcus Total, Phosphorus Turbidity Temperature
	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 Enterococcus Temperature Turbidity Total, Nitrogen Total, Phosphorus
	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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations		Overall Designated Use Attainment		Notes	Potential Sources	Causes of	
Dasin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	0N	of Pollution	Impairment
	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 Enterococcus Turbidity
	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	
	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 Enterococcus Total, Nitrogen Total, Phosphorus Turbidity
	RÍO BOTIJAS PRNR8E2	19.1	SD		4a	4a	5	3	D H K	Confined Animal Feeding Operations Onsite Wastewater Systems	pH

Basin		Waterbody Name (AU ID) Waterbody Size (miles)		2022 Monitoring Stations		Ove signa ttai	ited	Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	Z	of Pollution Impairment	Impairment
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 Enterococcus Total, Nitrogen Total, Phosphorus Turbidity Temperature
	RÍO INDIO PRNR9B1		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

Basin	Waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
24044	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	N	of Pollution	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	NS 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 Enterococcus Temperature
	RÍO DE LA PLATA PRER10A2	14.3	SD		4a	4a	3	3	B H	Confined Animal Feeding Operations Onsite Wastewater Systems	

Basin	Waterbody Name	Waterbody Size (miles)	ass	Stations	Designated Use Attainment		signated Use			Potential Sources	Causes of
Dushi		Size (miles)	IJ	NS = Network	R1	R2	AL	DW	Notes	of Pollution	Impairment
	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 Enterococcus Total, Phosphorus pH
	RÍO DE LA PLATA PRER10A4	10.2	SD	NS 50043000	5	5	5	5	В	Agriculture Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococcus pH Temperature Total, Phosphorus Turbidity
	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 Copper Enterococcus Lead pH Total, Phosphorus
	RÍO LAJAS PRER10B	16.6	SD		4a	4a	3	3	B H	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	

Basin	Waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations		Ove signa ttair	ted	Use	Notes	Potential Sources	Causes of
_ 1,2,1,2	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
	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 Enterococcus Total, Nitrogen Total, Phosphorus
	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 Enterococcus Total, Phosphorus
	RÍO HONDO PRER10H	25.6	SD		4a	4a	3	3	ВН	Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations		Ove signa ttair	ted	Use	Notes	Potential Sources	Causes of
Dasiii	(AU ID)		CE	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
	RÍO USABÓN PRER10I1	54.6	SD		4a	4a	3	3	В	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	ВН	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 Enterococcus pH Total, Nitrogen Total, Phosphorus
	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

Basin	Waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	Ž	of Pollution	Impairment
RÍO BAYAMÓN	RÍO BAYAMÓN PRER12A1	33.6	SD	NS 50048510	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Ammonia Chromium VI Enterococcus pH Total, Nitrogen Temperature
	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 Enterococcus
	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 Dissolved Oxygen Enterococcus Total, Nitrogen Total, Phosphorus
	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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	Ň	of Pollution	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 Enterococcus Total, Phosphorus Turbidity Temperature
	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 Enterococcus Pesticides Total, Phosphorus Turbidity Temperature
	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

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dusin	(AU ID)			NS = Network	R1	R2	AL	DW		of Pollution	Impairment
	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	
	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		SD	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 Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity
	RÍO VALENCIANO PRER14G2	42.8	SD	NS 50056500	5	5	5	5	C	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Ammonia Chromium VI Enterococcus pH Surfactants Total, Phosphorus Turbidity Total, Nitrogen

Bas	waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations		Ove signa ttaii	ated	Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	\mathbf{C}	NS = Network	R1	R2	AL	DW	N	of Pollution	Impairment
	RÍO BAIROA PRER14H	16.3	SD	NS 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 Enterococcus 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 Enterococcus Surfactants Total, Nitrogen Total, Phosphorus Turbidity Temperature
	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 Enterococcus 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 Enterococcus Total, Phosphorus Turbidity Temperature Total, Nitrogen
	RÍO EMAJAGUA PRER14L	8.5	SD		4a	4a	3	3	C H	Minor Industrial Point Sources Onsite Wastewater Systems	· ·

Basin	Waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	0	NS = Network	R1	R2	AL	DW	Z	of Pollution	Impairment
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 Enterococcus
	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	
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		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	

Basin	Waterbody Name			2022 Monitoring Stations		Ove signa ttair		Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	No	of Pollution	Impairment
	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 Enterococcus Temperature Total, Nitrogen Total, Phosphorus
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
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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations		signa	erall ated nme	Use	Notes	Potential Sources	Causes of
Dasiii	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	No	of Pollution	Impairment
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
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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	N_0	of Pollution	Impairment
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	Ammonia Chromium VI Copper Enterococcus Mercury pH Temperature Total, Nitrogen Turbidity
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 Enterococcus Lead pH Total, Phosphorus Turbidity Temperature Total, Nitrogen
	RÍO INGENIO PRER35A1	32.6	SD		4a	4a	3	3	F H	Confined Animal Feeding Operations Onsite Wastewater Systems	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations		Ove signa ttai		Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	No	of Pollution	Impairment
QUEBRADA EMAJAGUA	QUEBRADA EMAJAGUA PREQ36A	2.5	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	
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 Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity
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	Onsite Wastewater Systems	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

Basin	Waterbody Name V	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dasiii	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
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 Enterococcus pH
	RÍO MARÍN PRSR43B	8.7	SD		4a	4a	3	3	H J	Onsite Wastewater Systems	
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	D H J	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	

Basin	Waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations		Ove signa ttair	ted	Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	N	of Pollution	Impairment
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	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
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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
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 Enterococcus pH Total, Nitrogen Cyanide Temperature
	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
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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
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 Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems Surface Mining Urban Runoff/Storm Sewers	
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 Enterococcus Temperature
	RIO BUCANÁ- CERRILLOS PRSR62A2	32.6	SD	NS 50113800	5	5	5	5	J	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococcus pH Total, Phosphorus Turbidity

Basin	Waterbody Name	Waterbody Size (miles)	ass			Ove signa ttaii		Use	Notes	Potential Sources	Causes of
	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	No	of Pollution	Impairment
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 Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity
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	

Basin	Waterbody Name	Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
	(AU ID)		CI	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
RÍO GUAYANILLA	RÍO GUAYANILLA PRSR67A	60.0	SD	NS 50124700	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	Ammonia Chromium VI Dissolved Oxygen Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity
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	

Basin	Waterbody Name	Waterbody	S	2022 Monitoring Stations				Use	Si	Potential Sources	Causes of
Basin	(AU ID)	Waterbody Size (miles)	Clas	NS = Network				DW	Notes	of Pollution	Impairment
RÍO ARROYO CAJUL	RÍO ARROYO CAJUL PRSR70A	7.4	SD		4a	4a	3	3	H J, L	Onsite Wastewater Systems	
QUEBRADA BOQUERÓN	QUEBRADA BOQUERÓN PRWQ71A	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	
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 Enterococcus Total, Phosphorus
	RIO HONDO PRWR77B	17.2	SD		4a	4a	3	3	F H	Onsite Wastewater Systems Urban Runoff/Storm Sewers	

Basin	Waterbody Name	Waterbody Size (miles)	lass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	N	of Pollution	Impairment
	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 Enterococcus Pesticides Total, Phosphorus Turbidity
	RÍO VIEJO PRWR77D	21.1	SD	NS 50135625	5	5	5	5	F	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen Enterococcus Total, Phosphorus Turbidity Cyanide
	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	
	RÍO CUPEYES PRWR77G		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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dasm	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	No	of Pollution	Impairment
	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 Enterococcus
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	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	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dusti	(AU ID)	Size (miles)	D	NS = Network	R1	R2	AL	DW	Ň	of Pollution	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 Enterococcus Turbidity pH
	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		
	RÍO MAYAGUECILLO PRWR83F	18.0	SD		4a	4a	3	3	H K	Agriculture Onsite Wastewater Systems	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations				Use	Notes	Potential Sources	Causes of
Dasiii	(AU ID)	Size (miles)	CE	NS = Network	R1	R2	AL	DW	N ₀	of Pollution	Impairment
	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	
	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	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

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations		signa	erall ated ame	Use	Notes	Potential Sources	Causes of
Dasin	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW		of Pollution	Impairment
QUEBRADA PUNTA ENSENADA	QUEBRADA PUNTA ENSENADA PRWQ90A	5.0	SD		3	3	3	3	H L	Collection System Failure 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 PRWR92A	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	
RIO CULEBRINAS	PRWR95A		SD	NS 50149100	5	5	5	5	К	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 Copper Enterococcus Pesticides Total, Nitrogen Total, Phosphorus Turbidity
	RIO CAÑO (RÍO CAÑAS) PRWR95B	33.3	SD		4a	4a	3	3	H K	Onsite Wastewater Systems Urban Runoff/Storm Sewers	

Basin	Waterbody Name	Waterbody Size (miles)	ass	2022 Monitoring Stations		signa	erall ated nme	Use	Notes	Potential Sources	Causes of
24044	(AU ID)	Size (miles)	C	NS = Network	R1	R2	AL	DW	Ž	of Pollution	Impairment
	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
	QUEBRADA SALADA PRWQ95I	7.9	SD		4a	4a	1	3	D H K	Confined Animal Feeding Operations Onsite Wastewater Systems	
	RÍO SONADOR PRWR95J	37.7	SD		4a	4a	3	3	H K	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	

Rasin	Basin Waterbody Name		ass	2022 Monitoring Stations		Ove signa ttair	ted	Use	otes	Potential Sources	Causes of
Dusin	(AU ID)	Size (miles)	CI	NS = Network	R1	R2	AL	DW	Z	of Pollution	Impairment
	RÍO GUATEMALA PRWR95K	20.3	SD		4a	4a	3	3	H K	Collection System Failure Confined Animal Feeding Operations Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	
CAÑO CORAZONES	CAÑO CORAZONES PRWK96A	1.3	SD		4a	4a	3	3	H J	Collection System Failure Onsite Wastewater Systems Urban Runoff/Storm Sewers	

Bold and Red causes were listed into 2022 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2022 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 2022 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 Anastí, 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

6.2 Estuaries

Table 26: Size of Waters Impaired by Causes (Monitored squares miles for Estuaries)

Causes of In 2019-202	•	Causes of Impairments Summary		
Causes of Impairments	- (sq. m1)			
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)

· · · · · · · · · · · · · · · · · · ·	inputicu by Sources (Montto)	
Potential Source	ces of Pollution	Potential Sources of Pollution
2019-202	21 Cycle	Summary
Potential Sources of	Size of Waters Impaired	Size of Waters Impaired
Pollution	(sq. mi.)	(sq. mi.)
Agriculture	0.2635	0.2635
Collection System Failure	3.2261	3.2261
Confined Animal Feeding	2.2829	2.2829
Operations		
Landfill	0.9300	0.9300
Major Industrial Point Sources	0.2964	0.2964
Major Municipal Point	1.5296	1.5296
Sources		
Minor Industrial Point Sources	0.2232	0.2232
Onsite Wastewater Systems	4.3083	4.3083
Surface Mining	0.2298	0.2298
Upstream Impoundment	0.4596	0.4596
Urban Runoff/Storm Sewers	3.067	3.0678

Table 28: Estuaries Assessment (Except San Juan Estuary System)

Basin	Waterbody Name (AU ID)	Waterbody Size (sq. mi.)	Class	2022 Monitoring Stations	Overall Designated Use Attainment R1 R2 AL DW		Designated Use Attainment			Designated Use Attainment			Designated Use Attainment			Notes	Potential Sources Causes of of Pollution Impairment
RÍO GUAJATACA	RÍO GUAJATACA	0.048	SB		3	3		N/A	Н	Onsite Wastewater Systems							
PRNR3A	PRNE3A									Surface Mining Urban Runoff/Storm Sewers							
QUEBRADA BELLACA	QUEBRADA BELLACA PRNE4A	0.0042	SB		3	3	3	N/A	Н	Onsite Wastewater Systems							
PRNQ4A 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		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 Source Onsite Wastewater Systems Urban Runoff/Storm Sewers							

Basin	Waterbody Name	Waterbody Size	Class	2022 Monitoring		Ove signa ttain	ted	Use	Notes	Potential Sources	Causes of
	(AU ID)	(sq. mi.)	C	Stations	R1			DW	Z	of Pollution	Impairment
RÍO DE LA PLATA PRER10A	RÍO DE LA PLATA PREE10A	0.8256	SB		4a	4a	3	N/A	В	Collection System Failure Confined Animal Feeding Operations Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	
RÍO GRANDE DE LOIZA PRER14A	RÍO GRANDE DE LOIZA PREE14A	0.8685	SB		4a	4a		N/A	Н	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	Н	Onsite Wastewater Systems Surface Mining	
RÍO SABANA PRER19A	RÍO SABANA PREE19A	0.0288 mi ²			4a	4a	3	N/A	J	Urban Runoff/Storm Sewers	
RÍO JUAN MARTÍN PRER20A	RÍO JUAN MARTÍN PREE20A	0.0028	SB		4a	4a		N/A	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	N/A	D H, J	Collection System Failure Urban Runoff/Storm Sewers	Turbidity

Basin	Waterbody Name (AU ID)	Waterbody Size	Class	2022 Monitoring Stations	Overall Designated Use Attainment		ated Use		nated Use		nated Use inment		ignated Use		ignated Use ttainment		Notes	Potential Sources of Pollution	Causes of Impairment
		(sq. mi.)		Stations	R1	R2		DW											
QUEBRADA	QUEBRADA	0.0024	SB		4a	4a	3	N/A		Upstream Impoundment									
AGUAS CLARAS PREQ25A	AGUAS CLARAS PREE25A								J										
RÍO DAGUAO	RÍO DAGUAO	0.0672	SB		4a	4a	3	N/A	Н	Upstream Impoundment									
PRER26A	PREE26A								J										
QUEBRADA	QUEBRADA	0.005	SB		4a	4a	3	N/A		Upstream Impoundment									
PALMA	PALMA								J										
PREQ27A	PREE27A	0.0102	2.0		4			27/1											
QUEBRADA	QUEBRADA	0.0192	SB		4a	4a	3	N/A		Upstream Impoundment									
BOTIJAS	BOTIJAS								J										
PREQ28A	PREE28A	0.0252	αD		4		_	DT/A	**										
RÍO SANTIAGO PRER29A	RÍO SANTIAGO PREE29A	0.0252	SB		4a	4a	3	N/A	H J	Onsite Wastewater Systems									
RÍO BLANCO	RÍO BLANCO	0.0512	SB		4a	4a	3	N/A	Н	Upstream Impoundment									
PRER30A	PREE30A								J										
RÍO ANTON RUIZ	RÍO ANTÓN RUIZ	0.1296	SB		4a	4a	3	N/A	Н	Upstream Impoundment									
PRER31A	PREE31A								J										
RÍO HUMACAO	RÍO HUMACAO	0.124	SB		4a	4a	3	N/A		Collection System Failure									
PRER33A	PREE33A								Н	Landfill									
										Onsite Wastewater Systems									
RÍO CANDELERO	RÍO CANDELERO	0.078	SB		4a	4a	5	N/A		Collection System Failure	Dissolved Oxygen								
PRER34A	PREE34A								F, H		Temperature								
RÍO GUAYANÉS	RÍO GUAYANÉS	0.0364	SB		4a	4a	5	N/A		Agriculture	Arsenic								
PRER35A	PREE35A								Н	Collection System Failure	Turbidity								
										Onsite Wastewater Systems									
CAÑO SANTIAGO	CAÑO SANTIAGO	0.1152	SB		4a	4a	5	N/A		Agriculture	Dissolved Oxygen								
PREK35.1	PREE35.1								F	Collection System Failure	Surfactants								
									Н	Landfill	Turbidity								
										Major Municipal Point									
										Sources									

Basin	Waterbody Name (AU ID)	Waterbody Size	Class	2022 Monitoring		Overall Designated Use Attainment		Notes	Potential Sources of Pollution	Causes of Impairment	
		(sq. mi.)		Stations R		R1 R2 AL D		\mathbf{DW}			•
										Minor Industrial Point Sources	
										Onsite Wastewater Systems	
										Urban Runoff/Storm Sewers	
RÍO CHICO	RÍO CHICO	0.008	SB		4a	4a	3	N/A	Н	Onsite Wastewater Systems	
PRSR42A	PRSE42A								J, L		
RÍO GRANDE DE	RÍO GRANDE DE	0.0136	SB		4a	4a	3	N/A	Н	Upstream Impoundment	
PATILLAS	PATILLAS								J	Urban Runoff/Storm Sewers	
PRSR43A	PRSE43A										
QUEBRADA	QUEBRADA	0.006	SB		4a	4a	3	N/A	Н	Onsite Wastewater Systems	
SALADA	SALADA								J	Surface Mining	
PRSQ46A	PRSE46A								L		
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	Н	Onsite Wastewater Systems	
MELANÍA	MELANÍA								J		
PRSQ50A	PRSE50A	0.002.5	an		4			27/4	L	***	
RÍO SECO	RÍO SECO	0.0036	SB		4a	4a	3	N/A	Н	Urban Runoff/Storm Sewers	
PRSR51A	PRSE51A								J, L		
QUEBRADA	QUEBRADA	0.0042	SB		4a	4a	3	N/A	Н	Urban Runoff/Storm Sewers	
AMORÓS	AMORÓS								J		
PRSQ52A	PRSE52A							<u> </u>	L		
QUEBRADA	QUEBRADA	0.0036	SB		4a	4a	3	N/A		Upstream Impoundment	
AGUAS VERDES	AGUAS VERDES								Н	Urban Runoff/Storm Sewers	
PRSQ53A	PRSE53A								L		

Basin	Waterbody Name (AU ID)	Waterbody Size	Class	2022 Monitoring Stations		Notes	Potential Sources of Pollution	Causes of Impairment			
		(sq. mi.)		Stations	R1	R2	AL	DW	, ,		
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	DESCALABRADO								J		
PRSR58A	PRSE58A										
RÍO JACAGUAS	RÍO JACAGUAS	0.011	SB		4a	4a	3	N/A	F	Agriculture	
PRSR60A	PRSE60A								H, L	Onsite Wastewater Systems	
RÍO INABÓN	RÍO INABÓN	0.0036	SB		4a	4a	3	N/A	F	Urban Runoff/Storm Sewers	
PRSR61A	PRSE61A								Н		
RÍO MATILDE-	RÍO MATILDE-	0.0432	SB		4a	4a	5	N/A	D	Onsite Wastewater Systems	Turbidity
PASTILLO	PASTILLO								Н	Urban Runoff/Storm Sewers	
PRSR64A	PRSE64A								J, L		
RÍO TALLABOA	RÍO TALLABOA	0.0336	SB		4a	4a	5	N/A	D, H	Onsite Wastewater Systems	Turbidity
PRSR65A	PRSE65A								J, L	Urban Runoff/Storm Sewers	
RÍO MACANÁ	RÍO MACANÁ	0.0036	SB		4a	4a	3	N/A	Н	Urban Runoff/Storm Sewers	
PRSR66A	PRSE66A								J, L		
RÍO YAUCO	RÍO YAUCO	0.003	SB		4a	4a	3	N/A		Upstream Impoundment	
PRSR68A	PRSE68A								H, L		
RÍO LOCO	RÍO LOCO	0.0084	SB		4a	4a	3	N/A	F	Onsite Wastewater Systems	
PRSR69A	PRSE69A								Н	Surface Mining	
							_			Urban Runoff/Storm Sewers	
QUEBRADA	QUEBRADA	0.0096	SB		4a	4a	3	N/A	Н	Urban Runoff/Storm Sewers	
BOQUERÓN	BOQUERÓN								J		
PRWQ71A	PRWE71A	0.002	a =				_	37/:			
QUEBRADA	QUEBRADA	0.003	SB		4a	4a	3	N/A	H	Onsite Wastewater Systems	
ZUMBÓN	ZUMBÓN								J		
PRWQ72A	PRWE72A								L		

Basin	Sin Waterbody Name Waterbody Size Stations Stat		Ove signa ttain	ted	Use	Notes	Potential Sources of Pollution	Causes of Impairment			
		(sq. mi.)		Stations	R1	R2	AL	DW			•
QUEBRADA	QUEBRADA	0.008	SB		4a	4a	3	N/A	Н	Upstream Impoundment	
GONZÁLEZ	GONZÁLEZ								J		
PRWQ73A	PRWE73A	0.002	CD		4		2	NT/A	L		
QUEBRADA LOS PAJARITOS	QUEBRADA LOS PAJARITOS	0.003	SB		4a	4a	3	N/A	H		
PRWQ74A	PRWE74A								L		
RIO GUANAJIBO	RIO GUANAJIBO	0.0576	SB		4a	4a	3	N/A		Collection System Failure	
PRWR77A	PRWE77A								J	Onsite Wastewater Systems	
CAÑO MERLE	CAÑO MERLE	0.158	SB		4a	4a	5	N/A	D, H	Collection System Failure	Surfactants
PRWK78A	PRWE78A								J, L		
RIO YAGÜEZ	RIO YAGÜEZ	0.0192	SB		4a	4a	3	N/A		Collection System Failure	
PRWR79A	PRWE79A								J	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
RÍO GRANDE DE	RÍO GRANDE DE	0.2376	SB		4a	4a	3	N/A		Onsite Wastewater Systems	
AÑASCO PRWR83A	AÑASCO PRWE83A								K	j	
QUEBRADA	QUEBRADA	0.002	SB		4a	4a	5	N/A	D	Urban Runoff/Storm Sewers	Dissolved Oxygen
GRANDE	GRANDE								Н		
CALVACHE PRWQ88A	CALVACHE PRWE88A								L		
QUEBRADA LOS	QUEBRADA LOS	0.0006	SB		3	3	3	N/A	Н	Collection System Failure	
RAMOS	RAMOS	0.000				5		","	L		
PRWQ89A	PRWE89A										
RÍO GRANDE	RÍO GRANDE	0.0028	SB		4a	4a	3	N/A			
PRWR92A	PRWE92A								J, L		
CAÑO DE SANTI	CAÑO DE SANTI	0.0032	SB		4a	4a	3	N/A		Onsite Wastewater Systems	
PONCE	PONCE								J		
PRWK93A	PRWE93A								L		

Basin	Waterbody Name (AU ID)	Waterbody Size	Class	2022 Monitoring Stations	Designated Use Attainment		Attainment		ated Use nment		Notes	Potential Sources of Pollution	Causes of Impairment
		(sq. mi.)		Stations	R1	R2	AL	\mathbf{DW}					
RÍO GUAYABO	RÍO GUAYABO	0.0288	SB		4a	4a	5	N/A	D	Onsite Wastewater Systems	Dissolved Oxygen		
PRWR94A	PRWE94A								H, J	Urban Runoff/Storm Sewers			
RÍO CULEBRINAS	RÍO CULEBRINAS	0.1344	SB		4a	4a	3	N/A	Н	Onsite Wastewater Systems			
PRWR95A	PRWE95A								K	Upstream Impoundment			

Bold and Red causes were listed into 2022 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2022 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 2022 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 Culebrinas.

Añasco, Río

- 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

6.3 San Juan Bay Estuary System

Table 29: Size of Waters Impaired by Causes San Juan Bay Estuary System

	of Impairments 0-2021 Cycle	Causes of Impairments Summary
Causes of Impairments	Size of Waters Impaired (sq. mi., miles)	Size of Waters Impaired (sq. mi., miles)
Ammonia	0	3.8340 sq. mi.
Chromium VI	3.8340 sq. mi.	3.8340 sq. mi.
Copper	0	0.1009 sq. mi., 18.8 mi
Dissolved Oxygen	3.8340 sq. mi., 18.8 mi	3.8340 sq. mi., 18.8 mi
Enterococcus	3.8340 sq. mi., 18.8 mi	3.8340 sq. mi., 18.8 mi
Lead	0	0.1009 sq. mi.
Oil and Grease	18.8 mi	18.8 mi
pН	3.7331 sq. mi., 18.8 mi	3.7331 sq. mi., 18.8 mi
Surfactants	0	3.8340 sq. mi.
Temperature	3.8340 sq. mi., 18.8 mi	3.8340 sq. mi., 18.8 mi
Total, Nitrogen	0.1009 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

Table 60. Size of Harris Imparied by Sources San Guard Day Estaday System										
Potential Source	s of Pollution	Potential Sources								
2019-2021	Cycle	of Pollution Summary								
Potential Sources of Pollution	Size of Waters Impaired	Size of Waters Impaired								
Fotential Sources of Follution	(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 Source	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	Waterbody Size	2022 Monitoring Stations NS = Network	Des	Ove igna ttair	ted	Use	Notes	Potential Sources of Pollution	Causes of Impairment
	(AU ID)	(sq. mi., miles)	ED = External Data	R1	R2	A L	DW	_	of I onution	Impanment
ESTUARY SYSTEM	PREE13A1 Caño Control de La Malaria Bahía de San Juan Caño San Antonio Laguna Del Condado Península La Esperanza	18.8 miles	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 Enterococcus 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	Ammonia Chromium VI Copper Dissolved Oxygen Enterococcus Lead Surfactants Temperature Total, Nitrogen Total, Phosphorus Turbidity
ESTUARY SYSTEM	PREE13A3 Caño Martín Peña Quebrada Juan Méndez	3.7331 sq. mi.	NS 50050300 ED – CS 1, 2 CMP	5	5	5	N/A	M	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater System	Ammonia Chromium VI Dissolved Oxygen Enterococcus

Basin	Waterbody Name	Waterbody Size	2022 Monitoring Stations NS = Network	Des	Ove signa ttaii	ited	l Use	ote	Potential Sources of Pollution	Causes of Impairment
	(AU ID)	(sq. mi., miles)	ED = External Data	R1	R2	A L	DW	Z	of Foliation	impan ment
	Quebrada San		LSJ 1, 2						Urban Runoff/Storm	pН
	Antón		Blasina						Sewers	Surfactants
	Quebrada Blasina		San Antón							Temperature
	Canal Machicote		Laguna Los							Total, Nitrogen
	Canal Suárez		Corozos							Total, Phosphorus
	Laguna San José		LagunaTorrecilla 1,							Turbidity
	Laguna Torrecillas		2, 3							
	Laguna de Piñones									
	Laguna Los									
	Corozos									

Bold and Red causes were listed into 2022 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2022 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

6.4 Lagoons

Table 32: Size of Waters Impaired by Causes (Monitored square miles for Lagoons)

-	Causes of Impairments 2019-2021 Cycle								
Causes of Impairments	Size of Waters Impaired (sq. mi.)	Size of Waters Impaired (sq. mi.)							
Copper	0	2.6172							
Dissolved Oxygen	0	3.8781							
Enterococcus	0	0.5250							
pН	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 2019-2021 (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	0	2.3657
Urban Runoff/Storm Sewers	2.6328	2.6328

Table 34: Lagoons Assessment (Monitored and Unmonitored)

Municipality	Waterbody Name (AU ID)	Class	2022 Monitoring Stations	WB Size (sq. mi.)	De U	Overa signa ses a tego R2	all ated nd	Notes	Potential Sources of Pollution	Causes of Impairment
MAYAGÜEZ	Laguna Joyudas PRWN0005	SB		0.5297	4a	4a	5	H J	Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper 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 Sources	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 Enterococcus pH
CEIBA	Laguna Ceiba PREN0013	SB		0.1875	5	5	5	Н	Unknown Source	Copper Dissolved Oxygen Enterococcus 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

Municipality	Waterbody Name (AU ID)	Class	2022 Monitoring Stations	WB Size (sq. mi.)	Overall Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Designated Uses and Categories		Potential Sources of Pollution	Causes of Impairment
SALINAS	Laguna Punta Arenas PRSN0016	SB		0.0281	3	3	5	Н	Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Temperature Turbidity																										
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 Sources	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	·																										

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Notes:

Bold and Red causes were listed into 2022 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2022 Cycle. (Old causes)

- 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

6.5 Lakes

Table 35: Size of waters Impaired by Causes (Monitored Acres for Lakes)

-	Causes of Impairments 2019-2021 Cycle								
Causes of Impairments	Size of Waters Impaired (acres)	Size of Waters Impaired (acres)							
Arsenic	0	1,194							
Copper	0	2,500							
Dissolved Oxygen	7,234	7,288							
Enterococcus	0	35							
Lead	0	1,726							
Mercury	0	35							
Pesticides	0	2,133							
рН	4,158	6,858							
Surfactants	0	634							
Temperature	0 4,042	4,790							
Total, Nitrogen	0 6,476	6849							
Total, Phosphorus	0 6,915	7,269							
Turbidity	1,632	1,898							

Table 36: Size of waters Impaired by Sources (Monitored Acres for Lakes)

	Potential Sources of Pollution 2019-2021 Cycle							
Potential Sources	Size of Waters	Size of Waters						
of Pollution	Impaired (acres)	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						
Minor Municipal Point Sources	0	0						
Onsite Wastewater Systems	6,623	6,623						
Package Plant (Small Flows)	0	0						
Unknown Sources	108	1,232						
Urban Runoff/Storm Sewers	1,413	1,413						

Table 37: Lakes Assessment (Monitored and Unmonitored waters)

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2022 Monitoring Stations NS = Network	D A	ttai	gnat Ise nm	ted	Notes	Potential Sources of Pollution	Causes of Impairment
RÍO 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
RÍO GRANDE DE ARECIBO	LAGO DOS BOCAS PRNL ₁ 7A1	634	SD	NS 25110 27090 27090E	4a	4a	5	5	K N	2	Arsenic Copper Dissolved Oxygen
RÍO GRANDE DE ARECIBO	LAGO CAONILLAS PRNL ₂ 7C1	700	SD	NS 89001 89002 89003	4a	4a	5	5	K	Agriculture Onsite Wastewater Systems	Copper Dissolved Oxygen Pesticides pH Total, Nitrogen Total, Phosphorus
RÍO 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
RÍO GRANDE DE MANATÍ	LAGO GUINEO PRNL ₁ 8C1	54	SD		4a	4a	5	5		Agriculture Onsite Wastewater Systems	Dissolved Oxygen Pesticides

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2022 Monitoring Stations NS = Network	D A	esig U ttai	eral gnat Jse nm	ted	Notes	Potential Sources of Pollution	Causes of Impairment
RÍO GRANDE DE MANATÍ	LAGO MATRULLAS PRNL ₂ 8C1	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
RÍO DE LA PLATA	LAGO DE LA PLATA PREL ₁ 10A1	560	SD	NS 44400 44950 44950C	4a	4a	5	5	B	Collection System Failure Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	Arsenic Dissolved Oxygen Lead pH Temperature Total, Nitrogen Total, Phosphorus
RÍO DE LA PLATA	LAGO CARITE PREL ₂ 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
RÍO 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
RÍO 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

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2022 Monitoring Stations NS =	D A	Overall Designated Use Attainment		Designated Use Attainment		Designated Use		Designated Use Attainment		Designated Use Attainment		Designated Use Attainment		signated Use tainment		Potential Sources of Pollution	Causes of Impairment
RÍO GRANDE DE PATILLAS	LAGO PATILLAS PRSL43A1	312	SD	NS 89022 89023 89024	R1 4a			5	J	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH Temperature Total, Phosphorus										
QUEBRADA MELANÍA	LAGO MELANIA PRSL50A	35	SD	NS 89026	4a	4a	5	5	J	Agriculture Onsite Wastewater Systems	Enterococcus Mercury Pesticides Temperature Total, Nitrogen Total, Phosphorus										
RÍO JACAGUAS	LAGO GUAYABAL PRSL ₁ 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										
RÍO JACAGUAS	LAGO TOA VACA PRSL ₂ 60A1	836	SD	NS 89014 89015 89016	4a	4a	5	5	F	Agriculture Onsite Wastewater Systems	Dissolved Oxygen pH Total, Nitrogen Total, Phosphorus Temperature										
RÍO BUCANA- CERRILLOS	LAGO CERRILLOS PRSL62A1	700	SD	NS 89032 89033 89034	4a	4a	5	5	J	Urban Runoff/Storm Sewers	Dissolved Oxygen Total, Nitrogen Total, Phosphorus pH Temperature										

Basin	Waterbody Name (AU ID)	Waterbody Size (acres)	Class	2022 Monitoring Stations NS =	A	Attaillient		Designated Use Attainment		esignated Use ttainment		Designated Use Attainment		Designated Use Attainment		esignated Use ttainment		Potential Sources of Pollution	Causes of Impairment
				Network	R1	R2	+	DV	_										
RÍO YAUCO	LAGO LUCHETTI PRSL68A1	266	SD	NS 89017 89018 89019	4a			5	F	Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH Total, Nitrogen Total, Phosphorus Turbidity								
RÍO LOCO	LAGO LOCO PRSL69A	69	SD	NS 89021C	4a	4a	5	5	F	Onsite Wastewater Systems	Dissolved Oxygen pH Total, Nitrogen Total, Phosphorus								
RÍO 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								

Bold and Red causes were listed into 2022 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2022 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 2022 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

6.6 Coastal Shoreline

Table 38: Size of Waters Impaired by Causes (Monitored Miles for Coastal Waters)

Causes of 1	Impairments 021 Cycle	Causes of Impairments Summary
Causes of	Size of Waters	Size of Waters Impaired
Impairments	Impaired (miles)	(miles)
Arsenic	0	49.19
Copper	0	380.83
Dissolved Oxygen	56.18	92.65
Enterococcus	264.32	390.97
Fecal Coliforms	0	7.79
Lead	0	152.17
Mercury	0	213.37
Nickel	0	170.90
Oil and Grease	0	82.42
pН	100.42	190.52
Temperature	206.96	251.01
Thallium	0	203.74
Turbidity	351.48	434.94
Zinc	0	43.80

Table 39: Size of Waters Impaired by Sources (Monitored and Unmonitored Coastal waters)

Potential Sources of	Potential Sources of Pollution							
2019-2021 C	2019-2021 Cycle							
Potential Sources of Pollution	Size of Waters	Size of Waters						
	Impaired (miles)	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	4.20	4.20						
Construction								
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	Size of AU	Class	2022 Monitoring		Overall Designated Use Attainment			Potential Sources	Causes
(AU ID)	(miles)	C	NS - Network ED - External Data	R1	R2	AL	Notes	of Pollution	of Impairment
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 Enterococcus 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 Enterococcus 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 Enterococcus 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 Enterococcus Mercury pH Thallium Turbidity

Waterbody Name	Size of sea AU sea D	2022 Monitoring Station	Overall Designated Use Attainment			Notes	Potential Sources	Causes	
(AU ID)	(miles)	Ď	NS - Network ED - External Data	R1	R2	AL	N	of Pollution	of Impairment
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 Enterococcus Mercury Temperature Turbidity
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 Enterococcus Lead Nickel Turbidity Zinc
PREC09 (Punta Boca Juana to Punta Salinas)	5.78	SB	NS MAC-077 SEG9-01 RW-19	1	1	5		Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Arsenic Copper Enterococcus 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 Enterococcus Lead Mercury Nickel Turbidity

Waterbody Name	Size of AU (miles)	lass	2022 Monitoring Station	Overall Designated Use Attainment			Notes	Potential Sources	Causes
(AU ID)		NS - Network ED - External Data	R1	R2	AL	Ž	of Pollution	of Impairment	
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 Enterococcus Lead Mercury Nickel pH Temperature Thallium Turbidity Zinc
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	1	1	1	M		Enterococcus pH Turbidity
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 Enterococcus Lead Mercury Temperature Thallium Turbidity

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	ted Use		Potential Sources	Causes
(AU ID)	(miles)		NS - Network ED - External Data	R1	R2	AL	Notes	of Pollution	of Impairment
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 Enterococcus Mercury Nickel Thallium Temperaure Turbidity
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 Enterococcus 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

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	Use	Notes	Potential Sources	Causes
(AU ID)	(miles)		NS - Network ED - External Data	R1	R2	AL	N	of Pollution	of Impairment
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 Enterococcus 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 Enterococcus Temperature Thallium Turbidity
PREC21 (Punta Medio Mundo to Punta Puerca)	3.0	SB		3	3	3	Н		
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

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	Use	Notes	Potential Sources of Pollution	Causes
(AU ID)	(miles)	ご	NS - Network ED - External Data	R1	R2	AL	9N		of Impairment
PREC24 (Punta Cascajo to Punta Lima)	9.07	SB	SEG24-02	5	5	5		Major Industrial Point Sources Upstream Impoundment	Copper Dissolved Oxygen Enterococcus 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 Enterococcus 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 Enterococcus 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 Enterococcus Thallium Turbidity
PREC28C (Punta Guayanés to Punta Quebrada Honda)	4.68	SB	NS MAC-012 SBZ-037	5	5	5		Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Copper Enterococcus Mercury Oil & Grease Temperature Thallium Turbidity

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall signated Use Attainment		Notes	Potential Sources	Causes
(AU ID)	(miles)		NS - Network ED - External Data	R1	R2	AL	Ň	of Pollution	of Impairment
PREC28B (Punta Quebrada Honda to Punta Yeguas)	0.74	SB	NS SBZ-038	5	5	5		Onsite Wastewater Systems Unknown Source	Copper Enterococcus 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 Enterococcus Lead pH Thallium Turbidity
PREC30 (Punta Tuna to Cabo Mala Pascua)	2.65	SB	NS MAC-082	5	5	5		Unknown Source	Copper Enterococcus 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 Temperature Thallium Turbidity Enterococcus
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 Enterococcus Mercury Temperature Thallium Turbidity

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	Use	Notes	Potential Sources	Causes
(AU ID)	(miles)	Э	NS - Network ED - External Data	R1	R2	AL	N	of Pollution	of Impairment
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 Enterococcus 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 Enterococcus 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 Enterococcus 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 Mercury pH Temperature Turbidity Enterococcus

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	Use	Notes	Potential Sources	Causes
(AU ID)	(miles)		NS - Network ED - External Data	R1	R2	AL	ž	of Pollution	of Impairment
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 Enterococcus Mercury Oil & Grease Turbidity
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 Enterococcus 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 Enterococcus 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 Enterococcus Oil & Grease Temperature Thallium Turbidity

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	Use	Notes	Potential Sources	Causes
(AU ID)	(miles)	[]	NS - Network ED - External Data	R1	R2	AL	N	of Pollution	of Impairment
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 Enterococcus Nickel pH Temperature Turbidity
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 pH Temperature Thallium Turbidity Enterococcus
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 Enterorococus pH Temperature Thallium Turbidity
PRSC41A2 (Bahía Monsio José)	3.72	SA		3	3	3	Н		

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall Designated Use Attainment		Notes	Potential Sources	Causes
(AU ID)	(miles)	C	NS - Network ED - External Data	R1	R2	AL	Ž	of Pollution	of Impairment
PRSC41B3 (Bahía Monsio José to Faro de Cabo Rojo)	13.45	SB	NS SEG41B3-01 SEG41B3-02	5	5	5		Unknown Source	Dissolved Oxygen Enterococcus 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 pH Temperature Turbidity Enterococcus
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	Enterococcus 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	Enterococcus pH Thallium Turbidity Temperature
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 Enterococcus Lead Thallium Turbidity

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	_	verall nated Use ninment		Potential Sources	Causes
(AU ID)	(miles)		NS - Network ED - External Data	R1	R2	AL	Ž	of Pollution	of Impairment
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
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 Enterococcus Lead Mercury Nickel Oil & Grease pH Thallium Turbidity
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 Enterococcus Nickel pH Temperature Turbidity

Waterbody Name	Size of AU	Class	2022 Monitoring Station	Desig	Overall gnated tainme	Use	Notes	Potential Sources of Pollution	Causes of Impairment
(AU ID)	(miles)	IJ	NS - Network ED - External Data	R1	R2	AL	Ž		
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 Enterococcus Lead Mercury Nickel Turbidity pH
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 Enterococcus 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	Size of AU	Class	2022 Monitoring Station	Overall Designated Use Attainment			Notes	Potential Sources	Causes
(AU ID)	(miles)	IJ	NS - Network ED - External Data	R1	R2	AL	0N	of Pollution	of Impairment
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 2022 Cycle (New added causes).

Italicized and black causes were listed into and/or prior to 2022 Cycle. (Old causes)

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

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 boat). 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 42 shows 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	1	69
Mesotrophic	5	2,118
Eutrophic	11	4,852***

^{*} Including Las Curias Lake (55 acres) (SJBES)

^{**} Lago Guineo (54 acres) not assess for this cycle

Table 43: Puerto Rico Lakes Trophic Status

			Trophic Sta	atus ¹ [P mg/L] ²
Lake	Lake Size (acres)	AU	2020 Cycle (Oct.2017-Sept. 2019)	2022 Cycle (Oct.2019- Sept.2021)
Guajataca	1000	PRNL3A1	(0.02) O	(0.08) E
Dos Bocas	634	PRNL ₁ 7A1	(0.07) E	(0.13) E
Caonillas	700	PRNL ₂ 7C1	(0.06) E	(0.06) E
Garzas	108	PRNL ₃ 7A3	(0.02) O	(0.38) E
Matrullas	77	PRNL ₂ 8C1	(0.02) O	(0.04) M
La Plata	560	PREL ₁ 10A1	(0.06) E	(0.04) M
Carite	333	PREL ₂ 10A5	(0.02) O	(0.03) M
Cidra	268	PREL12A2	(0.07) E	(0.10) E
Las Curias	55	PREE13A2	(0.05) E	(0.10) E
Loíza	713	PREL14A1	(0.18) E	(0.18) E
Patillas	312	PRSL43A1	(0.02) O	(0.04) M
Melanía	35	PRSL50A	(0.03) M	(0.10) E
Guayabal	373	PRSL ₁ 60A	(0.04) M	(0.08) E
Toa Vaca	836	PRSL ₂ 60A	(0.06) E	(0.04) M
Cerrillos	700	PRSL62A	(0.05) M	(0.06) E
Luchetti	266	PRSL68A1	(0.03) M	(0.09) E
Loco	69	PRSL69A	(0.04) M	(0.02) O
Guayo	285	PRWL83H	(0.03) M	no assessed

(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 at 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

Lakes	Lake Size		DO*mg/L		Trend
Lakes	(acres)	2018 Cycle	2020 Cycle	2022 Cycle	1 renu
Caonillas	700	4.2	4.4	4.2	Stable
Guayo	285	4.3	3.8	4.1	Improved
Matrullas	77	5.2	4.4	5.2	Improved
Guayabal	373	4.7	5.4	5.9	Improved
Toa Vaca	836	4.8	3.5	5.1	Improved
Luchetti	266	4.7	4.9	7.6	Improved
Loco	69	5.3	5.4	3.7	Degraded

Lakes	Lake Size		Trend		
Lakes	(acres)	2018 Cycle	2020 Cycle	2022 Cycle	Trend
Patillas	312	4.4	4.6	4.4	Stable
Las Curias	55	2.7	1.8	2.4	Stable
Cidra	268	3.7	4.9	3.9	Degraded
Cerrillos	700	5.1	5.2	4.7	Degraded
Loíza	713	5.0	4.0	4.9	Improved
Guajataca	1000	4.9	5.7	4.8	Degraded
Dos Bocas	634	5.0	5.3	5.2	Stable
Carite	333	4.2	4.3	5.2	Improved
La Plata	560	4.5	4.3	4.4	Stable
Garzas	108	3.7	3.6	3.5	Stable
Melanía	35	7.1	7.1	7.7	Stable

^{*} Dissolved oxygen value corresponds at 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 April 11, 2019, 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 or not considered in the 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. The freshwater wetlands, comprises about of 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 of 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 the 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 fourty-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 publically available wetlands in the lower fourty-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.

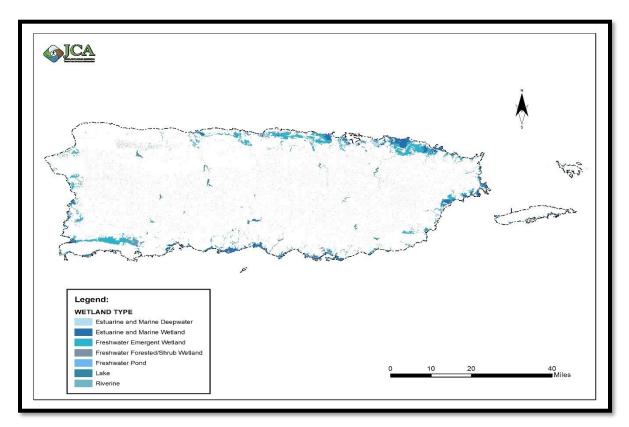


Figure 8: Puerto Rico Wetlands Type

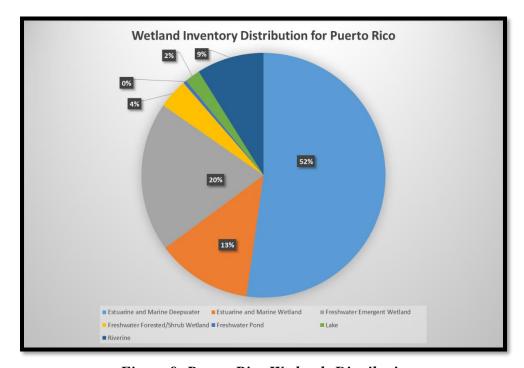


Figure 9: Puerto Rico Wetlands Distribution

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 the 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 the food production and in the 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 factor that could affect the coral reef ecosystem are the following: deforestation, erosion and sedimentation. The deterioration of the water quality 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).

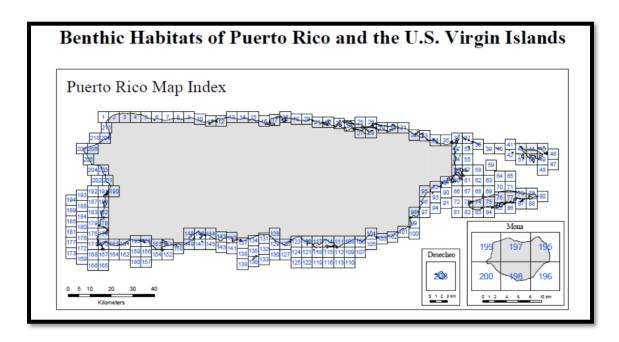


Figure 10: Benthic Habitats of Puerto Rico and the U.S. Virgin Islands

On the other hand, the PRDNER are conducting inspections at different basin through 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 the facilities that represent potential sources of pollution. These actions improve the water quality of the water body and will protect the marine ecosystems included the coral reef ecosystem.

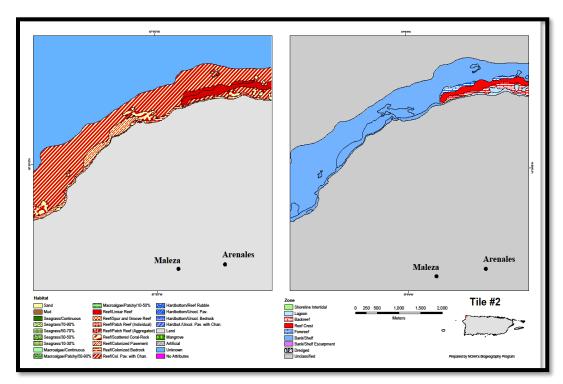


Figure 11: Example of one tile of the Benthic Map and the habitat classification



Figure 12: Benthic Habitats of PR and the Location of the PREQB Beach Monitoring Station

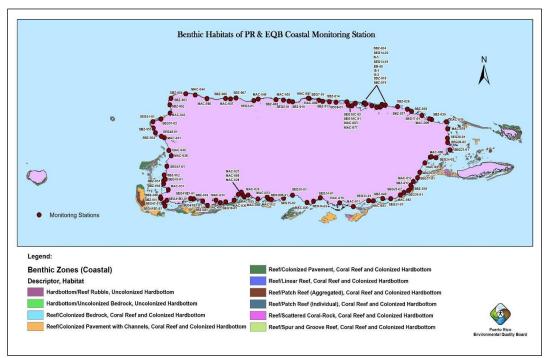


Figure 13: Benthic Habitats of PR and the Location of the PREQB Coastal Monitoring
Station

PART E. 303(d) List

1.0 303(d) List Criteria

The PR 2022 List of Impaired Waters (303(d) List) is based on the water quality data generated through the water quality monitoring networks, as explain in Section 2.0 Monitoring Program. In the case of the 2022 303(d) List, we considered the most recent available water quality data for each parameter in each AU (October 1, 2019, to September 30, 2021). 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).

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 2020 cycle exceed the applicable water quality standard at least once in 2022 Cycle, the parameter continues to appear as an impairment cause and the AU continues to be listed in Category 5. The 303(d) List 2022 is included in the Appendix I of this Integrated Report.

2.0 303(d) Delisting Criteria

If a previously listed parameter complied fully with the applicable water quality standard during the 2020 (October 1, 2017, to September 30, 2019) and 2022 (October 1, 2019 to September 30, 2021) 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).

According to Section 3.0 Designated Uses and applicable water quality standards, DNER will delist an assessment unit if the quantitative data for oil and grease is the detection level of 5 mg/L.

During this cycle it is proposed to remove sixty-one (61) parameter/assessment unit's combination from the 303(d) List (See Table 45).

Table 45: Parameter/AU Combinations to be delisted

AU ID	Type of water	Parameter	Reason for delisting
1. PRNR3A1	River	Fecal Coliform	Change in water quality standard
2. PRNR7A2	River	Copper	Water Quality Standard met
3. PRNR7A3	River	Turbidity	Water Quality Standard met
4. PRNR7C3	River	Copper	Water Quality Standard met
5. PRNR7B2	River	Copper	Water Quality Standard met
6. PRNR7B2	River	Lead	Water Quality Standard met
7. PRNR7B2	River	Total, Nitrogen	Water Quality Standard met
8. PRNR8A1	River	Copper	Water Quality Standard met
9. PRNR8A1	River	Total, Nitrogen	Water Quality Standard met
10. PRNR8B	River	pН	Water Quality Standard met
11. PRNR9A	River	Copper	Water Quality Standard met
12. PRER10A1	River	Total, Nitrogen	Water Quality Standard met
13. PRER10A1	River	Total, Phosphorus	Water Quality Standard met
14. PRER10A1	River	Turbidity	Water Quality Standard met
15. PRER10A3	River	Total, Nitrogen	Water Quality Standard met
16. PRER10A3	River	Turbidity	Water Quality Standard met
17. PRER10A4	River	Total, Nitrogen	Water Quality Standard met
18. PRER10A5	River	Total, Nitrogen	Water Quality Standard met
19. PRER10A5	River	Turbidity	Water Quality Standard met
20. PRER10E	River	Turbidity	Water Quality Standard met
21. PRER10G	River	Dissolved Oxygen	Water Quality Standard met
22. PRER10G	River	Turbidity	Water Quality Standard met

AU ID	Type of water	Parameter	Reason for delisting
23. PRER12A1	River	Total, Phosphorus	Water Quality Standard met
24. PRER12A1	River	Turbidity	Water Quality Standard met
25. PRER12A2	River	Total, Nitrogen	Water Quality Standard met
26. PRER12A2	River	Total, Phosphorus	Water Quality Standard met
27. PRER12B	River	Turbidity	Water Quality Standard met
28. PRER14A2	River	Lead	Water Quality Standard met
29. PRER14G1	River	Copper	Water Quality Standard met
30. PRER14H	River	Surfactants	Water Quality Standard met
31. PRER14J	River	Cadmium	Water Quality Standard met
32. PRER14K	River	Lead	Water Quality Standard met
33. PRER16A	River	Total, Nitrogen	Water Quality Standard met
34. PRER22A	River	Dissolved Oxygen	Water Quality Standard met
35. PRER22A	River	Turbidity	Water Quality Standard met
36. PRER33A	River	Lead	Water Quality Standard met
37. PRER33A	River	Surfactants	Water Quality Standard met
38. PRSR57A2	River	Total, Phosphorus	Water Quality Standard met
39. PRSR62A1	River	Total, Phosphorus	Water Quality Standard met
40. PRSR62A1	River	Turbidity	Water Quality Standard met
41. PRSR63A	River	Ammonia	Water Quality Standard met
42. PRWR77A	River	Turbidity	Water Quality Standard met
43. PRWR83A	River	Copper	Water Quality Standard met
44. PRWR83A	River	Total, Phosphorus	Water Quality Standard met
45. PREL110A1	Lake	Turbidity	Water Quality Standard met
46. PRNL37A3	Lake	pН	Water Quality Standard met
47. PREE13A1	SJBES	Arsenic	Water Quality Standard met
48. PREE13A1	SJBES	Lead	Water Quality Standard met
49. PREE13A1	SJBES	Mercury	Water Quality Standard met
50. PREE13A1	SJBES	Selenium	Water Quality Standard met
51. PREE13A1	SJBES	Surfactants	Water Quality Standard met
52. PREE13A1	SJBES	Total, Phosphorus	Water Quality Standard met
53. PREE13A2	SJBES	Oil and Grease	Change in water quality standard
54. PREE13A3	SJBES	Fecal Coliform	Change in water quality standard
55. PREE13A3	SJBES	Oil and Grease	Change in water quality standard
56. PRNC04	Coast	Dissolved Oxygen	Water Quality Standard met
57. PRNC05	Coast	Temperature	Water Quality Standard met
58. PRSC36C	Coast	Dissolved Oxygen	Water Quality Standard met
59. PRSC37C	Coast	Enterococcus	Water Quality Standard met
60. PRWC46	Coast	Enterococcus	Water Quality Standard met
61. PRWC48	Coast	Dissolved Oxygen	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. 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 including 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 and changes in regulations applicable to water quality standards are taken into consideration. For the 2022 cycle, three hundred sixteen (316) AU / parameter are evaluated as a high priority for the development of the TMDLs (Table

47) and five hundred twenty-two (522) with intermediate (moderate) and low priority (Table 48).

Table 47: Parameter/AU combinations with high priority to development of TMDL

	Table 47: Parameter/AU combinations with high priority to development of TMDL						
	Basin	Waterbody name	AU 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	Enterococcus	Н		
5.	Río Guajataca	Río Guajataca	PRNR3A1	Total, Nitrogen	Н		
6.	Río Guajataca	Río Guajataca	PRNR3A2	Chromium VI	Н		
7.	Río Guajataca	Río Guajataca	PRNR3A2	Enterococcus	Н		
8.	Río Guajataca	Río Guajataca	PRNR3A2	Total, Nitrogen	Н		
9.	Río Guajataca	Quebrada Las Sequías	PRNQ3B	Arsenic	Н		
10.	Río Guajataca	Quebrada Las Sequías	PRNQ3B	Dissolved Oxygen	Н		
11.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Chromium VI	Н		
12.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Enterococcus	Н		
13.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Temperature	Н		
14.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Total, Phosphorus	Н		
15.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A1	Turbidity	Н		
16.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Chromium VI	Н		
17.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Enterococcus	Н		
18.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Pesticides	Н		
19.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Temperature	Н		
20.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Total, Nitrogen	Н		
21.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Total, Phosphorus	Н		
22.	Río Grande de Arecibo	Río Grande de Arecibo	PRNR7A2	Turbidity	Н		
23.	Río Grande de Arecibo	Túnel	PRNR7A3	Chromium VI	Н		
24.	Río Grande de Arecibo	Túnel	PRNR7A3	Enterococcus	Н		
25.	Río Grande de Arecibo	Túnel	PRNR7A3	pН	Н		
26.	Río Grande de Arecibo	Túnel	PRNR7A3	Total, Phosphorus	Н		
27.	Río Grande de Arecibo	Río Caonillas	PRNR7C1	Chromium VI	Н		
28.	Río Grande de Arecibo	Río Caonillas	PRNR7C1	Enterococcus	Н		
29.	Río Grande de Arecibo	Río Caonillas	PRNR7C1	Total, Nitrogen	Н		
30.	Río Grande de Arecibo	Río Caonillas	PRNR7C1	Total, Phosphorus	Н		
31.	Río Grande de Arecibo	Río Caonillas	PRNR7C1	Turbidity	Н		
32.	Río Grande de Arecibo	Río Limón	PRNR7C2	Chromium VI	Н		
33.	Río Grande de Arecibo	Río Limón	PRNR7C2	Enterococcus	Н		
34.	Río Grande de Arecibo	Río Limón	PRNR7C2	Total, Nitrogen	Н		
35.	Río Grande de Arecibo	Río Limón	PRNR7C2	Turbidity	Н		
36.	Río Grande de Arecibo	Río Yunes	PRNR7C3	Chromium VI	Н		
37.	Río Grande de Arecibo	Río Yunes	PRNR7C3	Enterococcus	Н		
38.	Río Grande de Arecibo	Río Yunes	PRNR7C3	Temperature	Н		
39.	Río Grande de Arecibo	Río Yunes	PRNR7C3	Total, Nitrogen	Н		
40.	Río Grande de Arecibo	Río Yunes	PRNR7C3	Total, Phosphorus	Н		
41.	Río Grande de Arecibo	Río Yunes	PRNR7C3	Turbidity	Н		
42.	Río Grande de Arecibo	Río Tanamá	PRNR7B2	Chromium VI	Н		
43.	Río Grande de Arecibo	Río Tanamá	PRNR7B2	Enterococcus	Н		

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44. Río Grande de Arecibo	Río Tanamá	PRNR7B2	Total, Phosphorus	Н
45. Río Grande de Arecibo	Río Tanamá	PRNR7B2	Turbidity	Н
46. Río Grande de Manatí	Río Grande de Manatí	PRNR8A1	Chromium VI	Н
47. Río Grande de Manatí	Río Grande de Manatí	PRNR8A1	Enterococcus	Н
48. Río Grande de Manatí	Río Grande de Manatí	PRNR8A1	Temperature	Н
49. Río Grande de Manatí	Río Grande de Manatí	PRNR8A1	Total, Phosphorus	Н
50. Río Grande de Manatí	Río Grande de Manatí	PRNR8A1	Turbidity	Н
51. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Chromium VI	Н
52. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Copper	Н
53. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Enterococcus	Н
54. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Temperature	Н
55. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Total, Nitrogen	Н
56. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Total, Phosphorus	Н
57. Río Grande de Manatí	Río Grande de Manatí	PRNR8A2	Turbidity	Н
58. Río Grande de Manatí	Río Cialito	PRNR8B	Chromium VI	Н
59. Río Grande de Manatí	Río Cialito	PRNR8B	Enterococcus	Н
60. Río Grande de Manatí	Río Cialito	PRNR8B	Turbidity	Н
61. Río Grande de Manatí	Río Orocovis	PRNR8E1	Chromium VI	Н
62. Río Grande de Manatí	Río Orocovis	PRNR8E1	Enterococcus	Н
63. Río Grande de Manatí	Río Orocovis	PRNR8E1	Total, Nitrogen	Н
64. Río Grande de Manatí	Río Orocovis	PRNR8E1	Total, Phosphorus	Н
65. Río Grande de Manatí	Río Orocovis	PRNR8E1	Turbidity	Н
66. Río Grande de Manatí	Río Botijas	PRNR8E2	pН	Н
67. Río Cibuco	Río Cibuco	PRNR9A	Chromium VI	Н
68. Río Cibuco	Río Cibuco	PRNR9A	Enterococcus	Н
69. Río Cibuco	Río Cibuco	PRNR9A	Temperature	Н
70. Río Cibuco	Río Cibuco	PRNR9A	Total, Nitrogen	Н
71. Río Cibuco	Río Cibuco	PRNR9A	Total, Phosphorus	Н
72. Río Cibuco	Río Cibuco	PRNR9A	Turbidity	Н
73. Río Cibuco	Río Morovis	PRNR9B2	Dissolved Oxygen	Н
74. Río De La Plata	Río De La Plata	PRER10A1	Chromium VI	Н
75. Río De La Plata	Río De La Plata	PRER10A1	Dissolved Oxygen	Н
76. Río De La Plata	Río De La Plata	PRER10A1	Enterococcus	Н
77. Río De La Plata	Río De La Plata	PRER10A1	Temperature	Н
78. Río De La Plata	Río De La Plata	PRER10A3	Chromium VI	Н
79. Río De La Plata	Río De La Plata	PRER10A3	Enterococcus	Н
80. Río De La Plata	Río De La Plata	PRER10A3	pН	Н
81. Río De La Plata	Río De La Plata	PRER10A3	Total, Phosphorus	Н
82. Río De La Plata	Río De La Plata	PRER10A4	Chromium VI	Н
83. Río De La Plata	Río De La Plata	PRER10A4	Enterococcus	Н
84. Río De La Plata	Río De La Plata	PRER10A4	pН	Н
85. Río De La Plata	Río De La Plata	PRER10A4	Temperature	Н
86. Río De La Plata	Río De La Plata	PRER10A4	Total, Phosphorus	Н
87. Río De La Plata	Río De La Plata	PRER10A4	Turbidity	Н
88. Río De La Plata	Río De La Plata	PRER10A5	Chromium VI	Н
89. Río De La Plata	Río De La Plata	PRER10A5	Copper	Н
90. Río De La Plata	Río De La Plata	PRER10A5	Enterococcus	Н

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91. Río De La Plata	Río De La Plata	PRER10A5	Lead	Н
92. Río De La Plata	Río De La Plata	PRER10A5	pН	Н
93. Río De La Plata	Río De La Plata	PRER10A5	Total, Phosphorus	Н
94. Río De La Plata	Río Guadiana	PRER10E	Chromium VI	Н
95. Río De La Plata	Río Guadiana	PRER10E	Enterococcus	Н
96. Río De La Plata	Río Guadiana	PRER10E	Total, Nitrogen	Н
97. Río De La Plata	Río Guadiana	PRER10E	Total, Phosphorus	Н
98. Río De La Plata	Río Arroyata	PRER10G	Chromium VI	Н
99. Río De La Plata	Río Arroyata	PRER10G	Enterococcus	Н
100. Río De La Plata	Río Arroyata	PRER10G	Total, Phosphorus	Н
101. Río De La Plata	Río Matón	PRER10J	Chromium VI	Н
102. Río De La Plata	Río Matón	PRER10J	Enterococcus	Н
103. Río De La Plata	Río Matón	PRER10J	pН	Н
104. Río De La Plata	Río Matón	PRER10J	Total, Nitrogen	Н
105. Río De La Plata	Río Matón	PRER10J	Total, Phosphorus	Н
106. Río De La Plata	Río Guavate	PRER10K	pН	Н
107. Río Hondo	Río Hondo	PRER11A	Dissolved Oxygen	Н
108. Río Hondo	Río Hondo	PRER11A	Surfactants	Н
109. Río Bayamón	Río Bayamón	PRER12A1	Ammonia	Н
110. Río Bayamón	Río Bayamón	PRER12A1	Chromium VI	Н
111. Río Bayamón	Río Bayamón	PRER12A1	Enterococcus	Н
112. Río Bayamón	Río Bayamón	PRER12A1	pН	Н
113. Río Bayamón	Río Bayamón	PRER12A1	Temperature	Н
114. Río Bayamón	Río Bayamón	PRER12A1	Total, Nitrogen	Н
115. Río Bayamón	Río Bayamón	PRER12A2	Chromium VI	Н
116. Río Bayamón	Río Bayamón	PRER12A2	Enterococcus	Н
117. Río Bayamón	Rio Guaynabo	PRER12B	Chromium VI	Н
118. Río Bayamón	Rio Guaynabo	PRER12B	Dissolved Oxygen	Н
119. Río Bayamón	Rio Guaynabo	PRER12B	Enterococcus	Н
120. Río Bayamón	Rio Guaynabo	PRER12B	Total, Nitrogen	Н
121. Río Bayamón	Río Guaynabo	PRER12B	Total, Phosphorus	Н
122. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Chromium VI	Н
123. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Enterococcus	Н
124. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Temperature	Н
125. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Total, Phosphorus	Н
126. Río Grande de Loíza	Río Grande de Loíza	PRER14A1	Turbidity	Н
127. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Chromium VI	Н
128. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Enterococcus	Н
129. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Pesticides	Н
130. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Temperature	Н
131. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Total, Phosphorus	Н
132. Río Grande de Loíza	Río Grande de Loíza	PRER14A2	Turbidity	Н
133. Río Grande de Loíza	Río Canóvanas	PRER14B	Dissolved Oxygen	Н
134. Río Grande de Loíza	Río Canovanillas	PRER14C	Dissolved Oxygen	Н
135. Río Grande de Loíza	Río Gurabo	PRER14G1	Chromium VI	Н
136. Río Grande de Loíza	Río Gurabo	PRER14G1	Enterococcus	Н
137. Río Grande de Loíza	Río Gurabo	PRER14G1	Temperature	Н

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138. Río Grande de Loíza	Río Gurabo	PRER14G1	Total, Nitrogen	Н
139. Río Grande de Loíza	Río Gurabo	PRER14G1	Total, Phosphorus	Н
140. Río Grande de Loíza	Río Gurabo	PRER14G1	Turbidity	Н
141. Río Grande de Loíza	Río Valenciano	PRER14G2	Ammonia	Н
142. Río Grande de Loíza	Río Valenciano	PRER14G2	Chromium VI	Н
143. Río Grande de Loíza	Río Valenciano	PRER14G2	Enterococcus	Н
144. Río Grande de Loíza	Río Valenciano	PRER14G2	рН	Н
145. Río Grande de Loíza	Río Valenciano	PRER14G2	Surfactants	Н
146. Río Grande de Loíza	Río Valenciano	PRER14G2	Total, Nitrogen	Н
147. Río Grande de Loíza	Río Valenciano	PRER14G2	Total, Phosphorus	Н
148. Río Grande de Loíza	Río Valenciano	PRER14G2	Turbidity	Н
149. Río Grande de Loíza	Río Bairoa	PRER14H	Chromium VI	Н
150. Río Grande de Loíza	Río Bairoa	PRER14H	Enterococcus	Н
151. Río Grande de Loíza	Río Bairoa	PRER14H	Total, Nitrogen	Н
152. Río Grande de Loíza	Río Bairoa	PRER14H	Total, Phosphorus	Н
153. Río Grande de Loíza	Río Cagüitas	PRER14I	Chromium VI	Н
154. Río Grande de Loíza	Río Cagüitas	PRER14I	Enterococcus	Н
155. Río Grande de Loíza	Río Cagüitas	PRER14I	Surfactants	Н
156. Río Grande de Loíza	Río Cagüitas	PRER14I	Temperature	Н
157. Río Grande de Loíza	Río Cagüitas	PRER14I	Total, Nitrogen	Н
158. Río Grande de Loíza	Río Cagüitas	PRER14I	Total, Phosphorus	Н
159. Río Grande de Loíza	Río Cagüitas	PRER14I	Turbidity	Н
160. Río Grande de Loíza	Rio Turabo	PRER14J	Chromium VI	Н
161. Río Grande de Loíza	Rio Turabo	PRER14J	Copper	Н
162. Río Grande de Loíza	Rio Turabo	PRER14J	Enterococcus	Н
163. Río Grande de Loíza	Rio Turabo	PRER14J	Lead	Н
164. Río Grande de Loíza	Rio Turabo	PRER14J	Temperature	Н
165. Río Grande de Loíza	Rio Turabo	PRER14J	Total, Phosphorus	Н
166. Río Grande de Loíza	Rio Turabo	PRER14J	Turbidity	Н
167. Río Grande de Loíza	Río Cayaguas	PRER14K	Chromium VI	Н
168. Río Grande de Loíza	Río Cayaguas	PRER14K	Copper	Н
169. Río Grande de Loíza	Río Cayaguas	PRER14K	Enterococcus	Н
170. Río Grande de Loíza	Río Cayaguas	PRER14K	Temperature	Н
171. Río Grande de Loíza	Río Cayaguas	PRER14K	Total, Nitrogen	Н
172. Río Grande de Loíza	Río Cayaguas	PRER14K	Total, Phosphorus	Н
173. Río Grande de Loíza	Río Cayaguas	PRER14K	Turbidity	Н
174. Río Blanco	Río Blanco	PRER30A	Turbidity	Н
175. Río Blanco	Quebrada Peña Pobre	PREQ30B	Dissolved Oxygen	Н
176. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	Chromium VI	Н
177. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	Enterococcus	Н
178. Río Grande de Patillas	Río Grande de Patillas	PRSR43A2	pН	Н
179. Río Coamo	Río Coamo	PRSR57A2	Chromium VI	Н
180. Río Coamo	Río Coamo	PRSR57A2	Cyanide	Н
181. Río Coamo	Río Coamo	PRSR57A2	Enterococcus	Н
182. Río Coamo	Río Coamo	PRSR57A2	рН	Н
183. Río Coamo	Río Coamo	PRSR57A2	Temperature	Н
184. Río Coamo	Río Coamo	PRSR57A2	Total, Nitrogen	Н

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185. Río Coamo	Río Cuyón	PRSR57B	Temperature	Н
186. Río Guayanilla	Río Guayanilla	PRSR67A	Ammonia	Н
187. Río Guayanilla	Río Guayanilla	PRSR67A	Chromium VI	Н
188. Río Guayanilla	Río Guayanilla	PRSR67A	Dissolved Oxygen	Н
189. Río Guayanilla	Río Guayanilla	PRSR67A	Enterococcus	Н
190. Río Guayanilla	Río Guayanilla	PRSR67A	Temperature	Н
191. Río Guayanilla	Río Guayanilla	PRSR67A	Total, Nitrogen	Н
192. Río Guayanilla	Río Guayanilla	PRSR67A	Total, Phosphorus	Н
193. Río Guayanilla	Río Guayanilla	PRSR67A	Turbidity	Н
194. Río Guanajibo	Río Guanajibo	PRWR77A	Chromium VI	Н
195. Río Guanajibo	Río Guanajibo	PRWR77A	Dissolved Oxygen	Н
196. Río Guanajibo	Río Guanajibo	PRWR77A	Enterococcus	Н
197. Río Guanajibo	Río Guanajibo	PRWR77A	Total, Phosphorus	Н
198. Río Guanajibo	Río Rosario	PRWR77C	Chromium VI	Н
199. Río Guanajibo	Río Rosario	PRWR77C	Enterococcus	Н
200. Río Guanajibo	Río Rosario	PRWR77C	Pesticides	Н
201. Río Guanajibo	Río Rosario	PRWR77C	Total, Phosphorus	Н
202. Río Guanajibo	Río Rosario	PRWR77C	Turbidity	Н
203. Río Guanajibo	Río Viejo	PRWR77D	Chromium VI	Н
204. Río Guanajibo	Río Viejo	PRWR77D	Cyanide	Н
205. Río Guanajibo	Río Viejo	PRWR77D	Dissolved Oxygen	Н
206. Río Guanajibo	Río Viejo	PRWR77D	Enterococcus	Н
207. Río Guanajibo	Río Viejo	PRWR77D	Total, Phosphorus	Н
208. Río Guanajibo	Río Viejo	PRWR77D	Turbidity	H
209. Río Guanajibo	Río Cupeyes	PRWR77G	Pesticides	Н
210. Río Yagüez	Río Yagüez	PRWR79A	Chromium VI	H
211. Río Yagüez	Río Yagüez	PRWR79A	Enterococcus	Н
212. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Chromium VI	Н
213. Río Grande de Añasco	Río Grande de Añasco	PRWR83A	Enterococcus	H
214. Río Grande de Añasco	Río Grande de Añasco Río Grande de Añasco	PRWR83A	pH	Н
215. Río Grande de Añasco	Río Grande de Añasco Río Grande de Añasco	PRWR83A	Turbidity	H
216. Río Grande de Añasco	Río Prieto	PRWR83I	Pesticides	H
217. Río Culebrinas	Río Culebrinas	PRWR95A	Chromium VI	Н
218. Río Culebrinas	Río Culebrinas Río Culebrinas	PRWR95A	1	Н
219. Río Culebrinas	Río Culebrinas Río Culebrinas	PRWR95A PRWR95A	Copper	Н
			Enterococcus	Н
220. Río Culebrinas	Río Culebrinas	PRWR95A	Pesticides	
221. Río Culebrinas	Río Culebrinas	PRWR95A	Total, Nitrogen	H
222. Río Culebrinas	Río Culebrinas	PRWR95A	Total, Phosphorus	Н
223. Río Culebrinas	Río Culebrinas	PRWR95A	Turbidity	Н
224. Río Culebrinas	Quebrada La Salle	PRWQ95F	Dissolved Oxygen	Н
225. Río Culebrinas	Quebrada La Salle	PRWQ95F	Pesticides	Н
226. Río Culebrinas	Quebrada El Salto	PRWQ95G	Dissolved Oxygen	Н
227. Río Culebrinas	Quebrada Grande De La Majagua	PRWQ95H	Pesticides	Н
228. Río Guajataca	Lago Guajataca	PRNL3A1	Dissolved Oxygen	Н
229. Río Guajataca	Lago Guajataca	PRNL3A1	pН	Н
230. Río Guajataca	Lago Guajataca	PRNL3A1	Temperature	Н
231. Río Guajataca	Lago Guajataca	PRNL3A1	Total, Nitrogen	Н

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232. Río Guajataca	Lago Guajataca	PRNL3A1	Total, Phosphorus	Н
233. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Arsenic	Н
234. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Copper	Н
235. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Dissolved Oxygen	Н
236. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	pН	Н
237. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Surfactants	Н
238. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Temperature	Н
239. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Total, Nitrogen	Н
240. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Total, Phosphorus	Н
241. Río Grande de Arecibo	Lago Dos Bocas	PRNL ₁ 7A1	Turbidity	Н
242. Río Grande de Arecibo	Lago Caonillas	PRNL ₂ 7C1	Copper	Н
243. Río Grande de Arecibo	Lago Caonillas	PRNL ₂ 7C1	Dissolved Oxygen	Н
244. Río Grande de Arecibo	Lago Caonillas	PRNL ₂ 7C1	Pesticides	Н
245. Río Grande de Arecibo	Lago Caonillas	PRNL ₂ 7C1	pH	Н
246. Río Grande de Arecibo	Lago Caonillas	PRNL ₂ 7C1	Total, Nitrogen	Н
247. Río Grande de Arecibo	Lago Caonillas	PRNL ₂ 7C1	Total, Phosphorus	Н
248. Río Grande de Arecibo	Lago Garzas	PRNL ₃ 7A3	Copper	Н
249. Río Grande de Arecibo	Lago Garzas	PRNL ₃ 7A3	Dissolved Oxygen	Н
250. Río Grande de Arecibo	Lago Garzas	PRNL ₃ 7A3	Lead	Н
251. Río Grande de Arecibo	Lago Garzas	PRNL ₃ 7A3	Pesticides	Н
252. Río Grande de Arecibo	Lago Garzas	PRNL ₃ 7A3	Total, Phosphorus	Н
253. Río Grande de Manatí	Lago Guineo	PRNL ₁ 8C1	Dissolved Oxygen	Н
254. Río Grande de Manatí	Lago Guineo	PRNL ₁ 8C1	Pesticides	Н
255. Río Grande de Manatí	Lago Matrullas	PRNL ₂ 8C1	Copper	Н
256. Río Grande de Manatí	Lago Matrullas	PRNL ₂ 8C1	Dissolved Oxygen	Н
257. Río Grande de Manatí	Lago Matrullas	PRNL ₂ 8C1	Lead	Н
258. Río Grande de Manatí	Lago Matrullas	PRNL ₂ 8C1	рH	Н
259. Río Grande de Manatí	Lago Matrullas	PRNL ₂ 8C1	Total, Nitrogen	Н
260. Río Grande de Manatí	Lago Matrullas	PRNL ₂ 8C1	Total, Phosphorus	Н
261. Río De La Plata	Lago La Plata	PREL ₁ 10A1	Arsenic	Н
262. Río De La Plata	Lago La Plata	PREL ₁ 10A1	Dissolved Oxygen	Н
263. Río De La Plata	Lago La Plata	PREL ₁ 10A1	Lead	Н
264. Río De La Plata	Lago La Plata	PREL ₁ 10A1	рН	Н
265. Río De La Plata	Lago La Plata	PREL ₁ 10A1	Temperature	Н
266. Río De La Plata	Lago La Plata	PREL ₁ 10A1	Total, Nitrogen	Н
267. Río De La Plata	Lago La Plata	PREL ₁ 10A1	Total, Phosphorus	Н
268. Río De La Plata	Lago Carite	PREL ₂ 10A5	Dissolved Oxygen	Н
269. Río De La Plata	Lago Carite	PREL ₂ 10A5	pН	Н
270. Río De La Plata	Lago Carite	PREL ₂ 10A5	Total, Nitrogen	Н
271. Río De La Plata	Lago Carite	PREL ₂ 10A5	Total, Phosphorus	Н
272. Río Bayamón	Lago Cidra	PREL12A2	Copper	Н
273. Río Bayamón	Lago Cidra	PREL12A2	Dissolved Oxygen	Н
274. Río Bayamón	Lago Cidra	PREL12A2	Lead	Н
275. Río Bayamón	Lago Cidra	PREL12A2	Total, Nitrogen	Н
276. Río Bayamón	Lago Cidra	PREL12A2	Total, Phosphorus	Н
277. Río Grande de Loíza	Lago Loíza	PREL14A1	Copper	Н
278. Río Grande de Loíza	Lago Loíza	PREL14A1	Dissolved Oxygen	Н

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279. Río Grande de Loíza	Lago Loíza	PREL14A1	Lead	Н
280. Río Grande de Loíza	Lago Loíza	PREL14A1	рН	Н
281. Río Grande de Loíza	Lago Loíza	PREL14A1	Temperature	Н
282. Río Grande de Loíza	Lago Loíza	PREL14A1	Total, Nitrogen	Н
283. Río Grande de Loíza	Lago Loíza	PREL14A1	Total, Phosphorus	Н
284. Río Grande de Loíza	Lago Loíza	PREL14A1	Turbidity	Н
285. Río Grande de Patillas	Lago Patillas	PRSL43A1	Dissolved Oxygen	Н
286. Río Grande de Patillas	Lago Patillas	PRSL43A1	Pesticides	Н
287. Río Grande de Patillas	Lago Patillas	PRSL43A1	pН	Н
288. Río Grande de Patillas	Lago Patillas	PRSL43A1	Temperature	Н
289. Río Grande de Patillas	Lago Patillas	PRSL43A1	Total, Phosphorus	Н
290. Río Grande de Añasco	Lago Guayo	PRWL83H	Dissolved Oxygen	Н
291. Río Grande de Añasco	Lago Guayo	PRWL83H	Pesticides	Н
292. Río Grande de Añasco	Lago Guayo	PRWL83H	pН	Н
293. Río Grande de Añasco	Lago Guayo	PRWL83H	Total, Nitrogen	Н
294. Río Grande de Añasco	Lago Guayo	PRWL83H	Total, Phosphorus	Н
295. Río Grande de Añasco	Lago Guayo	PRWL83H	Turbidity	Н
296. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Ammonia	Н
297. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Chromium VI	Н
298. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Copper	Н
299. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Dissolved Oxygen	Н
300. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Enterococcus	Н
301. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Lead	Н
302. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Surfactants	Н
303. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Temperature	Н
304. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Total, Nitrogen	Н
305. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Total, Phosphorus	Н
306. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A2	Turbidity	Н
307. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Ammonia	Н
308. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Chromium VI	Н
309. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Dissolved Oxygen	Н
310. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Enterococcus	Н
311. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	pН	Н
312. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Surfactants	Н
313. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Temperature	Н
314. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Total, Nitrogen	Н
315. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Total, Phosphorus	Н
316. San Juan Bay Estuary	San Juan Bay Estuary	PREE13A3	Turbidity	Н

Table 48: Assessment Units/ 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	M
				Oxygen	
2.	Río Herrera	Río Herrera	PRER15A	Turbidity	M
3.	Río Espíritu Santo	Río Espíritu Santo	PRER16A	Chromium VI	M

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
4.	Río Espíritu Santo	Río Espíritu Santo	PRER16A	Enterococcus	M
5.	Quebrada Mata de	Quebrada Mata de Plátano	PREQ18A	Dissolved	M
	Plátano			Oxygen	
6.	Quebrada Mata de	Quebrada Mata de Plátano	PREQ18A	Surfactants	M
	Plátano				
7.	Quebrada Fajardo	Quebrada Fajardo	PREQ21A	Dissolved	M
	0.1.1.5.1	0 1 1 5 1	DDEO214	Oxygen	24
8.	Quebrada Fajardo	Quebrada Fajardo	PREQ21A	pH	M
9.	Quebrada Fajardo	Quebrada Fajardo	PREQ21A	Temperature	M
10.	Río Fajardo	Río Fajardo	PRER22A	Chromium VI	M
11.	Río Fajardo	Río Fajardo	PRER22A	Enterococcus	M M
12.	Río Fajardo	Río Fajardo	PRER22A	Temperature Total Nitrogen	M
13.	Río Fajardo	Río Fajardo	PRER22A	Total, Nitrogen Total,	
14.	Río Fajardo	Río Fajardo	PRER22A	Phosphorus	M
15.	Río Demajagua	Río Demajagua	PRER23A	Dissolved	M
13.	Kio Demajagua	Kio Demajagua	FKLKZSA	Oxygen	IVI
16.	Quebrada Ceiba	Quebrada Ceiba	PREQ24A	Dissolved	M
10.	Queorada ceroa	Quebrada eciba	TKLQ24A	Oxygen	171
17.	Quebrada Ceiba	Quebrada Ceiba	PREQ24A	Surfactants	M
18.	Quebrada Aguas Claras	Quebrada Aguas Claras	PREQ25A	Dissolved	M
10.	Queeruda riguas Ciaras	Queeruda riguas eraras	11622311	Oxygen	111
19.	Río Daguao	Río Daguao	PRER26A	Dissolved	M
	1110 2 48440	Tuo Duguno	1112112011	Oxygen	1.1
20.	Quebrada Botijas	Quebrada Botijas	PREQ28A	Dissolved	M
	C	Carrier states		Oxygen	
21.	Río Antón Ruiz	Río Antón Ruiz	PRER31A	Dissolved	M
				Oxygen	
22.	Río Antón Ruiz	Río Antón Ruiz	PRER31A	Temperature	M
23.	Quebrada Frontera	Quebrada Frontera	PREQ32A	Dissolved	M
				Oxygen	
24.	Río Humacao	Río Humacao	PRER33A	Ammonia	M
25.	Río Humacao	Río Humacao	PRER33A	Chromium VI	M
26.	Río Humacao	Río Humacao	PRER33A	Copper	M
27.	Río Humacao	Río Humacao	PRER33A	Enterococcus	M
28.	Río Humacao	Río Humacao	PRER33A	Mercury	M
29.	Río Humacao	Río Humacao	PRER33A	pН	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,	M
	D/ 11	7.		Phosphorus	
33.	Río Humacao	Río Humacao	PRER33A	Turbidity	M
34.	Río Candelero	Río Candelero	PRER34A	Dissolved	M
	D. C.	Di G	DDED 25 :	Oxygen	
35.	Río Guayanés	Río Guayanés	PRER35A	Chromium VI	M
36.	Río Guayanés	Río Guayanés	PRER35A	Copper	M
37.	Río Guayanés	Río Guayanés	PRER35A	Enterococcus	M

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
38.	Río Guayanés	Río Guayanés	PRER35A	Lead	M
39.	Río Guayanés	Río Guayanés	PRER35A	pН	M
40.	Río Guayanés	Río Guayanés	PRER35A	Temperature	M
41.	Río Guayanés	Río Guayanés	PRER35A	Total, Nitrogen	M
42.	Río Guayanés	Río Guayanés	PRER35A	Total, Phosphorus	M
43.	Río Guayanés	Río Guayanés	PRER35A	Turbidity	M
44.	Río Maunabo	Río Maunabo	PRER37A	Chromium VI	M
45.	Río Maunabo	Río Maunabo	PRER37A	Enterococcus	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	pH	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
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	Dissolved Oxygen	M
68.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A1	Enterococcus	M
69.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A1	Temperature	M
70.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Chromium VI	M
71.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Enterococcus	M
72.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	рН	M

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
73.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Total, Phosphorus	M
74.	Río Bucaná-Cerrillos	Río Bucaná Cerrillos	PRSR62A2	Turbidity	M
75.	Río Portugués	Río Portugués	PRSR63A	Chromium VI	M
76.	Río Portugués	Río Portugués	PRSR63A	Enterococcus	M
77.	Río Portugués	Río Portugués	PRSR63A	Temperature	M
78.	Río Portugués	Río Portugués	PRSR63A	Total, Nitrogen	M
79.	Río Portugués	Río Portugués	PRSR63A	Total, Phosphorus	M
80.	Río Portugués	Río Portugués	PRSR63A	Turbidity	M
81.	Río Matilde-Pastillo	Río Matilde-Pastillo	PRSR64A	Temperature	M
82.	Río Tallaboa	Río Tallaboa	PRSR65A	рН	M
83.	Río Tallaboa	Río Tallaboa	PRSR65A	Temperature	M
84.	Río Yauco	Río Yauco	PRSR68A1	Dissolved Oxygen	M
85.	Río Yauco	Río Yauco	PRSR68A1	Total, Phosphorus	M
86.	Río Loco	Río Loco	PRSR69A1	Dissolved Oxygen	M
87.	Río Loco	Río Loco	PRSR69A1	Temperature	M
88.	Río Loco	Río Loco	PRSR69A1	Turbidity	M
89.	Quebrada Zumbón	Quebrada Zumbón	PRWQ72A	Dissolved Oxygen	M
90.	Quebrada Zumbón	Quebrada Zumbón	PRWQ72A	Surfactants	M
91.	Quebrada González	Quebrada González	PRWQ73A	Dissolved Oxygen	M
92.	Quebrada Los Pajaritos	Quebrada Los Pajaritos	PRWQ74A	Dissolved Oxygen	M
93.	Caño Merle	Caño Merle	PRWK78A	Dissolved Oxygen	M
94.	Caño Merle	Caño Merle	PRWK78A	Surfactants	M
95.	Río Herrera	Río Herrera	PREE15A	Surfactants	M
96.	Río Espíritu Santo	Río Espíritu Santo	PREE16A	Dissolved Oxygen	M
97.	Río Espíritu Santo	Río Espíritu Santo	PREE16A	Surfactants	M
98.	Río Demajagua	Río Demajagua	PREE23A	Turbidity	M
99.	Río Candelero	Río Candelero	PREE34A	Dissolved Oxygen	M
100.	Río Candelero	Río Candelero	PREE34A	Temperature	M
101.	Río Guayanés	Río Guayanés	PREE35A	Arsenic	M
102.	Río Guayanés	Río Guayanés	PREE35A	Turbidity	M
103.	Caño Santiago	Caño Santiago	PREE35.1	Dissolved Oxygen	M
104.	Caño Santiago	Caño Santiago	PREE35.1	Surfactants	M
105.	Caño Santiago	Caño Santiago	PREE35.1	Turbidity	M
106.	Río Matilde-Pastillo	Río Matilde-Pastillo	PRSE64A	Turbidity	M
107.	Río Tallaboa	Río Tallaboa	PRSE65A	Turbidity	M

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
108.	Caño Merle	Caño Merle	PRWE78A	Surfactants	M
109.	Quebrada Grande de	Quebrada Grande de	PRWE88A	Dissolved	M
	Calvache	Calvache		Oxygen	
110.	Río Guayabo	Río Guayabo	PRWE94A	Dissolved	M
				Oxygen	
111.	Quebrada Melanía	Lago Melanía	PRSL50A	Enterococcus	M
112.	Quebrada Melanía	Lago Melanía	PRSL50A	Mercury	M
113.	Quebrada Melanía	Lago Melanía	PRSL50A	Pesticides	M
114.	Quebrada Melanía	Lago Melanía	PRSL50A	Temperature	M
115.	Quebrada Melanía	Lago Melanía	PRSL50A	Total, Nitrogen	M
116.	Quebrada Melanía	Lago Melanía	PRSL50A	Total, Phosphorus	M
117.	Río Jacaguas	Lago Guayabal	PRSL ₁ 60A1	Dissolved Oxygen	M
118.	Río Jacaguas	Lago Guayabal	PRSL ₁ 60A1	Pesticides	M
119.	Río Jacaguas	Lago Guayabal	PRSL ₁ 60A1	pН	M
120.	Río Jacaguas	Lago Guayabal	PRSL ₁ 60A1	Total, Nitrogen	M
121.	Río Jacaguas	Lago Guayabal	PRSL ₁ 60A1	Total, Phosphorus	M
122.	Río Jacaguas	Lago Toa vaca	PRSL ₂ 60A1	Dissolved Oxygen	M
123.	Río Jacaguas	Lago Toa vaca	PRSL ₂ 60A1	pH	M
124.	Río Jacaguas	Lago Toa vaca	PRSL ₂ 60A1	Temperature	M
125.	Río Jacaguas	Lago Toa vaca	PRSL ₂ 60A1	Total, Nitrogen	M
126.	Río Jacaguas	Lago Toa vaca	PRSL ₂ 60A1	Total, Phosphorus	M
127.	Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Dissolved Oxygen	M
128.	Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	pН	M
129.	Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Temperature	M
130.	Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Total, Nitrogen	M
131.	Río Bucaná-Cerrillos	Lago Cerrillos	PRSL62A1	Total, Phosphorus	M
132.	Río Yauco	Lago Luchetti	PRSL68A1	Dissolved Oxygen	M
133.	Río Yauco	Lago Luchetti	PRSL68A1	Pesticides	M
134.	Río Yauco	Lago Luchetti	PRSL68A1	pН	M
135.	Río Yauco	Lago Luchetti	PRSL68A1	Total, Nitrogen	M
136.	Río Yauco	Lago Luchetti	PRSL68A1	Total, Phosphorus	M
137.	Río Yauco	Lago Luchetti	PRSL68A1	Turbidity	M
138.	Río Loco	Lago Loco	PRSL69A	Dissolved Oxygen	M
139.	Río Loco	Lago Loco	PRSL69A	pH	M
140.	Río Loco	Lago Loco	PRSL69A	Total, Nitrogen	M
141.	Río Loco	Lago Loco	PRSL69A	Total, Phosphorus	M

142. Quebrada Los Ramos PRWQ89A Dissolved Coxygen 143. Quebrada Piletas Quebrada Piletas PRWQ91A Dissolved Coxygen 144. Caño Boquilla Caño Boquilla PRWE82A Dissolved Coxygen 145. Caño Boquilla Caño Boquilla PRWE82A Dissolved Coxygen 146. Caño Boquilla Caño Boquilla PRWE82A Turbidity L 147. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Copper L 148. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Copper L 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved Oxygen 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dilan Grease L 150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dilan Grease L 151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dilan Grease L 152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dilan Grease L 153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Temperature L 154. Laguna Joyudas Laguna Joyudas PRWN0005 Copper L 155. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved L 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 161. Laguna Grande Laguna Grande PREN0011 Dissolved L 162. Laguna Grande Laguna Grande PREN0012 Dissolved L 163. Laguna Grande Laguna Grande PREN0013 Dissolved L 164. Laguna Grande Laguna Grande PREN0013 Dissolved L 165. Laguna Grande Laguna Grande PREN0013 Dissolved L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved L 169. Laguna Pozuelo Laguna Pozuelo PREN0015 Dissolved L 170. Laguna Pozuelo Laguna Pozuelo PREN0015 Dissolved L 171.		Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
143. Quebrada Piletas Quebrada Piletas PRWQ91A Dissolved Oxygen	142.	Quebrada Los Ramos	Quebrada Los Ramos	PRWQ89A		L
144. Caño Boquilla Caño Boquilla PRWE82A Dissolved L Oxygen 145. Caño Boquilla Caño Boquilla PRWE82A Surfactants L 146. Caño Boquilla Caño Boquilla PRWE82A Surfactants L 147. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Copper L 148. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L Oxygen 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L Oxygen 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Enterococcus L 150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L 151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L 152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L 153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Temperature L 154. Laguna Joyudas Laguna Joyudas PRWN0005 Dissolved L 155. Laguna Joyudas Laguna Joyudas PRWN0005 Dissolved L 156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved L 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 158. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 161. Laguna Grande Laguna Grande PREN0012 Dissolved L 162. Laguna Grande Laguna Grande PREN0012 Dissolved L 163. Laguna Grande Laguna Grande PREN0013 Dissolved L 164. Laguna Grande Laguna Grande PREN0012 Dissolved L 165. Laguna Grande Laguna Grande PREN0013 Dissolved L 166. Laguna Grande Laguna Grande PREN0013 Dissolved L 167. Laguna Grande Laguna Ceiba PREN0014 Dissolved L 168. Laguna Ceiba Laguna Ceiba PREN0015 Dissolved L 169. Laguna Pozuelo Laguna Pozuelo PREN0015 Dissolved						
144. Caño Boquilla Caño Boquilla PRWE82A Dissolved Oxygen 145. Caño Boquilla Caño Boquilla PRWE82A Surfactants L 146. Caño Boquilla Caño Boquilla PRWE82A Turbidity L 147. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L 148. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L 150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L 151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 PH L 152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 PH L 153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 PH L 154. Laguna Joyudas Laguna Joyudas PRWN0005 Copper L 155. Laguna Tortuguero Laguna Joyudas PRWN0005 Copper L 156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved L 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Turbidity L 162. Laguna Grande Laguna Grande PREN0012 Dissolved L 163. Laguna Grande Laguna Grande PREN0012 Dissolved L 164. Laguna Grande Laguna Grande PREN0012 Dissolved L 165. Laguna Ceiba Laguna Grande PREN0013 Dissolved L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Ceiba Laguna Ceiba PREN0014 Dissolved L 168. Laguna Ceiba Laguna Ceiba PREN0015 Dissolved L 169. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved L 170. Laguna Pozuelo Laguna Pozuelo PREN0015 Dissolved L 171. Laguna Pozuelo Laguna Pozuelo PREN0015 Dissolved L 172. Laguna Mar Negro Laguna Mar Negro PREN0015 D	143.	Quebrada Piletas	Quebrada Piletas	PRWQ91A		L
Caño Boquilla Caño Boquilla PRWE82A Surfactants L					20	_
145. Caño Boquilla Caño Boquilla PRWE82A Surfactants L 146. Caño Boquilla Caño Boquilla PRWE82A Turbidity L 147. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Copper L 148. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved Oxygen 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved Coyygen 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L 150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Defined Dil and Grease L 151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Defined Defined Defined Defined 152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Defined Defined Defined Defined 153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Turbidity L 154. Laguna Joyudas Laguna Joyudas PRWN0005 Dissolved Doxygen 155. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved Doxygen 156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved Doxygen 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved Doxygen 158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved Doxygen 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved Doxygen 161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 162. Laguna Grande Laguna Grande PREN0012 Dissolved L 163. Laguna Grande Laguna Grande PREN0012 Dissolved L 164. Laguna Grande Laguna Grande PREN0013 Dissolved L 165. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Pozuelo Laguna Pozuelo PREN0014 Copper L 168. Laguna Ceiba Laguna Ceiba PREN0014 Dissolved Doxygen Defined Dissolved Doxygen Defined Dissol	144.	Caño Boquilla	Caño Boquilla	PRWE82A		L
146. Caño Boquilla Caño Boquilla PRWE82A Turbidity L 147. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Copper L 148. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L 150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L 151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L 152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Temperature L 153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Turbidity L 154. Laguna Joyudas Laguna Joyudas PRW0005 Copper L 155. Laguna Joyudas Laguna Joyudas PRW0005 Dissolved L 156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved Dissolved C 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 162. Laguna Grande Laguna Grande PREN0011 Dissolved L 163. Laguna Grande Laguna Grande PREN0012 Dissolved L 164. Laguna Grande Laguna Grande PREN0012 Dissolved L 165. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Grande Laguna Ceiba PREN0013 Dissolved L 168. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 169. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved Dosygen L 169. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved Dosygen L 170. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved Dosygen L 171. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved Dosygen Dissolved Dosygen Dissolved Dosygen		G ~ D '11	G ~ P '''	DDIVIE 02 A		Ţ
147. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved L Oxygen			*	+		
148. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dissolved Oxygen 149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Entercoccus L 150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Oil and Grease L 151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 PH L 152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Turbidity L 153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Turbidity L 154. Laguna Joyudas Laguna Joyudas PRWN0005 Copper L 155. Laguna Joyudas Laguna Joyudas PRWN0005 Dissolved L 156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved L 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 162. Laguna Grande Laguna Grande PREN0012 Dissolved L 163. Laguna Grande Laguna Grande PREN0012 Dissolved L 164. Laguna Grande Laguna Grande PREN0012 Dissolved L 165. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 168. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 169. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved L 169. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved L 170. Laguna Pozuelo Laguna Pozuelo PREN0014 Dissolved L 171. Laguna Pozuelo Laguna Pozuelo PREN0015 Dissolved L 172. Laguna Mar Negro Laguna Mar Negro PREN0015 Dissolved L 173. Laguna Mar Negro Laguna Mar Negro PREN0015 Dissolved L 174. Laguna Mar Negro Laguna Mar Negro PREN0015 Dissolved L 175. Laguna Mar Negro L					•	
San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Enterococcus L		·	San Juan Bay Estuary			
149. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Enterococcus L	148.	San Juan Bay Estuary	San Juan Bay Estuary	PREEI3AI		L
150. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Dil and Grease L	1.40	C I D	· ·	DDEE12 A 1		т
151. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Temperature L	_	· ·	•			
152. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Temperature L						
153. San Juan Bay Estuary San Juan Bay Estuary PREE13A1 Turbidity L 154. Laguna Joyudas Laguna Joyudas PRWN0005 Copper L 155. Laguna Joyudas Laguna Joyudas PRWN0005 Dissolved Coyxgen 156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved Coxygen 157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved Dissolved Dissolved Coxygen 158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 PH L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Turbidity L 162. Laguna Grande Laguna Grande PREN0012 Dissolved L 163. Laguna Grande Laguna Grande PREN0012 Enterococcus L 164. Laguna Grande Laguna Grande PREN0012 PH L 165. Laguna Ceiba Laguna Ceiba PREN0013 Copper L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 168. Laguna Ceiba Laguna Ceiba PREN0013 Enterococcus L 169. Laguna Ceiba Laguna Ceiba PREN0013 Enterococcus L 169. Laguna Pozuelo Laguna Pozuelo PRSN0014 Dissolved L 170. Laguna Pozuelo Laguna Pozuelo PRSN0014 Dissolved L 171. Laguna Pozuelo Laguna Pozuelo PRSN0014 Dissolved L 172. Laguna Mar Negro Laguna Mar Negro PRSN0015 Copper L 173. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 176. Laguna Mar Negro PRSN0015 PH L 177. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 178. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 178. Laguna Mar Negro Laguna Mar Ne					1	
154. Laguna Joyudas Laguna Joyudas PRWN0005 Copper L		· · ·			•	
155. Laguna Joyudas			, , ,		•	
Description	_					
156. Laguna Tortuguero Laguna Tortuguero PRNN0006 Dissolved Oxygen Coxygen	155.	Laguna Joyudas	Laguna Joyudas	PRWN0005		L
157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved Dissolved Doxygen			T	DD M MOOO C		· ·
157. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 Dissolved Oxygen L	156.	Laguna Tortuguero	Laguna Tortuguero	PRNN0006		L
Oxygen I58. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 pH L	1.55	Y W D 1 1	Y M D 1 1	DDAN 10007		T
158. Laguna Mata Redonda Laguna Mata Redonda PRNN0007 pH L 159. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L 160. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved L 161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Turbidity L 162. Laguna Grande Laguna Grande PREN0012 Dissolved Oxygen 163. Laguna Grande Laguna Grande PREN0012 Enterococcus L 164. Laguna Grande Laguna Grande PREN0012 pH L 165. Laguna Ceiba Laguna Ceiba PREN0013 Copper L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved Oxygen 167. Laguna Ceiba Laguna Ceiba PREN0013 Enterococcus L 168. Laguna Ceiba Laguna Ceiba PREN0013 PH L 169. Laguna Pozuelo Laguna Pozuelo PRSN0014 Copper L 170. Laguna Pozuelo Laguna Pozuelo PRSN0014 Dissolved L 171. Laguna Pozuelo Laguna Pozuelo PRSN0014 Dissolved L 172. Laguna Pozuelo Laguna Pozuelo PRSN0014 Temperature L 173. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 174. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 PH L 176. Laguna Mar Negro Lagun	157.	Laguna Mata Redonda	Laguna Mata Redonda	PRNN0007		L
Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Copper L	150	Laguna Mata Dadanda	Lagura Mata Dadar da	DDNIN10007		т
Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Dissolved Oxygen Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Turbidity Laguna Grande Laguna Grande PREN0012 Dissolved Laguna Grande PREN0012 Dissolved Laguna Grande PREN0012 Enterococcus Laguna Grande Laguna Grande PREN0012 PREN0012 PREN0012 PREN0013 Copper Laguna Ceiba Laguna Ceiba PREN0013 Dissolved Laguna Ceiba Laguna Ceiba PREN0013 Dissolved Laguna Ceiba Dissolved Laguna Ceiba PREN0013 Enterococcus Laguna Ceiba Laguna Ceiba PREN0013 Enterococcus Laguna Ceiba PREN0013 PREN0013 PREN0013 PREN0014 Dissolved Laguna Pozuelo Laguna Pozuelo PREN0013 PREN0014 Copper Laguna Pozuelo PREN0014 Dissolved Laguna Pozuelo PREN0014 Dissolved Laguna Pozuelo PREN0014 Dissolved Laguna Pozuelo PREN0014 Dissolved Laguna Pozuelo PREN0014 Temperature Laguna Pozuelo PREN0015 Copper Laguna Mar Negro PREN0015 Dissolved Dissolved Dissolved Laguna Mar Negro PREN0015 Dissolved Dissolved Dissolved Dissolved Laguna Mar Negro PREN0015 Dissolved Dis					*	
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161. Laguna Aguas Prieta Laguna Aguas Prieta PREN0011 Turbidity L 162. Laguna Grande Laguna Grande PREN0012 Dissolved Doxygen 163. Laguna Grande Laguna Grande PREN0012 Enterococcus L 164. Laguna Grande Laguna Grande PREN0012 pH L 165. Laguna Ceiba Laguna Ceiba PREN0013 Copper L 166. Laguna Ceiba Laguna Ceiba PREN0013 Dissolved L 167. Laguna Ceiba Laguna Ceiba PREN0013 Enterococcus L 168. Laguna Ceiba Laguna Ceiba PREN0013 pH L 169. Laguna Pozuelo Laguna Pozuelo PRSN0014 Copper L 170. Laguna Pozuelo Laguna Pozuelo PRSN0014 Dissolved L 171. Laguna Pozuelo Laguna Pozuelo PRSN0014 PH L 172. Laguna Pozuelo Laguna Pozuelo PRSN0014 Temperature L 173. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 174. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved Doxygen DRSN0015 Dissolved L 175. Laguna Mar Negro Laguna Mar Negro PRSN0015 Dissolved Doxygen DRSN0015 Dissolved L 175. Laguna Mar Negro PRSN0015 Dissolved Doxygen DRSN0015 DISSOlved DOxygen DRSN0015 DISSOlved DOXYGEN DISSOLVED DISSOLVE	160.	Laguna Aguas Prieta	Laguna Aguas Prieta	PRENUUTI		L
162.Laguna GrandeLaguna GrandePREN0012Dissolved OxygenL163.Laguna GrandeLaguna GrandePREN0012EnterococcusL164.Laguna GrandePREN0012pHL165.Laguna CeibaLaguna CeibaPREN0013CopperL166.Laguna CeibaPREN0013Dissolved OxygenL167.Laguna CeibaLaguna CeibaPREN0013EnterococcusL168.Laguna CeibaPREN0013PHL169.Laguna PozueloPREN0013pHL170.Laguna PozueloPRSN0014CopperL171.Laguna PozueloPRSN0014Dissolved OxygenL171.Laguna PozueloPRSN0014PHL172.Laguna PozueloPRSN0014TemperatureL173.Laguna Mar NegroPRSN0015CopperL174.Laguna Mar NegroPRSN0015Dissolved OxygenL175.Laguna Mar NegroPRSN0015Dissolved 	161	Laguna Aguas Driata	Laguna Aguas Prioto	DDENI0011		T
Oxygen Coxygen					•	
163.Laguna GrandeLaguna GrandePREN0012EnterococcusL164.Laguna GrandeLaguna GrandePREN0012pHL165.Laguna CeibaLaguna CeibaPREN0013CopperL166.Laguna CeibaLaguna CeibaDissolved OxygenL167.Laguna CeibaLaguna CeibaPREN0013EnterococcusL168.Laguna CeibaPREN0013pHL169.Laguna PozueloPRSN0014CopperL170.Laguna PozueloPRSN0014Dissolved OxygenL171.Laguna PozueloPRSN0014pHL172.Laguna PozueloPRSN0014TemperatureL173.Laguna Mar NegroLaguna Mar NegroPRSN0015CopperL174.Laguna Mar NegroLaguna Mar NegroPRSN0015Dissolved Oxygen175.Laguna Mar NegroLaguna Mar NegroPRSN0015pHL	102.	Laguna Grande	Laguna Grande	FRENOUIZ		L
164. Laguna GrandeLaguna GrandePREN0012pHL165. Laguna CeibaLaguna CeibaPREN0013CopperL166. Laguna CeibaLaguna CeibaPREN0013DissolvedL167. Laguna CeibaLaguna CeibaPREN0013EnterococcusL168. Laguna CeibaLaguna CeibaPREN0013pHL169. Laguna PozueloLaguna PozueloPRSN0014CopperL170. Laguna PozueloLaguna PozueloPRSN0014DissolvedL171. Laguna PozueloLaguna PozueloPRSN0014pHL172. Laguna PozueloLaguna PozueloPRSN0014TemperatureL173. Laguna Mar NegroLaguna Mar NegroPRSN0015CopperL174. Laguna Mar NegroPRSN0015DissolvedL175. Laguna Mar NegroLaguna Mar NegroPRSN0015pHL	163	Laguna Grande	Laguna Grande	PRENI0012		T
165.Laguna CeibaLaguna CeibaPREN0013CopperL166.Laguna CeibaPREN0013Dissolved OxygenL167.Laguna CeibaPREN0013EnterococcusL168.Laguna CeibaPREN0013pHL169.Laguna PozueloLaguna PozueloPRSN0014CopperL170.Laguna PozueloPRSN0014Dissolved OxygenL171.Laguna PozueloPRSN0014pHL172.Laguna PozueloPRSN0014TemperatureL173.Laguna Mar NegroPRSN0015CopperL174.Laguna Mar NegroPRSN0015Dissolved Dis						
166.Laguna CeibaPREN0013Dissolved Oxygen167.Laguna CeibaPREN0013Enterococcus168.Laguna CeibaPREN0013PHL169.Laguna PozueloPREN0014CopperL170.Laguna PozueloPRSN0014Dissolved OxygenL171.Laguna PozueloPRSN0014PHL172.Laguna PozueloPRSN0014PHL173.Laguna PozueloPRSN0014TemperatureL174.Laguna Mar NegroPRSN0015CopperL175.Laguna Mar NegroPRSN0015PRSN0015Dissolved Oxygen175.Laguna Mar NegroLaguna Mar NegroPRSN0015PHL		<u> </u>				
Oxygen		<u> </u>	<u> </u>			
167.Laguna CeibaLaguna CeibaPREN0013EnterococcusL168.Laguna CeibaPREN0013pHL169.Laguna PozueloPRSN0014CopperL170.Laguna PozueloPRSN0014Dissolved OxygenL171.Laguna PozueloPRSN0014pHL172.Laguna PozueloPRSN0014TemperatureL173.Laguna Mar NegroPRSN0015CopperL174.Laguna Mar NegroPRSN0015Dissolved OxygenL175.Laguna Mar NegroPRSN0015pHL	100.	Lagana Ceroa	Laguna Celoa	TRENO013		L
168. Laguna CeibaLaguna CeibaPREN0013pHL169. Laguna PozueloLaguna PozueloPRSN0014CopperL170. Laguna PozueloLaguna PozueloPRSN0014Dissolved OxygenL171. Laguna PozueloLaguna PozueloPRSN0014pHL172. Laguna PozueloLaguna PozueloPRSN0014TemperatureL173. Laguna Mar NegroLaguna Mar NegroPRSN0015CopperL174. Laguna Mar NegroLaguna Mar NegroPRSN0015Dissolved OxygenL175. Laguna Mar NegroLaguna Mar NegroPRSN0015pHL	167	Laguna Ceiba	Laguna Ceiha	PREN0013		T.
169. Laguna PozueloLaguna PozueloPRSN0014CopperL170. Laguna PozueloLaguna PozueloPRSN0014Dissolved OxygenL171. Laguna PozueloLaguna PozueloPRSN0014pHL172. Laguna PozueloLaguna PozueloPRSN0014TemperatureL173. Laguna Mar NegroPRSN0015CopperL174. Laguna Mar NegroPRSN0015Dissolved OxygenL175. Laguna Mar NegroLaguna Mar NegroPRSN0015pHL	_	-	<u> </u>			
170.Laguna PozueloLaguna PozueloPRSN0014Dissolved OxygenL171.Laguna PozueloPRSN0014pHL172.Laguna PozueloPRSN0014TemperatureL173.Laguna Mar NegroPRSN0015CopperL174.Laguna Mar NegroPRSN0015Dissolved OxygenL175.Laguna Mar NegroPRSN0015pHL		ŭ				
Oxygen 171. Laguna Pozuelo Laguna Pozuelo PRSN0014 pH L						
171.Laguna PozueloLaguna PozueloPRSN0014pHL172.Laguna PozueloPRSN0014TemperatureL173.Laguna Mar NegroPRSN0015CopperL174.Laguna Mar NegroPRSN0015Dissolved OxygenL175.Laguna Mar NegroPRSN0015pHL	170.	Luguiia i ozucio	Luguiiu i Ozucio	110110017		
172. Laguna PozueloLaguna PozueloPRSN0014TemperatureL173. Laguna Mar NegroLaguna Mar NegroPRSN0015CopperL174. Laguna Mar NegroLaguna Mar NegroPRSN0015Dissolved OxygenL175. Laguna Mar NegroLaguna Mar NegroPRSN0015pHL	171	Laguna Pozuelo	Laguna Pozuelo	PRSN0014		I.
173. Laguna Mar NegroLaguna Mar NegroPRSN0015CopperL174. Laguna Mar NegroLaguna Mar NegroPRSN0015Dissolved OxygenL175. Laguna Mar NegroLaguna Mar NegroPRSN0015pHL		-	<u> </u>			
174. Laguna Mar NegroLaguna Mar NegroPRSN0015Dissolved OxygenL175. Laguna Mar NegroLaguna Mar NegroPRSN0015pHL			-		•	
Oxygen 175. Laguna Mar Negro PRSN0015 pH L						
175. Laguna Mar Negro PRSN0015 pH L	1, 1,			110110015		
	175.	Laguna Mar Negro	Laguna Mar Negro	PRSN0015		I.
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	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
177.	Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Dissolved Oxygen	L
178.	Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Temperature	L
179.	Laguna Punta Arenas	Laguna Punta Arenas	PRSN0016	Turbidity	L
180.	Laguna Tiburones	Laguna Tiburones	PRSN0017	Copper	L
181.	Laguna Tiburones	Laguna Tiburones	PRSN0017	Dissolved	L
				Oxygen	
182.	Laguna Tiburones	Laguna Tiburones	PRSN0017	pH	L
183.	Laguna Tiburones	Laguna Tiburones	PRSN0017	Temperature	L
184.	Laguna Tiburones	Laguna Tiburones	PRSN0017	Turbidity	L
185.	Laguna Salinas	Laguna Salinas	PRSN0018	Copper	L
186.	Laguna Salinas	Laguna Salinas	PRSN0018	Dissolved	L
				Oxygen	
187.	Laguna Salinas 1	Fraternidad	PRSN0019	Copper	L
188.	Laguna Salinas 1	Fraternidad	PRSN0019	Dissolved	L L
				Oxygen	
189.	Laguna Salinas 1	Fraternidad	PRSN0019	Turbidity	L
190.	Laguna Cabo Rojo 2	Candelaria	PRSN0020	Copper	L
191.	Laguna Cabo Rojo 2	Candelaria	PRSN0020	Dissolved	L
				Oxygen	
192.	Laguna Cabo Rojo 2	Candelaria	PRSN0020	Temperature	L
193.	Laguna Cabo Rojo 2	Candelaria	PRSN0020	Turbidity	L
194.	Laguna Cabo Rojo 3	El Faro	PRSN0021	Copper	L
195.	Laguna Cabo Rojo 3	El Faro	PRSN0021	Dissolved	L
1,0,	Lugumu cues resje e	211 4110	11101(0021	Oxygen	
196.	Laguna Cabo Rojo 3	El Faro	PRSN0021	Turbidity	L
197.	Caño Boquerón	Caño Boquerón	PRSN0022	Copper	L
198.	Caño Boquerón	Caño Boquerón	PRSN0022	Dissolved	L
1,0.	cumo Boqueron	cumo Doqueron	11.51,0022	Oxygen	
199.	Caño Boquerón	Caño Boquerón	PRSN0022	pH	L
200.	Caño Boquerón	Caño Boquerón	PRSN0022	Turbidity	L
	Laguna Guaniquilla	Laguna Guaniquilla	PRSN0023	Dissolved	L
				Oxygen	_
202.	Laguna Guaniquilla	Laguna Guaniquilla	PRSN0023	pH	L
	Laguna Guaniquilla	Laguna Guaniquilla	PRSN0023	Turbidity	L
204.	Punta Borinquén to	Punta Borinquén to Punta	PRNC01	Copper	L
	Punta Sardina	Sardina	114,001	Сорры	
205.	Punta Borinquén to	Punta Borinquén to Punta	PRNC01	Thallium	L
	Punta Sardina	Sardina			_
206.	Punta Sardina to Punta	Punta Sardina to Punta	PRNC02	Copper	L
	Manglillo	Manglillo		11.	
207.	Punta Sardina to Punta	Punta Sardina to Punta	PRNC02	Enterococcus	L
	Manglillo	Manglillo			
208.	Punta Sardina to Punta	Punta Sardina to Punta	PRNC02	Lead	L
	Manglillo	Manglillo			
209.	Punta Sardina to Punta	Punta Sardina to Punta	PRNC02	Thallium	L
	Manglillo	Manglillo			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
210.	Punta Sardina to Punta Manglillo	Punta Sardina to Punta Manglillo	PRNC02	Turbidity	L
211.	Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Copper	L
212.	Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Enterococcus	L
213.	Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Temperature	L
	Punta Manglillo to Punta Morillos	Punta Manglillo to Punta Morillos	PRNC03	Turbidity	L
	Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Copper	L
216.	Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Enterococcus	L
217.	Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Mercury	L
218.	Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Nickel	L
	Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	pН	L
220.	Manatí	Punta Morrillos to Punta Manatí	PRNC04	Thallium	L
221.	Punta Morrillos to Punta Manatí	Punta Morrillos to Punta Manatí	PRNC04	Turbidity	L
222.	Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Copper	L
223.	Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Enterococcus	L
224.	Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Mercury	L
225.	Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	pН	L
	Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Thallium	L
227.	Punta Manatí to Punta Chivato	Punta Manatí to Punta Chivato	PRNC05	Turbidity	L
228.	Punta Chivato to Punta Cerro Gordo	Punta Chivato to Punta Cerro Gordo	PRNC06	Copper	L
229.	Punta Chivato to Punta Cerro Gordo	Punta Chivato to Punta Cerro Gordo	PRNC06	Enterococcus	L
230.	Punta Chivato to Punta Cerro Gordo	Punta Chivato to Punta Cerro Gordo	PRNC06	Mercury	L
231.	Punta Chivato to Punta Cerro Gordo	Punta Chivato to Punta Cerro Gordo	PRNC06	Temperature	L
232.	Punta Chivato to Punta Cerro Gordo	Punta Chivato to Punta Cerro Gordo	PRNC06	Turbidity	L
233.	Punta Puerto Nuevo to Punta Cerro Gordo	Punta Puerto Nuevo to Punta Cerro Gordo	PRNC07	Copper	L

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
234.	Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Mercury	L
	Punta Cerro Gordo	Punta Cerro Gordo			
235.	Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	pН	L
	Punta Cerro Gordo	Punta Cerro Gordo			
236.	Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Temperature	L
	Punta Cerro Gordo	Punta Cerro Gordo			
237.	Punta Puerto Nuevo to	Punta Puerto Nuevo to	PRNC07	Turbidity	L
	Punta Cerro Gordo	Punta Cerro Gordo			
238.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Arsenic	L
	Punta Boca Juana	Punta Boca Juana			
239.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Copper	L
	Punta Boca Juana	Punta Boca Juana			
240.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Enterococcus	L
	Punta Boca Juana	Punta Boca Juana			
241.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Lead	L
	Punta Boca Juana	Punta Boca Juana			
242.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Nickel	L
	Punta Boca Juana	Punta Boca Juana			
243.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Turbidity	L
	Punta Boca Juana	Punta Boca Juana			
244.	Punta Cerro Gordo to	Punta Cerro Gordo to	PRNC08	Zinc	L
	Punta Boca Juana	Punta Boca Juana			
245.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	Arsenic	L
	Punta Salinas	Salinas			
246.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	Copper	L
	Punta Salinas	Salinas			
247.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	Enterococcus	L
	Punta Salinas	Salinas			
248.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	Lead	L
	Punta Salinas	Salinas			
249.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	Nickel	L
	Punta Salinas	Salinas			
250.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	pН	L
	Punta Salinas	Salinas			
251.	Punta Boca Juana to	Punta Boca Juana to Punta	PREC09	Turbidity	L
	Punta Salinas	Salinas			
252.	Punta Salinas to Río	Punta Salinas to Río	PREC10B	Copper	L
	Bayamón Mouth	Bayamón Mouth			
253.	Punta Salinas to Río	Punta Salinas to Río	PREC10B	Enterococcus	L
	Bayamón Mouth	Bayamón Mouth			
254.	Punta Salinas to Río	Punta Salinas to Río	PREC10B	Lead	L
	Bayamón Mouth	Bayamón Mouth			
255.	Punta Salinas to Río	Punta Salinas to Río	PREC10B	Mercury	L
	Bayamón Mouth	Bayamón Mouth			
256.	Punta Salinas to Río	Punta Salinas to Río	PREC10B	Nickel	L
	Bayamón Mouth	Bayamón Mouth			
257.	Punta Salinas to Río	Punta Salinas to Río	PREC10B	Turbidity	L
	Bayamón Mouth	Bayamón Mouth			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
258.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Copper	L
259.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Enterococcus	L
260.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Lead	L
261.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Mercury	L
262.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Nickel	L
263.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	pН	L
264.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Temperature	L
265.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Thallium	L
266.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Turbidity	L
267.	Rio Bayamón Mouth to Isla de Cabras	Rio Bayamón Mouth to Isla de Cabras	PREC10C	Zinc	L
268.	Isla de Cabras to Punta Del Morro	Isla de Cabras to Punta Del Morro	PREC11	Arsenic	L
269.	Isla de Cabras to Punta Del Morro	Isla de Cabras to Punta Del Morro	PREC11	Copper	L
270.	Isla de Cabras to Punta Del Morro	Isla de Cabras to Punta Del Morro	PREC11	Dissolved Oxygen	L
271.	Isla de Cabras to Punta Del Morro	Isla de Cabras to Punta Del Morro	PREC11	Fecal Coliform	L
272.	Punta Del Morro to West Side of Condado Bridge	Punta Del Morro to West Side of Condado Bridge	PREC12	Enterococcus	L
273.	Punta Del Morro to West Side of Condado Bridge	Punta Del Morro to West Side of Condado Bridge	PREC12	рН	L
274.	Punta Del Morro to West Side of Condado Bridge	Punta Del Morro to West Side of Condado Bridge	PREC12	Turbidity	L
275.	East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Copper	L
276.	East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Enterococcus	L
277.	East side of Condado Bridge to Punta Las Marías	East side of Condado Bridge to Punta Las Marías	PREC13	Lead	L

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
278.	East side of Condado	East side of Condado	PREC13	Mercury	L
	Bridge to Punta Las	Bridge to Punta Las			
	Marías	Marías			
279.	East side of Condado	East side of Condado	PREC13	Temperature	L
	Bridge to Punta Las	Bridge to Punta Las			
	Marías	Marías			
280.	East side of Condado	East side of Condado	PREC13	Thallium	L
	Bridge to Punta Las	Bridge to Punta Las			
	Marías	Marías			
281.	East side of Condado	East side of Condado	PREC13	Turbidity	L
	Bridge to Punta Las	Bridge to Punta Las			
	Marías	Marías			_
282.	Punta Las Marías to	Punta Las Marías to Punta	PREC14	Arsenic	L
	Punta Cangrejos	Cangrejos			_
283.	Punta Las Marías to	Punta Las Marías to Punta	PREC14	Copper	L
	Punta Cangrejos	Cangrejos			
284.	Punta Las Marías to	Punta Las Marías to Punta	PREC14	Lead	L
	Punta Cangrejos	Cangrejos			
285.	Punta Las Marías to	Punta Las Marías to Punta	PREC14	Temperature	L
	Punta Cangrejos	Cangrejos			
286.	Punta Las Marías to	Punta Las Marías to Punta	PREC14	Thallium	L
	Punta Cangrejos	Cangrejos			
287.	Punta Las Marías to	Punta Las Marías to Punta	PREC14	Turbidity	L
	Punta Cangrejos	Cangrejos			
288.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Arsenic	L
	Punta Vacía Talega	Vacía Talega			_
289.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Copper	L
	Punta Vacía Talega	Vacía Talega			_
290.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Enterococcus	L
	Punta Vacía Talega	Vacía Talega	2222	7.6	-
291.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Mercury	L
	Punta Vacía Talega	Vacía Talega	DD TG1 #	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	-
292.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Nickel	L
	Punta Vacía Talega	Vacía Talega	DDEC15		·
293.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Temperature	L
20:	Punta Vacía Talega	Vacía Talega	DDEC15	TTI 11:	
294.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Thallium	L
20.7	Punta Vacía Talega	Vacía Talega	DDEC15	T. 1:1:	_
295.	Punta Cangrejos to	Punta Cangrejos to Punta	PREC15	Turbidity	L
20.5	Punta Vacía Talega	Vacía Talega	DDEC16	A	T
296.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Arsenic	L
207	Punta Miquillo	Punta Miquillo	DDEC16	Committee	т
297.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Copper	L
200	Punta Miquillo	Punta Miquillo	DDFC16	Entrar	T
298.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Enterococcus	L
200	Punta Miquillo	Punta Miquillo	DDFC16	T 1	T
299.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Lead	L
	Punta Miquillo	Punta Miquillo			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
300.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Mercury	L
	Punta Miquillo	Punta Miquillo			
301.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Nickel	L
	Punta Miquillo	Punta Miquillo			
302.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Temperature	L
	Punta Miquillo	Punta Miquillo			
303.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Thallium	L
	Punta Miquillo	Punta Miquillo			
304.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Turbidity	L
	Punta Miquillo	Punta Miquillo			
305.	Punta Vacía Talega to	Punta Vacía Talega to	PREC16	Zinc	L
	Punta Miquillo	Punta Miquillo			
306.	Punta Miquillo to Punta	Punta Miquillo to Punta	PREC17	Copper	L
	La Bandera	La Bandera			
307.	Punta Miquillo to Punta	Punta Miquillo to Punta	PREC17	Mercury	L
	La Bandera	La Bandera			
308.	Punta Miquillo to Punta	Punta Miquillo to Punta	PREC17	Temperature	L
	La Bandera	La Bandera			
309.	Punta Miquillo to Punta	Punta Miquillo to Punta	PREC17	Turbidity	L
	La Bandera	La Bandera			
310.	Punta La Bandera to	Punta La Bandera to	PREC18	Copper	L
	Cabezas de San Juan	Cabezas de San Juan			
311.	Punta La Bandera to	Punta La Bandera to	PREC18	pН	L
	Cabezas de San Juan	Cabezas de San Juan			
312.	Punta La Bandera to	Punta La Bandera to	PREC18	Temperature	L
	Cabezas de San Juan	Cabezas de San Juan			
313.	Punta La Bandera to	Punta La Bandera to	PREC18	Thallium	L
	Cabezas de San Juan	Cabezas de San Juan			
314.	Punta La Bandera to	Punta La Bandera to	PREC18	Turbidity	L
	Cabezas de San Juan	Cabezas de San Juan			
315.	Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Copper	L
	Punta Barrancas	Punta Barrancas			
316.	Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Enterococcus	L
	Punta Barrancas	Punta Barrancas			
317.	Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Oil and Grease	L
	Punta Barrancas	Punta Barrancas			
318.	Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Temperature	L
	Punta Barrancas	Punta Barrancas			
319.	Cabezas de San Juan to	Cabezas de San Juan to	PREC19	Turbidity	L
	Punta Barrancas	Punta Barrancas			
320.	Punta Barrancas to	Punta Barrancas to Punta	PREC20	Copper	L
	Punta Medio Mundo	Medio Mundo			
321.	Punta Barrancas to	Punta Barrancas to Punta	PREC20	Dissolved	L
	Punta Medio Mundo	Medio Mundo		Oxygen	
322.	Punta Barrancas to	Punta Barrancas to Punta	PREC20	Enterococcus	L
	Punta Medio Mundo	Medio Mundo			
323.	Punta Barrancas to	Punta Barrancas to Punta	PREC20	Temperature	L
	Punta Medio Mundo	Medio Mundo			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
324.	Punta Barrancas to Punta Medio Mundo	Punta Barrancas to Punta Medio Mundo	PREC20	Thallium	L
325.	Punta Barrancas to	Punta Barrancas to Punta	PREC20	Turbidity	L
323.	Punta Medio Mundo	Medio Mundo	T KLC20	Turbiaity	L
326.	Isla Cabras to Punta	Isla Cabras to Punta	PREC23	Copper	L
320.	Cascajo	Cascajo	1112023	Сорры	
327.	Isla Cabras to Punta	Isla Cabras to Punta	PREC23	Turbidity	L
	Cascajo	Cascajo			
328.	Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Copper	L
	Lima	Lima			
329.	Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Dissolved	L
	Lima	Lima		Oxygen	
330.	Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Enterococcus	L
	Lima	Lima			
331.	Punta Cascajo to Punta	Punta Cascajo to Punta	PREC24	Temperature	L
	Lima	Lima			
332.	J	Punta Cascajo to Punta	PREC24	Turbidity	L
	Lima	Lima	DD T C0.5		-
333.	Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Copper	L
	Humacao	Humacao	PDE CO.		·
334.	Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Enterococcus	L
22.5	Humacao	Humacao	DDEC25	3.4	T
335.	Punta Lima to Morro de	Punta Lima to Morro de	PREC25	Mercury	L
226	Humacao	Humacao	DDEC25	T	т
336.	Punta Lima to Morro de Humacao	Punta Lima to Morro de Humacao	PREC25	Temperature	L
227		Punta Lima to Morro de	PREC25	Tumbidity	L
337.	Humacao	Humacao	PREC25	Turbidity	L
338.	Morro de Humacao to	Morro de Humacao to	PREC26	Copper	L
336.	Punta Candelero	Punta Candelero	T KEC20	Соррег	L
339.	Morro de Humação to	Morro de Humacao to	PREC26	Enterococcus	L
337.	Punta Candelero	Punta Candelero	T REC20	Linterococcus	L
340.	Morro de Humacao to	Morro de Humacao to	PREC26	Temperature	L
	Punta Candelero	Punta Candelero	112.020	- Jan porturare	
341.	Morro de Humacao to	Morro de Humacao to	PREC26	Turbidity	L
	Punta Candelero	Punta Candelero			_
342.	Punta Candelero to	Punta Candelero to Punta	PREC27	Arsenic	L
	Punta Guayanés	Guayanés			
343.	Punta Candelero to	Punta Candelero to Punta	PREC27	Copper	L
	Punta Guayanés	Guayanés			
344.	Punta Candelero to	Punta Candelero to Punta	PREC27	Enterococcus	L
	Punta Guayanés	Guayanés			
345.	Punta Candelero to	Punta Candelero to Punta	PREC27	Thallium	L
	Punta Guayanés	Guayanés			
346.	Punta Candelero to	Punta Candelero to Punta	PREC27	Turbidity	L
	Punta Guayanés	Guayanés			
347.	Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Arsenic	L
	Quebrada Honda	Quebrada Honda			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
348.	Punta Guayanés to Punta Quebrada Honda	Punta Guayanés to Punta	PREC28C	Copper	L
349.	Punta Guayanés to Punta	Quebrada Honda Punta Guayanés to Punta	PREC28C	Enterococcus	L
347.	Quebrada Honda	Quebrada Honda	TREE20C	Enterococcus	L
350.	Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Mercury	L
	Quebrada Honda	Quebrada Honda		•	
351.	Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Oil and Grease	L
	Quebrada Honda	Quebrada Honda			
352.	Punta Guayanés to Punta	Punta Guayanés to Punta	PREC28C	Temperature	L
	Quebrada Honda	Quebrada Honda	PDEG00G	FD1 11:	·
353.	Punta Guayanés to Punta Quebrada Honda	Punta Guayanés to Punta Quebrada Honda	PREC28C	Thallium	L
354.	Punta Guayanés to Punta Quebrada Honda	Punta Guayanés to Punta Quebrada Honda	PREC28C	Turbidity	L
355.	Punta Quebrada Honda to Punta Yeguas	Punta Quebrada Honda to Punta Yeguas	PREC28B	Copper	L
356.	Punta Quebrada Honda to Punta Yeguas	Punta Quebrada Honda to Punta Yeguas	PREC28B	Enterococcus	L
357	Punta Quebrada Honda	Punta Quebrada Honda to	PREC28B	Thallium	L
337.	to Punta Yeguas	Punta Yeguas	11626262		
358.	Punta Quebrada Honda	Punta Quebrada Honda to	PREC28B	Turbidity	L
	to Punta Yeguas	Punta Yeguas			
359.	Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Copper	L
	Tuna	Tuna			
360.	Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Enterococcus	L
	Tuna	Tuna	DDE GOO	· .	·
361.	Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Lead	L
362.	Tuna Punta Yeguas to Punta	Tuna Punta Yeguas to Punta	PREC29	pН	L
302.	Tuna	Tuna	T KEC29	pii	L
363.	Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Thallium	L
	Tuna	Tuna	11232		
364.	Punta Yeguas to Punta	Punta Yeguas to Punta	PREC29	Turbidity	L
	Tuna	Tuna			
365.	Punta Tuna to Cabo	Punta Tuna to Cabo Mala	PREC30	Copper	L
	Mala Pascua	Pascua			
366.	Punta Tuna to Cabo	Punta Tuna to Cabo Mala	PREC30	Enterococcus	L
267	Mala Pascua	Pascua Cala Mala	DDEC20	The also 124	т
367.	Punta Tuna to Cabo Mala Pascua	Punta Tuna to Cabo Mala Pascua	PREC30	Turbidity	L
368.	Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Copper	L
500.	Punta Viento	Punta Viento	TROCOL	Сорры	
369.	Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Enterococcus	L
	Punta Viento	Punta Viento			
370.	Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Temperature	L
	Punta Viento	Punta Viento			
371.	Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Thallium	L
	Punta Viento	Punta Viento			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
372.	Cabo Mala Pascua to	Cabo Mala Pascua to	PRSC31	Turbidity	L
	Punta Viento	Punta Viento			_
373.	Punta Viento to Punta	Punta Viento to Punta	PRSC32	Copper	L
	Figuras	Figuras			_
374.	Punta Viento to Punta	Punta Viento to Punta	PRSC32	Dissolved	L
	Figuras	Figuras		Oxygen	
375.		Punta Viento to Punta	PRSC32	Enterococcus	L
	Figuras	Figuras			_
376.	Punta Viento to Punta	Punta Viento to Punta	PRSC32	Mercury	L
	Figuras	Figuras			_
377.	Punta Viento to Punta	Punta Viento to Punta	PRSC32	Temperature	L
	Figuras	Figuras			
378.	Punta Viento to Punta	Punta Viento to Punta	PRSC32	Thallium	L
	Figuras	Figuras			
379.	Punta Viento to Punta	Punta Viento to Punta	PRSC32	Turbidity	L
	Figuras	Figuras			
380.	\mathcal{C}	Punta Figuras to Punta	PRSC33	Copper	L
	Ola Grande	Ola Grande			
381.	Punta Figuras to Punta	Punta Figuras to Punta	PRSC33	Enterococcus	L
	Ola Grande	Ola Grande			
382.	<u>e</u>	Punta Figuras to Punta	PRSC33	Lead	L
	Ola Grande	Ola Grande			
383.	Punta Figuras to Punta	Punta Figuras to Punta	PRSC33	Mercury	L
	Ola Grande	Ola Grande			_
384.	Punta Figuras to Punta	Punta Figuras to Punta	PRSC33	Temperature	L
	Ola Grande	Ola Grande			_
385.	C	Punta Figuras to Punta	PRSC33	Turbidity	L
	Ola Grande	Ola Grande	DD 0 00 1		-
386.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Copper	L
	Punta Petrona	Petrona	DD C CO 4	D: 1 1	-
387.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Dissolved	L
	Punta Petrona	Petrona	DD 0 00 1	Oxygen	-
388.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Enterococcus	L
200	Punta Petrona	Petrona	DD C CC 4	T 1	
389.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Lead	L
200	Punta Petrona	Petrona	DD C CO 4		T
390.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Mercury	L
201	Punta Petrona	Petrona Perrona Perrona Perrona Perrona	DD C CC 4	NT: -1 1	T
391.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Nickel	L
202	Punta Petrona	Petrona Perrona Perrona Perrona Perrona	DD C CO 4	0.1 1 C	T
392.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Oil and Grease	L
202	Punta Petrona	Petrona Punto Olo Crondo to Punto	DDCC24	all	т
393.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	pН	L
20.4	Punta Petrona	Petrona Perrona Perrona Perrona Perrona	DD C CO 4	T	T
394.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Temperature	L
20.7	Punta Petrona	Petrona	DDCC24	TD 1:1:	T
395.	Punta Ola Grande to	Punta Ola Grande to Punta	PRSC34	Turbidity	L
	Punta Petrona	Petrona			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
396.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Copper	L
397.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Enterococcus	L
398.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Lead	L
399.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Mercury	L
400.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Nickel	L
401.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Thallium	L
	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Turbidity	L
403.	Punta Petrona to Punta Cabullones	Punta Petrona to Punta Cabullones	PRSC35	Zinc	L
404.	Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Copper	L
405.	Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Enterococcus	L
406.	Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Mercury	L
407.	Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	pН	L
408.	Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Temperature	L
409.	Punta Cabullones to Punta Carenero	Punta Cabullones to Punta Carenero	PRSC36B	Turbidity	L
410.	Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Copper	L
411.	Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Enterococcus	L
412.	Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Mercury	L
413.	Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Oil and Grease	L
414.	Punta Carenero to Punta Cuchara	Punta Carenero to Punta Cuchara	PRSC36C	Turbidity	L
415.	Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Copper	L
416.	Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Enterococcus	L
417.	Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Mercury	L
418.		Punta Cuchara to Cayo Parguera	PRSC37B	Nickel	L
419.	Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	pН	L

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
420.	Punta Cuchara to Cayo Parguera	Punta Cuchara to Cayo Parguera	PRSC37B	Turbidity	L
421.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Copper	L
422.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Mercury	L
423.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Lead	L
424.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Nickel	L
425.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Oil and Grease	L
426.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Thallium	L
427.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Turbidity	L
428.	Cayo Parguera to Punta Guayanilla	Cayo Parguera to Punta Guayanilla	PRSC37C	Zinc	L
429.	Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Copper	L
430.	Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Enterococcus	L
431.	Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Mercury	L
432.	Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Oil and Grease	L
	Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Temperature	L
	Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Thallium	L
435.	Punta Guayanilla to Punta Verraco	Punta Guayanilla to Punta Verraco	PRSC38	Turbidity	L
	Punta Verraco to Punta Ballena	Punta Verraco to Punta Ballena	PRSC39	Copper	L
	Punta Verraco to Punta Ballena	Punta Verraco to Punta Ballena	PRSC39	Thallium	L
438.	Punta Verraco to Punta Ballena	Punta Verraco to Punta Ballena	PRSC39	Turbidity	L
439.	Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Copper	L
440.	Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Enterococcus	L
441.	Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Nickel	L
442.	Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	рН	L
443.	Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Temperature	L

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
444.	Punta Ballena to Punta Brea	Punta Ballena to Punta Brea	PRSC40	Turbidity	L
445.	Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Copper	L
446.	Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Enterococcus	L
447.	Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	рН	L
448.	Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Temperature	L
449.	Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Thallium	L
450.	Punta Brea to Bahía Fosforescente La Parguera	Punta Brea to Bahía Fosforescente La Parguera	PRSC41B1	Turbidity	L
451.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Copper	L
452.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Dissolved Oxygen	L
453.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Enterococcus	L
454.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	pH	L
455.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Temperature	L
456.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Thallium	L
457.	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	Bahía Fosforescente La Parguera to Punta Cueva de Ayala	PRSC41B2	Turbidity	L
458.	Bahía Monsio José to Faro de Cabo Rojo	Bahía Monsio José to Faro de Cabo Rojo	PRSC41B3	Dissolved Oxygen	L
459.	Bahía Monsio José to Faro de Cabo Rojo	Bahía Monsio José to Faro de Cabo Rojo	PRSC41B3	Enterococcus	L
460.	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
461.	Bahía Monsio José to	Bahía Monsio José to Faro	PRSC41B3	Nickel	L
	Faro de Cabo Rojo	de Cabo Rojo			
462.	Bahía Monsio José to	Bahía Monsio José to Faro	PRSC41B3	Temperature	L
	Faro de Cabo Rojo	de Cabo Rojo			
463.	Bahía Monsio José to	Bahía Monsio José to Faro	PRSC41B3	Thallium	L
	Faro de Cabo Rojo	de Cabo Rojo			
464.	Bahía Monsio José to	Bahía Monsio José to Faro	PRSC41B3	Turbidity	L
	Faro de Cabo Rojo	de Cabo Rojo			
465.	Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Dissolved	L
	Punta Águila	Punta Águila		Oxygen	
466.	Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Enterococcus	L
	Punta Águila	Punta Águila			
467.	Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	pН	L
	Punta Águila	Punta Águila			
468.	Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Temperature	L
	Punta Águila	Punta Águila			
469.	Faro de Cabo Rojo to	Faro de Cabo Rojo to	PRWC42	Turbidity	L
	Punta Águila	Punta Águila			
470.	Punta Águila to Punta	Punta Águila to Punta	PRWC43	Enterococcus	L
	Guaniquilla	Guaniquilla			
471.	Punta Águila to Punta	Punta Águila to Punta	PRWC43	Temperature	L
	Guaniquilla	Guaniquilla			
472.	Punta Águila to Punta	Punta Águila to Punta	PRWC43	Turbidity	L
	Guaniquilla	Guaniquilla			
473.	Punta Guaniquilla to	Punta Guaniquilla to	PRWC44	Enterococcus	L
	Punta La Mela	Punta La Mela			
474.	Punta Guaniquilla to	Punta Guaniquilla to	PRWC44	pН	L
	Punta La Mela	Punta La Mela			
475.	Punta Guaniquilla to	Punta Guaniquilla to	PRWC44	Temperature	L
	Punta La Mela	Punta La Mela			
476.	Punta Guaniquilla to	Punta Guaniquilla to	PRWC44	Thallium	L
	Punta La Mela	Punta La Mela			
477.	Punta Guaniquilla to	Punta Guaniquilla to	PRWC44	Turbidity	L
	Punta La Mela	Punta La Mela			
478.	Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Copper	L
	Carenero	Carenero			
479.	Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Enterococcus	L
	Carenero	Carenero			
480.	Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Lead	L
	Carenero	Carenero			
481.	Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Thallium	L
	Carenero	Carenero			
482.	Punta La Mela to Punta	Punta La Mela to Punta	PRWC45	Turbidity	L
	Carenero	Carenero			
483.	Punta Carenero to front	Punta Carenero to front of	PRWC46	Copper	L
	of Cayo Ratones	Cayo Ratones			
484.	Punta Carenero to front	Punta Carenero to front of	PRWC46	Enterococcus	L
	of Cayo Ratones	Cayo Ratones			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
485.	Punta Carenero to front	Punta Carenero to front of	PRWC46	Lead	L
	of Cayo Ratones	Cayo Ratones			
486.	Punta Carenero to front	Punta Carenero to front of	PRWC46	Temperature	L
	of Cayo Ratones	Cayo Ratones			
487.	Punta Carenero to front	Punta Carenero to front of	PRWC46	Thallium	L
	of Cayo Ratones	Cayo Ratones			
488.	Punta Carenero to front	Punta Carenero to front of	PRWC46	Turbidity	L
	of Cayo Ratones	Cayo Ratones			
489.	In front of Cayo Ratones	In front of Cayo Ratones	PRWC47	Copper	L
	to Punta Guanajibo	to Punta Guanajibo			
490.	In front of Cayo Ratones	In front of Cayo Ratones	PRWC47	Nickel	L
	to Punta Guanajibo	to Punta Guanajibo			
491.	In front of Cayo Ratones	In front of Cayo Ratones	PRWC47	Turbidity	L
	to Punta Guanajibo	to Punta Guanajibo			
492.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Copper	L
	Punta Algarrobo	Algarrobo			
493.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Enterococcus	L
	Punta Algarrobo	Algarrobo			
494.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Lead	L
	Punta Algarrobo	Algarrobo			
495.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Mercury	L
	Punta Algarrobo	Algarrobo			
496.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Nickel	L
	Punta Algarrobo	Algarrobo			
497.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Oil and Grease	L
	Punta Algarrobo	Algarrobo			
498.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	pН	L
	Punta Algarrobo	Algarrobo			
499.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Thallium	L
	Punta Algarrobo	Algarrobo			
500.	Punta Guanajibo to	Punta Guanajibo to Punta	PRWC48	Turbidity	L
	Punta Algarrobo	Algarrobo			
501.	Punta Algarrobo to	Punta Algarrobo to Punta	PRWC49	Copper	L
	Punta Cadena	Cadena			
502.	Punta Algarrobo to	Punta Algarrobo to Punta	PRWC49	Enterococcus	L
	Punta Cadena	Cadena			
503.	Punta Algarrobo to	Punta Algarrobo to Punta	PRWC49	Nickel	L
	Punta Cadena	Cadena			
504.	Punta Algarrobo to	Punta Algarrobo to Punta	PRWC49	pН	L
	Punta Cadena	Cadena			
505.	Punta Algarrobo to	Punta Algarrobo to Punta	PRWC49	Temperature	L
	Punta Cadena	Cadena			
506.	Punta Algarrobo to	Punta Algarrobo to Punta	PRWC49	Turbidity	L
	Punta Cadena	Cadena			
507.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Copper	L
	Higüero	Higüero			
508.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Enterococcus	L
	Higüero	Higüero			

	Basin	Waterbody Name	Assessment Unit ID	Parameter	Priority
509.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Lead	L
	Higüero	Higüero			
510.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Mercury	L
	Higüero	Higüero			
511.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Nickel	L
	Higüero	Higüero			
512.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	pН	L
	Higüero	Higüero			
513.	Punta Cadena to Punta	Punta Cadena to Punta	PRWC50	Turbidity	L
	Higüero	Higüero			
514.	Punta Higüero to Punta	Punta Higüero to Punta	PRWC51	Copper	L
	del Boquerón	del Boquerón			
515.	Punta Higüero to Punta	Punta Higüero to Punta	PRWC51	Enterococcus	L
	del Boquerón	del Boquerón			_
516.		Punta Higüero to Punta	PRWC51	Lead	L
	del Boquerón	del Boquerón			_
517.		Punta Higüero to Punta	PRWC51	Mercury	L
	del Boquerón	del Boquerón			_
518.	Punta Higüero to Punta	Punta Higüero to Punta	PRWC51	Nickel	L
	del Boquerón	del Boquerón			_
519.	Punta Higüero to Punta	Punta Higüero to Punta	PRWC51	Turbidity	L
319.	del Boquerón	•	FRWC31	Turbiaity	L
520	•	del Boquerón	PRWC52	Common	L
520.	Punta del Boquerón to	Punta del Boquerón to	PRWC52	Copper	L
501	Punta Borinquén	Punta Borinquén	DDWGG	TD 1:1:4	τ
521.	Punta del Boquerón to	Punta del Boquerón to	PRWC52	Turbidity	L
	Punta Borinquén	Punta Borinquén			_
522.	Culebra Island	Culebra Island	PRCC53	pH	L
523.	Culebra Island	Culebra Island	PRCC53	Turbidity	L

Following are TMDL development status for specific segment/pollutant combination. (See Table 49).

Table 49: TMDL Development Status

	Table 49. TMDL Development Status										
	AU/Pollutant	AU ID	Project status								
1.	RIO BAIROA/TOTAL PHOSPHORUS	PRER14H	Final draft								
2.	RÍO BAIROA/TOTAL, NITROGEN	PRER14H	Final draft								
3.	RÍO GUAYANILLA/TOTAL,	PRSR67A	Final draft								
	PHOSPHORUS	FKSK0/A									
4.	RÍO GUAYANILLA/TOTAL,	PRSR67A	Final draft								
	NITROGEN	FKSK0/A									
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,	PREL ₁ 10A1	Final draft								
	PHOSPHORUS	I KEL]IUAI									
9.	LAGO LA PLATA/TOTAL,	PREL ₁ 10A1	Final draft								
	NITROGEN	I KEL] IUAI									

AU/Pollutant	AU ID	Project status
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. RIO GRANDE DE ARECIBO/COPPER	PRNR7A2	Final draft
14. RIO BAUTA/COPPER	PRNR8C2	Final draft
15. RIO GUAYNABO/COPPER	PRER12B	Final draft
16. RIO GUAYNABO/LEAD	PRER12B	Final draft
17. RIO 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. RIO VALENCIANO/COPPER	PRER14G2	Final draft
22. RIO VALENCIANO/LEAD	PRER14G2	Final draft
23. RIO CULEBRINAS/COPPER	PRWR95A	Final draft
24. RIO DE LA PLATA/COPPER	PRER10A5	Final draft

4.0 Implementation of the Clean Water Act 303(d) Program Vision Long – Term Vision

In December 2013, USEPA announced a new framework for implementing the Clean Water Act (CWA) Section 303(d) Program – A long-term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program. This new vision, encourage states and territories to develop tailored strategies to implementation CWA 303(d) responsibilities of their overall water quality goals and individual's states priorities.

Recognizing each State is unique, USEPA expects that States will vary in the extent to which and how they implement the goals of the Vision, depending on particular circumstances and water quality goals of the State. To support State and EPA discussions on re-orienting CWA 303(d) Program responsibilities consistent with the Vision, EPA is providing additional information for States to consider when implementing the Prioritization, Engagement and Alternative Goals. EPA and States jointly identified these topics as warranting further clarification to promote timely implementation of the Vision and submittal and review of States' 2020 Integrated Reports. EPA anticipates working closely with the States on these issues as States move forward with developing their Integrated Reports.

Long-term Prioritization from 2016 to 2022

Consistent with the new USEPA's vision, PRDNER identifies those AU for priority restoration and protection activities (See Table 50).

Table 50: Long-Term Priorities 2016 – 2022

Westernheider Connect of								
Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach			
RIO GURABO	PRER14G1	Copper (0530), Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	32512.22173	50.800346	1, 5a			
RIO CAONILLAS	PRNR7C1	Arsenic (0510), Cyanide (0720)	23524.998676	36.75781	1, 5a			
RIO GRANDE DE LOIZA	PRER14A2	Cyanide (0720), Pesticides (0200), Total Coliforms (1700), Turbidity (2500)	26498.345459	41.403665	1, 5a			
RIO CAGUITAS	PRER14I	Cyanide (0720), Surfactants (0400), Thermal Modifications (1400), Total Coliforms (1700), Turbidity (2500	12019.471726	18.780425	1, 5a			
RIO LA PLATA	PRER10A1	Cyanide (0720), Turbidity (2500)	6762.208267	10.56595	1, 5a			
RIO CIBUCO	PRNR9A	Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	14250.254207	22.266022	1, 5a			
RIO GRANDE DE LOIZA	PRER14A1	Copper (0530), Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	10851.784356	16.955913	1, 5a			
RIO ESPIRITU SANTO	PRER16A	Copper (0530), Cyanide (0720), Lead (0550), Low Dissolved Oxygen (1200), pH (1000), Surfactants (0400), Turbidity (2500)	15760.761314	24.62619	1, 5a			
RIO LA PLATA	PRER10A3	Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	12896.790193	20.151235	1, 5a			
TÚNEL	PRNR7A3	Cyanide (0720)	19822.753445	30.973052	1, 5a			
RIO LA PLATA	PRER10A5	Arsenic (0510), Copper (0530), Cyanide (0720), Lead (0550), Mercury (0560), Surfactants (0400), Turbidity (2500)	23893.320027	37.333313	1, 5a			
RIO GUAYNABO	PRER12B	Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	12590.494231	19.672647	1, 5a			
RIO CULEBRINAS	PRWR95A	Arsenic (0510), Copper (0530), Cyanide (0720), Lead (0550), Pesticides (0200), Surfactants	30592.920494	47.801438	1, 5a			

Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach
		(0400), Total Coliforms (1700), Turbidity (2500)			
LAKE LA PLATA	PREL110A1	Arsenic (0510), Cyanide (0720), Low Dissolved Oxygen (1200), Phosphorus (0910)	7938.7658	12.404322	3, 4, 5a
LAKE GUAJATACA	PRNL3A1	Low Dissolved Oxygen (1200)	5824.294966	9.100461	3, 4, 5a
RIO TURABO	PRER14J	Arsenic (0510), Copper (0530), Cyanide (0720), pH (1000), Surfactants (0400), Turbidity (2500)	19006.0409	29.696939	1, 5a
RIO VALENCIANO	PRER14G2	Arsenic (0510), Copper (0530), Cyanide (0720), Surfactants (0400), Turbidity (2500)	12200.5404	19.063344	1, 5a
RIO GRANDE DE ARECIBO	PRNR7A2	Copper (0530), Cyanide (0720), Lead (0550), Pesticides (0200), Total Coliforms (1700), Turbidity (2500)	22446.225457	35.072227	1, 5a
RIO GRANDE DE ARECIBO	PRNR7A1	Copper (0530), Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	7207.74912	11.262108	1, 5a
RIO CIALITO	PRNR8B	Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	10776.451776	16.838206	1, 5a
RIO GRANDE DE MANATI	PRNR8A1	Copper (0530), Cyanide (0720), Turbidity (2500)	14214.337007	22.209902	1, 5a
RIO ROSARIO	PRWR77C	Cyanide (0720), Pesticides (0200), Turbidity (2500)	15356.703909	23.99485	1, 5a
RIO LA PLATA	PRER10A4	Cyanide (0720), Turbidity (2500)	4187.745159	6.543352	1, 5a
RIO HUMACAO	PRER33A	Copper (0530), Cyanide (0720), Lead (0550), Surfactants (0400), Total Coliforms (1700), Turbidity (2500)	14678.023253	22.934411	1, 5a
LAKE LOIZA	PREL14A1	Copper (0530), Lead (0550), Low Dissolved Oxygen (1200), Turbidity (2500)	7928.060628	12.387595	3, 4, 5a
RIO GRANDE DE AÑASCO	PRWR83A	Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	32194.001763	50.303128	1, 5a

Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach
LAKE DOS BOCAS	PRNL17A1	Arsenic (0510), Copper (0530), Cyanide (0720), Low Dissolved Oxygen (1200), pH (1000), Surfactants (0400)	10734.480607	16.772626	3, 4, 5a
RIO BAIROA	PRER14H	Phosphorus	5005.816097	7.821588	3
RIO GUAYANILLA	PRSR67A	Phosphorus	16090.163506	25.14088	3
RIO YAUCO	PRSR68A1	Phosphorus	20519.523795	32.061756	3
RIO GUAYABO	PRWR94A	Phosphorus	8200.426277	12.813166	3
SAN JUAN BAY ESTUARY SYSTEM	PREE13A2	Dissolve Oxygen, Ammonia, Oil and Grease, pH, Thermal Modification, Total Coliforms, Turbidity, NO2+NO3, Surfactants, Lead, Copper, Cyanide	16626.02176	25.978159	5b

This prioritization provides a framework to focus the location and timing for the development of, alternative restoration, protection plans and TMDLs. Those alternatives should include:

- Identification of specific impairment addressed by an alternate approach.
- Planning, development and implement effectiveness monitoring programs.
- Revisions, and amendments to the existing regulations.

Recently, PRDNER update its Non-Point Source Management Program (NPSMP). One of the most important parts of this NPSMP is the development and implementation of a Priority System. This Priority System will be used as a priority based system in the long-term vision of the assessment restoration and protection under the CWA section 303(d). The main purpose will be standardizing the priority systems and the basic criteria used for a more effective assessment of island's water quality. In Appendix II is the Implementation of the Clean Water Act 303(d) Program Vision Long – Term Vision document. It is important to establish that this document originaly was prepare using the 2014 303(d) List.

The time frame for the implementation of Long- *Term Vision Program was from 2016 to 2022*. Beginning in 2016 Cycle PRDNER identify a total of one hundred twenty – five (125) AU/parameter combination for priority restoration and protection activities under this program (Table 49). This prioritization provides a framework to focus the

location and timing for the development of alternative restoration, protection plans and TMDLs.

Taking into consideration the development of strategies and alternative approaches, the PRDNER achieved the improvement of seventy-eight (78) AU/parameter combination which corresponds to sixty-two point four (62.4) percent of the total AU/parameters combination of the *Long - Term Vision Program 2016 to 2022* (Table 51). The alternatives approaches included are identification of specific impairment addressed, planning, development and implement effectiveness monitoring programs and revisions, and amendments to the existing regulations.

Table 51: Long-Term Priorities Assessment Units/Parameter Combinations Improvement

Tubic 31. Long-1	erm I rioriile	es Assessment Units/Par	ameter Combina	uous Improv	
Water body name	AU ID	impairment delisted delisted		Cycle delisted	2022 Cycle parameter in improvement
RIO GURABO	PRER14G1	Copper, Cyanide, Total	Cyanide	2016	
		Coliforms, Turbidity*	Total Coliform	2018	
			Copper	2022	
RIO	PRNR7C1	Arsenic, Cyanide	Arsenic	2016	
CAONILLAS**		•	Cyanide	2016	
RIO GRANDE DE	PRER14A2	Cyanide, Pesticides*,	Cyanide	2016	
LOIZA		Total Coliforms,	Total	2018	
		Turbidity*	Coliforms		
RIO CAGÜITAS	PRER14I	Cyanide, Surfactants*,	Cyanide	2018	
		Thermal	Total Coliform	2018	
		Modifications*, Total Coliforms, Turbidity*			Surfactants
RIO DE LA	PRER10A1	Cyanide, Turbidity	Cyanide	2016	
PLATA **			Turbidity	2022	
RIO CIBUCO	PRNR9A	Cyanide, Total	Cyanide	2016	
		Coliforms, Turbidity*	Total Coliforms	2018	
					Turbidity
RIO GRANDE DE	PRER14A1	Copper, Cyanide, Low	Cyanide	2016	•
LOIZA		Dissolved Oxygen,	Low Dissolved	2020	
		Turbidity*	Oxygen		
			Copper	2020	
DYO EGDYDYEY	DD ED 4 6 4			201.5	Turbidity
RIO ESPIRITU	PRER16A	Copper, Cyanide, Lead,	Copper	2016	
SANTO**		Low Dissolved	Lead	2016	
		Oxygen, pH, Surfactants, Turbidity	Low Dissolved Oxygen	2016	
			pН	2016	
			Surfactants	2016	
			Cyanide	2016	
			Turbidity	2016	
RIO DE LA	PRER10A3		Low Dissolved	2016	
PLATA **			Oxygen	2010	

Water body name	AU ID	2014 Causes of impairment	Parameter delisted	Cycle delisted	2022 Cycle parameter in improvement
		Cyanide, Low	Cyanide	2018	
		Dissolved Oxygen, Turbidity	Turbidity	2022	
TÚNEL**	PRNR7A3	Cyanide	Cyanide	2016	
RIO DE LA	PRER10A5	Arsenic, Copper*,	Cyanide	2016	
PLATA		Cyanide, <i>Lead*</i> ,	Arsenic	2016	
		Mercury, Surfactants,	Surfactants	2016	
		Turbidity	Mercury	2018	
			Turbidity	2022	
					Copper
					Lead
RIO GUAYNABO	PRER12B	Cyanide, Total	Cyanide	2016	
**		Coliforms, Turbidity	Total	2018	
			Coliforms		
			Turbidity	2022	
RIO	PRWR95A	Arsenic, Copper*,	Lead	2016	
CULEBRINAS		Cyanide, Lead,	Surfactants	2016	
		Pesticides*,	Total	2016	
		Surfactants, Total	Coliforms		
		Coliforms, Turbidity*	Cyanide	2016	
			Arsenic	2018	
			~		Copper
LAKE LA PLATA	PREL ₁ 10A	Arsenic*, Cyanide, Low Dissolved Oxygen*, Phosphorus*	Cyanide	2018	
LAKE GUAJATACA	PRNL3A1	Low Dissolved Oxygen*			
RIO TURABO	PRER14J	Arsenic, Copper*,	Arsenic	2016	
		Cyanide, pH,	Surfactants	2016	
		Surfactants, <i>Turbidity</i> *	Cyanide	2018	
			рН	2020	
RIO	PRER14G2	Arsenic, Copper,	Copper	2020	
VALENCIANO		Cyanide, Surfactants*,	Arsenic	2016	
		Turbidity*	Cyanide	2016	
					Surfactants
RIO GRANDE DE	PRNR7A2	Copper, Cyanide, Lead,	Cyanide	2016	
ARECIBO		Pesticides*, Total	Lead	2018	
		Coliforms, Turbidity*	Total	2018	
			Coliforms		
			Copper	2022	
RIO GRANDE DE	PRNR7A1	Copper, Cyanide, Low	Copper	2016	
ARECIBO		Dissolved Oxygen,	Cyanide	2018	_
		Turbidity*	Low Dissolved	2018	
			Oxygen		m 1:::
					Turbidity

Water body name	AU ID	2014 Causes of impairment	Parameter delisted	Cycle delisted	2022 Cycle parameter in improvement
RIO CIALITO	PRNR8B	Cyanide, Total	Cyanide	2016	
		Coliforms, Turbidity*	Total Coliforms	2018	
RIO GRANDE DE	PRNR8A1	Copper, Cyanide,	Cyanide	2016	
MANATI	1 Kt (KO/11	Turbidity*	Copper	2022	
RIO ROSARIO	PRWR77C	Cyanide, Pesticides*, Turbidity*	Cyanide	2016	
RIO DE LA	PRER10A4	Cyanide, Turbidity*	Cyanide	2016	
PLATA					Turbidity
RIO HUMACAO	PRER33A	Copper*, Cyanide,	Cyanide	2016	
		Lead, Surfactants, Total Coliforms, <i>Turbidity*</i>	Total Coliforms	2018	
			Lead	2022	
			Surfactants	2022	
LAKE LOIZA	PREL14A1	Copper*, Lead*, Low Dissolved Oxygen*, Turbidity*			Lead Copper
RIO GRANDE DE	PRWR83A	Cyanide, Low	Cyanide	2016	
AÑASCO		Dissolved Oxygen,	Low Dissolved	2016	
		Turbidity*	Oxygen		
					Turbidity
LAKE DOS	PRNL ₁ 7A1	Arsenic*, Copper*,	Cyanide	2018	
BOCAS		Cyanide, Low			Copper
		Dissolved Oxygen*, pH*, Surfactants*			Surfactants
RIO BAIROA	PRER14H	Phosphorus*			
RIO GUAYANILLA	PRSR67A	Phosphorus*			
RIO YAUCO	PRSR68A1	Phosphorus*			
RIO GUAYABO **	PRWR94A	Phosphorus	Phosphorus	2016	
SAN JUAN BAY	PREE13A2	Low Dissolved	pН	2020	
ESTUARY		Oxygen*, Ammonia*,	Cyanide	2016	
SYSTEM		Oil and Grease, pH,	NO2+NO3	2016	_
		Thermal Modification*, Total Coliforms,	Total Coliforms	2018	
		Turbidity*, NO2+NO3,	Oil and Grease	2022	
		Surfactants*, Lead*, Copper*, Cyanide			Ammonia
		Copper, Cyamuc			Copper
					Lead
					Surfactants

Many alternatives' approaches were implemented to achieve the overall water quality goals.

^{*} AU/parameter combination that did not achieve improvement

** AU/Parameter combinations with full improvement and were completely removed from 303(d) List

- PRDNER obtained other data and information, of water quality monitoring sampling from different government agencies and non-government 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 DRNA is working in the development of a series of workshop to trained 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.

PART F. Public Participation

The List of Impacted Water Bodies draft for the 2022 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@drna.pr.gov, 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: ayudaalciudadano@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 must be indicated.

The public notice was appropriated published in two local newspaper of island wide circulation, PRIMERA HORA and EL VOCERO on August 2, 2023, (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 th Governing Board of PRDNER.

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APENDIX I – 2022 CYCLE 303 (d) List

RIVERS, STREAMS AND CREEKS

• • • • • • • • • • • • • • • • • • • •	Table 52: Size of waters Impaired by Causes all cycles (Monitored Miles for Rivers and Streams)									
Causes of Impairments	Size of Waters Impaired (miles)									
Pesticides	544.3									
Surfactants	241.3									
Arsenic	25.4									
Copper	594.8									
Chromium VI	2,555.1									
Lead	301.5									
Mercury	55.8									
Ammonia	310.6									
Total, Phosphorus	2,184									
Total, Nitrogen	1,545.7									
рН	931.5									
Dissolved Oxygen	1,135.8									
Temperature	1,585.8									
Enterococcus	2,555.1									
Turbidity	1,864.3									
Cyanide	90.0									
Silver	14.6									

ARECIBO

PRNR7A1

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Sources **Impairment** Cycles Name Size (miles) DW NS =R1 R2 AL Network RÍO RÍO 9.9 SD NS Collection System Failure 5 5 5 5 Chromium VI 2022, 2020 GUAJATACA **GUAJATACA** 50011400 Landfill Cyanide 2022 Minor Industrial Point PRNR3A1 Dissolved 2022 Sources Oxygen Onsite Wastewater 2022, 2020, Enterococcus Systems 2018 Total, 2022, 2020, Nitrogen 2018, 2016 RÍO 22 NS Agriculture 5 5 5 5 F Chromium VI 2022, 2020 SD Η Collection System Failure GUAJATACA 50010600 Enterococcus 2022, 2020, Confined Animal Feeding PRNR3A2 2018 **Operations** Total, 2022, 2020, Major Municipal Point Nitrogen 2018, 2016 Sources Minor Industrial Point Sources **Onsite Wastewater** Systems Urban Runoff/Storm Sewers OUEBRADA 3.5 SD 5 5 D Η Confined Animal Feeding 2006 4a 4a Arsenic LAS SEQUÍAS Operations F Dissolved 2006 PRNQ3B Onsite Wastewater H, Oxygen Systems L RIO GRANDE 22.4 NS 5 Agriculture 2022, 2020 RÍO SD 5 5 5 K Η Chromium VI **GRANDE DE** Collection System Failure DE ARECIBO 50027600 2022, 2020, Enterococcus

2018

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) **Impairment** Cycles Name Sources NS =R2 DW R1 AL Network 2020 Confined Animal Feeding Temperature Operations **Major Industrial Point** Sources Onsite Wastewater **Systems** Urban Runoff/Storm Sewers 122.8 NS K Н RÍO GRANDE SD 5 5 5 5 Agriculture Chromium VI 2022, 2020 Collection System Failure DE ARECIBO 50025000 Total. 2020, 2018 Confined Animal Feeding PRNR7A2 Phosphorus Operations Turbidity 2020, 2018, Landfill 2014, 2012, Minor Industrial Point 2010, 2006 Sources Major Municipal Point Sources TÚNEL NS 5 5 5 Н Agriculture 2022, 2020 28.9 SD 5 K Chromium VI Collection System Failure 2022, 2020, PRNR7A3 50020500 Enterococcus Confined Animal Feeding 2018 **Operations** 2022 рН Minor Industrial Point Total, 2022 Sources Phosphorus Minor Municipal Point

Sources

Systems

Sewers

Onsite Wastewater

Urban Runoff/Storm

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes Class **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of **Stations** Basin **Impairment Cycles** Name Size (miles) **Sources** R2 AL DW NS =R1 Network RÍO 87.0 SD NS K Н Agriculture 2022, 2020 5 5 5 5 Chromium VI **CAONILLAS** 50026000 Collection System Failure 2022, 2020, Enterococcus PRNR7C1 Confined Animal Feeding 2018 **Operations** Total, 2020 Landfill Nitrogen Major Municipal Point Total. 2022, 2020 Sources Phosphorus Minor Industrial Point 2020 **Turbidity** Sources Onsite Wastewater **Systems** Surface Mining Urban Runoff/Storm Sewers RÍO LIMÓN 40.7 SD NS 5 5 5 K Η Agriculture Chromium VI 2022, 2020 5 PRNR7C2 Minor Industrial Point 2022, 2020, 50026350 Enterococcus Sources 2018 Onsite Wastewater 2020 Total, **Systems** Nitrogen Turbidity 2020, 2016 RÍO YUNES NS 32.7 SD 5 5 5 5 K Η Agriculture Chromium VI 2022, 2020 PRNR7C3 50026950 Minor Industrial Point 2022, 2020, Enterococcus Sources 2018 Onsite Wastewater Temperature 2020 **Systems** Total. 2020 Urban Runoff/Storm Nitrogen Sewers Total, 2020, 2018 Phosphorus **Turbidity** 2020, 2018

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes Class **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations **Impairment Cycles** Name Size (miles) **Sources** R2 DW NS =R1 \mathbf{AL} Network RÍO TANAMÁ NS K Н Agriculture 2022, 2020 5 5 5 5 Chromium VI 43.5 SD PRNR7B2 50028000 Collection System Failure Enterococcus 2022, 2020, Minor Industrial Point 2018 Sources Total, 2022, 2018 Onsite Wastewater Phosphorus **Systems** 2022, 2018, **Turbidity** 2014, 2012, 2008 RÍO 31 **RÍO GRANDE** NS 5 K Collection System Failure Chromium VI 2022, 2020 SD 5 5 5 Η **GRANDE** DE MANATÍ Confined Animal Feeding 50038100 2022, 2018 Enterococcus DE MANATÍ **Operations** PRNR8A1 Temperature 2022 Landfill 2022, 2018, Total. Major Municipal Point Phosphorus 2016 Sources **Turbidity** 2022, 2018, **Onsite Wastewater** 2014, 2012, **Systems** 2010, 2008, Urban Runoff/Storm 2006 Sewers NS Collection System Failure 2022, 2018 Н Copper RÍO GRANDE 38.1 SD 5 5 5 5 K 50035500 DE MANATÍ Confined Animal Feeding Chromium VI 2022, 2020 PRNR8A2 Operations Enterococcus 2022, 2020, Landfills 2018 Onsite Wastewater Temperature 2020 **Systems** 2022 Total, Urban Runoff/Storm Nitrogen

Sewers

Total,

Phosphorus Turbidity 2022

2022, 2018, 2014, 2012,

No	te: The 2022 303(d) L	ist is comprised o		Table 53: 2022 uses of impairme							nd Streams 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS = Network	Desi	ignate	d Use s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
													2010, 2008 2006
	RÍO CIALITO PRNR8B	25.8	SD	NS 50035950	5	5	5	5	K	Н	Agriculture Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococcus Turbidity	2022, 2020 2022, 2020 2018 2022, 2018 2014, 2012 2010
	RÍO OROCOVIS PRNR8E1	19.8	SD	NS 50030700	5	5	5	5	K	Н	Collection System Failure Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Enterococcus Total, Nitrogen Total, Phosphorus Turbidity	2022, 2020 2018 2020 2018 2020 2018, 2016 2020, 2018 2016, 2014 2012, 2010 2008, 2006
	RÍO BOTIJAS PRNR8E2	19.1	SD		4a	4a	5	3	D H K	Н	Confined Animal Feeding Operations Onsite Wastewater Systems	рН	2020
		31.1	SD		5	5	5	5	A	Н	Agriculture	Chromium VI	2022, 202

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.													
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Designated Uses and Categories Summary			s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				NS = Network	R1	R2	AL	שען		P		_	
RÍO CIBUCO	RÍO CIBUCO PRNR9A			NS 50039500							Collection System Failure Confined Animal Feeding Operations Landfill Major Industrial Point Sources Major Municipal Point Sources Onsite Wastewater Systems	Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity	2022, 2020, 2018 2022 2022, 2020, 2018, 2016 2022, 2020, 2018 2020, 2018, 2014, 2012, 2010, 2008,
	RÍO MOROVIS PRNR9B2	25.5	SD		4a	4a	5	3	A D H	Н	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	2020, 2014
RÍO DE LA PLATA	RÍO DE LA PLATA PRER10A1	21	SD	NS 50046000	5	5	5	1	В	Н	Collection System Failure Confined Animal Feeding Operations Major Industrial Point Sources	Chromium VI Dissolved Oxygen Enterococcus	2022, 2020 2022, 2020, 2018, 2016 2022, 2020, 2018

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) Sources **Impairment** Cycles Name R2 DW NS =R1 AL Network Minor Municipal Point Temperature 2020 Sources **Onsite Wastewater Systems Surfaces Mining** RÍO DE LA 55.7 NS Η Agriculture 2022, 2020 SD 5 5 5 5 В Chromium VI **PLATA** Collection System Failure 50044000 Enterococcus 2022, 2020, Confined Animal Feeding PRER10A3 2018 **Operations** рН 2020 Landfill Total. 2022, 2018, Major Municipal Point Phosphorus 2016 Sources Onsite Wastewater Systems RÍO DE LA Agriculture 2022, 2020 10.2 NS 5 5 5 SD 5 В Η Chromium VI Confined Animal Feeding **PLATA** 50043000 2022, 2020, Enterococcus PRER10A4 Operations 2018 Landfill 2020 pН Minor Industrial Point Temperature 2020 Sources 2022, 2020, Total. Onsite Wastewater Phosphorus 2018, 2016 **Systems** 2020, 2018, **Turbidity** 2016, 2014, 2010, 2008 RÍO DE LA 92.7 SD NS 5 5 5 5 В Η Collection System Failure Chromium VI 2022, 2020 Confined Animal Feeding **PLATA** 50042500 Copper 2020 PRER10A5 **Operations** 2022, 2020, Enterococcus Major Municipal Point 2018 Sources 2020 Lead

RÍO GUAVATE

PRER10K

19.8

SD

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) Sources **Impairment** Cycles Name R2 DW NS =R1 AL Network рН Minor Industrial Point 2020 Total. 2022, 2020, Sources Onsite Wastewater Phosphorus 2018, 2016 Systems Urban/Runoff/Storm Sewers RÍO 21.8 NS 5 5 Η Collection System Failure Chromium VI 2022, 2020 SD 5 5 В **GUADIANA** 50044850 **Confined Animal Feeding** Enterococcus 2022, 2020, Operations PRER10E 2018 Minor Municipal Point Total, 2022, 2018, Sources Nitrogen 2016 Onsite Wastewater Total. 2022, 2020, **Systems** 2018, 2016 Phosphorus RÍO NS В Н 5 5 5 5 Agriculture Chromium VI 2022, 2020 36.8 SD Collection System Failure ARROYATA 50043998 Enterococcus 2022, 2020, Confined Animal Feeding 2018 PRER10G Operations Total, 2022, 2020, Onsite Wastewater Phosphorus 2018, 2016 Systems RÍO MATÓN Confined Animal Feeding Chromium VI 2022, 2020 15.8 SD NS 5 5 5 5 В PRER10J 50042800 Operations Enterococcus 2022, 2020, Onsite Wastewater 2018 Systems 2020 рН Total. 2020

5

4a

4a

3

Н

В

D

Collection System Failure

Nitrogen Total,

рН

Phosphorus

2020

2020, 2012

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Sources **Impairment** Cycles Name Size (miles) R2 DW NS =R1 \mathbf{AL} Network Confined Animal Feeding Η Operations Onsite Wastewater **Systems** Urban Runoff/Storm Sewers RÍO HONDO RÍO HONDO 22 3 Η Collection System Failure 2016, 2014, SD 4a 4a 5 D Dissolved PRER11A Urban Runoff/Storm 2008, 2006 F Oxygen Η Sewers Surfactants 2016, 2008, 2006 RÍO RÍO 33.6 SD NS 5 5 5 5 F Collection System Failure Ammonia 2020 BAYAMÓN BAYAMÓN 50048510 Confined Animal Feeding 2022, 2020 Chromium VI PRER12A1 **Operations** 2022, 2020, Enterococcus Onsite Wastewater 2018 Systems 2020 pН Urban Runoff/Storm Temperature 2022 Sewers Total. 2022, 2020 Nitrogen RÍO 83.7 NS 5 5 5 F Η Collection System Failure Chromium VI 2022, 2020 SD 1 BAYAMÓN Confined Animal Feeding 50047820 Enterococcus 2022, 2020, PRER12A2 Operations 2018 Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers 5 Η Collection System Failure 50.7 SD 5 5 5 F Chromium VI 2022, 2020

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations **Impairment** Cycles Name Size (miles) **Sources** R2 DW NS =R1 AL Network RÍO Dissolved Confined Animal Feeding NS 2020 **GUAYNABO** 50047990 Operations Oxygen 2022, 2020, PRER12B Landfill Enterococcus Major Industrial Point 2018 Sources Total, 2022, 2018, Onsite Wastewater Nitrogen 2016 Systems Total. 2022, 2020, Urban Runoff/Storm 2018, 2016 Phosphorus Sewers RÍO RÍO GRANDE 31 NS 5 Collection System Failure Chromium VI 2022, 2020 SD 5 5 5 F Confined Animal Feeding **GRANDE** DE LOIZA 50059100 Enterococcus 2022, 2018 Operations 2022 **DE LOIZA** PRER14A1 Temperature Major Industrial Point 2020, 2016 Total. Sources Phosphorus Onsite Wastewater 2020, 2018, **Turbidity** Systems 2016, 2014, **Surfaces Mining** 2010, 2008, Urban Runoff/Storm 2006 Sewers RÍO GRANDE NS 5 5 5 5 C Η Agriculture 2022, 2020 86.6 SD Chromium VI E Collection System Failure **DE LOIZA** 50055000 Enterococcus 2022, 2020, PRER14A2 G Confined Animal Feeding 2018 **Operations** 2008 Pesticides Landfill 2022 Temperature Minor Industrial Point 2022, 2018, Total, Sources 2016 Phosphorus Onsite Wastewater Turbidity 2022, 2018 Systems **Surfaces Mining**

42.8

SD

NS

5

5

5

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) **Impairment** Cycles Name **Sources** R2 DW NS =R1 AL Network Urban Runoff/Storm Sewers 32.6 SD Н Confined Animal Feeding Dissolved 2016 RÍO 5 3 D 4a 4a CANÓVANAS F Operations Oxygen Minor Industrial Point PRER14B Н Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers Collection System Failure Н Dissolved 2016, 2014 RÍO 27.9 SD 4a 4a 5 3 D CANOVANILLA F Confined Animal Feeding Oxygen **Operations** PRER14C Η Onsite Wastewater Systems Urban Runoff/Storm Sewers RÍO GURABO 124.3 NS 5 5 5 5 C Н Collection System Failure Chromium VI 2022, 2020 SD PRER14G1 Confined Animal Feeding 50057025 E Enterococcus 2022, 2020, **Operations** 2018 Landfills Temperature 2022, 2020 Minor Industrial Point Total. 2022, 2020, Sources 2018 Nitrogen Onsite Wastewater 2022, 2020, Total, Systems 2018, 2016 Phosphorus **Surfaces Mining Turbidity** 2022, 2020, 2018, 2014, 2012, 2010, 2008, 2006

C

5

Н

Agriculture

Ammonia

2020

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) **Impairment Cycles** Name **Sources** R2 DW NS =R1 AL Network 2022, 2020 Collection System Failure Chromium VI RÍO 50056500 VALENCIANO Confined Animal Feeding Enterococcus 2022, 2020, PRER14G2 2018 Operations Landfills рН 2020 Minor Industrial Point Surfactants 2020 Sources 2022 Total. **Onsite Waster Systems** Nitrogen Urban Runoff/Storm Total. 2022, 2020, Sewers Phosphorus 2018, 2016 **Turbidity** 2022, 2018, 2014, 2010, 2008 RÍO BAIROA 16.3 NS Н Collection System Failure 2022, 2020 SD 5 5 5 5 C Chromium VI PRER14H 50055410 E Major Municipal Point 2022, 2020, Enterococcus G Sources 2018 Minor Industrial Point Total, 2022, 2020, Sources Phosphorus 2018, 2016, Onsite Wastewater 2014, 2012, **Systems** 2010, 2008 Urban Runoff/Storm Total. 2022, 2018, Sewers Nitrogen 2016 RÍO NS 5 5 Collection System Failure Chromium VI 2022, 2020 33.9 SD 5 5 C **CAGÜITAS Confined Animal Feeding** 2022, 2020, 50055250 Ε Enterococcus G **Operations** PRER14I 2018 Onsite Wastewater 2020 Surfactants Systems Temperature 2022 **Surfaces Mining** 2022, 2020, Total. Nitrogen 2018, 2016

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams

Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.

Not	e: The 2022 303(d) Li	ist is comprised o	f the ca	uses of impairme	nts inc	luded i	n asses	sment c	ycles 2	2022,	2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations	Cate	ignate egorie	s Sum	mary	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
	Name	Size (iiiies)	J	NS = Network	R1	R2	AL	DW		Pr		-	·
	DÍO TUDA DO	54.7	gh.	NG							Urban Runoff/Storm Sewers Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Total, Phosphorus Turbidity	2022, 2020, 2018, 2016 2022, 2018, 2014, 2010, 2008
	RÍO TURABO PRER14J	54.7	SD	NS 50054500	5	5	5	5	С	Н	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 Enterococcus Lead Temperature Total, Phosphorus Turbidity	2022, 2020 2022, 2018, 2014 2022, 2020, 2018 2022, 2018 2022, 2020 2022, 2018 2022, 2018, 2014, 2006
	RÍO CAYAGUAS PRER14K	38.5	SD	NS 50051500	5	5	5	5	С	Н	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Chromium VI Copper Enterococcus Temperature Total, Nitrogen	2022, 2020 2022, 2018 2022, 2020, 2018 2022 2022

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022 uses of impairme							and Streams 2020, 2018, 2016, 2014, 2012, 2	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	ignate	d Use s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				Network								T-4-1	2022 2018
												Total, Phosphorus Turbidity	2022, 2018, 2016 2022, 2018
RÍO HERRERA	RÍO HERRERA PRER15A	17	SD		4a	4a	5	5	D F H	M	Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen Turbidity	2016, 2006
RÍO ESPIRITU SANTO	RÍO ESPÍRITU SANTO PRER16A	53.9	SD	NS 50063800	5	5	5	1	F	M	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Chromium VI Enterococcus	2022, 2020 2022, 2020, 2018
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 pH	2020, 2006 2020, 2018 2020 2020, 2018
RÍO FAJARDO	RÍO FAJARDO PRER22A	59.0	SD	NS 50072500	5	5	5	5	J	M	Confined Animal Feeding Operations Landfill	Chromium VI Enterococcus	2022, 2020 2022, 2020, 2018

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes **Categories Summary** Waterbody Waterbody **Potential Pollution** Causes of **Impaired** Basin Stations **Impairment Cycles** Name Size (miles) **Sources** R2 DW NS =R1 AL Network 2022, 2020 Major Municipal Point Temperature Sources Total. 2022, 2020, Minor Industrial Point 2018, 2016 Nitrogen Sources 2022, 2020, Total, Onsite Wastewater Phosphorus 2018, 2016 Systems Urban Runoff/Storm Sewers M RÍO 2.8 3 Onsite Wastewater Dissolved 2020, 2016, RÍO SD 4a 4a 5 D **DEMAJAGUA** DEMAJAGUA Η Systems Oxygen 2012 PRER23A **QUEBRADA OUEBRADA** 5.0 SD 5 3 D M Onsite Wastewater 2016, 2014, Dissolved 4a 4a **CEIBA CEIBA** Η Oxygen 2012, 2006 **Systems** PREQ24A 2016, 2014, Surfactants 2012 **OUEBRADA** Onsite Wastewater 2020, 2012, **OUEBRADA** M Dissolved 4.8 SD 4a 5 3 D 4a **AGUAS Systems AGUAS** Η Oxygen 2006 J **CLARAS CLARAS** Urban Runoff/Storm Sewers PREQ25A RÍO RÍO DAGUAO Dissolved 13.8 SD 4a 5 3 D M Confined Animal Feeding 2016, 2012, 4a **DAGUAO** PRER26A Η Operations 2006 Oxygen J Onsite Wastewater **Systems** Confined Animal Feeding **OUEBRADA OUEBRADA** M Dissolved 2020, 2018, 7.4 SD 4a 4a 5 3 D **BOTIJAS BOTIJAS** Η **Operations** Oxygen 2012, 2006 PREQ28A Onsite Wastewater **Systems** RÍO RÍO BLANCO 45.0 Η Agriculture **Turbidity** 2020, 2012 SD 4a 5 5 D 4a **BLANCO** Confined Animal Feeding PRER30A Η **Operations**

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022							and Streams 2020, 2018, 2016, 2014, 2012, 2	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations	Desi Cate	ignate egorie	d Use s Sum	s and mary	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
		(NS = Network	R1	R2	AL	DW		Pı	200200		
											Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers		
	QUEBRADA PEÑA POBRE PREQ30B	13.4	SD		4a	4a	5	3	D H J	Н	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen	2020, 2018, 2006
RÍO ANTÓN RUIZ	RÍO ANTÓN RUIZ PRER31A	16.9	SD		4a	4a	5	3	D H J	M	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen Temperature	2020, 2016, 2014, 2012 2020
QUEBRADA FRONTERA	QUEBRADA FRONTERA PREQ32A	8.5	SD		4a	4a	5	3	D H J	M	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen	2020, 2012, 2006
RÍO HUMACAO	RÍO HUMACAO PRER33A	55.8	SD	NS 50082000	5	5	5	5	F	M	Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems	Ammonia Chromium VI Copper Enterococcus Mercury pH Temperature	2020 2022, 2020 2022, 2018, 2014 2022, 2020, 2018 2020, 2018 2020 2022, 2020

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022 uses of impairme							and Streams 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	ignate	d Uses s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				Network									
											Urban Runoff/Storm Sewers	Total, Nitrogen Total, Phosphorus Turbidity	2022, 2020, 2018 2022, 2020, 2018, 2016 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 GUAYANÉS	RÍO GUAYANÉS PRER35A	62.0	SD	NS 50085000	5	5	5	5	F	M	1	Chromium VI Copper Enterococcus	2022, 2020 2020, 2016, 2014, 2012, 2006 2022, 2020, 2018
											Onsite Wastewater Systems	PH Temperature Total, Nitrogen	2020, 2016, 2014, 2006 2020, 2016, 2014 2022 2022
												Total, Phosphorus	2022, 2020

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022 uses of impairme							and Streams , 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS = Network	Desi	ignate	ed Use s Sum	s and	Notes	Priority		Causes of Impairment	Impaired Cycles
												Turbidity	2022, 2020, 2016, 2014, 2012, 2006
RÍO MAUNABO	RÍO MAUNABO PRER37A	36.0	SD	NS 50091000	5	5	5	5	F	M	Agriculture Collection System Failure Landfill Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewer	Chromium VI Enterococcus Temperature Total, Nitrogen Total, Phosphorus	2022, 2020 2022, 2020, 2018 2022, 2020 2022, 2020, 2016 2022, 2020, 2016
QUEBRADA PALENQUE	QUEBRADA PALENQUE PRSQ41A	1.0	SD		4a	4a	5	3	D H J, L	M	Onsite Wastewater Systems	Dissolved Oxygen	2012
RÍO CHICO	RÍO CHICO PRSR42A	14.6	SD		4a	4a	5	5	D H J L	M	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Ammonia Copper Dissolved Oxygen Silver Surfactants Total, Phosphorus	2016, 2014, 2012, 2006 2016, 2006 2016, 2012, 2006 2004 2016, 2006 2016, 2006
		35.9	SD	NS	5	5	5	1	J	Н		Chromium VI	2022, 2020

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022							and Streams 2020, 2018, 2016, 2014, 2012, 2	2010 2008 and 200)6
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	gnate	d Uses s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
RÍO GRANDE DE PATILLAS	RÍO GRANDE DE PATILLAS PRSR43A2			Network 50092000							Onsite Wastewater Systems	Enterococcus pH	2022, 2020, 2018 2020
RÍO GUAMANÍ	RÍO GUAMANÍ PRSR49A	22.0	SD		4a	4a	5	3	D H J L	M	Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Temperature	2012
QUEBRADA MELANÍA	QUEBRADA MELANÍA PRSQ50A	7.0	SD		4a	4a	5	3	D H J, L	M	Landfill Onsite Wastewater Systems Urban Runoff/Storm Sewers	Dissolved Oxygen	2020, 2018, 2016, 2014, 2012, 2008
RÍO SECO	RÍO SECO PRSR51A	24.7	SD		4a	4a	5	3	D H J, L	M	Agriculture Onsite Wastewater Systems	Dissolved Oxygen	2012
QUEBRADA AMORÓS	QUEBRADA AMORÓS PRSQ52A	0.7	SD		4a	4a	5	3	D H J, L	M	Agriculture Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen pH	2020, 2012, 2008 2020
QUEBRADA AGUAS VERDES	QUEBRADA AGUAS VERDES	15.0	SD		4a	4a	5	3	D F	M	Confined Animal Feeding Operations	Dissolved Oxygen	2020, 2016, 2014, 2012

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022	•		*		•		and Streams , 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200)6.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	ignate	d Uses s Sum	s and	Notes	Priority		Causes of Impairment	Impaired Cycles
				Network	111	142	712	D ((I			
	PRSQ53A								H, L		Onsite Wastewater Systems		
RÍO NIGUAS DE SALINAS	RÍO NIGUAS DE SALINAS PRSR54A	102.5	SD		4a	4a	5	3	D F H L	M	Confined Animal Feeding Operations Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Dissolved Oxygen	2010
RÍO CAYURES	RÍO CAYURES PRSR56A	5.0	SD		4a	4a	5	3	D H J L	M	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Surfactants	2016, 2014, 2012 2016, 2014, 2012
RÍO COAMO	RÍO COAMO PRSR57A2	59.0	SD	NS 50106500	5 4a	5 4a	5	3	J	Н	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers Agriculture	Chromium VI Cyanide Enterococcus pH Temperature Total, Nitrogen Temperature	2022, 2020 2022 2022, 2020, 2018 2020 2022 2020, 2016
	PRSR57B	49.2	รม		4a	4a	3	3	H J	н	Collection System Failure Confined Animal Feeding Operations	Temperature	2020

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022 uses of impairme							and Streams 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200)6.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	ignate	d Use s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				Network	KI	K2	AL	שעו		P			
											Onsite Wastewater Systems Urban Runoff/Storm Sewers		
RÍO BUCANÁ- CERRILLOS	RÍO BUCANÁ- CERRILLOS PRSR62A1	27.8	SD	NS 50114400	5	5	5	1	J	M	Collection System Failure Onsite Wastewater Systems Surfaces Mining Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen Enterococcus Temperature	2022, 2020 2022, 2020, 2018 2022, 2020, 2018 2020
	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 Enterococcus pH Total, Phosphorus Turbidity	2022, 2020 2022, 2020, 2018 2020 2020
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 Enterococcus Temperature Total, Nitrogen Total, Phosphorus Turbidity	2022, 2020 2022, 2020, 2018 2020 2020 2020 2020, 2018 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes Class **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) **Impairment** Cycles Name Sources NS =R2 AL DW R1 Network RÍO RÍO MATILDE 43.2 SD D M Agriculture 2020 4a 5 3 Temperature 4a MATILDE -- PASTILLO Η Collection System Failure **PASTILLO** PRSR64A Confined Animal Feeding J L Operations Landfills Major Industrial Point Sources Minor Industrial Point Sources Onsite Wastewater **Systems** Urban Runoff/Storm Sewers 2020 RÍO RÍO SD 5 M Agriculture рН 59.6 4a 4a D **TALLABOA TALLABOA** Collection System Failure 2020 Η Temperature Minor Municipal Point PRSR65A L Sources Minor Industrial Point Sources Onsite Wastewater **Systems** Urban Runoff/Storm Sewers RÍO RÍO 60.0 SD NS 5 5 5 5 F Η Agriculture 2022, 2020, Ammonia GUAYANILLA **GUAYANILLA** 50124700 Collection System Failure 2018, 2014 Landfill PRSR67A Chromium VI 2022, 2020 Minor Industrial Point Dissolved 2022, 2020, Sources 2016, 2014, Oxygen 2012, 2008

Note	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022 uses of impairme							nd Streams 2020, 2018, 2016, 2014, 2012, 2	2010, 2008 and 200	06.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	ignate	d Use s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				Network	KI	K2	AL	אע		P			
RÍO YAUCO	RÍO YAUCO PRSR68A1	61.4	SD		4a	4a	5	5	D F H L	M	Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers Agriculture Collection System Failure Landfill Major Municipal Point Sources Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Temperature Total, Nitrogen Total, Phosphorus Turbidity Dissolved Oxygen Total, Phosphorus	2022, 2020, 2018 2022, 2020 2022, 2020, 2018, 2016 2022, 2020, 2018, 2016, 2012, 2010, 2008 2020 2014 2016, 2012
RÍO LOCO	RÍO LOCO PRSR69A1	92.4	SD		4a	4a	5	5	D F H	M	Agriculture Collection System Failure Confined Animal Feeding Operation Landfills Major Municipal Point Sources	Dissolved Oxygen Temperature	2020, 2016, 2014, 2012, 2006 2020

Note	e: The 2022 303(d) L	ist is comprised o		Table 53: 2022							and Streams 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200)6.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS = Network	Desi	ignate	d Use s Sum	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							Minor Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers		
QUEBRADA ZUMBÓN	QUEBRADA ZUMBÓN PRWQ72A	1.7	SD		4a	4a	5	3	D H J, L	M	Collection System Failure Onsite Wastewater Systems	Dissolved Oxygen Surfactants	2016, 2014
QUEBRADA GONZÁLEZ	QUEBRADA GONZÁLEZ PRWQ73A	1.8	SD		4a	4a	5	3	D H J, L	M	Onsite Wastewater Systems	Dissolved Oxygen	2020, 2018, 2012
QUEBRADA LOS PAJARITOS	QUEBRADA LOS PAJARITOS PRWQ74A	2.7	SD		4a	4a	5	3	D H J, L	M	Onsite Wastewater Systems	Dissolved Oxygen	2020, 2012
RÍO GUANAJIBO	RÍO GUANAJIBO PRWR77A	119.3	SD	NS 50138000	5	5	5	5	F	Н	Collection System Failure Confined Animal Feeding Operations Landfill Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Chromium VI Dissolved Oxygen Enterococcus Total, Phosphorus	2022, 2020 2020 2022, 2020, 2018 2022, 2020, 2018, 2016
		58.3	SD		5	5	5	5	F	Н	Agriculture	Chromium VI	2022, 2020

Not	re: The 2022 303(d) L	ist is comprised o		Table 53: 2022							and Streams 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200)6.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations NS =	Desi	ignate egories R2	d Use	s and	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
	RÍO ROSARIO PRWR77C RÍO VIEJO PRWR77D	21.1	SD	NS 50136700 NS 50135625	5	5	5	5	F	Н	Collection System Failure Confined Animal Feeding Operations Landfills Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers Collection System Failure Confined Animal Feeding	Enterococcus Pesticides Total, Phosphorus Chromium VI Cyanide	2022, 2020, 2018 2012 2022 2022 2022 2022, 2020 2022
	RÍO CUPEYES PRWR77G	8.0	SD		4a	4a	5	5	D F H	Н	Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers Agriculture Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm	Dissolved Oxygen Enterococcus Total, Phosphorus Pesticides	2022, 2020, 2018, 2016, 2014, 2012 2022, 2020, 2018 2022, 2020, 2018, 2016 2012

Sewers

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 **Designated Uses and** Priority Monitoring Notes Class **Categories Summary Impaired** Waterbody Waterbody **Potential Pollution** Causes of Basin Stations Size (miles) **Impairment** Cycles Name Sources NS =R2 DW R1 AL Network CAÑO MERLE SD Collection System Failure Dissolved 2012 4a 4a 5 3 D 1.6 PRWK78A Η **Surfaces Mining** Oxygen Onsite Wastewater 2012 J Surfactants L Systems Urban Runoff/Storm Sewers RÍO RÍO YAGÜEZ 42.2 NS 5 Η Agriculture Chromium VI 2022, 2020 SD 5 5 1 J **YAGÜEZ** PRWR79A 50139000 Collection System Failure 2022, 2020, Enterococcus Confined Animal Feeding 2018 Operations Minor Industrial Point Sources Onsite Wastewater Systems Package Plant (Small Flow) Urban Runoff/Storm Sewers RÍO RÍO GRANDE NS 126.0 SD 5 5 5 5 K Η Agriculture Chromium VI 2022, 2020 **GRANDE** DE AÑASCO Collection System Failure 50146000 Enterococcus 2022, 2020, **DE AÑASCO** PRWR83A Confined Animal Feeding 2018 **Operations** рН 2022 Major Municipal Point Turbidity 2020, 2018, Sources 2016, 2014, Minor Industrial Point 2012, 2010 Sources Onsite Wastewater Systems

Not	e: The 2022 303(d) Li	ist is comprised o		Table 53: 2022 uses of impairme							and Streams 2020, 2018, 2016, 2014, 2012,	2010, 2008 and 200)6.
Basin	Waterbody Name	Waterbody Size (miles)	Class	2022 Monitoring Stations	Desi	ignate egorie	d Uses Sum	s and mary	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
				NS = Network	R1	R2	AL	DW		P		•	
											Urban Runoff/Storm Sewers		
	RÍO PRIETO PRWR83I	59.8	SD		4a	4a	5	5	D H K	Н	Agriculture Confined Animal Feeding Operations	Pesticides	2012
											Minor Industrial Point Sources Onsite Wastewater Systems		
QUEBRADA LOS RAMOS	QUEBRADA LOS RAMOS PRWQ89A	6.9	SD		3	3	5	3	D H L	L	Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	Dissolved Oxygen	2020, 2018, 2012, 2008
QUEBRADA PILETAS	QUEBRADA PILETAS PRWQ91A	2.0	SD		3	3	5	3	D H L	L	Onsite Wastewater Systems	Dissolved Oxygen	2012
RÍO CULEBRINAS	RÍO CULEBRINAS PRWR95A	142.6	SD	NS 50149100	5	5	5	5	K	Н	Agriculture Collection System Failure Confined Animal Feeding Operations Landfill Major Industrial Point Sources	Chromium VI Copper Enterococcus Pesticides Total, Nitrogen	2022, 2020 2020 2022, 2020, 2018 2012 2022, 2018

Table 53: 2022 Cycle 303(d) List – List of Rivers and Streams Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2

Basin	Waterbody	Waterbody	Class San Table	2022 Monitoring Stations	Desi	ignate	d Use		Notes 7	Priority Priority	2, 2020, 2018, 2016, 2014, 2012, Potential Pollution Sources	Causes of Impairment	Impaired
	Name	Size (miles)	O	NS = Network	R1	R2	AL	DW	Z	Pri	Sources	ımpairment	Cycles
											Major Municipal Point Sources Minor Industrial Point Sources Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Total, Phosphorus	2022, 2020, 2018
	QUEBRADA LA SALLE PRWQ95F	11.8	SD		4a	4a	5	5	D H K	Н	Agriculture Confined Animal Feeding Operations Onsite Wastewater Systems	Pesticides Dissolved Oxygen	2012
	QUEBRADA EL SALTO PRWQ95G	7.8	SD		4a	4a	5	3	D H K	Н	Agriculture Onsite Wastewater Systems	Dissolved Oxygen	2020, 2016
Notes:	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 2022 cycle.

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- 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

Table 54: Size of waters Impaired by Causes (Monitored sq. mi. for Estuaries)											
Causes of Impairments	Size of Waters Impaired (sq. mi.)										
Surfactants	1.0130										
Arsenic	0.0364										
Dissolved Oxygen	0.8618										
Temperature	0.0780										
Turbidity	0.2932										

	Table 55: 2022 Cycle 303(d) List – List of Estuaries											
Note: The 2022 30	3(d) List is compris									e s 020, 2018, 2016, 201	14, 2012, 2010, 2	008 and 2006.
Basin	Waterbody Name	Waterbody Size (sq. miles)	Class	2022 Monitoring Stations	ring Categories		Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
RÍO HERRERA PRER15A	RÍO HERRERA PREE15A	0.102	SB		4a	4a	5	D F, H	M	Landfill Onsite Wastewater Systems	Surfactants	2012
RÍO ESPÍRITU SANTO 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
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	Dissolved Oxygen Surfactants Turbidity	2012, 2006 2012 2012

PRWE82A

Table 55: 2022 Cycle 303(d) List – List of Estuaries Note: The 2022 303(d) List is comprised of the causes of impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. Designated Priority Waterbody 2022 Uses and Notes **Potential** Waterbody Causes of **Impaired** Basin Categories Size Monitoring **Pollution Impairment Cycles** Name (sq. miles) **Stations Summary** Sources R1 R2 AL Minor **Industrial Point** Sources Onsite Wastewater **Systems** Urban Runoff/Storm Sewers RÍO RÍO 0.0432 SB 5 D M Onsite **Turbidity** 2012 4a 4a **MATILDE-**MATILDE-Η Wastewater **PASTILLO PASTILLO** J, **Systems** PRSR64A PRSE64A L Urban Runoff/Storm Sewers RÍO RÍO 0.0336 Turbidity 2012 SB 4a5 Onsite 4a D. M **TALLABOA TALLABOA** Η Wastewater PRSR65A PRSE65A J, **Systems** Urban L Runoff/Storm Sewers CAÑO CAÑO MERLE 0.158 2014 SB 4a 4a 5 D, M Collection Surfactants **MERLE** PRWK78A System Failure Η PRWE78A J, L CAÑO CAÑO 0.062 SB 3 3 5 D Onsite Dissolved 2012 L **BOOUILLA BOOUILLA** Η Wastewater Oxygen PRWK82A

L

Systems

Surfactants

Turbidity

2012

2012

Note: The 2022 303(d) List is comprised of the causes of impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.

Basin	Waterbody Name	Waterbody Size (sq. miles)	Class	2022 Monitoring Stations	Ca	Designated Uses and Categories Summary R1 R2 AL		Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
					R1							
QUEBRADA	QUEBRADA	0.002	SB		4a	4a	5	D	M	Urban	Dissolved	2016, 2012,
GRANDE DE	GRANDE DE							Н		Runoff/Storm	Oxygen	2008
CALVACHE	CALVACHE							L		Sewers		
PRWQ88A	PRWE88A											
RÍO	RÍO	0.0288	SB		4a	4a	5	D	M	Onsite	Dissolved	2012, 2008
GUAYABO	GUAYABO							H,		Wastewater	Oxygen	
PRWR94A	PRWE94A							J		Systems		
										Urban		
										Runoff/Storm		
										Sewers		

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 included 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

Table 56: Size of waters Impaired by	Causes San Juan Bay Estuary System
Causes of Impairments	Size of Waters Impaired (sq. mi., miles)
Ammonia	3.8340 sq. mi.
Chromium VI	3.8340 sq. mi.
Copper	0.1009 sq. mi., 18.8 mi
Dissolved Oxygen	3.8340 sq. mi., 18.8 mi
Enterococcus	3.8340 sq. mi., 18.8 mi
Lead	0.1009 sq. mi.
Oil and Grease	18.8 mi.
рН	3.7331 sq. mi., 18.8 mi.
Surfactants	3.8340 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

Table 57: 2022 Cycle 303(d) List – List of San Juan Bay Estuary System

Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.

Basin	Waterbody	Waterbody Size	Class	2022 Monitoring Stations	Desi	Cate	d Use gories mary		Notes	Priority	Potential Pollution	Causes of	Impaired
Dasiii	Name		CI	NS = Network ED = External Data	R1	R2	AL	DW	N	Prio	Sources	Impairment	Cycles
ESTUARY SYSTEM	PREE13A1 * Caño Control de La Malaria * Bahía de San Juan * Caño San Antonio * Laguna Del Condado * Península La Esperanza	18.8 miles	SB	ED SJBEP - Bahía de San Juan 1, 2, 3 Laguna Del Condado 1, 2 Canal San Antonio Canal La Malaria Peninsula La Esperanza ED USGS — Monitoring Station 50048565 and 50048580	5	5	5	N/A	FM		Collection System Failure Confined Animal Feeding Operations Major Industrial Point Sources Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Enterococcus Oil & Grease pH Temperature Turbidity	2006 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006 2022, 2020, 2018, 2016, 2014, 2012 2022, 2020, 2018, 2016, 2014, 2012, 2010 2022, 2020, 2018, 2016, 2014, 2012, 2016 2022, 2020, 2018, 2016, 2014, 2012, 2006 2022, 2020, 2018, 2016, 2014, 2012, 2018, 2016, 2014, 2012, 2018, 2016, 2014, 2012, 2018, 2016, 2014, 2012, 2014, 2012, 2014, 2012, 2010
	PREE13A2 * Río Piedras	0.1009 sq. mi. 55 miles	SD	NS 50049100 89027	5	5	5	5	F M	Н	Collection System Failure Confined Animal Feeding	Ammonia Chromium VI	2020, 2014, 2012, 2010, 2008, 2006 2022, 2020

Table 57: 2022 Cycle 303(d) List – List of San Juan Bay Estuary System

Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.

Basin	Waterbody	Waterbody Size	Class	2022 Monitoring Stations NS - Notwork		Cate	ed Use gories mary	3	Notes	Priority	Potential Pollution	Causes of	Impaired
Dasin	Name	(sq. mi., miles)	Ü	NS = Network ED = External Data	R1	R2	AL	DW	Ž	Prio	Sources	Impairment	Cycles
	* Embalse Las Curías			ED SJBEP - Río Piedras 01, 02, 03 Río Puerto Nuevo Embalse Las Curias							Operations Landfill Urban Runoff/Storm Sewers	Copper Dissolved Oxygen	2020 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												Enterococcus	2022, 2020, 2018
												Lead	2020
												Surfactants	2020
												Temperature	2022, 2018, 2016, 2014
												Total,	2022, 2020,
												Nitrogen	2018, 2016
												Total,	2022, 2020,
												Phosphorus	2018, 2016
												Turbidity	2022, 2020,
													2018, 2014,
													2012, 2010, 2008, 2006
	PREE13A3 * Caño	3.7331 sq. mi.	SB SD	NS 50050300	5	5	5	N/A	M	Н	Collection System Failure	Ammonia	2020, 2018, 2016
	Martín	47.9 miles									Confined Animal	Chromium VI	2022, 2020
	Peña			ED SJBEP –							Feeding	Dissolved	2022, 2020,
				Canal Suárez 1, 2 Caño Martín Peña							Operations Onsite Wastewater	Oxygen	2018, 2016, 2014, 2012,

Table 57: 2022 Cycle 303(d) List – List of San Juan Bay Estuary System

Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.

Basin	Waterbody Name	Waterbody Size (sq. mi., miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	Des R1	Categories Summary		Categories		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categorie Summary		Categories Summary		Summary		Categories Summary		Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles								
	* Quebrada			Laguna San José 1,							Systems		2010, 2008,																											
	Juan Méndez			Quebrada Blasina							Urban Runoff/Storm Sewers	Entangagaga	2006																											
	* Quebrada			Quebrada San							Seweis	Enterococcus	2022, 2020, 2018, 2014,																											
	San Antón			Antón									2010, 2014,																											
	* Quebrada			Laguna Los								pН	2022, 2020,																											
	Blasina			Corozos									2018, 2016,																											
	* Canal			Laguna Torrecillas									2014, 2012,																											
	Machicote			1, 2, 3									2010, 2006																											
	* Canal			Laguna Piñones								Surfactants	2020, 2016																											
	Suárez											Temperature	2022, 2020,																											
	* Laguna												2018, 2016,																											
	San José * Laguna											TD + 1	2014, 2012																											
	Torrecillas											Total,	2020, 2018,																											
	* Laguna											Nitrogen	2016																											
	Piñones											Total, Phosphorus	2022, 2020, 2018, 2016																											
	* Laguna											Turbidity	2022, 2020,																											
	Los											Isloidity	2018, 2016,																											
	Corozos												2014, 2012,																											
													2010, 2006																											

Notes:

 ${\bf F}$ - Watersheds that have approved TMDL on September 2012, the pollutant was Fecal Coliforms.

M- External Data

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 including in the PRUWARA and have 50% or more of its waters as impaired for some designated use.
- L: Low Priority: basins that were not including in the PRUWARA and have less than 50% of its waters as impaired for some designated use.

LAGOONS

Table 58: Size of waters Impaired by Causes (Monitored Acres for Lagoons)											
Causes of Impairments	Size of Waters Impaired (sq. mi.)										
Copper	2.6172										
рН	1.2703										
Dissolved Oxygen	3.8781										
Temperature	0.4016										
Enterococcus	0.5250										
Turbidity	1.4344										

N	<i>Table 59:</i> 2022 Cycle 303(d) List – List of Lagoons Note: The 2022 303(d) List is comprised of the impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, and 2008.																																																					
Note: The 2022	303(d) L1st 1s con	mprised of the in	npairme 	ents included in a				22, 20)20,	2018, 2016, 2014, 2012 	2, 2010, and 2008.																																											
Waterbody Name	AU - ID	Waterbody Size (sq. mi.)	Class	2022 Monitoring Stations	U Ca	Designated Uses and Categories Summary R1 R2 A1		ses and tegories mmary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Uses and Categories Summary		Jses and ategories ummary		Uses and Categories Summary		Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaire d Cycles														
LAGUNA JOYUDAS	PRWN0005	0.5297	SB		4a	4a	5	Н	L	Onsite	Copper	2014																																										
								J		Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Dissolved Oxygen	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																																										
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 Enterococcus pH	2014, 2008 2014 2008																																										

Note: The 2022	Table 59: 2022 Cycle 303(d) List – List of Lagoons Note: The 2022 303(d) List is comprised of the impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, and 2008.																																									
Waterbody Name	AU - ID	Waterbody Size (sq. mi.)	Class	2022 Monitoring Stations	De U Ca	Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Designated Uses and Categories Summary		Uses and Categories Summary		Designated Uses and Categories Summary		Uses and Categories Summary		Notes Salva	Priority '		Causes of Impairment	Impaire d Cycles																		
LAGUNA CEIBA	PREN0013	0.1875	SB		5	5	5	Н	L	Unknown Source	Copper Dissolved Oxygen Enterococcus pH	2014 2014 2014 2014																														
LAGUNA POZUELO	PRSN0014	0.0547	SB		3	3	5	Н	L	Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen pH Temperature	2014 2014 2014 2014																														
LAGUNA MAR NEGRO	PRSN0015	0.325	SB		3	3	5	Н	L	Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen pH	2014 2014 2014																														
LAGUNA PUNTA ARENAS	PRSN0016	0.0281	SB		3	3	5	Н	L	Unknown Source Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Temperature Turbidity	2014 2014 2014 2014																														
LAGUNA TIBURONES	PRSN0017	0.0219	SB		3	3	5	Н	L	Landfill Unknown Source	Copper Dissolved Oxygen pH Temperature Turbidity	2014 2014 2014 2014 2014 2014																														
LAGUNA SALINAS	PRSN0018	0.1203	SB		3	3	5	Н	L	Onsite Wastewater Systems Unknown Source	Copper Dissolved Oxygen	2014 2014																														

Note: The 2022	303(d) List is co			2022 Cycle 303(conts included in s					20	2018 2016 2014 2017	2010 and 2008	
Waterbody Name	AU - ID	Waterbody Size (sq. mi.)	Class	2022 Monitoring Stations	De U Ca	Summary R2 AL Sources In		Causes of Impairment	Impaire d Cycles			
LAGUNA SALINAS I (FRATERNIDAD)	PRSN0019	0.4594	SB		3	3	5	Н	L	Onsite Wastewater Systems Unknown Source	Copper Dissolved Oxygen Turbidity	2014 2014 2014
LAGUNA CABO ROJO 2 (CANDELARIA)	PRSN0020	0.2969	SB		3	3	5	Н	L	Unknown Source	Copper Dissolved Oxygen Temperature Turbidity	2014 2014 2014 2014
LAGUNA CABO ROJO 3 (EL FARO)	PRSN0021	0.1078	SB		3	3	5	Н	L	Unknown Source	Copper Dissolved Oxygen Turbidity	2014 2014 2014
CAÑO BOQUERÓN	PRSN0022	0.2859	SB		3	3	5	Н	L	Marinas and Recreational Boating Minor Industrial Point Sources	Copper Dissolved Oxygen pH Turbidity	2014 2014 2014 2014
LAGUNA GUANIQUILLA	PRSN0023	0.0344	SB		3	3	5	Н	L	Unknown Source	Dissolved Oxygen pH Turbidity	2014 2014 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 on 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 including 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

Table 60: Size of waters Impaired by Causes (Monitored acres/miles for Lakes)											
Causes of Impairments	Size of Waters Impaired (acres)										
Arsenic	1,194										
Copper	2,500										
Dissolved Oxygen	7,288										
Enterococcus	35										
Lead	1,726										
Mercury	35										
Pesticides	2,133										
рН	6,858										
Surfactants	634										
Temperature	4,790										
Total, Nitrogen	6,849										
Total, Phosphorus	7,269										
Turbidity	1,898										

Note: T	ha 2022 303(d) List i	is comprised of th		e 61: 2022 Cy		٠, ,		v	4		018, 2016, 2014, 2012, 2	010, 2008 and 200	06
Basin	Waterbody Name	Waterbody Size (acres)	Class	2022 Monitoring Stations NS = Network		ignate Cate	d Uses gories mary AL	and	Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
RÍO GUAJATACA	LAGO GUAJATACA PRNL3A1	1000	SD	NS 10720 10790 10790C	4a	4a	5	5	F	Н	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater	Dissolved Oxygen	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
											Systems	pH Temperature Total, Nitrogen Total,	2022, 2020, 2016 2022, 2020 2022, 2020 2022, 2020,
RÍO GRANDE	LAGO DOS	634	SD	NS	4a	4a	5	5	K	Н	Agriculture	Phosphorus Arsenic	2018 2006
DE ARECIBO	BOCAS PRNL ₁ 7A1	0.54	טט	25110 27090 27090E	та	- 74	5	,	IX	11	Confined Animal Feeding Operations Minor Industrial Point Sources Onsite Wastewater	Copper Dissolved Oxygen	2006 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
											Systems	pН	2022, 2020, 2018, 2016, 2012
												Surfactants Temperature Total, Nitrogen Total, Phosphorus	2006 2022, 2020 2022, 2020, 2018 2022, 2020, 2018
												Phosphorus Turbidity	2018 2022, 2020

PRNL₂8C1

N-4 T	Table 61: 2022 Cycle 303(d) List – List of Lakes Note: The 2022 303(d) List is comprised of the impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.												
Basin	Waterbody Name	Waterbody Size (acres)	Class equi	2022 Monitoring Stations NS = Network		ignate Cate		s and	Notes Notes	_	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
RÍO GRANDE DE ARECIBO	LAGO CAONILLAS PRNL ₂ 7C1	700	SD	NS 89001 89002 89003	4a	4a	5	5	K	Н	Agriculture Onsite Wastewater Systems	Copper Dissolved Oxygen	2020, 2012 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
												Pesticides pH Total, Nitrogen Total, Phosphorus	2008 2020 2022, 2020 2022, 2020, 2018
RÍO GRANDE DE ARECIBO	LAGO GARZAS PRNL ₃ 7A3	108	SD	NS 20050	4a	4a	5	5	K	Н	Agriculture Onsite Wastewater Systems Unknown Source	Copper Dissolved Oxygen Lead Pesticides Total, Phosphorus	2020 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006 2020 2008 2022, 2018
RÍO GRANDE DE MANATÍ	LAGO GUINEO PRNL ₁ 8C1	54	SD		4a	4a	5	5	H K	Н	Agriculture Onsite Wastewater Systems	Dissolved Oxygen Pesticides	2012, 2010, 2006 2008
RÍO GRANDE DE MANATÍ	LAGO MATRULLAS	77	SD	NS 89009	4a	4a	5	5	K	Н	Agriculture Confined Animal	Copper Dissolved	2020 2022, 2020,

2018, 2016,

2014, 2012, 2010

Oxygen

Feeding

Operations

89010

Note: 7	Table 61: 2022 Cycle 303(d) List – List of Lakes Note: The 2022 303(d) List is comprised of the impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.																																														
Basin	Waterbody Name	Waterbody Size (acres)	Class	2022 Monitoring Stations NS = Network	Designated Uses and			Designated Uses and Categories Summary		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 Summary			Categories Summary			Potential Pollution Sources	Causes of Impairment	Impaired Cycles																		
											Minor Industrial Point Sources Onsite Wastewater Systems Unknown Source	Lead pH Total, Nitrogen Total, Phosphorus	2020 2020, 2018, 2014, 2012, 2010, 2006 2022, 2020 2022, 2020, 2018																																		
RÍO DE LA PLATA	LAGO DE LA PLATA PREL ₁ 10A1	560	SD	NS 44400 44950 44950C	4a	4a	5	5	В	Н	Collection System Failure Confined Animal Feeding Operations Landfill Onsite Wastewater Systems	Arsenic Dissolved Oxygen Lead pH Temperature Total, Nitrogen Total, Phosphorus	2006 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006 2020 2022, 2020, 2018, 2016 2022, 2020 2022, 2020 2022, 2020 2022, 2020 2022, 2020, 2018, 2016, 2018, 2016, 2006																																		
RÍO DE LA PLATA	LAGO CARITE PREL ₂ 10A5	333	SD	NS 39900 39950 39950C	4a	4a	5	5	В	Н	Confined Animal Feeding Operations Onsite Wastewater Systems	Dissolved Oxygen pH	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2006 2020																																		

N. C	. 2022 2027 1) 1: 7:			e 61: 2022 Cy							2016 2014 2012 2	010 2000 1200	
Basin	Waterbody Name	Waterbody Size (acres)	Class	2022 Monitoring Stations NS = Network		ignate Cate		s and	Notes Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
												Total, Nitrogen Total, Phosphorus	2022 2022, 2020, 2018
RÍO BAYAMÓN	LAGO CIDRA PREL12A2	268	SD	NS 89029 89030 89031	4a	4a	5	5	F	Н	Collection System Failure Confined Animal Feeding Operations Minor Industrial Point Sources	Copper Dissolved Oxygen	2020 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006
											Onsite Wastewater Systems	Lead Total, Nitrogen Total, Phosphorus	2020 2022, 2020 2022, 2020, 2018
RÍO GRANDE DE LOIZA	LAGO LOIZA PREL14A1	713	SD	NS 57500 58800 58800D	4a	4a	5	5	C	Н	Collection System Failure Confined Animal Feeding Operations Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Dissolved Oxygen Lead pH Temperature Total, Nitrogen Total,	2020, 2014, 2012 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 2012 2022, 2020 2022, 2020 2022, 2020, 2018 2022, 2020,
												Phosphorus	2022, 2020, 2018

Note: Ti	Table 61: 2022 Cycle 303(d) List – List of Lakes Note: The 2022 303(d) List is comprised of the impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.																																																																																
Basin	Waterbody Name	Waterbody Size (acres)	Class	2022 Monitoring Stations NS = Network	Designated Uses and		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Categories Summary		Designated Uses and Categories Summary		Categories Summary		Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
												Turbidity	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008																																																																				
RÍO GRANDE DE PATILLAS	LAGO PATILLAS PRSL43A1	312	SD	NS 89022 89023 89024	4a	4a	5	5	J	Н	Agriculture Minor Industrial Point Sources Onsite Wastewater Systems	Dissolved Oxygen	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006																																																																				
											Unknown Source	Pesticides pH Temperature Total, Phosphorus	2008 2020 2022, 2020 2022, 2020, 2018																																																																				
QUEBRADA MELANÍA	LAGO MELANÍA PRSL50A	35	SD	NS 89026	5	5	5	5	J	M	Agriculture Onsite Wastewater Systems Unknown Source	Enterococcus Mercury Pesticides Temperature Total, Nitrogen Total, Phosphorus	2020 2020 2008 2020 2022, 2020 2022, 2020 2022, 2020, 2018																																																																				
RÍO JACAGUAS	LAGO GUAYABAL PRSL ₁ 60A1	373	SD	NS 89011 89012 89013	4a	4a	5	5	F	M	Agriculture Collection System Failure Minor Industrial Point Sources Onsite Wastewater Systems	Dissolved Oxygen Pesticides pH	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006 2008																																																																				

N T	Table 61: 2022 Cycle 303(d) List – List of Lakes Note: The 2022 303(d) List is comprised of the impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006. 2022 Designated Uses and													
Basin	Waterbody Name	Waterbody Size	Class	2022 Monitoring Stations	Desi	ignate Cate Sum	d Use gories mary	s and	Notes Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
		(acres)		NS = Network	R1	R2	AL	DW	, ,	P ₁				
												Total, Nitrogen Total, Phosphorus	2020 2022, 2020, 2018	
RÍO JACAGUAS	LAGO TOA VACA PRSL ₂ 60A1	836	SD	NS 89014 89015 89016	4a	4a	5	5	F	M	Agriculture Onsite Wastewater Systems	Dissolved Oxygen	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008	
												pH Temperature Total, Nitrogen	2020, 2016 2022 2022, 2020	
												Total, Phosphorus	2022, 2020, 2018	
RÍO BUCANÁ- CERRILLOS	LAGO CERRILLOS PRSL62A1	700	SD	NS 89032 89033 89034	4a	4a	5	5	J	M	Unknown Source Urban Runoff/Storm Sewers	Dissolved Oxygen	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006	
												pH Temperature Total, Nitrogen Total,	2022 2022 2022, 2020 2022, 2020, 2018	
RIO YAUCO	LAGO LUCHETTI PRSL68A1	266	SD	NS 89017 89018 89019	4a	4a	5	5	F	M	Agriculture Onsite Wastewater Systems	Phosphorus Dissolved Oxygen	2018 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008,	

AT , S	Table 61: 2022 Cycle 303(d) List – List of Lakes Note: The 2022 303(d) List is comprised of the impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.																								
Basin	Waterbody Name	Waterbody Size (acres)	Class ma	2022 Monitoring Stations NS = Network		Designated Uses and Categories Summary			Designated Uses and Categories Summary			Designated Uses and Categories Summary			Categories Summary			Categories Summary			Notes Notes		Potential Pollution Sources	Causes of Impairment	Impaired Cycles
												Pesticides pH Total, Nitrogen Total, Phosphorus	2006 2008 2022, 2020, 2018 2022, 2020 2022, 2020, 2018												
RÍO LOCO	LAGO LOCO PRSL69A	69	SD	NS 89021C	4a	4a	5	5	F	M	Onsite Wastewater Systems	Turbidity Dissolved Oxygen pH Total, Nitrogen Total,	2020 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 2020 2022, 2020 2020, 2018												
RÍO GRANDE DE AÑASCO	LAGO GUAYO PRWL83H	285	SD	NS 89004 89005 89006	4a	4a	5	5	K	Н	Agriculture Confined Animal Feeding Operations Major Industrial Point Sources Minor Industrial Point Sources Onsite Wastewater Systems	Phosphorus Dissolved Oxygen Pesticides pH Total, Nitrogen	2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008, 2006 2008 2022, 2020, 2018 2022, 2020, 2018												

Note: T	Table 61: 2022 Cycle 303(d) List – List of Lakes Note: The 2022 303(d) List is comprised of the impairments included in assessments cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008 and 2006.														
Basin Waterbody Name Waterbody Size (acres) Waterbody Size (acres) R1 R2 AL DW Waterbody Name R1 R2 AL DW Waterbody Size (acres) R1 R2 AL DW Waterbody Stations Summary R1 R2 AL DW R1 R2 AL DW R2 Potential Pollution Sources Impairment Cycles												Impaired			
				Network	IXI	112		DW				Total,	2020, 2018		
												Phosphorus	2020, 2010		
	Turbidity 2022, 2020														

Notes:

- **B** Watershed that has an approved TMDL for Río de la Plata, the TMDL was approved on September 2003, the pollutant was Fecal Coliforms.
- C Watershed that has an approved TMDL for Río Grande de Loíza, the TMDL was approved on September 2007, the pollutant was Fecal Coliforms.
- **F** Watersheds that have approved TMDL on 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 on September 2011, the pollutant was Fecal Coliform.
- K Watersheds that have an approved TMDL on 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.
- 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 including in the PRUWARA and have 50% or more of its waters as impaired for some designated use.

COASTAL SHORELINE

Table 62: Size of Waters Imp	Table 62: Size of Waters Impaired by Causes Coastal Shoreline Size of Waters Impaired										
Causes of Impairment	Size of Waters Impaired (miles)										
Arsenic	49.19										
Copper	380.83										
Dissolved Oxygen	92.65										
Enterococcus	390.97										
Fecal Coliforms	7.79										
Lead	152.17										
Mercury	213.37										
Nickel	170.90										
Oil and Grease	82.42										
pН	190.52										
Temperature	251.01										
Thallium	203.74										
Turbidity	434.94										
Zinc	43.80										

Note: The 2022 30	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2022 Designated													
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca		ted nd ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
PRNC01 Punta Borinquén to Punta Sardina	11.75	SB	NS MAC-044, SBZ- 003, SBZ-004, SBZ-005	1	1	5		L	Onsite Wastewater Systems	Copper Thallium	2020 2020			
PRNC02 Punta Sardina to Punta Manglillo	14.10	SB	NS MAC-047 MAC-086 SBZ-006	5	5	5		L	Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Thallium Lead Enterococci Turbidity	2020, 2018 2020 2020 2020, 2018 2022, 2020, 2018, 2016, 2014, 2012			
PRNC03 Punta Manglillo to Punta Morrillos	9.65	SB	NS SBZ-007 SEG3-01	5	5	5		L	Collection System Failure Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Enterococci Temperature Turbidity	2020 2022, 2020, 2018 2020 2020, 2018, 2016			
PRNC04 Punta Morrillos to Punta Manatí	13.66	SB	NS MAC-049 MAC-055 SBZ-008	5	5	5		L	Collection System Failure Onsite Wastewater Systems Urban Runoff/Storm Sewers Upstream Impoundment	Copper Enterococci Mercury Nickel pH Thallium Turbidity	2020, 2018 2020, 2018 2020 2020 2022, 2018 2022, 2018 2022, 2020, 2018, 2016, 2014, 2012			

	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline ote: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.													
Note: The 2022 303	3(d) List is	compr		_			ed in a	ssessm	ent cycles 2022, 2020, 201	8, 2016, 2014, 2012	, 2010, 2008.			
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	U Ca	esigna Ises ar ategor umma R2	nd ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
PRNC05 Punta Manatí to Punta Chivato	7.46	SB	NS SBZ-010 SEG5-01	5	5	5		L	Unknown Source	Copper Enterococci Mercury Thallium pH Turbidity	2020, 2018 2022, 2018 2020 2020 2022, 2020, 2018 2022, 2018			
PRNC06 Punta Chivato to Punta Cerro Gordo	3.23	SB	NS MAC-087 RW23	5	5	5		L	Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Enterococci Mercury Temperature Turbidity	2018 2022, 2018 2020 2022, 2020 2022, 2018			
PRNC07 Punta Puerto Nuevo to Punta Cerro Gordo	5.05	SB	NS MAC-088 SEG7-01 RW-17	1	1	5		L	Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Mercury pH Temperature Turbidity	2020, 2018 2018 2022, 2020 2022, 2020 2020, 2018			
PRNC08 Punta Cerro Gordo to Punta Boca Juana	7.32	SB	NS SBZ-013 SBZ-014 RW-18	5	5	5		L	Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Arsenic Enterococci Lead Copper Nickel Zinc Turbidity	2020 2022, 2020, 2018 2020 2020, 2018 2020 2020 2022, 2020, 2018, 2016			
PREC09	5.78	SB	NS	5	5	5		L		Arsenic	2020			

Note: The 2022 30	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline [ote: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2022 Designated													
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca		ted nd ries	Notes	Priority Second	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
Punta Boca Juana to Punta Salinas			MAC-077 SEG9-01 RW-19						Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Enterococci Lead Nickel pH Turbidity	2020, 2018 2022, 2020 2020 2020, 2018 2022 2022, 2020, 2018, 2016			
PREC10B Punta Salinas to Rio Bayamón Mouth	2.91	SB	NS MAC-063	5	5	5		L	Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Nickel Turbidity	2020, 2018 2022, 2020, 2016, 2014 2020, 2018 2020, 2018 2020, 2018 2022, 2020, 2018, 2016, 2014			
PREC10C Rio Bayamón Mouth to Isla de Cabras	6.63	SB	NS SEG10C-01 SEG10C-02	5	5	5		L	Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Nickel Zinc Thallium pH Temperature Turbidity	2020, 2018 2020, 2018 2020, 2018 2020, 2018 2020, 2018 2020, 2018 2020 2022, 2018 2020 2022, 2018 2020 2022, 2020, 2018, 2016			

Note: The 2022 303	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.													
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses an ategor imma R2	ited nd ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
PREC11 Isla de Cabras to Punta Del Morro	7.79	SB		5	5	5	Н	L	Major Industrial Point Sources Major Municipal Point Sources Minor Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems	Arsenic Copper Dissolved Oxygen Fecal Coliforms	2010 2010 2010 2010			
PREC12 Punta del Morro to West side of Condado Bridge	3.5	SB	NS SBZ-018, SBZ- 019, RW-20B, RW-20A, RW- 25A, ED- CariCoos Buoy	5	5	1		L	Unknown Sources	Enterococci Turbidity pH	2022 2022 2022			
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		L	Urban Runoff/Storm Sewers	Copper Enterococci Lead Mercury Thallium Temperature Turbidity	2020 2022, 2020, 2018 2020 2020 2020 2022, 2020 2022, 2020			
PREC14	4.19	SB	NS EB-40, B-3, SEG14-01	1	1	5		L	Marinas and Recreational Boating	Arsenic Lead Copper	2020 2020 2020			

Note: The 2022 30	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2022 Designated													
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca		ited nd ries	Notes	Priority [5]	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
Punta Las Marías to Punta Cangrejos			SEG14-02, RW- 21C						Urban Runoff/Storm Sewers	Thallium Temperature Turbidity	2020 2022, 2020 2022, 2020, 2018, 2016, 2014			
PREC15 Punta Cangrejos to Punta Vacía Talega	6.23	SB	NS SBZ-024 SBZ-026	5	5	5		L	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Copper Enterococci Mercury Nickel Temperature Thallium Turbidity	2020 2022, 2020, 2018 2020 2020 2022, 2020 2022, 2020 2022, 2020 2022, 2020, 2018, 2016			
PREC16 Punta Vacía Talega to Punta Miquillo	9.46	SB	NS SBZ-027 SBZ-028	5	5	5		L	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Mercury Copper Lead Nickel Thallium Zinc Enterococci Temperature Turbidity	2020 2020 2020 2020 2020 2020 2020 202			

Note: The 2022 30	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2022 Designated													
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca		ited nd ries	Notes	Priority [5]	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
PREC17 Punta Miquillo to Punta La Bandera	8.41	SB	NS MAC-009, SEG17-01 RW-1A	1	1	5		L	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Mercury Temperature Turbidity	2020 2020 2022, 2020 2022, 2018, 2016			
PREC18 Punta La Bandera to Cabezas de San Juan	10.46	SB	NS MAC-010 SBZ-030 RW-2	1	1	5		L	Unknown Source	Copper Thallium pH Temperature Turbidity	2020 2020 2020, 2018 2022, 2020 2022, 2020, 2018, 2016, 2014, 2012			
PREC19 Cabezas de San Juan to Punta Barrancas	7.08	SB	NS MAC-078	5	5	5		L	Marinas and Recreational Boating Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Enterococci Oil & Grease Temperature Turbidity	2020, 2018 2022, 2020, 2018, 2016 2014 2022, 2020 2022, 2020, 2018, 2016, 2014			
PREC20 Punta Barrancas to Punta Medio Mundo	5.33	SB	NS SEG20-01 SEG20-02	5	5	5		L	Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Thallium Dissolved Oxygen Enterococci Temperature Turbidity	2020 2022, 2018, 2016 2020, 2018 2022, 2020 2022, 2020, 2018, 2016			

	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.													
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	esigna Ises ar ategor umma R2	ited nd ries	Notes San a	Priority mssess	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
PREC23 Isla Cabras to Punta Cascajo	8.33	SB	NS SEG23-01	1	1	5		L	Major Industrial Point Sources Marinas and Recreational Boating	Copper Turbidity	2020 2020, 2016			
PREC24 Punta Cascajo to Punta Lima	9.07	SB	NS SEG24-02	5	5	5		L	Major Industrial Point Sources Upstream Impoundment	Copper Dissolved Oxygen Enterococci Temperature Turbidity	2020 2018, 2016 2020, 2018 2022, 2020 2022, 2020, 2018, 2016			
PREC25 Punta Lima to Morro de Humacao	9.83	SB	NS MAC-080 MAC-081 SEG25-01 RW-4, RW-31	5	5	5		L	Major Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Mercury Temperature Enterococci Turbidity	2020, 2018 2020 2022, 2020 2022, 2020, 2018 2022, 2020, 2018, 2016, 2014, 2012			
PREC26 Morro de Humacao to Punta Candelero	1.84	SB	NS SEG26-01	5	5	5		L	Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Enterococci Temperature Turbidity	2020 2020, 2018 2022, 2020 2022, 2020, 2018, 2016			
PREC27	3.74	SB	NS SEG27-01	5	5	5		L	Onsite Wastewater Systems	Arsenic Copper Thallium	2020 2020 2020			

	Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline [ote: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008. 2022 Designated													
Note: The 2022 303	3(d) List is	compr					ed in as	ssessm	ent cycles 2022, 2020, 2018	3, 2016, 2014, 2012, T	, 2010, 2008.			
Assessment Unit ID (AU)	Size of AU (miles)	Class	Monitoring Stations NS = Network ED = External Data	U Ca	signa ses ai itegoi imma R2	nd ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles			
Punta Candelero to Punta Guayanés									Urban Runoff/Storm Sewers	Enterococci Turbidity	2022, 2020, 2018, 2008 2022, 2020, 2018, 2016			
PREC28B Punta Quebrada Honda to Punta Yeguas	0.74	SB	NS SBZ-038	5	5	5		L	Onsite Wastewater Systems Unknown Source	Copper Thallium Enterococci Turbidity	2020, 2018 2020 2020, 2018 2022, 2020, 2016			
PREC28C Punta Guayanés to Punta Quebrada Honda	4.68	SB	NS MAC-012 SBZ-037	5	5	5		L	Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Arsenic Mercury Copper Thallium Enterococci Oil & Grease Temperature Turbidity	2020 2020, 2018 2020, 2018 2020, 2018 2014 2020 2022, 2020, 2018, 2016, 2014, 2012			
PREC29 Punta Yeguas to Punta Tuna	4.35	SB	NS SEG29-02 SEG29-01	5	5	5		L	Onsite Wastewater Systems Unknown Source Urban Runoff/Storm Sewers	Copper Lead Thallium Enterococci pH Turbidity	2020, 2018 2018 2020 2020 2020, 2018 2022, 2020, 2018, 2016			
PREC30	2.65	SB	NS	5	5	5		L	Unknown Source	Copper	2020, 2018			

Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.											
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External	De U Ca	signa ses an ategor mma R2	ted nd ries	Notes and a	Priority gas	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
Punta Tuna to Cabo Mala Pascua			Data MAC-082							Enterococci Turbidity	2022, 2020, 2018, 2016 2022, 2020, 2018, 2016, 2014, 2012
PRSC31 Cabo Mala Pascua to Punta Viento	4.06	SB	NS SEG31-01	5	5	5		L	Onsite Wastewater Systems Urban Runoff/Storm Sewers Upstream Impoundment	Copper Thallium Enterococci Turbidity Temperature	2018 2020 2022 2022, 2020 2020
PRSC32 Punta Viento to Punta Figuras	6.16	SB	NS MAC-083 SBZ-040 RW-6 RW-7	5	5	5		L	Onsite Wastewater Systems Urban Runoff/Storm Sewers Upstream Impoundment	Copper Mercury Thallium Dissolved Oxygen Enterococci	2020, 2018 2020 2020 2018, 2016 2022, 2020, 2018, 2014, 2010 2022, 2020
PRSC33 Punta Figuras to Punta Ola Grande	8.10	SB	NS MAC-017 SEG33-01	5	5	5		L	Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Copper Lead Mercury Enterococci Temperature	2022, 2020 2022, 2020, 2018, 2016, 2014 2020, 2018 2020 2020 2022, 2020 2020

Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.											
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses an ategor umma R2	ted 1d ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
										Turbidity	2022, 2020, 2018, 2016, 2014, 2012, 2008
PRSC34 Punta Ola Grande to Punta Petrona	40.9	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	L	Agriculture Major Industrial Point Sources Onsite Wastewater Systems Urban Runoff/Storms sewers Upstream Impoundment	Copper Lead Mercury Nickel Dissolved Oxygen Enterococci Oil & Grease pH Temperature Turbidity	2020, 2018 2020 2020 2020 2022, 2018, 2016, 2014, 2012, 2010 2022, 2018, 2012, 2010 2014 2022, 2020, 2018, 2016, 2014, 2012, 2010 2022, 2020, 2016, 2014 2022, 2020, 2016, 2014 2022, 2020, 2018, 2016, 2014, 2012, 2010 2021, 2020, 2016, 2014 2022, 2020, 2018, 2016, 2014, 2012, 2014, 2012, 2010
PRSC35 Punta Petrona to Punta Cabullones	16.19	SB	NS MAC-020 SEG35-01 SEG35-02	5	5	5	M	L	Major Municipal Point Sources Onsite Wastewater Systems	Copper Lead Nickel Thallium	2020, 2018 2020 2020 2020 2020

Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.											
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses an ategor umma R2	ted nd ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
			ED-CariCoos Buoy						Upstream Impoundment Urban Runoff/Storm Sewers	Zinc Enterococci Mercury Turbidity	2020 2022, 2020, 2018, 2016 2020, 2018 2022, 2020, 2018, 2016, 2014
PRSC36B Punta Cabullones to Punta Carenero	2.53	SB	NS SEG36B-01	5	5	5		L	Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	pH Temperature Enterococci Copper Mercury Turbidity	2022, 2020 2022, 2020 2022 2018 2018 2022, 2020, 2018, 2016
PRSC36C Punta Carenero to Punta Cuchara	6.70	SB	NS MAC-022 MAC-023	5	5	5		L	Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity Copper Enterococci Mercury Oil & Grease	2022, 2020 2020, 2018 2022, 2020, 2018, 2014 2018 2014
PRSC37B Punta Cuchara to Cayo Parguera	3.30	SB	NS MAC-084	5	5	5		L	Surface Mining Urban Runoff/Storm Sewers	Turbidity Enterococci	2022, 2020, 2018, 2016, 2014 2020, 2018

N-4 Th- 2022 20	<i>Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline</i> Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.											
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses au ategou umma R2	ted nd ries	Notes	Priority sas	Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
DDGC25C	4.20	ap.	NG	1	1	-		.	Upstream Impoundment Unknown Source	pH Copper Nickel Mercury	2020 2020, 2018 2020 2020, 2018	
PRSC37C Cayo Parguera to Punta Guayanilla	4.20	SB	NS MAC-24 MAC-25	1	1	5		L	Major Municipal Point Sources Major Industrial Point Sources Surface Mining Onsite Wastewater Systems Upstream Impoundment Marinas and Recreational Boating Urban Runoff/Storm Sewers	Turbidity Copper Mercury Lead Nickel Thallium Oil & Grease Zinc	2020, 2018, 2016, 2014 2020, 2018 2020 2018 2018 2020 2014 2018	
PRSC38 Punta Guayanilla to Punta Verraco	13.20	SB	NS MAC-027 MAC-028 MAC-089	5	5	5		L	Major Municipal Point Sources Marinas and Recreational Boating Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	Copper Mercury Thallium Oil & Grease Enterococci Turbidity Temperature	2020, 2018 2020 2020 2014 2022, 2020, 2018 2022, 2020 2022, 2020, 2018, 2016, 2014	

	<i>Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline</i> Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.												
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses an ategor umma R2	ited nd ries	Notes	Priority was seen	Potential Pollution Sources	Causes of Impairment	Impaired Cycles		
PRSC39 Punta Verraco to Punta Ballena	6.41	SB	NS MAC-030, Seg39-01, G1	1	1	5		L	Unknown Source	Turbidity Copper Thallium	2022, 2020, 2018, 2016, 2014, 2012 2020 2020		
PRSC40 Punta Ballena to Punta Brea	13.26	SB	NS MAC-034 MAC-085 RW-9	5	5	5		L	Marinas and Recreational Boating Minor Municipal Point Sources Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity Copper Nickel pH Enterococci Temperature	2022, 2020, 2012 2020 2020, 2018 2020, 2018, 2016, 2012 2022, 2020 2022, 2020, 2018, 2012		
PRSC41B1 Punta Brea to Bahía Fosforescente La Parguera	10.93	SB	NS SBZ-045 SEG41B1-01 RW-10	5	5	5		L	Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity Copper Thallium Enterococci Temperature pH	2018, 2012 2022, 2020, 2018, 2016, 2014, 2012 2020 2020 2022 2022, 2020 2020 2022		
PRSC41B2 Bahía Fosforescente La Parguera to	7.00	SB	NS SBZ-046 Seg41B2-01, RW-33	5	5	5		L	Landfill Marinas and Recreational Boating Onsite Wastewater Systems	Copper Thallium Dissolved Oxygen Enterococci	2020, 2018 2020 2022, 2020, 2016 2022, 2020		

Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.												
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network	Designated Uses and Categories Summary		Notes Salva	Priority wassess	Potential Pollution Sources	Causes of Impairment	Impaired Cycles		
	(111100)		ED = External Data	R1	R2	AL		Ь				
Punta Cueva de Ayala									Urban Runoff/Storm Sewers	pH Temperature Turbidity	2020, 2018 2022, 2020 2022, 2018, 2016	
PRSC41B3 Bahía Monsio José to Faro de Cabo Rojo	13.45	SB	NS SEG41B3-01 SEG41B3-02	5	5	5		L	Unknown Source	Turbidity Mercury Thallium Nickel Dissolved Oxygen Enterococci Temperature	2022, 2020, 2018, 2016 2020 2020 2020 2020, 2016 2022, 2020, 2018 2022, 2020	
PRWC42 Faro de Cabo Rojo to Punta Águila	2.89	SB	NS SEG42-01	5	5	5		L	Unknown Source	Turbidity Enterococci Dissolved Oxygen pH Temperature	2022, 2020, 2018, 2016 2022 2022, 2020, 2018, 2016 2022, 2020, 2018 2022, 2020, 2018	
PRWC43	9.54	SB	NS MAC-037, SBZ- 047	5	5	5		L	Collection System Failure	Enterococci Turbidity	2022, 2020 2022, 2020, 2018, 2016	

<i>Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline</i> Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.												
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses an itegor imma R2	ted 1d ries	Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
Punta Águila to Punta Guaniquilla			SBZ-048 RW-12A, RW- 12B, RW-13, RW- 14A						Marinas and Recreational Boating Minor Municipal Point Sources Onsite Wastewater Systems	Temperature	2022, 2020	
PRWC44 Punta Guaniquilla to Punta La Mela	2.50	SB	NS SBZ-050 SBZ-051, RW-8	5	5	5		L	Onsite Wastewater Systems	Enterococci Turbidity Temperature pH Thallium	2022, 2020 2020, 2018, 2016 2022 2020 2020	
PRWC45 Punta La Mela to Punta Carenero	2.95	SB	NS SEG45-01	5	5	5		L	Collection System Failure Marinas and Recreational Boating Onsite Wastewater Systems	Turbidity Copper Thallium Lead Enterococci	2022, 2020, 2018, 2016 2020, 2018 2020 2020 2020, 2018, 2016	
PRWC46 Punta Carenero to front of Cayo Ratones	4.00	SB	NS SBZ-052	1	1	5		L	Collection System Failure Marinas and Recreational Boating Onsite Wastewater Systems Urban Runoff/Storm Sewers	Turbidity Copper Lead Thallium Temperature	2020, 2018, 2016 2020 2020 2020 2020	

<i>Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline</i> Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.											
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	De U Ca	signa ses an ategor imma R2	ted nd ries	Notes un as	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles
PRWC47 In front of Cayo Ratones to Punta Guanajibo	3.85	SB	NS SEG47-01	1	1	5		L	Onsite Wastewater Systems	Turbidity Copper Nickel	2020, 2018 2020 2020
PRWC48 Punta Guanajibo to Punta Algarrobo	5.60	SB	NS MAC-038 MAC-040	5	5	5		L	Onsite Wastewater Systems Upstream Impoundment Urban Runoff/Storm Sewers	pH Turbidity Copper Lead Mercury Thallium Enterococci Nickel Oil & Grease	2018 2022, 2020 2020, 2018 2020 2020 2020 2022, 2020, 2018, 2016, 2014, 2010 2020, 2018 2014
PRWC49 Punta Algarrobo to Punta Cadena	6.98	SB	NS MAC-041 SEG49-01 RW-15	5	5	5		L	Major Municipal Point Sources Upstream Impoundment Urban Runoff/Storm Sewers Onsite Wastewater Systems	Copper Enterococci Nickel pH Temperature Turbidity	2020, 2018 2022, 2020, 2018 2022, 2018, 2012 2022, 2018, 2012 2022, 2020 2022, 2020, 2018, 2016, 2014
PRWC50	4.98	SB	NS SBZ-054	5	5	5		L	Onsite Wastewater Systems	Copper Nickel	2020, 2018 2020, 2018

<i>Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline</i> Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.											
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External	Designated Uses and Categories Summary R1 R2 AL		Notes	Priority [55]	Potential Pollution Sources	Causes of Impairment	Impaired Cycles	
			Data	KI	K2	AL					
Punta Cadena to Punta Higüero			SBZ-055 RW-5						Unknown Sources Upstream Impoundment	Enterococci pH Turbidity	2022, 2018 2022 2022, 2020, 2018, 2016
										Lead	2018
										Mercury	2020
PRWC51	6.14	SB	NS	5	5	5		L	Onsite Wastewater	Copper	2020, 2018
Punta Higüero			SEG51-01						Systems	Lead	2020
to Punta del			SEG51-02						Unknown Source	Mercury	2020
Boquerón			RW-22							Nickel	2020, 2018
										Enterococci	2022, 2020, 2018
										Turbidity	2020, 2018, 2016
PRWC52	6.80	SB	NS	1	1	5		L	Major Municipal	Turbidity	2022, 2020,
Punta del	0.80	SD	MAC-043	1	1)		L	Point Sources	Turbidity	2016, 2018
Boquerón to			SBZ-002, SBZ-						Onsite Wastewater	Copper	2020
Punta			003,						Systems	Соррег	2020
Borinquén			SBZ-004						Urban Runoff/Storm		
1			RW-16, RW-						Sewers		
			16A								
PRCC53	32.70	SB	NS	1	1	5		L		Turbidity	2020, 2010

Note: The 2022 303	<i>Table 63: 2022 Cycle 303(d) List – List of Coastal Shoreline</i> Note: The 2022 303(d) List is comprised of the causes of impairments included in assessment cycles 2022, 2020, 2018, 2016, 2014, 2012, 2010, 2008.												
Assessment Unit ID (AU)	Size of AU (miles)	Class	2022 Monitoring Stations NS = Network ED = External Data	U Ca	Designated Uses and Categories Summary		Notes	Priority	Potential Pollution Sources	Causes of Impairment	Impaired Cycles		
Culebra Island			RW-3						Onsite Wastewater Systems Marinas and Recreational Boating Debris and Bottom Deposits Hazardous Waste	pН	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 including 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 2022 – 305(b) and 303(d) Integrated Report Page 239 APENDIX II - Implementation of the Clean Water Act 303(d) Program Vision Long – Term Vision

Implementation of the Clean Water Act 303(d) Program Vision Long – Term Vision

Introduction

In December 2013, Environmental Protection Agency (EPA) announced a new framework for implementing the Clean Water Act (CWA) Section 303(d) Program – A long-term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program. This new vision, encourage states and territories to develop tailored strategies to implementation CWA 303(d) responsibilities of their overall water quality goals and individuals states priorities.

Recognizing each State is unique, EPA expects that States will vary in the extent to which and how they implement the goals of the Vision, depending on particular circumstances and water quality goals of the State. To support State and EPA discussions on re-orienting CWA 303(d) Program responsibilities consistent with the Vision, EPA is providing additional information for States to consider when implementing the Prioritization, Engagement and Alternative Goals. EPA and States jointly identified these topics as warranting further clarification to promote timely implementation of the Vision and submittal and review of States' 2016 Integrated Reports. EPA anticipates working closely with the States on these issues as States move forward with developing their Integrated Reports.

Long-term Prioritization from 2016 to 2022

Consistent with the new EPA's vision, Puerto Rico Environmental Quality Board (PREQB) identify those assessment units (AU) for priority restoration and protection activities. This prioritization provides a framework to focus the location and timing for the development of, alternative restoration, protection plans and TMDLs. Those alternatives should include:

- Identification of specific impairment addressed by an alternate approach.
- Planning, development and implement effectiveness monitoring programs.
- Revisions, and amendments to the existing regulations.

Recently, PREQB update its Non-Point Source Management Program (NPSMP). One of the most important parts of this NPSMP is the development and implementation of a Priority System. This Priority System will be used as a priority based system in the long-term vision of the assessment restoration and protection under the CWA section 303(d). The main purpose will be standardizing the priority systems and the basic criteria used for a more effective assessment of island's water quality.

Priority Ranking Criteria System

The Priority Ranking Criteria System is based on the awarding of points, distributed in 10 criteria, which will identify the priority. To establish the degree of priority for the protection and restoration the evaluation will be by AU. The selected criteria are:

1. Segment Classification (description)

Under this criterion was established six (6) categories to which a score is assigned considering where it drains the segment into the basin or sub-basin. The highest score in this criteria is awarded to the lake itself and in descending order to its tributaries according to its draining on the basin or sub-basin. Each AU will be classified as follow:

- Stream or Channel not related to river or lakes
- Tributary of main river not flowing into a lake
- Main river not flowing into lake
- Tributary of the main river, which flows into a lake
- Main river which runs into a Lake
- Lake

2. Population Density

The population density is an important criterion to determine which segments are in the greatest need for protection in relation to each other. The relationship of people with respect to the surface space they occupy an area allows us to anticipate where we can find more activity that involves activities with a potential impact on the basins or sub-basins.

The ranges of population density used are the following:

- 160-499
- 500-749
- 750-999
- 1,000-1,349
- 1,350-2,999
- 3.000-9.1000

3. Mean Annual Rainfall

Precipitation generates run-off waters that run on the ground, which have the potential to drag and transport sediment and other pollutants into waterbodies. Those areas in which the precipitation is high, have a greater potential impact on surface water (AU). Therefore, as part of the prioritization system is included the mean annual rainfall as a criterion to assign the priority level of protection of AU. For this criteria were established five classification based on ranges that are shown below:

- 35-49 in
- 50-69 in
- 70-89 in
- 90-99 in
- 100 in or more

4. Predominant Special Activities

The surface water that are impacted, sometimes can be associated to certain contaminant activities. Those activities that are related to specific pollutants have been identified and included under predominant activities criteria. This criterion is intended to give priority to surface water with such activities present in the AU. The classification established are the following:

- Agriculture
- Industrial

5. Monitory Station

Monitoring stations are essential to gather data on water quality and keep it updated. The lack of water quality data limits the analysis and monitoring that can be performed on a waterbody. The existence of a sampling station is essential to carry out successfully the monitoring of the AU. Therefore, this approach is essential in determining whether it is potential candidate or not to be protected. The criteria of monitoring station will be:

- Exist
- Do not exist

6. Known Potential Pollution Source

The potential pollution sources, affect significantly the water quality. The recognition of knowns potential pollution sources on the watershed or sub- basin, imparts a greater certainty in the prioritization process. Therefore, the identification of that sources, will allow to establish the priority order to protect the AU as needed. The classification under this criterion are the following:

- Superfund Site
- Non active landfill
- Active landfill
- Underground storage tanks (UIC)
- Wastewater pump stations (Bypass)
- CES projects
- Livestock Enterprises
- Presence of communities without sanitary sewerage

7. AU frequency on 303(d) List

This criterion was based on the analysis of the 2014 303(d) list. The value of percentage ranges increases according to the frequency the AU was included in the 303(d) List in each evaluation cycles.

- 100-90%
- 89-80%
- 79-70%
- 69-60%
- 59-0%

8. Priority Watersheds

It will be considered if the AU is part of one of the 18 priority watersheds identified in the *Puerto Rico Unified Watershed Assessment and Restoration Activities* (PRUWA) document.

9. Sensitives Natural Area

The presence of sensitive areas in an AU is a criterion that is also important to consider as a matter of priority, since runoff can impact it with many potential pollutants. Therefore, we establish the following criteria:

- None
- Proposed area for conservation
- Designed Natural Reserve
- Natural Reserve designed with proposed area for conservation

10. Water intake from Puerto Rico Aqueduct and Sewer Authority (PRASA)

Water Intakes in the AU will be taken in consideration as a priority criterion.

11. Valuable Coral Reef Areas (Coastal Sensitive Area)

Assessments units that drain to an area identified as valuable coral threatened areas will be established as priority criteria to be manage with a higher priority. On this criterion are considered two categories: For coral reef areas, PREQB took in consideration the information of the National Oceanic and Atmospheric Administration and DNER.

- AU do not drain to a valuable coral reef area (No)
- AU drains to a valuable coral reef area (Yes)

Detail Point of the Priority Ranking System

In order to establish the priority ranking each one of the AU for the inland waters was evaluated considering the following point system (Table 64).

Table 64: Detailed Point System

Criteria Detailed and element	Point
1. Segment Clasification	
• Stream or Caño not related to river or lakes	1
• Tributary of a main river not flowing into a Lake	2
 Main river not flowing into a Lake 	3
• Tributary of the main river, which flows into a lake	4
 Main river which runs into a Lake 	5
• Lake	6
Points to be considered in the percentage calculation	6
2. Population Density	
• 160-499	1
• 500-749	2
• 750-999	3
• 1,000-1,349	4
• 1,350-2,999	5
• 3,000-9,100	6
Points to be considered in the percentage calculation	6
3. Mean Annual Rainfall	
• 35-49 in.	1
• 50-69 in.	2
• 70-89 in.	3
• 90-99 in.	4
• 100 in or more	5
Points to be considered in the percentage calculation	5
4. Predominant Special Activities	
• Industrial	1
Agriculture	2
Points to be considered in the percentage calculation	3
5. Monitory station	
• No	0
• Yes	2
Points to be considered in the percentage calculation	2
6. Known Potential Pollution Sources	
Superfund Site	1
Non active landfills	2
Active landfill	3
• Underground storage tanks (UIC)	4
Wastewater pump stations (Bypass)	5
CES projects	6
Livestock Enterprises	7
Presence of communities without sanitary sewerage	8
Points to be considered in the percentage calculation	36
7. AU frequency on 303 (d) List	

	Criteria Detailed and element	Points
•	0% (not listed)	0
•	1-59%	1
•	60-69%	2
•	70-79%	3
•	80-89%	4
•	90% or more	5
	Points to be considered in the percentage calculation	5
8.	Priority Watersheds	
•	No	0
•	Yes	2
	Points to be considered in the percentage calculation	2
9.	Sensitive Natural Area (Ecological sensitive area)	
•	None	0
•	Proposed area for conservation according to Planning Board	2
•	Designed Natural Reserve	4
•	Designed Natural Reserve with Proposed area for conservation	6
	Points to be considered in the percentage calculation	6
10.	Water intake from AAA	
•	None	0
•	1	2
•	2	4
•	3	6
•	4 or more	8
	Points to be considered in the percentage calculation	8
11.	Valuable Coral Reef Areas (Coastal Sensitive Area)	
	AU do not drains to a valuable coastal area (No)	0
	AU drains to a valuable coastal area (Yes)	5
	Points to be considered in the percentage calculation	5
	TOTAL POINT TO CALCULATE PRIORITY PERCENTAGE	84

Once the evaluation is completed for each one of the assessment unit; to summarize the priority order in which the AU will be address the following categories were established:

High Priority (**H**): are assessment units that have a ranking between 100 to 70 percentages (adjusted).

Moderate Priority (M): are assessment units that have a ranking between 70 to 32 percentages (adjusted)

Low Priority (L): are assessment units that have a ranking between 32 to 0 percentages (adjusted).

Others Consideration for Prioritization

Phosphorus impairments

Due to the fact that the nutrient criteria are much needed for rivers and stream as endpoint for developing TMDL, PREQB had intended to adopt rivers and streams nutrient criteria first. It is likely that the criteria will be adopted for all water of appropriate classes, islandwide.

PREQB amended the Puerto Rico Water Quality Standard Regulation (PRWQSR) to incorporate the new standards for Total Phosphorus and Total Nitrogen applicable to the rivers and streams of PR. It was adopted on August 19, 2014. Actually, PREQB is in the process of complete the development and adoption of the numeric nutrient criteria (TP and TN) for lakes/reservoirs.

The development of the Puerto Rico Nutrient Standard Plan (PRNSP) describes the approach to addressing nutrient over-enrichment, 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.

However, in addition to those AU identified by the priority system the following AU will be included as part of the priority watersheds for the parameter of Phosphorus (Table 65):

Table 65: Additional AU due to Phosphorus Impairments

AU ID	Causes name
PRER14H	Phosphorus
PRSR67A	Phosphorus
PRSR68A1	Phosphorus
PRWR94A	Phosphorus

San Juan Bay Estuary System

The AU (PREE13A2) will be considered as priority, it's belongs to the San Juan Estuary System. This Estuary was designated in 1992 as part of National Estuary Program for which it's developed the Comprehensive Conservation and Management Plan (CCMP), to improved and maintain the integrity of the San Juan Bay Estuary and its designated uses (Table 66).

Table 66: AU of the San Juan Bay Estuary System

AU ID	Causes of imparments
PREE13A2	Dissolve Oxygen, Ammonia, Oil and
	Grease, pH, Thermal Modification, Total
	Coliforms, Turbidity, NO2+NO3,
	Surfactants, Lead, Copper, Cyanide

Long-Term Priorities AU

The PREQB uses the river basins system for planning activities and implementation of restoration efforts. In order to achieve these efforts in a more effective manner, we have replaced the old system based on the segmentation of small portions of rivers and individual creeks by basin segmentation system that has been implemented since the 2006 reporting cycle. The non-contributions basins are those areas, contribute to the coastal shoreline instead of the inland waters. Under this system, each main river basin it is divided in assessment units that consist of complete sub-basins. The smaller river basins have been maintained as a single assessment unit or, at the most, it may be segmented in two assessment units. A total of 194 AU for rivers and streams water bodies; 18 AU for the lakes or reservoirs; and 62 for estuaries (Please refers to Table 67) are delimited in the inland water off Puerto Rico.

 Water body type
 AU
 Sizes of water type

 Rivers/Streams
 194
 5,052.8 miles

 Lakes/Reservoirs
 18
 7,323 acres

 Estuary
 62
 3,430.3 acres

Table 67: AU and water bodies size per Type of Water body

After evaluated each one of the AU taking in consideration the criteria and the other considerations above mentioned the AU included in Table 5 are the long term priorities areas.

Integrated alternatives approaches

Following the alternatives approaches that will be considered to restore and protect impaired waterbodies.

1. Improve Monitoring Strategy

Parameters such as: Arsenic and Cyanide recently have changes in the water quality standard adopted in the PWQSR. Therefore, a specific monitoring plan needs to be develop and implement in each one of the AU that includes parameters such as: arsenic, cyanide in order to very if the impairment persists and a restoration plan or TMDL is needed or identified those AU that comply with the water quality standard and therefore and needs to be delisted from the 303 (d) List.

2. Puerto Rico's Nutrient Plan

This document describes the approach to addressing nutrient over-enrichment, 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. This information will be used as the endpoint in the development of Nutrient TMDL.

3. TMDL development for Nutrient parameter

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 places in the priority list to develop TMDLs for TP.

The final outcome will be gather data to identified those AU that accomplished the parameters and therefore support the delist candidate assessment unit from the list 303 (d).

4. Modifying the Assessment Protocol for the Implementation of the Aquatic Life Criteria in Reservoirs of Puerto Rico

- a. Currently all the lakes in PR are included in the list 303 (d) for the parameter of Dissolved Oxygen (DO). The modification of the protocol implementation for aquatic life will promote the identification of those lakes that under the current protocol do not comply with the parameter of DO. The main objectives are:
 - i. Assess and identify with greater certainty the lakes that really are impacted by dissolved oxygen.
 - ii. Develop an appropriate strategy to restore the lakes/reservoirs identified that are impaired for DO.

5. Integrating Other Programs

a. Puerto Rico Non-Point Source Management Program

- i. This program has among its main objectives integrate the agencies that are partners in the protection, restoration and management of the environment and natural resources. In addition to integrating all areas of work of the EQB in the effort to work in a unified way, considering the priority areas identified, the intention is to integrate to other agencies in this effort.
- ii. Those waters having a high priority (highest priority ranking) will refer to the corresponding PREQB WQA Divisions: ESCD, LEPCD and UICD in order that they can implement their regulatory programs in a strategically effort. Also, the priority will be share with partnerships so they can include it as part of their work plans and thus can direct their efforts (programs, incentives, technical assistance, and outreach activities) to address the highest priority for these waters (please refers to Figure 1).

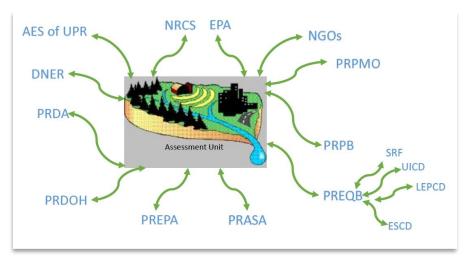


Figure 14: Federal and State Programs, and partners working together

- iii. This strategy: (1) will enhance the strategically coordinated integration of the permit systems, (2) will enhance coordination and improve efficiency, (3) will improve communications among federal, state agencies and NGOs involved in non-point source management, (4) will identify cooperative activities, (5) will evaluate and promote guidance, and (6) will coordinate programs of federal and local agencies and NGOs to better utilize existing resources. The main goal will be:
 - 1. Disseminate the priorities list of the PREQB so that it can be integrated into the decision-making of the related agencies and launch a concerted effort integrated in the priority areas.
 - 2. Elaborate a most complete list with the protection and restoration projects or actions conducted in the priority areas.

b. Partnerships Project

- i. San Juan Bay Estuary System
 - 1. Assessment Protocol for Conducting Outfall Reconnaissance Inventory of San Juan Estuary Bay Watershed.
 - a. The scope of work basically is the identification of illicit discharge outfalls in a sizeable, highly dense populated watershed characterized in a significant portion by the lack of adequate sewage management infrastructure can be particularly challenging. The proposed screening protocol is based on guidelines established by USEPA for detection of illicit discharges. Field screening crews will inventory *all* recognizable outflows along the stream banks of the stream network of the SJBE. No distinction will be established *a*

priory regarding the nature of the existing outfalls (i.e., pluvial, industrial, sewage). Field screening will be conducted during the "dry" season (as recommended by EPA guidelines) to avoid "dilution" from runoff or groundwater sources. Each identified outfall will be catalogued into a relational database linked to a GIS system. A final color coded classification will be assigned to each outfall as follows: unlikely (green); confirmed suspect (red), and initially evident (black). The field screening efforts will be complemented with a stream water quality assessment component to support watershed restoration efforts once the project is completed. The goal of thus subcomponent of the proposal is to identify critical contributing subbasins (i.e., "hot zones") that should receive highest priority in future watershed restoration projects. A sampling strategy will be established based on a subbasin delineation assemblage. document the existence of sewer cross contamination the study will include a rotational sampling scheme of selected major sub-basins in the San Juan Bay Estuary watershed under high flow (storm events) conditions.

Long-term Priorities 2016 - 2022 AUs

Table 68 shows the long-term vision AU's 2016-2022 with its corresponding alternative approaches.

Table 68: Long-term Priorities 2016 - 2022 AUs

Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach
RIO GURABO	PRER14G1	Copper (0530), Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	32512.22173	50.800346	1, 5a
RIO CAONILLAS	PRNR7C1	Arsenic (0510), Cyanide (0720)	23524.998676	36.75781	1, 5a
RIO GRANDE DE LOIZA	PRER14A2	Cyanide (0720), Pesticides (0200), Total Coliforms (1700), Turbidity (2500)	26498.345459	41.403665	1, 5a
RIO CAGUITAS	PRER14I	Cyanide (0720), Surfactants (0400), Thermal Modifications (1400), Total Coliforms (1700), Turbidity (2500	12019.471726	18.780425	1, 5a

Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach
RIO LA PLATA	PRER10A1	Cyanide (0720), Turbidity (2500)	6762.208267	10.56595	1, 5a
RIO CIBUCO	PRNR9A	Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	14250.254207	22.266022	1, 5a
RIO GRANDE DE LOIZA	PRER14A1	Copper (0530), Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	10851.784356	16.955913	1, 5a
RIO ESPIRITU SANTO	PRER16A	Copper (0530), Cyanide (0720), Lead (0550), Low Dissolved Oxygen (1200), pH (1000), Surfactants (0400), Turbidity (2500)	15760.761314	24.62619	1, 5a
RIO LA PLATA	PRER10A3	Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	12896.790193	20.151235	1, 5a
TÚNEL	PRNR7A3	Cyanide (0720)	19822.753445	30.973052	1, 5a
RIO LA PLATA	PRER10A5	Arsenic (0510), Copper (0530), Cyanide (0720), Lead (0550), Mercury (0560), Surfactants (0400), Turbidity (2500)	23893.320027	37.333313	1, 5a
RIO GUAYNABO	PRER12B	Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	12590.494231	19.672647	1, 5a
RIO CULEBRINAS	PRWR95A	Arsenic (0510), Copper (0530), Cyanide (0720), Lead (0550), Pesticides (0200), Surfactants (0400), Total Coliforms (1700), Turbidity (2500)	30592.920494	47.801438	1, 5a
LAKE LA PLATA	PREL110A1	Arsenic (0510), Cyanide (0720), Low Dissolved	7938.7658	12.404322	3, 4, 5a

Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach
		Oxygen (1200), Phosphorus (0910)			
LAKE GUAJATACA	PRNL3A1	Low Dissolved Oxygen (1200)	5824.294966	9.100461	3, 4, 5a
RIO TURABO	PRER14J	Arsenic (0510), Copper (0530), Cyanide (0720), pH (1000), Surfactants (0400), Turbidity (2500)	19006.0409	29.696939	1, 5a
RIO VALENCIANO	PRER14G2	Arsenic (0510), Copper (0530), Cyanide (0720), Surfactants (0400), Turbidity (2500)	12200.5404	19.063344	1, 5a
RIO GRANDE DE ARECIBO	PRNR7A2	Copper (0530), Cyanide (0720), Lead (0550), Pesticides (0200), Total Coliforms (1700), Turbidity (2500)	22446.225457	35.072227	1, 5a
RIO GRANDE DE ARECIBO	PRNR7A1	Copper (0530), Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	7207.74912	11.262108	1, 5a
RIO CIALITO	PRNR8B	Cyanide (0720), Total Coliforms (1700), Turbidity (2500)	10776.451776	16.838206	1, 5a
RIO GRANDE DE MANATI	PRNR8A1	Copper (0530), Cyanide (0720), Turbidity (2500)	14214.337007	22.209902	1, 5a
RIO ROSARIO	PRWR77C	Cyanide (0720), Pesticides (0200), Turbidity (2500)	15356.703909	23.99485	1, 5a
RIO LA PLATA	PRER10A4	Cyanide (0720), Turbidity (2500)	4187.745159	6.543352	1, 5a
RIO HUMACAO	PRER33A	Copper (0530), Cyanide (0720), Lead (0550), Surfactants (0400), Total Coliforms (1700), Turbidity (2500)	14678.023253	22.934411	1, 5a

Water body name	AU ID	Causes of impairments	Area	Sq miles	Approach
LAKE LOIZA	PREL14A1	Copper (0530), Lead (0550), Low Dissolved Oxygen (1200), Turbidity (2500)	7928.060628	12.387595	3, 4, 5a
RIO GRANDE DE AÑASCO	PRWR83A	Cyanide (0720), Low Dissolved Oxygen (1200), Turbidity (2500)	32194.001763	50.303128	1, 5a
LAKE DOS BOCAS	PRNL17A1	Arsenic (0510), Copper (0530), Cyanide (0720), Low Dissolved Oxygen (1200), pH (1000), Surfactants (0400)	10734.480607	16.772626	3, 4, 5a
RIO BAIROA	PRER14H	Phosphorus	5005.816097	7.821588	3
RIO GUAYANILLA	PRSR67A	Phosphorus	16090.163506	25.14088	3
RIO YAUCO	PRSR68A1	Phosphorus	20519.523795	32.061756	3
RIO GUAYABO	PRWR94A	Phosphorus	8200.426277	12.813166	3
SAN JUAN BAY ESTUARY SYSTEM	PREE13A2	Dissolve Oxygen, Ammonia, Oil and Grease, pH, Thermal Modification, Total Coliforms, Turbidity, NO2+NO3, Surfactants, Lead, Copper, Cyanide	16626.02176	25.978159	5b

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APENDIX - III Public Notice



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 enmendada, requiere que las jurisdicciones desarrollen y sometan cada dos años e la Agencia Federal de Protección Ambiental (EPA, por sus siglas en inglés) una lista de los cuerpos de agua que no cumplieron con los estándares de calidad de agua aplicables para los usos designados. Los usos designados para las aguas de Puerto Rico son: contacto primario (natación), contacto secundario (pesca y paseo en botes), propagación y preservación de especies deseables incluyendo especies armenazadas y en peligro (vida acuática) y abasto crudo de agua potable. Para los cuerpos de agua que no cumplen con la norma aplicable, a algún uso designado, la Ley requiere que se implanten medidas de control para los contaminantes. Las medidas de control deben ser aquellas que attendan el problema causado por el incumplimiento al estándar aplicable al uso designado. Cada incumplimiento reflejado en la Lista 303(d) requiere el cálculo de la cantidad máxima del contaminante en incumplimiento que ucuerpo de agua puede recibir y aún así cumplir con los estándares de calidad de agua. Este cálculo se conoce como TMDL (por sus siglas en inglés). Los TMDL's Incluyen reducciones para las fuertes de contaminación que están impactando al cuerpo de agua, las cuales cuando son alcanzadas, resultarán en cl cumplimiento de los estándares de calidad de agua del cuerpo de agua impactando.

El Departamento de Recursos Naturales y Ambientales de Puerto Rico (DRNA) ha desarrollado el borrador de la Lista 303(d) pare el ciclo 2022 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 2022 y la Metodología 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@drna.pr.goy. Las partes interesadas o afectadas pueden someter sus comentarios por escrito a la Sra. Wanda E. García Hernández, Sub-Gerente del Área de Calidad de Agua, a la dirección electrónica antes indicada no más tarde de treinta (30) días a partír de la publicación de este aviso. La fecha límite para sometor dias a partír de la publicación de sete aviso. La fecha límite para sometor 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 Secretaria a la siguiente. dirección electrónica: avudaciudadano@drna.or.gov. no más tarde de treinta (30) dias a partir de la fecha de publicación de este aviso y deberá señalarse la razón o las razones que en la opinión del solicitante american la celebración de la vista pública.



DRNA

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 Jose Industrial Park, 1375 Ave Ponce de Leon, San Juan, PR 00926 797,999 2200 • 787,999,2303 • www.drna.pngov



GOVERNMENT OF PUERTO RICO Department of Natural and Environmental

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 (swimming), secondary 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 803(d) List requires a calculation of the that caused the non-compliance of the standard for the designated use. Each impairment reflected on the 803(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 for 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 Puerto Rico Department of Natural and Environmental Resources (PRDNER) has developed the 303(d) draft list, for the 2022 cycle and invites governmental agencies, non-governmental agencies, and the general public to submit their comments and recommendations.

The List of Impacted Water Bodies draft for the 2022 cycle and the The List of Impacted Water Bodies draft for the 2022 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: waterouality@drna.pr.gov. Interested or affected parties may submit their comments in writing to Mrs. Wanda E. García Hernández, Water Quality Area Sub Manager, 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 deerned 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@ avudaalcudadano@ avudaalcudadano@ avudaalcudadano@ avudaalcudadano@ avudaalcudadano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaalcudaano@ avudaano@ avudaalcudaano@ avudaano@ <a href="mailto:avu merit the holding of the public hearing must be indicated.





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.

San Josephanes (1998) San Gas Sector El Cinco. Rio Piedras, PR 00926 San Jose Industrial Park, 1875 Ave Ponce de Leon, San Juan, PR 00926 San Jose 1990, 2000 - 787 999 2303 - www.drna.pr.gov

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GOBIERNO DE PUERTO RICO Departamento de Recursos Naturales

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 Umpia (CVIA, por sus siglas
en inglés) de 1972, según enmendada, requiere que las jurisdicciones
desarrollen y sometan cada dos años a la Agencia Federal de Protección
Ambiental (EPA), por sus siglas en inglés) una lista de los cuerpos de agua
que no cumpitieron con los estándares de calidad de agua aplicatiles para
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propagación y perservación de especies desetables incluyendo especies
propagación y perservación de especies desetables incluyendo especies
para los cuerpos de agua que no cumplen con la norma aplicable a Jegún
tos designado, la ley requiere que se implanten medidas de control para
los contaminantes, los medidas de control deben ser aquellas que atendan
el problema clussido por el incumplimientos de estandar aplicable a luo
designado. Codo incumplimiento reflejado en la Lista 303(d) requiere el
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cuerpo de agua puede recibir y aún así cumplir con los catándares de calidad
de agua. Este cácidos se conoce como TMDL (por sus siglas en inglés), Los
TMOUs incluyen reduccionas para las fuentes de contaminación que están
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impactando al cuerpo de agua, las fuentes de contaminación que

general a someter sus comentarios y recomendaciones para el cicle 2022 y la Metadologia de Evaluación estarán a la disposición del público para ser examinadas, a petición del interesado nedisante el envide de un curreo electrónico a la siguiente dirección: <u>waterousility@dina.or.gov.</u> Los partes interesados o efectudas pueden someter sus comentarios por estrito a lo fixu Wando E. Garcia Hernándes, Sub-Gerente del Área de Calidad de Agua, a la dirección electrónico antes indicada no más tarte de treinta (30) días a partir del la publicación de este aviso. La fecha límite para someter comentarios puede estendence si se estima necesario o apopiado para el intense publico.

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de él^{*} Pr. 22-6

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MR-18442 IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF PU-ERTO RICO SUNERGY, INC., LLC

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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

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water Quality Stationaria.

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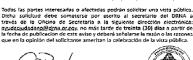
The Puerto Rico Department of Natural and Environmental Resources (PRDDRR) has developed the 303(d) draft list, for the 2022 cycle and invites governmental agencies, non-governmental agencies, and the general public to submit their comments and recommendations.

The List of Impacted Water sodies draft for the 2022 cycle and the Assessment Methodology will be available to the public for examination, at the request of the interested party by sending an ensul to the following address: wateroughlivediran.parcow. interested or affected parties may submit their comments in writing to Mrs. Wanda E. Garda Hernández, Water Qualify Area Sub Manager, 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 porties 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: <u>modelecticadarino® gringoro</u>go, 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.



This announcement was published as required by the Law on Environmental Public Pollicy, Law No. 416 of September 22, 2004, as amended. The cost of the Public Notice is defrayed by the DRNA.







nuncio se publicó conforme a la requerido por la Ley sobre Política . Arribiental, Ley Núm. 416 del 22 de septiembre de 2004, según dodo. El costo del Aviso Público es sufragado por el DRNA.

Puerto Rico 2022 – 305(b) and 303(d) Integra Page 257	ted Report
APENDIX IV – Departmen	nt of Natural and Environmental Resources Determination



GOBIERNO DE PUERTO RICO DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTAI F

IN RE:

PROMULGACIÓN DE LA LISTA DE CUERPOS DE AGUA IMPACTADOS PARA PUERTO RICO PARA EL CICLO 2022

ÁREA DE CALIDAD DE AGUA

RES. NÚM.: N/A

SOBRE LISTA 303(d) DE PUERTO RICO

REF: DIVISIÓN PLANES Y

PROYECTOS

RESOLUCIÓN Y NOTIFICACIÓN

Se presentó ante la consideración de la secretaria de Recursos Naturales y Ambientales el (18) de septiembre de 2023), 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 2022, 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 2 de agosto de 2023. 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 periodo 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.

I. RESOLUCIÓN

Luego de evaluar la totalidad del expediente administrativo sobre la Lista de Cuerpos de Agua Impactados de Puerto Rico para el ciclo 2022, 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 ACOGE 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 2022, Lista 303(d).
- C: Se ordena a la División de Planes y Proyectos 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 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



LISTA DE CUERPOS DE AGUA IMPACTADOS PARA PUERTO RICO CICLO 2022 Página 2

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 período 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 18 de aprim bu de 2023.

Secretaria

Anais Rodriguez Vega