

Supporting Documentation for Review and Approval of Puerto Rico 2024 303(d) List

Pursuant to Sections 303(d) and 305(b) of the Clean Water Act, the Puerto Rico Department of Natural and Environmental Resources submitted its 2024 integrated water quality assessment report to the U.S. Environmental Protection Agency. The 2024 integrated water quality assessment report contains the Puerto Rico 2024 Clean Water Act Section 303(d) list of impaired waters that require total maximum daily load development. The Puerto Rico 2024 303(d) list and supporting documentation are referred to below collectively as the integrated water quality assessment.

The EPA reviewed the integrated water quality assessment to determine whether Puerto Rico developed its impaired waters list in compliance with Section 303(d) of the Clean Water Act and the EPA's implementing regulations. The EPA evaluated whether Puerto Rico reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed. The EPA has concluded that Puerto Rico developed its 2024 303(d) list in compliance with Section 303(d) of the Clean Water Act and 40 Code of Federal Regulations Section 130.7. For the reasons set forth below, EPA Region 2 approves the Puerto Rico 2024 303(d) list.

Identification of Water Quality Limited Segments for Inclusion on the 303(d) List

Section 303(d)(1) of the Clean Water Act directs states (Section 502 of the Act defines "state" to include Puerto Rico) to identify those waters within their jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to achieve any applicable water quality standards, and establish a priority ranking of those waters for TMDL development. The ranking must consider the severity of the pollution and the uses of those waters. According to the EPA's long-standing interpretation of Section 303(d), the listing requirement applies to waters impaired by point and/or nonpoint sources.

The EPA regulations do not require states to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Clean Water Act; (2) more stringent effluent limitations required by state or local authority; and (3) other pollution control requirements required by state, local or federal authority. See 40 CFR 130.7(b)(1).

A state may also exclude a water from the impaired waters list where it demonstrates good cause based on: more recent or accurate data; more sophisticated water quality modeling; flaws in the original analysis that led to the water being listed as impaired; or changes in conditions (e.g., new control equipment or elimination of discharges). See 40 CFR 130.7(b)(6)(iv).

Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information. At a minimum, states must consider existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent Clean Water Act Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public or academic institutions; and (4) waters identified as impaired or threatened in a nonpoint assessment submitted to the EPA under section 319 of the Clean Water Act. See 40 CFR 130.7(b)(5). The EPA regulations specify that states should actively solicit data

from organizations and groups such as local governments, federal agencies, academic institutions and members of the public. See 40 CFR 130.7(b)(5)(iii).

In addition to assembling and evaluating all existing and readily available water quality-related data and information, the EPA regulations at 40 CFR 130.7(b)(6) require states to document the data and information used in making its decision to list or not to list waters on the impaired waters list. The documentation needs to include, at a minimum: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) a rationale for not using any existing and readily available data and information; and (4) any other reasonable information requested by the EPA.

The Puerto Rico Department of Natural and Environmental Resources assessment methodology describes the process for evaluating monitoring data and information. Puerto Rico incorporates its methods document into its integrated water quality assessment report. The methods document describes the process for the consolidation and evaluation of monitoring data and information to determine whether a waterbody's designated use is supported or impaired. The methods include: an explanation of the identification of waterbody type, classification, and use; a description of the Puerto Rico water quality standards used in evaluation; and a detailed presentation of surface water monitoring and assessment.

Puerto Rico's integrated water quality assessment report includes: (1) the segmentation system and assessment unit description; (2) assessment methodology used for the report and assessment results (including the segments classified as category 5, which make up the 303(d) list); (3) Puerto Rico's listing and delisting criteria; (4) the priority ranking and TMDL development status; and (5) a summary of the public participation process.

Puerto Rico has established four monitoring networks from which it collects water quality data and information. These are: surface water, clean lakes, coastal, and beach monitoring networks. The networks provide physical, chemical and biological water quality data for each type of water. Data generated from the rivers and stream stations sampled and analyzed by the U.S. Geological Survey are available on the internet through the water quality portal (www.waterqualitydata.us/) or hardcopy files from its Caribbean Field Office.

Puerto Rico actively solicits data from sources including other territory departments, federal agencies, educational institutions and the San Juan Bay Estuary Program. Due to the large amount of published information on the internet and its accessibility, Puerto Rico conducted a search for information related to the quality of the coastal waters in Puerto Rico. The information search was limited to recognized and reliable sources. Puerto Rico received water quality data from the San Juan Bay Estuary Program (SJBEP), the U.S. Geologic Service (USGS), the National Oceanic and Atmospheric Administration (NOAA), and the Department of Geology at the University of Puerto Rico - Mayagüez Campus (UPR). The SJBEP supplied data from 26 monitoring stations located in the San Jaun Bay estuary which were assessed for 17 physical and chemical parameters. The USGS supplied data from two monitoring stations, also located in the San Juan Bay estuary, which were assessed for 24 physical and chemical parameters. The NOAA National Estuarine Research Reserve System provided data through the Centralized Data Management Office (<http://cdmo.baruch.sc.edu/>) for four monitoring stations, which were assessed for four physical and chemical parameters. Lastly, the Department of Geology at UPR supplied water quality data, however, the sampling protocols and quality assurance for these data could not be verified, and therefore they were not used.

After evaluating all existing and readily available data and information, Puerto Rico, in keeping with its

assessment methodology and based on designated use support, placed its assessment units in one of the following five categories:

- 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 data and/or information is available to determine if any designated uses are being attained.
- Category 4: Waters in which designated uses are impaired or threatened and development of a TMDL is not necessary. A TMDL has been developed by a state and approved by the EPA or a TMDL has been established by the EPA (4a). Other required control measures are expected to result in the attainment of an applicable water quality standard in a reasonable period (4b). A water where a designated use is impaired or threatened by a cause that is not a pollutant (e.g., hydrologic and habitat alterations) (4c).
- Category 5: Waters where at least one water quality standard is not attained and development of a TMDL is needed. Waters in category 5 make up Puerto Rico's 303(d) list.

The EPA reviewed Puerto Rico's description of the data and information in the 2024 integrated water quality assessment and compared the assessment unit/pollutant combinations listed in 2024 with those listed in 2022. The EPA also confirmed all data used for delisting with data from the water quality portal. The EPA concluded that Puerto Rico properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR 130.7(b)(5).

Each listing contains the assessment unit identification number, the assessment unit name, and the impairment cause. The 2024 303(d) list contains 878 assessment unit/pollutant combinations; 86 of these assessment unit/pollutant combinations are new additions to the 2024 303(d) list. The additions are:

PREC12 - Punta Del Morro to West side of Condado Bridge for temperature
PREC29 - Punta Yeguas to Punta Tuna for temperature
PREE13A2 - San Juan Bay Estuary for mercury
PREE13A2 - San Juan Bay Estuary for oil and grease
PREE13A3 - San Juan Bay Estuary for mercury
PREE13A3 - San Juan Bay Estuary for oil and grease
PREL110A1 - Río De La Plata for turbidity
PREL12A2 - Río Bayamón for turbidity
PREL210A5 - Río De La Plata for turbidity
PRER10A1 - Río De La Plata for phosphorus
PRER10A1 - Río De La Plata for surfactants
PRER10A1 - Río De La Plata for turbidity
PRER10A3 - Río De La Plata for temperature
PRER10A4 - Río De La Plata for cyanide
PRER10A5 - Río De La Plata for cyanide
PRER10A5 - Río De La Plata for nitrogen
PRER10A5 - Río De La Plata for temperature
PRER10A5 - Río De La Plata for turbidity
PRER10E - Río De La Plata for cyanide
PRER10E - Río De La Plata for temperature
PRER10G - Río De La Plata for cyanide

PRER10J - Río De La Plata for cyanide
PRER12A1 - Río Bayamón for cyanide
PRER12B - Río Bayamón for pH
PRER12B - Río Bayamón for temperature
PRER14A1 - Río Grande de Loiza for nitrogen
PRER14A1 - Río Grande de Loiza for surfactants
PRER16A - Río Espíritu Santo for ammonia
PRER22A - Río Fajardo for turbidity
PRER33A - Río Humacao for surfactants
PRER37A - Río Maunabo for copper
PRER37A - Río Maunabo for cyanide
PRNC05 - Punta Manatí to Punta Chivato for temperature
PRNL27C1 - Río Grande de Arecibo for turbidity
PRNL28C1 - Río Grande de Manatí for turbidity
PRNL37A3 - Río Grande de Arecibo for pH
PRNR3A1 - Río Guajataca for surfactants
PRNR3A2 - Río Guajataca for cyanide
PRNR3A2 - Río Guajataca for pH
PRNR3A2 - Río Guajataca for phosphorus
PRNR3A2 - Río Guajataca for turbidity
PRNR7A3 - Río Grande de Arecibo for cyanide
PRNR7B2 - Río Grande de Arecibo for copper
PRNR7B2 - Río Grande de Arecibo for lead
PRNR7C2 - Río Grande de Arecibo for temperature
PRNR8A1 - Río Grande de Manatí for pH
PRNR8A2 - Río Grande de Manatí for cyanide
PRNR8A2 - Río Grande de Manatí for lead
PRNR8A2 - Río Grande de Manatí for mercury
PRNR8B - Río Grande de Manatí for phosphorus
PRNR8E1 - Río Grande de Manatí for cyanide
PRNR9A - Río Cibuco for lead
PRSL160A1 - Río Jacaguas for turbidity
PRSL260A1 - Río Jacaguas for turbidity
PRSL50A - Quebrada Melanía for dissolved oxygen
PRSL50A - Quebrada Melanía for pH
PRSL50A - Quebrada Melanía for turbidity
PRSR43A2 - Río Grande de Patillas for copper
PRSR43A2 - Río Grande de Patillas for cyanide
PRSR57A2 - Río Coamo for phosphorus
PRSR57A2 - Río Coamo for surfactants
PRSR62A1 - Río Bucaná-Cerrillos for cyanide
PRSR62A2 - Río Bucaná-Cerrillos for cyanide
PRSR62A2 - Río Bucaná-Cerrillos for surfactants
PRSR63A - Río Portugués for cyanide
PRSR63A - Río Portugués for dissolved oxygen
PRSR67A - Río Guayanilla for cyanide
PRWC47 - In front of Cayo Ratones to Punta Guanajibo for temperature
PRWC48 - Punta Guanajibo to Punta Algarrobo for temperature
PRWC50 - Punta Cadena to Punta Higüero for temperature

PRWR77A - Río Guanajibo for cyanide
PRWR77A - Río Guanajibo for turbidity
PRWR77C - Río Guanajibo for cyanide
PRWR77D - Río Guanajibo for surfactants
PRWR77D - Río Guanajibo for temperature
PRWR79A - Río Yagüez for cyanide
PRWR79A - Río Yagüez for nitrogen
PRWR79A - Río Yagüez for phosphorus
PRWR79A - Río Yagüez for temperature
PRWR79A - Río Yagüez for turbidity
PRWR83A - Río Grande de Añasco for copper
PRWR83A - Río Grande de Añasco for cyanide
PRWR83A - Río Grande de Añasco for phosphorus
PRWR83A - Río Grande de Añasco for temperature
PRWR95A - Río Culebrinas for cyanide
PRWR95A - Río Culebrinas for temperature

Delistings

Puerto Rico delisted 46 waterbody/pollutant combinations from the 2022 303(d) list. According to 40 CFR 130.7(b)(6)(iv), Puerto Rico has shown good cause to delist these waterbody/pollutant combinations; the applicable water quality standards have been attained (shown through monitoring data from October 2019 through September 2023). These waterbody/pollutant combinations are:

PREE13A2 - San Juan Bay Estuary for ammonia
PREE13A3 - San Juan Bay Estuary for surfactants
PREE13A3 - San Juan Bay Estuary for ammonia
PRER10A3 - Río La Plata for pH
PRER10A5 - Río La Plata for copper
PRER10A5 - Río La Plata for lead
PRER10A5 - Río La Plata for pH
PRER10J - Río Matón for pH
PRER10J - Río Matón for phosphorus
PRER12A1 - Río Bayamón for ammonia
PRER12B - Río Guaynabo for dissolved oxygen
PRER14A1 - Río Grande de Loiza for phosphorus
PRER14G2 - Río Valenciano for ammonia
PRER14G2 - Río Valenciano for pH
PRER14G2 - Río Valenciano for surfactants
PRER14I - Río Cagüitas for surfactants
PRER33A - Río Humacao for ammonia
PRER33A - Río Humacao for mercury
PRER33A - Río Humacao for pH
PRER35A - Río Guayanés for lead
PRER35A - Río Guayanés for pH

PRNL27C1 - Lago Caonillas for pH
PRNR7A1 - Río Grande de Arecibo for temperature
PRNR7A1 - Río Grande de Arecibo for phosphorus
PRNR7C1 - Río Caonillas for nitrogen
PRNR7C1 - Río Caonillas for turbidity
PRNR7C2 - Río Limón for nitrogen
PRNR7C2 - Río Limón for turbidity
PRNR7C3 - Río Yunes for nitrogen
PRNR7C3 - Río Yunes for phosphorus
PRNR7C3 - Río Yunes for turbidity
PRNR8E1 - Río Orocovis for nitrogen
PRNR8E1 - Río Orocovis for turbidity
PRSR43A2 - Río Grande de Patillas for pH
PRSR57A2 - Río Coamo for pH
PRSR62A1 - Río Bucaná-Cerrillos for temperature
PRSR62A2 - Río Bucaná-Cerrillos for pH
PRSR62A2 - Río Bucaná-Cerrillos for Phosphorus
PRSR62A2 - Río Bucaná-Cerrillos for turbidity
PRSR63A - Río Portugués for temperature
PRSR63A - Río Portugués for nitrogen
PRSR63A - Río Portugués for phosphorus
PRSR63A - Río Portugués for turbidity
PRSR67A - Río Guayanilla for turbidity
PRWR77D - Río Viejo for turbidity
PRWR95A - Río Culebrinas for copper

Priority Ranking

Section 303(d)(1)(A) of the Clean Water Act and the EPA regulations at 40 CFR 130.7(b)(4) require states to prioritize waters on their impaired waters lists for TMDL development. The EPA regulations further require states to identify those waterbody segments targeted for TMDL development in the next two years. The EPA expects states to identify long-term impaired water program priorities in the context of the state's broader overall water quality goals. This long-term prioritization process is expected to be focused on identifying watersheds or individual waters for priority restoration and protection activities, taking into consideration how Clean Water Act 303(d)-related activities could collectively help achieve a state's broader overall water quality goals. The prioritization provides a framework to focus the location and timing of the development of TMDLs, and alternative restoration and protection plans, in relation to other planning and implementation activities that may already exist in the priority watersheds or waters.

In the 2002 integrated water quality assessment, Puerto Rico established a priority ranking for each waterbody/pollutant combination to determine the sequence of TMDL development and implementation. This ranking prioritizes the watersheds of Puerto Rico based on factors including pollution sources, proximity to sensitive natural habitats including coral reefs, capacity for restoration and the frequency of water quality exceedances. The ranking established three levels of priority:

- ✓ **High Priority:** waterbody/pollutant combinations in basins included in the Puerto Rico Unified Watershed Assessment and Restoration Activities Strategy with a high pollution level related to all the designated uses.
- ✓ **Intermediate (moderate) Priority:** waterbody/pollutant combinations in basins that were not included in the Puerto Rico Unified Watershed Assessment and Restoration Activities Strategy and 50% or more of its waters are listed as impaired for some designated use.
- ✓ **Low Priority:** waterbody/pollutant combinations in basins that were not included in the Puerto Rico Unified Watershed Assessment and Restoration Activities Strategy and less than 50% of its waters are listed as impaired for some designated use.

In the 2024 303(d) list, 348 waterbody/pollutant combinations have been identified as a high priority for the development of TMDLs, 143 waterbody/pollutant combinations have been identified as moderate priority and 387 waterbody pollutant combinations have been identified as low priority.

Puerto Rico has 24 waterbody/pollutant combinations currently in development for TMDLs in the next two years. These 24 waterbody/pollutant combinations are:

PRER14H – Río Bairoa for phosphorus
 PRER14H – Río Bairoa for nitrogen
 PRSR67A – Río Guayanilla for phosphorus
 PRSR67A – Río Guayanilla for nitrogen
 RSR68A1 – Río Yauco for nitrogen
 PRSR68A1 – Río Yauco for phosphorus
 PRWR94A – Río Guayabo for nitrogen
 PREL10A1 – Lago La Plata for phosphorus
 PREL10A1 – Lago La Plata for nitrogen
 PREL14A – Lago Loiza for phosphorus
 PREL14A – Lago Loiza for nitrogen
 PRNR8A3 – Río Grande de Manatí for copper
 PRNR7A2 – Río Grande de Arecibo for copper
 PRNR8C2 – Río Buata for copper
 PRER12B – Río Guaynabo for copper
 PRER12B – Río Guaynabo for lead
 PRER14A1 – Río Grande de Loiza for copper
 PRER14G1 – Río Gurabo for copper
 PRER14J – Río Turabo for copper
 PRWR83A – Río Grande de Añasco for copper
 PRER14G2 – Río Valenciano for copper
 PRER14G2 – Río Valenciano for lead
 PRWR85A – Río Culebrinas for copper
 PRWR95A – Río de La Plata for copper

The EPA has reviewed the Puerto Rico priority ranking of listed waters for TMDL development and concludes that Puerto Rico properly considered the severity of pollution and the uses to be made of such waters. EPA believes that the 24 waterbody/pollutant combinations selected by the Puerto Rico for

completion of a TMDL over the next two years, is an appropriate target for near-term TMDL development.

Public Participation

The availability of the Puerto Rico 2024 draft 303(d) list was publicized by posting notices in the newspapers *Primera Hora* and *El Vocero* on May 6, 2024. The public comment period for the 2024 303(d) list concluded 30 days after the notices were published. During the public comment period, those requesting information were emailed copies of the draft list and methodology in English and Spanish. No comments were received during the public notice period; therefore, no changes were made to the draft 303(d) list for the final 303(d) list.