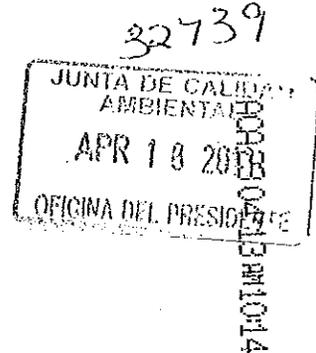




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAR - 9 2013

Laura M. Vélez Vélez, Esq.
Executive Director
Puerto Rico Environmental Quality Board
PO Box 11488
San Juan, PR 00910-2588



Dear Ms. Vélez:

Thank you for your final submittal of Puerto Rico's 2012 303(d)/305(b) Integrated Report dated March 8, 2013. In accordance with Section 303(d) of the Clean Water Act (CWA) and 40 Code of Federal Regulations (CFR) 130.7, the U.S. Environmental Protection Agency (EPA) conducted a complete review of Puerto Rico's Section 303(d) list and supporting documentation, including TMDL Priority Ranking document dated March 25, 2013. The statutory and regulatory requirements and EPA's review of Puerto Rico's compliance with each requirement are described in the enclosed Supporting Documentation.

Section 303(d) of the CWA and EPA's implementing regulations at 40 CFR 130.7 require the Commonwealth to identify waters within its boundaries for which technology-based and other controls are not stringent enough to implement any water quality standards applicable to those waters. Under EPA's regulations, 40 CFR 130.7(b)(4), the Commonwealth is required to identify the pollutants causing the impairment of the listed waters. Section 303(d) further requires the Commonwealth to establish a priority ranking for the listed waters, taking into account the severity of the pollution and the designated uses of the listed waters. Finally, the Commonwealth is required to identify the waters targeted for total maximum daily load (TMDL) development over the next two years.

Puerto Rico's 2012 Section 303(d) list identifies 630 waterbody segment/pollutant combinations still requiring TMDLs. Of these, 52 have been identified as high priority waters targeted for development of TMDLs over the next two years.

The Commonwealth announced the availability of the 2012 Section 303(d) list in *Primera Hora* and *El Vocero* newspapers on February 16, 2012, and provided a 30-day comment period, which ended on March 16, 2012. In addition, a public hearing was held on March 19, 2012, concerning the 2012 Section 303(d) list. Puerto Rico prepared a response to comments summary document.

Based upon our review of the submittal, EPA approves Puerto Rico's 2012 Section 303(d) list. Specifically, EPA approves Puerto Rico's decision to list waterbody segments and associated pollutants set forth in the March 8, 2013 listing document along with the Commonwealth's priority ranking for these waters and pollutants. Should you have any questions concerning this approval, please do not hesitate to contact me at (212) 637-3724, or have your staff contact Nesmarie Negrón at (212) 637-3883.

Sincerely,



Joan Leary Matthews
Director
Clean Water Division

Enclosure.

cc: Carmelo Vázquez Fernández, Director, The Evaluation and Strategic Planning Area (w/enclosure)
Ángel R. Meléndez Aguilar, Chief, The Evaluation and Strategic Planning Area (w/enclosure)

Supporting Documentation for Review and Approval of Puerto Rico's 2012 303(d) List

Pursuant to Section 303(d) of the Clean Water Act (CWA), Puerto Rico (the Commonwealth) submitted to the U.S. Environmental Protection Agency (EPA) its 2012 305(b)/303(d) Integrated Report (2012 Integrated Report). Contained within the 2012 Integrated Report is the Commonwealth's 2012 Clean Water Act Section 303(d) list (2012 303(d) list). EPA has reviewed the 2012 303(d) list and supporting documentation. Puerto Rico's 2012 303(d) list and supporting documentation are referred to below collectively as the "submission."

EPA's review is based on whether the Commonwealth has developed its list in compliance with Section 303(d) of the CWA and EPA's implementing regulations, including whether the Commonwealth reasonably considered existing and readily available water quality-related data and information, and reasonably identified waters required to be listed. EPA has concluded that Puerto Rico developed its 2012 303(d) list in compliance with Section 303(d) of the CWA and 40 Code of Federal Regulations (CFR) 130.7. For the reasons set forth below, EPA approves Puerto Rico's 2012 303(d) list.

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

Section 303(d)(1) of the CWA directs states (Section 502 of the Act defines "state" to include the Commonwealth of 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 implement any applicable water quality standards, and to establish a priority ranking for those waters, taking into account the severity of the pollution and the uses to be made of those waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the CWA; (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).

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, including, at a minimum, consideration of 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 CWA 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 any Section 319 nonpoint assessment submitted to EPA. See 40 CFR 130.7(b)(5). In addition to these minimum categories, states are required to consider any other data and information that is existing and readily available. EPA's guidance describes categories of water quality-related data and information that may be existing and readily available. See Guidance for Water Quality-Based

Decisions: The TMDL Process, EPA Office of Water, 1991, EPA 440-4-91-001, Appendix C (EPA's 1991 Guidance). While states are required to evaluate all existing and readily available water quality-related data and information, states may decide to rely or not rely on particular data or information in determining whether to list particular waters depending on their listing methodology.

In addition to the assemblage and the evaluation of all existing and readily available water quality-related data and information, EPA regulations at 40 CFR 130.7(b)(6) require states to submit documentation in support of determinations to rely or not rely on particular data and information for list decisions. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) documentation to support decisions not to use particular data and information, as well as documentation to support decisions to list or not list waters; and (4) any other reasonable information requested by EPA.

Consistent with EPA's guidance, Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates - EPA841-B-97-002A and EPA841-B-97-002B, 1997, and Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act, July 29, 2005 ("EPA's 2006 Integrated Report Guidance"), the Puerto Rico Environmental Quality Board (PREQB) developed a Consolidated Assessment and Listing Methodology (CALM) in order to integrate the monitoring and assessment activities under Sections 305(b) and 303(d). PREQB's CALM describes the process for the evaluation and consolidation of monitoring data and information to determine the levels of water quality and use support. PREQB incorporates its CALM into its Integrated Report. PREQB's Integrated Report consists of five distinct parts: (1) Segmentation Criteria and Waterbody Segment Definition; (2) Category Determination; (3) Water Quality Assessment by Designated Use; (4) Listing Criteria; and (5) Priority Ranking of the 2012 303(d) list. Each section builds on the previous components to provide a comprehensive methodology. PREQB segments waters under the jurisdiction of the Commonwealth into "assessment units" and assesses water quality standards attainment as specified by PREQB's CALM. The CALM was submitted to EPA as part of the 2012 Integrated Report and is the background document for the 2012 303(d) list.

PREQB has established six monitoring networks from which it collects water quality data and information. These are the Surface Water, Clean Lakes, Nonpoint Sources, Groundwater, Coastal, and Beach Monitoring Networks. These networks provide physical, chemical and biological water quality data for each type of water. PREQB also receives water quality data and information from local governmental agencies and organizations pursuant to Puerto Rico Law No. 416 (September 22, 2004), which requires any agency, office, instrumentality, public corporation, or municipality of Puerto Rico that receives or generates scientific research, work or studies regarding the environment and natural resources to submit a copy of the research, work, or study to PREQB. In addition, for the 2012 303(d) listing cycle, PREQB sent letters, on July 22, 2011, soliciting chemical and biological data on water bodies along with information pertaining to the quality control procedures that were used to generate the data, to a wide variety of organizations, including academic institutions, government agencies, and environmental organizations. Once received, PREQB assembles all existing and readily available data and evaluates this data in accordance with its CALM.

After it has evaluated all existing and readily available data and information, PREQB, in accordance with its CALM and based on designated use support, places assessment units in one of the following five categories in its Integrated Report:

- Category 5: impaired and requiring a Total Maximum Daily Load (TMDL);
- Category 4: impaired or threatened but not requiring TMDL;
- Category 3: insufficient data for determining use attainment;
- Category 2: attaining some designated uses and insufficient data to determine attainment for other uses; and
- Category 1: waters attaining water quality standards for all designated uses.

Assessment units placed in Category 5 of the Integrated Report require a TMDL. Category 5, therefore, is the Commonwealth's 303(d) list.

Assessment units on the 303(d) list are grouped by basin. Each listing contains the assessment unit name, the assessment unit identification number, the impairment type, and the impairment source. The 2012 303(d) list contains 630 assessment unit/pollutant combinations.

To ensure that all impaired waters are listed, EPA reviewed the Commonwealth's description of the data and information in the 2012 Integrated Report and the methodology employed for identifying and categorizing assessment unit/pollutant combinations, and compared the assessment unit/pollutant combinations listed in 2012 with those listed in 2010. EPA concludes that the Commonwealth 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).

Delistings

The Commonwealth delisted 96 assessment unit/pollutant combinations from the 2010 303(d) list. As per 40 CFR 130.7(b)(6)(iv), Puerto Rico has shown good cause to delist these 96 waterbody/pollutant combinations based on one of the following reasons:

1. Approval or establishment by EPA of a TMDL since the last Section 303(d) list.
55 waterbody/pollutant combinations have been delisted due to completion of Fecal Coliform TMDLs:
 - Rio Botijas (PRNR8E2)
 - Rio Orocovis (PRNR8E1)
 - Rio Sana Muertos (PRNR8D)
 - Rio Toro Negro (PRNR8C1)
 - Tunel (PRNR7A3)
 - Quebrada Grande (PRWQ95C)
 - Rio Blanco (PRWR83H)
 - Rio Grande de Manati (PRNR8A2, PRNR8A3 and PRNL28C1)
 - Rio Prieto (PRWR83I)
 - Rio Guayabo (PRWR94A)
 - Rio Culebrinas (PRWR95A)
 - Rio Grande de Manatí (PRNR8A1)
 - Rio Tanama (PRNR7B2)
 - Rio Cialito (PRNR8B)

Rio Caonillas (PRNR7C1)
Rio Mayaguecillo (PRWR83F)
Rio Grande de Arecibo (PRNR7A1 and PRNR7A2)
Rio Guatemala (PRWR95K)
Rio Sonador (PRWR95J)
Quebrada Salada (PRWQ95I)
Quebrada Grande de la Majagua (PRWQ95H)
Quebrada el Salto (PRWQ95G)
Quebrada la Salle (PRWQ95F)
Quebrada las Marias (PRWQ95D)
Rio Caño (PRWR95B)
Quebrada Palma (PREQ27A)
Rio Portugues (PRSR63A)
Quebrada Boqueron (PRWQ71A)
Rio Bucana Cerrillos (PRSR62A1 and PRSL62A)
Rio Cuyon (PRSR57B)
Rio Coamo (PRSR57A2)
Rio Grande de Patillas (PRSR43A2)
Rio Chico (PRSR42A)
Rio Yagüez (PRWR79A)
Rio Grande de Añasco (PRWR83A)
Rio Anton Ruiz (PRER31A)
Quebrada Peña Pobre (PREQ30B)
Quebrada Botijas (PREQ28A)
Quebrada Fajardo (PREQ21A)
Rio Humata (PRWR83D)
Quebrada Aguas Claras (PREQ25A)
Rio Casey (PRWR83C)
Quebrada Ceiba (PREQ24A)
Rio Demajagua (PRER23A)
Rio Daguao (PRER26A)
Rio Blanco (PRER30A)
Rio Sabana (PRER19A)
Rio Cañas (PRWR83B)
Rio Indio (PRNR9B1)
Rio Grande de Loiza (PRER14A2)
Rio de los Negros (PRNR9D)

2. The original listing was made in error and a correction is necessary.

3 waterbody/pollutant combinations previously listed in error:

Rio Grande de Loiza (PRER14A2) was delisted for Ammonia.

The Ammonia standard is not applicable to this segment and was listed in error in 2010. According to the Puerto Rico Water Quality Standards, the Ammonia standard is applicable only to specific segments, which does not include PRER14A2.

Rio Grande de Patillas (PRSR43A1) was delisted for Fecal Coliform and Arsenic.

The correct assessment unit is PRSR43A2 instead of PRSR43A1.

PRSR43A2 is listed for Arsenic and PRSR43A2 is delisted for Fecal Coliform due to TMDL development.

3. The assessment and interpretation of more recent or more accurate data demonstrate that an applicable water quality standard (WQS) is being met.

38 waterbody/pollutant combinations meet the applicable WQS:

Rio Blanco (PRWR83H) for Lead
Rio Grande de Manati (PRNR8A1) for Surfactants and Lead
Rio Caonillas (PRNR7C1) for Low Dissolved Oxygen
Rio Grande de Arecibo (PRNR7A2) for Thermal Modifications
Rio Caño (PRWR95B) for Mercury and Copper
Rio Guayanilla (PRSR67A) for Surfactants
Rio Prieto (PRWR83I) for Copper
Rio Grande de Manati (PRNR8A3) for Mercury
Rio Blanco (PRWR83H) for Copper
Rio Casey (PRWR83C) for Cadmium and Copper
Rio Rosario (PRWR77C) for Surfactants
Rio Guanajibo (PRWR77A) for Phosphorus and Lead
Rio Prieto (PRWR83I) for Lead
Rio Guaynabo (PRER12B) for Mercury
Rio Portugues (PRSR63A) for Low Dissolved Oxygen
Rio Coamo (PRSR57A2) for Surfactants (0400)
Rio Humacao (PRER33A) for Thermal Modifications, Lead, Mercury, and Copper
Rio Grande de Manati (PRNR8A2) for Copper and Surfactants
Rio Caguaitas (PRER14I) for Lead
Rio Bayamon (PRER12A1) for Surfactants
Rio Hondo (PRER11A) for Ammonia
Rio de la Plata (PRER10A4) for Thermal Modifications
Rio de la Plata (PRER10A3) for pH
Rio de la Plata (PRER10A1) for Low Dissolved Oxygen
Rio Orocovis (PRNR8E1) for Copper
Rio Guayanilla (PRSR67A) for Ammonia
Rio Cayaguas (PRER14K) for Low Dissolved Oxygen
Rio Grande de Loiza (PREL14A1) Phosphorus
Rio Guajataca (PRNL3A1) for Mercury
San Juan Bay Estuary (Caño Control de La Malaria, Bahía de San Juan, Caño San Antonio, Laguna Del Condado, Península La Esperanza - PREE13A1) for Arsenic

Priority Ranking

EPA regulations codify Section 303(d)(1)(A) of the Act, which requires states to establish a priority ranking for listed waters. The regulations at 40 CFR 130.7(b)(4) require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those waterbody segments targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A) of the Act. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreation, economic, and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities. See *57 Federal Register* 33040, 33045 (July 24, 1992) and EPA's 1991 Guidance.

PREQB prioritizes assessment units for TMDL development in accordance with its CALM and the Puerto Rico Unified Watershed Assessment and Restoration Activities report (1998) (PRUWA). The PRUWA includes monitoring and assessment methodologies conducted and developed through the cooperative efforts of PREQB, the United States Department of Agriculture's Natural Resources Conservation Service, the United States Geological Survey, and EPA. The PRUWA also identifies priority watersheds for restoration activities. The PRUWA established 18 priority watersheds for targeted restoration activities. The following criteria are used under the PRUWA to prioritize watersheds: (1) the population size that the watershed serves as a source of drinking water; (2) the overall water quality conditions of the watershed; and (3) the number of pollution sources threatening waters throughout the watershed. The 18 priority watersheds targeted for restoration activities are identified under Restoration Priority Category I of the PRUWA and include the following:

Río Grande de Arecibo; Río La Plata; Río Cibuco; Río Grande de Loíza; Río Grande de Añasco; Río Guajataca; Río Yagüez; Río Bayamón; Río Piedras; Río Guanajibo; Quebrada Blasina; Río Grande de Manatí; Río Culebrinas; Río Hondo; Río Grande de Patillas; Río Coamo; Río Guayanilla; and Río Blanco.

PREQB's CALM adopts the priority watersheds identified in the PRUWA as high priority basins. PREQB's CALM considers all assessment unit/pollutant combinations on its 303(d) list located within the priority watersheds identified in the PRUWA as high priority for TMDL development.

The Commonwealth's 2012 Section 303(d) list identifies 630 assessment unit/pollutant combinations still requiring TMDLs. PREQB has targeted 52 of these assessment unit/pollutant combinations for TMDL development over the next two years.

In addition to the assessment unit/pollutant combinations on Puerto Rico's 2012 303(d) list that are located within high priority basins, PREQB established protocols to designate the remaining assessment unit/pollutant combinations on the 2012 303(d) list as medium or low priority for TMDL development. Medium and low priority assessment unit/pollutant combinations are located in medium or low priority basins respectively. Medium priority basins are watersheds in which fifty percent or more of the waters are identified as impaired. Low priority basins are watersheds in which less than fifty percent of the waters are identified as impaired.

EPA has reviewed the Commonwealth's priority ranking of listed waters for TMDL development and concludes that the Commonwealth properly took into account the severity of pollution and the uses of the waters. EPA believes that the 52 unit/pollutant combinations selected by the Commonwealth for completion over the next two years are appropriate waters to target for near-term TMDL development.

Public Participation

On February 16, 2012, the Commonwealth published the availability of the 2012 303(d) list in two local newspapers, *Primera Hora* and *El Vocero*. The thirty-day public comment period ended on March 16, 2012. A public hearing was held on March 19, 2012, as part of the Commonwealth's public participation process. In addition to EPA's comments on the draft 2012 303(d) list, PREQB received comments from the Center of Biological Diversity (CBD) during the public comment period. PREQB sufficiently addressed EPA's concerns and responded to

comments received. Following is a summary of PREQB's response to CBD and EPA's clarification on the Agency's efforts to address ocean acidification.

CBD Comments

CBD provided information and comments suggesting that Puerto Rico list its marine waters due to exceedance of Puerto Rico's water quality standards for pH and its anti-degradation policy.

Puerto Rico responded to CBD's information and comments, stating that while the effects of ocean acidification are of concern, PREQB's assessment of the data and articles submitted does not sufficiently demonstrate non-attainment (or non-attainment within the next listing cycle) of Puerto Rico's water quality standards because they are laboratory-based studies with no field data, or do not contain information or data at the appropriate spatial scale or the appropriate location to show conditions in the Commonwealth's waters. EPA would like to clarify that in Puerto Rico's response, the second use of the word "not" was included mistakenly in the sentence, "EPA guidance suggest[s] that modeling studies should be looked[] into however, the article does not indicate that it has taken samples or carried out studies in areas **not** representative to waters of Puerto Rico."

Conclusion

Based upon its review of the Commonwealth's Responsiveness Summary, EPA concludes that PREQB adequately addressed the issues raised in the comments received on the 2012 303(d) list.

