



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Keith Kawaoka, Deputy Director
Environmental Health Administration
Hawai'i Department of Health
Kinau Hale
1250 Punchbowl Street
Honolulu, Hawai'i 96813

Re: Hawai'i 2020 List of Impaired Waters under Clean Water Act (CWA) Section 303(d) (2020 List)

Dear Deputy Director Kawaoka,

I am pleased to partially approve the subject Impaired Waters List, including all water quality-limited segments and associated pollutants identified by the Hawai'i Department of Health (HDOH) as requiring a total maximum daily load (TMDL) under CWA section 303(d). I am also disapproving the State's omission of Kapoho Point, O'ahu and Lanikai Boat Ramp, O'ahu for enterococcus impairments and am identifying both segments for inclusion on the 2020 List.

The Environmental Protection Agency's (EPA) review and rationale for approval is in the enclosure to this letter. EPA finds that Hawai'i developed its 2020 List partially consistent with the requirements of CWA section 303(d) and its implementing regulations and provides an appropriate framework to improve water quality in impaired waters through TMDLs, but found HDOH's decision not to list Kapoho Point and Lanikai Boat Ramp was inconsistent with the provisions of Hawai'i's water quality standards for fecal indicator bacteria.

EPA will issue a public notice providing for a 30-day public comment period on the inclusions of the two impairments to Hawai'i's 2020 List. After considering any comments received, EPA may make revisions, as appropriate, and will transmit its listings to Hawai'i for incorporation into the State's water quality management plan.

I look forward to our continued partnership to assess and protect Hawai'i's water quality. Please call me if you would like to discuss further, or your staff may contact Eric Dubinsky at (415) 972-3517 or dubinsky.eric@epa.gov with specific questions concerning this decision.

Sincerely,

Tomás Torres
Director, Water Division

Enclosure

cc: Alec Wong

Enclosure

EPA Review of Hawai‘i’s 2020 CWA Section 303(d) List

I. Purpose

Section 303(d) of the Clean Water Act (CWA) requires each state and territory to “identify those waters within its boundaries for which [current pollution control technologies] ... are not stringent enough to implement any water quality standard applicable to such waters.” This list is referred to as the Impaired Waters List, 303(d) List or Category 5 (see Five Reporting Categories below).¹ In addition to section 303(d) lists of impaired waters, states are required to submit CWA section 305(b) water quality reports that provide information on the water quality status of all waters in the state. EPA recommends that states combine the section 305(b) report and section 303(d) List into a single “Integrated Report” (IR). EPA reviews CWA 305(b) reports but is only required to approve or disapprove CWA 303(d) Lists.

Five Reporting Categories

- Category 1: All designated uses are supported, no use is threatened;
- Category 2: Available data and/or information indicate that some, but not all of the designated uses are supported;
- Category 3: There is insufficient available data and/or information to make a use support determination;
- Category 4: Available data and/or information indicate that at least one designated use is not being supported or is threatened, but a TMDL is not needed;
- Category 5: Available data and/or information indicate that at least one designated use is not being supported or is threatened, and a TMDL is needed.

This document describes EPA's rationale for partial approval and partial disapproval of the State of Hawai‘i’s 2020 CWA section 303(d) list of water quality-limited segments (WQLSs) requiring a Total Maximum Daily Load (TMDL) pursuant to 40 C.F.R. § 130.7(a) (2020 List). EPA received Hawai‘i’s submittal: *2020 State of Hawaii Water Quality Monitoring and Assessment Report: Integrated Report to the U.S. Environmental Protection Agency and the U.S. Congress Pursuant to §303(d) and §305(b), Clean Water Act (P.L. 97-117)* (2020 Integrated Report) on November 17, 2020. EPA’s ATTAINS database logs receipt on November 19, 2020, and includes Hawai‘i’s 2020 List, listing decisions, assessment methodology and supporting data.

This review describes the basis for EPA’s decision to approve the State’s listings of WQLSs requiring a TMDL identified in the State’s 2020 Integrated Report, Appendix C,

¹ U.S. Environmental Protection Agency. 2005. “Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act,” Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds, Washington, DC.

“§303(d) List of Impaired Waters.” This review also describes the basis for EPA’s decision to disapprove Hawai‘i’s exclusion of two waterbodies (Kapoho Point, O‘ahu and Lanikai Boat Ramp, O‘ahu) from its list of WQLSs requiring a TMDL for enterococcus (fecal indicator bacteria) based on monitoring results and the State’s water quality standards for enterococcus. The basis for EPA’s addition of Kapoho Point and Lanikai Boat Ramp on the 2020 List for enterococcus impairments is detailed below and case-specific waterbody information is provided in Table 1.

EPA will open a public comment period on the addition of two coastal waterbodies (Kapoho Point and Lanikai Boat Ramp) for enterococcus impairments to Hawai‘i’s section 303(d) List and will, if appropriate, revise the list of added waterbodies following consideration of comments received.

II. Statutory and Regulatory Background

A. Identification of WQLSs for Inclusion in the List

CWA section 303(d)(1) directs states to identify those waters within its jurisdiction for which effluent limitations required by CWA section 301(b)(1)(A) and (B) are not stringent enough to achieve applicable water quality standards, and to establish a priority ranking for addressing such waters, taking into account the severity of the pollution and the designated uses of such waters. CWA section 303(d) listing requirements apply to waters impaired by both point sources and nonpoint sources of pollution.

As provided at 40 C.F.R. § 130.7(b)(1), a state need not include WQLSs in Category 5 when specific circumstances exist. Such WQLSs are included in Category 4 as follows:

- Category 4a: A TMDL to address a specific segment/pollutant combination has been approved or established by EPA.
- Category 4b: A use impairment caused by a pollutant is being addressed by the state through other pollution control requirements.
- Category 4c: A use is impaired, but the impairment is not caused by a pollutant.

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

EPA regulations require each state to “assemble and evaluate all existing and readily available water quality-related data and information to develop the list” and provide a rationale, subject to EPA approval, for any decision not to use existing and readily available data and information. 40 C.F.R. § 130.7(b).

EPA’s *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act* describes examples of the types of water quality-related data and information that should be assembled and evaluated for developing state lists. The regulations specify that this requirement includes, but is not

limited to, all the existing and readily available data and information about the following categories of waters:

- Waters identified as partially meeting or not meeting designated uses or as threatened in the state’s most recent CWA section 305(b) report.
- Waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards.
- Waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions.
- Waters identified as impaired or threatened in any CWA section 319 nonpoint source assessment submitted to the EPA. 40 C.F.R. § 130.7(b)(5).

Pursuant to 40 C.F.R. § 130.7(b)(6), each state must include, as part of its submittal to EPA, documentation to support decisions to rely or not rely on particular data and information, and decisions to list or not list waters. 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; and (3) any other reasonable information requested by EPA.

C. Priority Ranking

EPA regulations at 40 C.F.R. § 130.7(b)(4) also require each state to prioritize WQLSs for TMDL development, and to specifically identify those targeted for TMDL development in the next two years. In prioritizing and targeting waters, each state must, at a minimum, take into account the severity of the pollution and the uses of such waters. CWA section 303(d)(1)(A). A state may consider other factors including immediate programmatic needs including vulnerable aquatic habitats, recreational, economic, and aesthetic importance, degree of public interest and support, and state or national policies and priorities.^{2,3}

III. Analysis of Submittal

A. Identification of WQLSs

EPA has reviewed the State’s submittal and concludes Hawai‘i’s 2020 List is in partial compliance with CWA section 303(d) and 40 C.F.R. § 130.7.

Hawai‘i based its 2020 List on its analysis of readily available data and information to determine whether additions to or deletions from its 2018 List were necessary (*2018 State of Hawaii Water Quality Monitoring and Assessment Report: Integrated Report to the*

² U.S. Environmental Protection Agency. 1992. July 24, 1992 Federal Register and 40 C.F.R. Parts 122, 123, 130, revision of regulation, 57 Fed. Reg. 43 pp. 33040.

³ U.S. Environmental Protection Agency. 1991. “Guidance for Water Quality-Based Decisions: The TMDL Process,” Office of Water. EPA 440/4-91-001.

U.S. Environmental Protection Agency and the U.S. Congress Pursuant to §303(d) and §305(b), Clean Water Act (P.L. 97-117)). The State’s approach, wherein previously listed waters remain WQLSs unless the existing and readily available water quality-related data no longer indicate impairment, is consistent with federal requirements. EPA finds it was reasonable for the State to include most of the previously listed waters on its 2020 List. The State also added new listings as a result of new data reviewed.

B. Assembly of Data

EPA evaluated whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed. EPA finds the State’s approach to assembling readily available data and information to be reasonable.

EPA’s finds the State’s data compilation process was clear and provided an adequate basis for assessments. The State considered research data provided by government and non-government agencies and water quality data collected by the Hawai‘i Department of Health (HDOH) Clean Water Branch (CWB) staff between November 1, 2017 through October 31, 2019, as well as historic data previously provided.

EPA finds the State satisfied the regulatory requirement to assemble all readily available data and information for its 2020 Integrated Report and 2020 List. The State compiled data and information from multiple sources, including those identified at 40 C.F.R. § 130.7(b)(5)(iii). The State requested the submittal of water quality data between June 19, 2019 through November 1, 2019 via the HDOH CWB’s website (<http://health.hawaii.gov/cwb/>) and local newspapers including Honolulu Star-Advertiser, The Garden Isle, Hawai‘i Tribune-Herald, West Hawaii Today, The Maui News and MidWeek.

HDOH’s monitoring programs provided the main source of data reviewed. Most of the data assessed in the 2020 Integrated Report originated from HDOH CWB coastal beach samples collected in nearshore coastal areas, as most of the CWB’s monitoring efforts are currently focused on coastal beach monitoring, with only a minor amount of data assessed from inland water bodies. Additional water quality data considered for the 2020 Integrated Report originated from NPDES permitted facilities, private consulting firms, a non-profit program (Hui O Ka Wai Ola), and routine and special sampling conducted by HDOH or partnering entities as shown in Appendix A of the State’s submittal.

C. Listing Methodology

The State’s listing methodology identifies impaired waters and specifies explicit factors for making listing and delisting decisions for different pollutant types based on different kinds of data. In general, the State lists a waterbody based on adequate documentation that water quality standards (WQSs), as defined in the Hawaii Administrative Rules Title 11, Chapter 54, and approved by EPA, were not met during the assessment period.

Decisions to list or delist are based on the quality and quantity of data, water body type and the applicable WQS. The State's surface waters are monitored to determine if water quality conditions support aquatic life, human health, recreational uses, and ecosystem health.

The State's assessment methodologies and quantitative assessment factors include statistical methods for evaluating potential WQS exceedances, and data quality requirements. These decision factors are applied to various types of data, including water chemistry, bacteria, nutrients, and other parameters. The State's submittal includes a list of segments that are impaired but are being addressed by an EPA approved TMDL (Appendix C). The State uses the assessment decision factors as the basis for its 2020 listing decisions.

EPA reviewed the assessments and concludes the State's assessments are consistent with federal listing requirements and applicable WQSs in most cases. However, EPA, relying on federal listing regulations under 40 C.F.R. § 130.7, has determined that Kapoho Point and Lanikai Boat Ramp are impaired by enterococcus and were omitted from the State's list of water quality-limited segments requiring a TMDL. EPA is therefore disapproving with respect to the omission of Kapoho Point and Lanikai Boat Ramp for enterococcus impairments and is identifying both segments for inclusion on the 2020 List.

Basis for EPA decision to add two waterbodies to Hawai'i's 2020 section 303(d) List

This section describes the basis for EPA's decision to disapprove the State's omission of two waterbodies and associated pollutant and identify them for addition to Hawai'i's 2020 List. EPA analyzed the State's waterbody assessments and supporting rationales to determine whether the State's decisions were consistent with federal listing requirements and Hawai'i WQSs. The State is required to evaluate potential violations of both narrative and numeric water quality objectives. See 40 C.F.R. § 130.7(b)(3).

When determining whether to add waters to Hawai'i's 2020 List, EPA considered the State WQSs as well as EPA's listing regulations at 40 C.F.R. § 130.7(b) and considerations described in EPA's water quality assessment guidance documents (EPA 2002, 2003, 2005, 2006, 2009, 2011, 2013, 2015, 2017).

EPA found Hawai'i's decision not to list two waters was inconsistent with the provisions of Hawai'i's WQSs for fecal indicator bacteria. These criteria are designed to protect the public from exposure to harmful levels of pathogens while participating in water-contact activities. Hawai'i's indicator bacteria standards are found in its Administrative Rules, Title 11 Department of Health, Chapter 54 Water Quality Standards §11-54-8 Recreational criteria for all State waters:

(b) Enterococcus content shall not exceed a geometric mean of 35 colony forming units per one hundred milliliters over any thirty day interval.

(c) A Statistical Threshold Value (STV) of 130 per one hundred milliliters shall be used for enterococcus. The STV shall not be exceeded by more than ten percent of samples taken within the same thirty day interval in which the geometric mean is calculated.

In its 2020 Integrated Report the State did not use 30-day intervals to calculate geometric means for each waterbody. Instead, the State based its assessment on a single two-year geometric mean for each waterbody that averaged single sample values over the entire assessment period. In addition, the State did not consider the STV in its enterococcus assessments. The State’s WQSs specify that both a 30-day geometric mean and STV must be used for its assessments.

EPA reviewed all enterococcus data considered by the State for its 2020 303(d) listing decisions and re-assessed the data with 30-day geometric means and STVs using the assessment methodology used by the State for its previous 303(d) listing decisions (2018 Integrated Report, p. 12). As a result, EPA found two additional waterbodies that were not identified as impaired by Hawai‘i in its 2020 List: 1) Kapoho Point and 2) Lanikai Boat Ramp. EPA’s assessment finds these waters did not meet WQSs for enterococcus (Table 1). Kapoho Point exceeded the 30-day geometric mean criteria for enterococcus in 13 of 24 intervals (54%) during the assessment period and Lanikai Boat Ramp exceeded the 30-day geometric mean criteria for enterococcus in 5 of 24 intervals (21%) during the assessment period. EPA is therefore disapproving with respect to the omission of Kapoho Point and Lanikai Boat Ramp for enterococcus impairments and is identifying both segments for inclusion on the 2020 List.

Table 1: Waterbodies added by the EPA to Hawai‘i’s 2020 List

Waterbody Name	Waterbody ID	EPA Assessment Summary
Kapoho Point	HIW00192	30-day geometric mean exceeded in 13 of 24 intervals. Add waterbody to 2020 List for enterococcus.
Lanikai Boat Ramp	HIW00193	30-day geometric mean exceeded in 5 of 24 intervals. Add waterbody to 2020 List for enterococcus.

D. New Impairment Listings

The State added 136 waterbody-pollutant impairment listings to the 2020 List compared to its 2018 List. New listings are shown in Tables 8 through 12 (pp. 20-38) of the submittal (2020 Integrated Report). Turbidity was the leading cause of impairments, followed by nutrients and chlorophyll *a*.

EPA is adding an additional new impairment listing (Lanikai Boat Ramp) as described above, for a total of 137 waterbody-pollutant impairment listings added to the 2020 List.

As discussed above, EPA is disapproving the State's decision to delist Kapoho Point and is identifying it for inclusion on the 2020 List.

E. Waters Removed from Hawai'i's 303(d) List

The State's 2020 Integrated Report delists 26 waterbody-pollutant impairments that were identified on the 2018 List. Delistings are shown in Tables 8 through 12 (pp. 20-38) of the submittal (2020 Integrated Report). EPA finds that for 25 of 26 waterbody-pollutant impairments the State provided a reasonable explanation for its decision to delist. The reasons for each delisting were included in the submittal, and the State provided additional details by email demonstrating good cause for delisting as requested by EPA consistent with 40 C.F.R. § 130.7(b)(6)(iv). The reason cited for the removal of waterbodies from the 2020 List was that assessment of new data supported a conclusion that water quality has improved such that applicable WQS were no longer exceeded in these waterbodies.

In the case of Kapoho Point, EPA finds applicable WQSs were exceeded in this waterbody, as described above. The State has not demonstrated good cause for removing Kapoho Point from its 303(d) List. EPA therefore disapproves this omission and is identifying Kapoho Point for inclusion on Hawai'i's 2020 List.

F. Public Comment

The State solicited public comments on the draft 2020 Integrated Report over a 32-day period from June 12, 2020 through July 13, 2020 through the HDOH CWB's website and local newspapers. A printed notice was published in the Honolulu Star-Advertiser, The Garden Isle, Hawai'i Tribune-Herald, West Hawaii Today and The Maui News on June 12, 2020, and MidWeek on June 17, 2020. The full list of public comments from three commenters and Hawai'i's responses to comments (which EPA has reviewed) are included in the 2020 Integrated Report submittal to EPA.

IV. TMDL Priority Ranking and Schedule

The State's submittal includes a priority ranking for TMDL completion for those waters requiring a TMDL, using a low/medium/high scale. The State's TMDL priority rankings are shown in Appendix C in the State's submittal. EPA finds that the State's 2020 priority rankings for TMDL development meet requirements related to priority setting in 40 C.F.R. § 130.7(b). Federal regulations do not require EPA approval of the substance of priority rankings or schedules.

References

2020 State of Hawaii Water Quality Monitoring and Assessment Report: Integrated Report to the U.S. Environmental Protection Agency and the U.S. Congress Pursuant to §303(d) and §305(b), Clean Water Act (P.L. 97-117). Submitted via Letter and Enclosures from Keith E. Kawaoka to Tomás Torres, Director, Water Division, U.S. EPA Region 9 (November 17, 2020).

2018 State of Hawaii Water Quality Monitoring and Assessment Report: Integrated Report to the U.S. Environmental Protection Agency and the U.S. Congress Pursuant to §303(d) and §305(b), Clean Water Act (P.L. 97-117).

Hawaii Department of Health. Hawaii Administrative Rules. Title 11, Chapter 54. Water Quality Standards.

U.S. Environmental Protection Agency. 1991. "Guidance for Water Quality-Based Decisions: The TMDL Process," Office of Water. EPA 440/4-91-001.

U.S. Environmental Protection Agency. 1992. July 24, 1992 Federal Register and 40 C.F.R. Parts 122, 123, 130, revision of regulation, 57 Fed. Reg. 43 pp. 33040.

U.S. Environmental Protection Agency. 2002. Consolidated Assessment and Listing Methodology. Office of Wetlands, Oceans, and Watersheds, Washington, DC.

U.S. Environmental Protection Agency. 2003. "Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act," Diane Regas, Office of Wetlands, Oceans, and Watersheds, Washington, DC.

U.S. Environmental Protection Agency. 2005. "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act," Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds, Washington, DC.

U.S. Environmental Protection Agency. 2006. "Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds, Washington, DC.

U.S. Environmental Protection Agency. 2009. "Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," Suzanne Schwartz, Office of Wetlands, Oceans, and Watersheds, Washington, DC.

U.S. Environmental Protection Agency. 2011. "Information Concerning 2012 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," Denise Keehner, Office of Wetlands, Oceans, and Watersheds, Washington, DC.

U.S. Environmental Protection Agency. 2013. "Information Concerning 2014 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," Denise Keehner, Office of Wetlands, Oceans, and Watersheds, September 3, 2013.

U.S. Environmental Protection Agency. 2015. "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," Benita Best-Wong, Office of Wetlands, Oceans, and Watersheds, August 13, 2015.

U.S. Environmental Protection Agency. 2017. "Information Concerning 2018 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," John Goodin, Office of Wetlands, Oceans, and Watersheds, December 22, 2017.