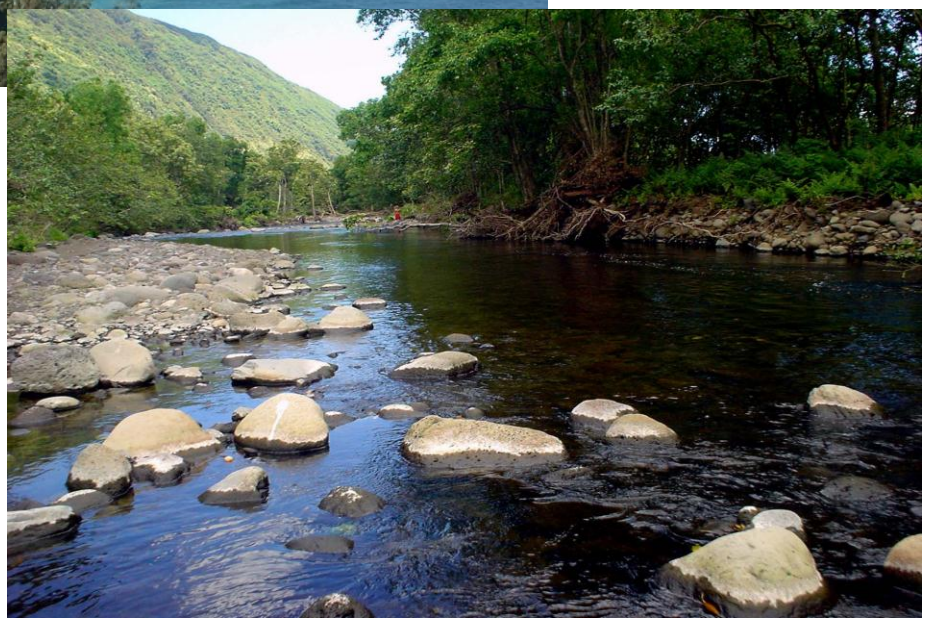
2008/2010 STATE OF HAWAII WATER QUALITY MONITORING AND ASSESSMENT REPORT:

Integrated Report to the U.S. Environmental Protection Agency and the U.S. Congress
Pursuant to Sections §303(d) and §305(b), Clean Water Act (P.L.97-117)



The Hawaii Department of Health
Honolulu, Hawaii
July 3, 2012

EXECUTIVE SUMMARY

The Hawaii State Department of Health (HIDOH) is required by the Clean Water Act (CWA) section §305(b) and §303(d) to report on the state's water quality. The CWA §305(b) requires states to describe the overall status of water quality statewide and the extent to which water quality provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allows recreational activities in and on the water. The CWA §303(d) requires states to submit a list of waters that do not meet state water quality standards, plus a priority ranking of listed waters based on the severity of pollution and the uses of the waters.

Due to reorganization within HIDOH, the Integrated Report is now under HIDOH Clean Water Branch (CWB). The Integrated Report was previously under HIDOH Environmental Planning Office (EPO). HIDOH EPO did not complete the 2008 and 2010 Integrated Reports. An agreement was made between the Environmental Protection Agency (EPA) and HIDOH CWB to submit just an updated version for the 2008/2010 Integrated Report, with the intention of doing a more robust 2012 report.

As previously mentioned, the 2008/2010 Integrated Report is an update of the previous 2006 Integrated Report. The previous 2006 Integrated Report, plus assessments made from data collected from marine waters between January 2006 and December 2009, constitute the body of information reviewed for the 2008/2010 Integrated Report. In order to complete this belated report in a timely manner, no data from new locations are used. Any unreviewed data received will be incorporated in the next cycle, the 2012 Integrated Report.

HIDOH's 2008/2010 Integrated Report contains a total of 204 marine segments and 91 stream segments for which decisions of non-attainment reflect the waterbody status as impaired. There are seven new marine waterbodies listed for impairment and no new inland water segments.

Marine Waters

The 2008/2010 Integrated Report contains a total of 204 impaired marine segments. The breakdown per island for the 204 impaired marine segments (and the percent listed waters per island/total number listed waters) is: Kauai 23 (11%), Oahu 65 (32%), Molokai 3 (1%), Lanai 8 (4%), Maui 72 (35%), and Hawaii 33 (16%).

There are seven new marine waterbodies listed as impaired for one or more pollutants that include Total Nitrogen, Nitrate + Nitrite Nitrogen, Chlorophyll a, and/or Ammonium Nitrogen:

Ala Moana Beach (Diamond Head) (HIW00002)
Pokai Bay (HIW00007)
Royal-Moana Beach (HI898947)
Sans Souci (HI617815)
Sunset Beach (HI860544)
Hulupoe Bay (HIW00177)
Manele Bay Beach (HIW00178)

There are also 10 waterbodies that are delisted, all of which are delisted for enterococci:

Kapaa Beach County Park (HI972832)
Poipu Beach County Park (HI396850)
Hawaii Kai Station (HIW00117)
Hawaiian Electric Beach Park (HI628972)
Kaaawa Beach Park (HI580360)
Kaiona Beach (HI234342)
Kawaikui Beach Park (HI304424)
Mamala Bay (Sand Isl. Offshore) (HIW00014)
Waialae Beach County Park (HI997368)
Waimea Bay (HIW00128)

Of the marine waterbodies previously listed in the 2006 Integrated Report, 30 waterbodies are now listed for one or more new pollutants, for a total of 76 newly listed pollutants. Conversely, one or more pollutants are now delisted from 39 previously listed waterbodies, resulting in the delisting of a total of 49 pollutants.

Of the 204 listed marine segments, 37 are due to high enterococci indicator bacteria test results. Hawaii's bacteria water quality criteria for enterococci are now set at a geometric mean of 35 colony forming units (CFU)/100 mL and a single sample maximum limit of 104 CFU/100 mL, which are the same as the Environmental Protection Agency's (EPA) recommended criteria. HIDOH amended Hawaii's water quality criteria for enterococci in May 2009. This action revised the geometric mean from 7 to 35 CFU/100 mL and the single sample maximum limit from 100 to 104 CFU/100 mL. Hawaii also uses a secondary tracer, *Clostridium perfringens*, as an additional investigative tool to help confirm high bacterial indicator counts.

Turbidity is the most common pollutant to trigger a marine water listing for impairment, with 151 occurrences in the 2008/2010 Integrated Report. The HIDOH thinks these are due to polluted runoff and is focusing its polluted runoff control program on selected watersheds to make measurable improvements.

Inland Waters

The 2008/2010 Integrated Report contains a total of 91 stream segments. Within the 91 listed inland freshwater perennial stream segments, there are a total of 320 individual occurrences of pollutants which did not meet the state water quality criteria. The most common listing was turbidity with 106 instances of exceedance. The next most common listings were Nitrate + Nitrite Nitrogen, Total Nitrogen, and Total Phosphorus with 76, 67, and 40 instances of exceedance, respectively. No new data since the previous 2006 cycle were reviewed for the freshwater portion of the 2008/2010 Integrated Report. However, any data submitted since December 2005 will be reviewed in the 2012 Integrated Report. Therefore, all data submitted since the cut off for the 2006 Integrated Report will be reviewed for the 2012 Integrated Report.

Table of Contents

Executive Summary
Introduction
Chapter 1: Marine Waters
Chapter 2: Inland Waters
Chapter 3: 2008/2010 Waterbody Assessment Decisions [Integrated 303(d) List/305(b) Report for Hawaii] Table

INTRODUCTION

The 2008/2010 Integrated Report is intended to satisfy the requirements for State reporting pursuant to Sections §303(d) and §305(b), Clean Water Act (P.L. 97-117). The CWA requires states to provide an assessment every two years of the quality of all their waters (§305(b)) and a list of those waters that are impaired or threatened (§303(d)).

The 305(b) report is "[the] **National Water Quality Inventory Report to Congress**... is the primary vehicle for informing Congress and the public about general water quality conditions in the United States. This document characterizes our water quality, identifies widespread water quality problems of national significance, and describes various programs implemented to restore and protect our waters."[1] EPA recommends that states sort their surface waters into five categories according to the following guidance:

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

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.

Waterbodies classified in Category 5 constitute the CWA §303(d) List of Impaired Waters. The 2008/2010 Integrated Report identifies waterbodies that are not expected to meet state water quality standards, even after application of technology-based effluent limitations. States are required to obtain and review all existing and readily available surface water quality data and related information to compare against the state's water quality standards, and after applying listing criteria, determine the level of impairment for that waterbody. The list requirements apply to waterbodies impaired by point and/or non-point sources of pollution and include a requirement for listing of those pollutants for which applicable water quality standards are exceeded.

The 2008/2010 Integrated Report, including a priority ranking of listed waters based on the severity of pollution and the uses of the waters, will be submitted to EPA immediately upon completion. Computation of Total Maximum Daily Loads (TMDLs) for all §303(d)-listed pollutant/waterbody combinations, prepared in accordance with the priority rankings, must follow with EPA approval of each state's List. TMDLs for all listed pollutant/waterbody

[1] EPA Monitoring and Assessing Water Quality (n.d.). Retrieved September 27 2006, from http://water.epa.gov/lawsregs/guidance/cwa/305b/index.cfm

combinations are prepared in accordance with the priority rankings and the State-EPA schedule for submission for TMDLs. The time frame for establishing TMDLs should be 8 to 13 years from the date of the original listing. This schedule is negotiated on a continuing basis and is influenced by federal funding, state policy, data availability and a host of other factors, which vary from year to year.

Decisions to list, delist, or not list a waterbody for which data exist and have been reviewed must be documented (40 CFR §130.7). The periodic listing process allows HIDOH to list waterbodies, which after recent sampling, show exceedance; delist waterbodies (from the 303(d) section), which do not, after further sampling show exceedance for listed parameters; and more clearly articulate the parameter for which previously listed waterbodies should be listed. Additional information is also provided regarding attainment of known pollutants, pursuant to the 305(b) portion of the guidance as well.

Hawaii's 2006 Integrated Report, plus data collected from January 2006 to December 2009, constitutes the body of information reviewed for the 2008/2010 Integrated Report. In order to complete this belated report in a timely manner, no data from new locations are used. Changes to the marine listings are described in Chapter 1. Although there are no changes from the 2006 List of Impaired Waters for stream segments, Chapter 2 of this report provides a description of the inland water assessments. The full table of Waterbody Assessment Decisions is presented in Chapter 3.

Chapter 1
Marine Waters

CHAPTER 1 TABLE OF CONTENTS

PART A. SCOPE OF WATERS 4

PART B. MONITORING AND ASSESSMENT.....4

B.1. Monitoring Program 4

Monitoring Strategy Overview 4

Microbiological Sampling 5

Chemical Sampling.....5

Laboratory Analytical Support 5

Quality Assurance/Quality Control.....6

Data Storage, Management, and Sharing.....6

B.2. Assessment Methodology.....6

Data Source.....6

Assessment Methodology 7

Assessment Utilizing Hawaii Water Quality Standards 9

Assessment Unit Methodology.....11

Assessment Codes (Geocodes) 11

B.3. Assessment Results.....11

LIST OF FIGURES AND TABLES

FIGURE 1: Flow Chart of Listing/De-listing Process for Conventional Pollutants.....8

TABLE 1. Category Totals by Island 12
TABLE 2. Delisted Marine Waterbodies.....12
TABLE 3. Newly Impaired Marine Waters.....13
TABLE 4. Category List of Changes to 2006 Listed Coastal Waters 15

PART A. SCOPE OF WATERS

This chapter of the 2008/2010 Integrated Report covers all waters of salinity more than 0.5 parts per thousand. Assessment units for the 2008/2010 Integrated Report remain the same as the assessment units applied in the previous report. Waterbodies are partitioned according to the Hawaii Administrative Rules (HAR) §11-54 by type and then listing renewed accordingly. Please see methodology section in Part B.2. for details regarding decision units for attainment decisions.

PART B. MONITORING AND ASSESSMENT

B.1. Monitoring Program

This part of the 2008/2010 Integrated Report discusses HIDOH's monitoring program for marine waters. The entire monitoring program is examined from strategies and procedures to data assessment.

Monitoring Strategy Overview

Two main types of surface water monitoring data are used in this report: bacteriological and chemical. Bacteriological monitoring of the shoreline areas is conducted under the auspices of the HIDOH Clean Water Branch (CWB) Beach Monitoring program and the guidance of HIDOH's Beach Monitoring Quality Assurance Project Plan (QAPP). CWB coastal chemistry sampling was limited to shoreline areas for the period reviewed in this report.

EPA's STORET database is the repository of data and information collected by HIDOH. Waterbody assessments utilize the most current data and information from these systems. For the 2008/2010 Integrated Report, HIDOH retrieved data from STORET for the period starting in January 2006 and ending in December 2009. The end-users of the STORET database system include not only government agencies but consultants, students, and the general public.

Assisted monitoring programs contribute invaluable service not only to the communities but to government as well. In Hawaii, an example of data generated by monitoring groups is the HIDOH's monitoring program partnership with the Hanalei Watershed Hui and the Surfrider organizations.

Collaboration between HIDOH and other state and federal agencies, including private consulting firms, is another key component of the monitoring program. CWA §401 and §402 permits stipulate water quality monitoring requirements applied to permit holders. Monitoring conducted by permitees provides a source of data from which the State's monitoring program also benefits. Water quality data generated by permitees result in greater statewide coverage and comprehensive assessments at no increase in cost to the HIDOH program. The coordination between multiple agencies and permit applicants also provides for expediting the permit process through early plan reviews and dialogues in preconstruction meetings.

Microbiological Sampling
The CWB microbiological sampling program focuses mainly on shoreline waters throughout the state for the purpose of assuring the safety of the swimmers, surfers, divers, and other recreational users of the near shore waters. This program serves two purposes. First, it identifies those areas where there is a potential for health related risks associated with the recreational use of shoreline waters. Secondly, monitoring provides an ongoing baseline from which to establish trends in the future and from which to determine if additional sample results show unusual or abnormal levels of indicator bacteria (i.e., indicating possible contamination, such as a sewage leak).

Water samples are analyzed for enterococci, the recommended EPA indicator bacteria for marine recreational waters. EPA has allowed Hawaii to use *Clostridium perfringens*, in conjunction with enterococci, as a secondary tracer to help confirm high bacterial indicator counts.

For the period between January 2006 and December 2009, the CWB bacteriological monitoring program collected samples at approximately 332 stations throughout the state (Kauai, 52 stations; Oahu, 147; Maui, 65; and Hawaii, 68). The approximate 332 stations are among the 385 beach stations established throughout the state, most of which are sampled on a rotational basis. The sites are monitored on a twice-weekly (core sites) or bi-weekly (rotational sites) basis.

Chemical Sampling
The CWB periodically collects shoreline chemistry samples for nutrient analysis, in support of the Polluted Runoff Control Program. The chemistry parameters analyzed include Nitrate+Nitrite Nitrogen, Ammonia Nitrogen, Total Nitrogen, Total Phosphorus, and Chlorophyll-a.

The coastal offshore chemistry monitoring program is designed to monitor conditions in the marine environment, while compiling a database from which a baseline can be established. As mentioned above, offshore sampling has been temporarily suspended. This is due to personnel and resource limitations and an increase in the frequency of shoreline sampling in the beach monitoring program.

Laboratory Analytical Support
The HIDOH employed the use of three Hawaii-based laboratories for analysis of samples: the State DOH Laboratory, Natural Energy Laboratory of Hawaii (NELH), and Microbiology Consulting Services, LLC (MCS). The Environmental Health Analytical Services Branch (EHASB) is responsible for the analysis of the samples collected by HIDOH personnel. The two basic types of samples, microbiological and chemical, are each handled by separate sections within EHASB of the State Laboratories Division. Microbiological samples for West Hawaii (Kona) were handled by NELH until 2007. MCS began microbiological sampling analysis for West Hawaii in July 2007. The State maintains microbiology laboratories on each of the four largest islands, Kauai, Oahu, Maui, and Hawaii, which conducts the analysis for their respective islands. Only the Oahu laboratory is currently capable of conducting chemical analyses. Samples from the other islands are air-shipped to the Oahu laboratory for chemical analysis.

Quality Assurance/Quality Control
The monitoring program quality assurance/quality control is governed by the CWB Beach Monitoring Quality Assurance Project Plan (QAPP) and the Coastal Chemistry Monitoring Quality Assurance Project Plan.

Data Storage, Management, and Sharing
The main repository for monitoring data is EPA's STOrage and RETrieval (STORET) system. All post 1999 sampling data obtained from the CWB's fixed network of routine monitoring stations is first compiled into a CWB Access database, then entered into EPA's STORET system. Data prior to 1999 are stored in the "Legacy STORET Database". As of 2007, monitoring data are transferred into STORET via the Water Quality Exchange (WQX) system. The data are then uploaded to EPA's main database which can be accessed via the internet. Future plans include development of a SQL based data management interface, and the use of the Exchange Network for data transfer (www.exchangenetwork.net).

Permittee effluent monitoring also generates a significant amount of sampling data. However, the data are only on hard copy, not in electronic form. Although the data are accessible, they must be gathered and then compiled by hand before analysis is performed. Hence, only those involved with or concerned about a specific location normally reviews this type of information. The CWB staff would like to have this data available as an additional source of information (especially in areas where no other sampling may exist), however, other responsibilities have higher priority, and therefore, no progress has been made in inputting this data into STORET.

B.2. Assessment Methodology

Data Sources
A formal call for marine data was made by the previous author of this report. Due to changes in personnel and the tardiness of the 2008/2010 Integrated Report, this report will just be an update of the previous 2006 Report. In order to complete this report in a timely manner, no data from new locations were used. The unused data will be incorporated in the next cycle, the 2012 Report. The list below details the major sources used in the 2008/2010 Integrated Report.

CLEAN WATER BRANCH
With continued funding from EPA's Beaches Environmental Assessment and Coastal Health (BEACH) program, the existing bacteriological shoreline program was able to greatly expand both the number of sites and samples taken. The microbiological dataset extends from 1973 to present. Data from the previous four years (January 2006 through December 2009) were assessed for this report. The CWB Monitoring Section provided a bacteriological dataset of 22,919 samples from the four main Hawaiian Islands. The data were collected following the CWB Beach Monitoring QAPP and are routinely checked by the QA/QC officer.

ENVIRONMENTAL ASSESSMENT COMPANY
EAC is a private research company headed by Richard Brock, PhD. An extensive dataset was provided by Dr. Brock for the south-southeastern coast of Lanai, and the Kona (western) coast of Hawaii. All data was produced following a prepared methodology, complying with the "West

Hawaii Coastal Monitoring Program Monitoring Protocol Guidelines" (May 1992). Laboratory analysis follows Standard Methods (1999).

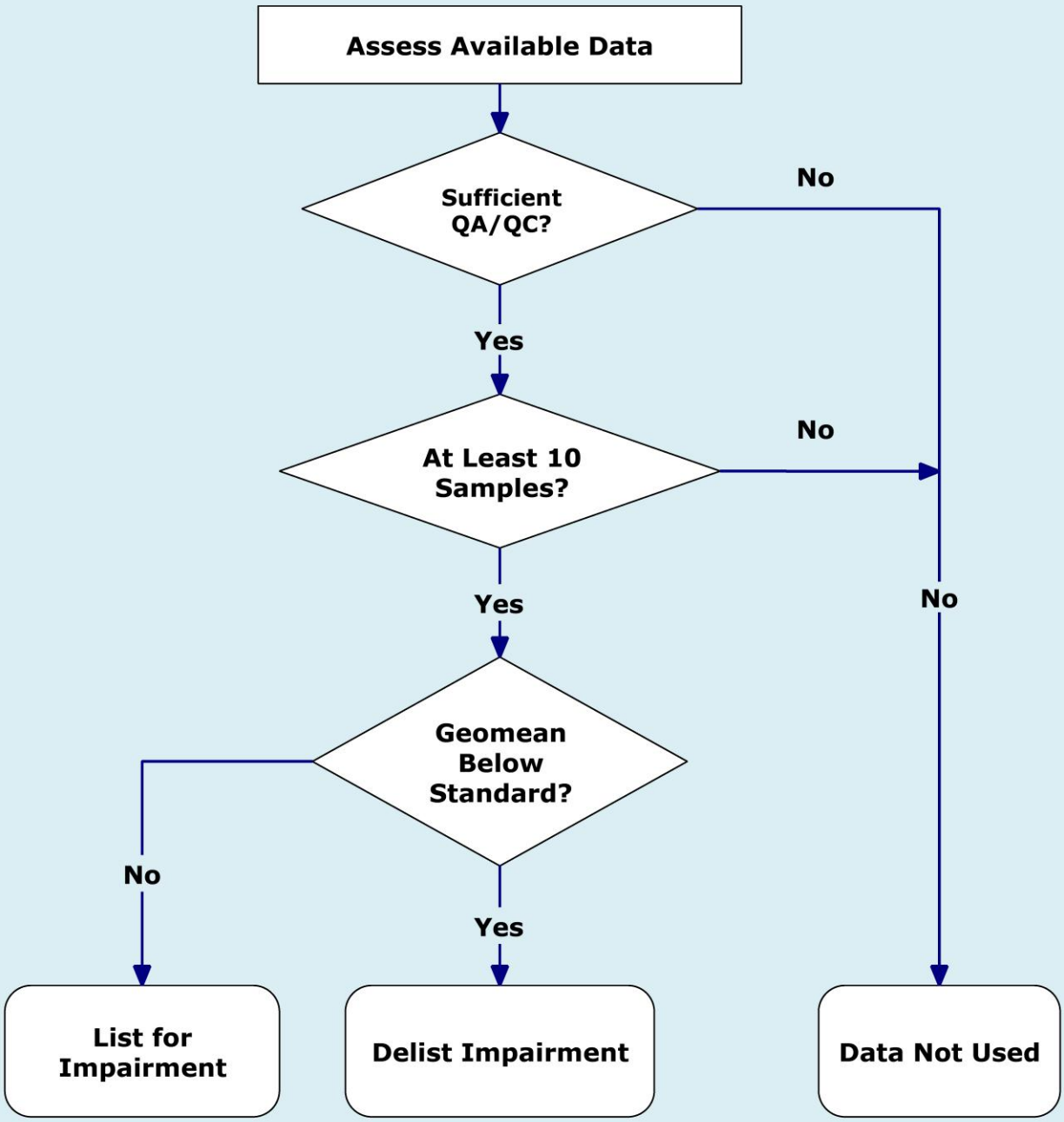
MARINE RESEARCH CONSULTANTS
MRC is a private research company headed by Steve Dollar, PhD. The ongoing research was prepared for the Makena Resort Corporation to characterize coastal water quality (specifically targeting parameters set forth in HAR 11-54), in Makena, Maui. An extensive dataset was provided, following prepared sampling methodology, documented analysis methodology (Strickland and Parsons 1968, Grasshoff 1983), and utilizing EPA rated laboratories (Marine Analytical Specialists).

HANALEI WATERSHED HUI
In 2005, the CWB began a cooperative bacteriological sampling program with the Hanalei Watershed Hui, in which the Hui collects samples at several of the northern Kauai stations. Data are collected according to the CWB BEACH Monitoring QAPP.

Assessment Methodology
Data from marine waters monitored between January 2006 and December 2009 were reassessed for this report. Previously evaluated waterbodies were updated with the current information. The assessments performed by CWB staff for this document follow the EPA's Guidance for 2006 Assessment, Listing and Reporting document (EPA 2005) to the maximum extent practicable. The flow chart in Figure 1 shows the basic process used for listing/delisting conventional pollutants. Enterococci data was given a 10% allowable exceedence of the geometric mean standard for the entire data set.

For this cycle, the multi-categorization method as proposed by EPA has been retained, yielding a better categorical description for each waterbody. Please refer back to the Introduction section for the list and description of the categories. Table 4 documents any changes between the 2006 and the 2008/2010 reports, and the justifications for doing so.

FIGURE 1: Flow Chart of Listing/Delisting Process for Conventional Pollutants
(enterococci, TN, NO3+NO2, TP, turbidity, chl-a, NH4, others)



Assessment Utilizing Hawaii Water Quality Standards

The HAR Chapter 11-54 defines the state standards for particular parameters for Hawaii waters, and is defined by both narrative and numerical criteria. §11-54-1.1 defines a general policy of water quality anti-degradation for all water types and is as follows:

(a) Existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(b) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the director finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation on lower water quality, the director shall assure water quality adequate to protect existing uses fully. Further, the director shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(c) Where existing high quality waters constitute an outstanding resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

HAR §11-54-3(c) defines classifications for marine waters. Marine waterbodies are separated by type into three main waterbody categories: embayment, open coastal, and oceanic. The classification uses a tiered system, defining two Classes, "AA" and "A". Class AA waters are described as: "It is the objective of class AA waters that these waters remain in their natural pristine state as nearly as possible with an absolute minimum of pollution or altercation of water quality from any human-caused source or actions. To the extent practicable, the wilderness character of these areas shall be protected." Zones of mixing are not permitted within certain Class AA waters (HAR §11-54-3(c)(1)). Class A waters are describes as: "It is the objective of class A waters that their use for recreational purposes and aesthetic enjoyment be protected. Any other use shall be permitted as long as it is compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters." New sewage discharges or industrial discharges are not permitted within Class A embayments, with the exception of three industrial discharge types identified in HAR §11-54-3(c)(2).

The embayment and open coastal categories are further refined by inclusion of a wet or dry criterion, typically defined by levels of freshwater input (HAR §11-54-6(a)(3) and HAR §11-54-6(b)(3)). For the previous 2006 Report, these criteria were revised using maps of "Wet and Dry Marine Waters" provided in State 208 Plans and county Water Management Plans. Delineations of embayments and their mouth openings made for the 2006 Report using best professional judgment remain the same.

Two special area categories, Pearl Harbor and Kona (west Hawaii), are defined for marine waters, and establish specific standards for their respective water type. In addition, defined limits are placed upon the application of the standard for enterococci. As stated by HAR §11-54,

the standard is applicable "within 300 meters (one thousand feet) of the shoreline, including natural public bathing or wading areas". Waters outside the 300 meter (one thousand feet) distance from shoreline are covered by EPA's 2004 promulgation of bacteria criteria, which defines bacteria criteria for waters in which the States do not already have criteria in place. Available assessment data were compiled using the defined methodology (geometric mean) and compared to each applicable standard. Each waterbody was categorized according to comparison with each particular standard. A more detailed description of the standards can be accessed at the following website: http://gen.doh.hawaii.gov/sites/har/AdmRules1/11-54.pdf.

HIDOH's microbiological sampling utilizes enterococci bacteria density measurements as an indicator of human fecal contamination. However, using this bacterial indicator for the state standard has been found to be problematic in Hawaii and other BEACH programs across the country. Several studies have shown that enterococci may not be a reliable indicator in tropical locations such as Hawaii because it can multiply outside of the human body, and is also found in fecal matter of various wildlife, such as feral pigs.[1] Additionally, a 2005 study at Mission Bay, San Diego, California focused upon tracking causes of bacterial contamination, and found that "...fecal coliform and *Enterococcus* bacteria can survive for prolonged periods of time in coastal storm drains..." and that "...the majority of the indicator bacteria in Mission Bay originates from birds and that the initial load generated from avian sources can then be amplified by irrigation runoff, storm drains, intertidal sediments, and the wrack line" (Gruber et al., 2005).[2]

Clostridium perfringens has validity as an effective tracer of fecal contamination and is a viable option as an additional tool for monitoring water quality. A report produced by the Experts Scientific Workshop on Critical Research Needs for the Development of New or Revised Recreational Water Quality Criteria attempted to address the applicability of several potential bacterial indicators. The report acknowledges that "The presence of *C. perfringens* (spores) in water, therefore provides evidence of existing human/urban fecal contamination...", and adds that "although methods have been available for some time, confirmation of a robust and consistent method approach should be developed".[3] As shown, both organisms have limitations in applicability. Usage of a single organism for water quality characterization therefore, is not desirable. To improve accuracy of Hawaii's water quality monitoring, a two-organism approach is applied, using *C. perfringens* as a companion tracer alongside enterococci.

Although the HAR does not specify the use of *C. perfringens* as a companion indicator for enterococci, as noted earlier, it is allowable by EPA for its use as a tool in Hawaii, and has been employed effectively in daily assessments. As mentioned in the Executive Summary, HIDOH amended Hawaii's water quality criteria for enterococci in May 2009. This action revised the geometric mean from 7 to 35 CFU/100 mL and the single sample maximum limit from 100 to 104 CFU/100 mL.

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[1] Byappanahalli, M and R. Fujioka. 2004. Indigenous soil bacteria and low moisture may limit but allow fecal bacteria to multiply and become a minor population in topical soils. Water Science and Technology. vol. 50, 1:27-32.

[2] Gruber, S.J., Kay, L.M., Kolb, R., and Henry, K. 2005 Mission Bay bacterial source identification study-A Clean Beaches initiative grant helps track causes of contamination. Stormwater. vol 6,3:40-51.

[3] EPA - Office of Water, Office of Research and Development. 2007. *Report of the Experts Scientific Workshop on Critical Research Needs for the Development of New or Revised Recreational Water Quality Criteria*. EPA 823-R-07-006. (June 15, 2007).

Assessment Unit Methodology
Hawaii's topographical structure is comprised of generally short, small watersheds defined by steep mountain walls. Input of fresh waters into the fronting marine waters is generally limited to the specific watershed that feeds those streams. In future cycles it is hoped that watershed names will be included to organize listings for both inland and marine waters. It is hoped that the restructuring of the assessment units may provide a more seamless integration of both water-types.

Two boundaries are defined by HAR 11-54 to guide the application of water quality standards: 1) 1000 feet or 300 meters boundary and, 2) 100 fathom depth contour boundary. The first boundary defines the marine recreational waters as "[w]ithin 300 meters (1000 feet) of the shoreline, including natural public bathing or wading areas..." (HAR 11-54-8(b)(1)). The second boundary defines the open coastal waters and is the "...marine waters bounded by the 183 meter or 600 foot (100 fathom) depth contour and the shoreline..." (HAR 11-54-6(b)(1)). As previously stated, waters outside the 300 meter boundary are covered by EPA's 2004 promulgation of bacteria criteria. Water Quality Standards Maps are located on the CWB website: http://hawaii.gov/health/environmental/water/cleanwater/wqsmaps/index.html.

There are difficulties in combining the boundary guidelines of HAR 11-54 and defined boundary limits for coastal areas. The delineated boundaries were carried over from the previous 2006 Report to this 2008/2010 Report. Each named segment corresponds to an identification alphanumeric geocode (e.g. Royal-Moana Beach is geocode HI898947) and both are used to identify the segments in Tables 1-4. A discussion on the geocodes is found in the following section, Assessment Codes.

Visual assessments were not used for the 2008/2010 Integrated Report. Unlike previous cycles prior to the 2006 Integrated Report, visual assessment data was not available for the 2008/2010 cycle. Listings from previous cycles based on legacy visual assessments have been carried over to the present listing. An example is the carry-over of the 2004 nutrient and turbidity listing for the geographic scope of "Kahului Bay inshore of breakwater". In future cycles, it is possible that these data will be revisited and/or reassessed.

Assessment Codes (Geocodes)
The alphanumeric code (geocode) assigned to each marine waterbody in the 2006 Integrated Report was retained for the 2008/2010 Report. Two sets of geocodes exist in the Hawaii structure, a two-letter alphanumeric (HI) and 3-letter alphanumeric (HIW). The numeric portion of both geocodes is preceded by the state abbreviation (HI) as suggested by EPA protocol. The two-letter geocode is from an existing structure from the EPA BEACH program that identifies recreational waters across the state. The three-letter code was generated in response to areas where BEACH codes do not exist and areas that are divided into small subsections. Each code is comprised of a total of eight characters, and is not ordered.

B.3. Assessment Results

Table 1 below summarizes the results of the assessment. Of the approximately 525 marine waterbody segments already established statewide, 279 (53%) waterbody segments are assessed

for this report. A total of 10 waterbodies were delisted (no category 5 listing present). Table 2 displays the delisted waterbodies. Assessment results for all 10 delisted waterbodies showed that state standards were attained for enterococci, using the enterococci indicator bacteria as mentioned earlier in the document. Mamala Bay (Sand Isl. Offshore) also showed attainment of the state's nutrient standards.

TABLE 1. Category Totals by Island

Island	Total # Assessed Segments	# Segments w/ Listed Pollutant	# Newly Listed Pollutants	# Newly Listed Waterbodies	# Delisted Pollutants	# Delisted Waterbodies
Kauai	36	23	8	0	6	2
Oahu	112	65	33	5	26	8
Molokai	3	3	0	0	0	0
Lanai	8	8	9	2	6	0
Maui	73	72	6	0	9	0
Hawaii	47	33	20	0	2	0
Totals	**279**	**204**	**76**	**7**	**49**	**10**

TABLE 2. Delisted Marine Waterbodies

Island	**Scope of Assessment**	**Geocode**	**Entero**	**TN**	**NO3+ NO2**	**TP**	**Turb**	**Other**
Kauai	Kapaa Beach County Park	HI972832	**A**	?	?	?	?	
Kauai	Poipu Beach County Park	HI396850	**A**	?	?	?	?	
Oahu	Hawaii Kai Station	HIW00117	**A**	?	?	?	?	
Oahu	Hawaiian Electric Beach Park	HI628972	**A**	?	?	?	?	
Oahu	Kaawa Beach Park	HI580360	**A**	?	?	?	?	
Oahu	Kaiona Beach	HI234342	**A**	?	?	?	?	
Oahu	Kawaikui Beach Park	HI304424	**A**	?	?	?	?	
Oahu	Mamala Bay (Sand Isl. Offshore)	HIW00014	**A**	**A**	A	A	A	**chl-a(A)**, NH4(A)
Oahu	Waialae Beach County Park	HI997368	**A**	?	?	?	?	
Oahu	Waimea Bay	HIW00128	**A**	?	?	?	?	

Key: Entero=enterococci; TN=Total Nitrogen; NO3+NO2=Nitrate+Nitrite Nitrogen, TP=Total Phosphorus; Turb=Turbidity; chl-a=chlorophyll a; NH4=Ammonium Nitrogen; **BOLD A**=Delisted pollutant (data shows attainment of the state water quality standard).

A total of 39 previously listed waterbodies had one or more pollutants delisted, for a total of 49 delisted pollutants. Assessment results for 22 waterbodies showed that state standards were attained for enterococci.

A total of seven new waterbodies were listed with at least one category "5", and a total of 30 previously listed waterbodies had one or more pollutants added to category "5", for a total of 76 newly listed pollutants. Table 3 lists the newly listed waterbodies. Assessments for the five newly listed waterbodies on Oahu showed that state standards were not met for NO3+NO2, chl-a, and/or NH4. However, all five Oahu waterbodies attained state standards for enterococci (using enterococci indicator bacteria), TN, and TP. Assessments for the two newly listed waterbodies on Lanai showed that state standards were not met for TN, but do meet all other nutrient standards.

TABLE 3. Newly Impaired Marine Waters

Island	Scope of Assessment	Geocode	Entero	TN	NO3+ NO2	TP	Turb	other
Oahu	Ala Moana Beach (Diamond Hd)	HIW00002	A	**A**	**A**	**A**	?	**chl-a(N), NH4(N)**
Oahu	Pokai Bay	HIW00007	A	**A**	**N**	**A**	?	**chl-a(N), NH4(N)**
Oahu	Royal-Moana Beach	HI898947	A	**A**	**N**	**A**	?	**chl-a(N), NH4(N)**
Oahu	Sans Souci	HI617815	A	**A**	**N**	**A**	?	**chl-a(A), NH4(N)**
Oahu	Sunset Beach	HI860544	A	**A**	**N**	**A**	?	**chl-a(N), NH4(N)**
Lanai	Hulupoe Bay	HIW00177	?	**N**	A	A	A	chl-a(A), NH4(A)
Lanai	Manele Bay Beach	HIW00178	?	**N**	A	A	A	chl-a(A), NH4(A)

Key: Entero=enterococci; TN=Total Nitrogen; NO3+NO2=Nitrate+Nitrite Nitrogen, TP=Total Phosphorus; Turb=Turbidity; chl-a=chlorophyll a; NH4=Ammonium Nitrogen; **BOLD A**=Newly Delisted pollutant (data shows attainment of the state water quality standard); **BOLD N**=Newly Listed pollutant (data shows non-attainment of the state water quality standard).

Two tables are provided to display changes that have occurred since the previous listing period, Table 4 and the 2008/2010 Waterbody Assessment Decisions Table (Chapter 3). Table 4 is provided to aid the reader in tracking any changes from the 2006 Integrated Report for marine/estuary waters to the 2008/2010 cycle. The first column of Table 4 is entitled Assessment Location, and contains the specific name of the area that the assessment applied to. The second column, Assmt ID, contains the geocode for the waterbody. Column 3 contains the pollutant where a change has occurred. Column 4 lists the action taken to categorize the waterbody as a result of assessed data. Column 5 describes the justification for each action taken. Column 6 lists the action taken, and a description of the reasons for the change.

Assessment results for each waterbody were categorized according to EPA methods, and placed in the 2008/2010 Waterbody Assessment Table in Chapter 3, for both marine and inland waters. Inland waters are discussed in Chapter 2. The following narrative only applies to the marine section of the Waterbody Assessment Table. The first column contains the waterbody type, as distinguished by HAR 11-54. The second column, Scope of Listing, is the name of the specific area that the assessment applies to. The next column contains the Geocode ID, which is the alphanumeric identifier attached to each listing. Columns 5 through 9 contain common

pollutants found in Hawaii's waters, and Column 10 lists other less frequently found pollutants. The eleventh column contains the assessment categories that apply to each waterbody. As described earlier, the multi-category assessment allows for a better description of each waterbody. The last column states the TMDL priority and indicates which TMDLs are currently under development or completed.

If the calculated level of a pollutant was found to be above the state standard, the parameter was entered in columns five through ten as "Not Attaining" (N). If the calculated value was below the stated value, the parameter was enters as "Attaining" (A). It is important to note that the marine waterbodies entered in the table are not reflective of all marine areas of the state. Rather, they indicate areas where sampling has taken place, and areas of higher incidence of human contact. Areas not shown in the table do not have any sampling data available, and are considered to be in category "3". Ensuing cycles may add waters as necessary. Parameters where no data were available were coded with a "?".

The Waterbody Assessment Decisions Table in Chapter 3 contains a number of waterbodies that are similar in name to other waterbodies (indicated by an asterisk *); these are not duplicates. These waterbody entries are from previous 303(d) listing cycles and were listed at that time as separate entries from similar sampling stations.

TABLE 4. Category List of Changes to 2006 Listed Coastal Waters (excludes newly listed waters)

- A multi-category listing method was employed for 2008/2010 to better characterize water quality conditions. Therefore, a Category "2" is assigned to all water bodies that have shown attainments for one or more pollutants and a Category "3" has been assigned to all water bodies for one or more pollutants that have inadequate data available for assessing attainment status.
- The Pollutants column is populated with pollutants on which a *change* has occurred (e.g. new listing, delisting, etc.).
- Pollutants**:** entero=enterococci; TN=Total Nitrogen, NO3+NO2=Nitrate+Nitrite nitrogen, TP=Total Phosphorus, Turb=Turbidity, chl-a=chlorophyll a; PO4=Phosphate.
- For the purposes of this report, listed water bodies are sorted by island, north to south.
- Summary Rationale Codes: NND=New Numerical Data; NL=New Listed Impairment (category 5); DL=Delisting (category 5 to 2); A2=Assigning of category 2; CGS=Clarified Geographical Scope; TC=Textual Change.

KAUAI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Hanalei Bay (Pavilion)	HIW00092	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Kapa'a Beach Co. Park	HI972832	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Nawiliwili Bay (Kalapaki Beach)	HIW00114	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

KAUAI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Nawiliwili Bay (Nawiliwili Harbor)	HIW00115	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Po'ipu Beach Co. Park	HI396850	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Port Allen Boat Harbor (Port Allen Pier)	HIW00026	Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for chl-a, resulting in a category change from 5 to 2.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

KAUAI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Salt Pond Beach Co. Park	HI701008	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
		Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Ala Moana Beach (Center)	HIW00001	Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Ala Moana Beach (Diamond Hd)	HIW00002	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Ewa Beach Park	HI319095	Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		Total P	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total phosphorus, resulting in a category change from 5 to 2.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Haleiwa Ali'i	HI451176	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Haleiwa Beach Park	HI994019	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Hanauma Bay (Beach)	HIW00096	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
		Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for chl-a, resulting in a category change from 5 to 2.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Hawaii Kai station	HIW00117	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Hawaiian Electric Beach Park	HI628972	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Heeia Kea Small Boat Harbor	HIW00097	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Ihilani Kohola Lagoon	HI515191	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kaaawa Beach Park	HI580360	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Kahala Beach Shoreline	HI514582	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kahala Hilton Beach	HI173325	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kahanamoku Beach	HI366432	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
		Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kailua Beach Park	HI482719	Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		Total P	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total phosphorus, resulting in a category change from 5 to 2.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kaiona Beach	HI234342	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Kakaako Waterfront	HI302297	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kanenelu Beach	HI196120	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kaupo Beach Co. Park	HI791127	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Kawaiku'i Beach Park	HI304424	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Kawela Bay	HI698581	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Kokololio Beach	HI467112	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kualoa Co. Regional Park	HI848207	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
		Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kuhio Beach	HI681782	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kuhio Beach (Public Bath)	HI851298	Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kuilima Cove	HI412224	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Laniakea Beach	HI183312	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Maipalaoa Beach	HI280966	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Makaha Beach	HI632106	Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Mamala Bay (Sand Isl. Offshore)	HIW00014	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		Total N	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total nitrogen, resulting in a category change from 5 to 2.
		NO3+NO2		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		Turb		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for chl-a, resulting in a category change from 5 to 2.
		NH4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Mauna Lahilahi Beach	HI639551	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Oneawa Beach	HI952205	entero	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Point Panic	HI197311	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Pokai Bay	HIW00007	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Royal-Moana Beach	HI898947	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Sandy Beach	HI776760	NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Sans Souci	HI617815	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Sunset Beach	HI860544	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Tongg's	HI248913	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Ulehawa Beach	HI784010	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Wai'alae Beach Co. Park	HI997368	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Waimanalo Beach Co. Park (South)	HIW00174	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
		Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Waimea Bay	HIW00128	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.

OAHU					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Wawamalu Beach Park	HI329454	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

LANAI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Awehi	HIW00134	Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for NH4, resulting in a category change from 5 to 2.
Hulupoe Bay	HIW00177	Waterbody Type	Correction	TC	Correction of mislabeled waterbody type from Bay to Coastal
		Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kaluakoi Point to Huawai Bay	HIW00135	Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for NH4, resulting in a category change from 5 to 2.
Kawaiu Gulch-Makole Pt.	HIW00133	Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for NH4, resulting in a category change from 5 to 2.
Mahanalua	HIW00136	Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

LANAI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for NH4, resulting in a category change from 5 to 2.
Manele Bay Beach	HIW00178	Waterbody Type	Correction	TC	Correction of mislabeled waterbody type from Bay to Coastal
		Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Manele Boat Harbor	HIW00179	NO3+NO2	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for NO3+NO2, resulting in a category change from 5 to 2.
		NH4	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for NH4, resulting in a category change from 5 to 2.

MAUI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
H.A. Baldwin Beach Co. Pk.	HI846900	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kahului Harbor	HIW00104	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Kalama Beach Co. Park (Beach)	HIW00023	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kalepolepo (Waimahaihai)	HIW00141	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
		Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kamaole Beach 3	HI496115	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kapalua (Fleming's) Beach	HI391006	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

MAUI					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Launiupoko St. Wayside Park	HI558359	entero	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for entero, resulting in a category change from 5 to 2.
Mai Poina Oe Iau Beach Co. Pk.	HIW00025	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Makena Landing-Maluaka Beach	HIW00142	Total P	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total phosphorus, resulting in a category change from 5 to 2.
		Turb	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for turbidity, resulting in a category change from 5 to 2.
Oneloa Beach (Big Beach)-Ahihi-Kinau	HIW00144	Total P	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for total phosphorus, resulting in a category change from 5 to 2.
		Turb	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for turbidity, resulting in a category change from 5 to 2.
Oneuli Beach	HI756040	Turb	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for turbidity, resulting in a category change from 5 to 2.
Poolenalena-Makena Landing	HIW00143	Turb	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for turbidity, resulting in a category change from 5 to 2.

HAWAII					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Hapuna Beach St. Rec. Area	HI621002	Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Hilo Bay (Exit of Ice Pond)	HI659453	Total N	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		chl-a		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Hilo Bay (Lighthouse)	HIW00028	Total N		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NO3+NO2	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Total P		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

HAWAII					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Honokohau Beach	HI315174	Total P	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		Turb	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		NH4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		PO4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kahuwai Bay-Mano Pt.	HIW00153	Turb	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		PO4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kauna'oa Beach	HI261869	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Keahou Bay (Kona)	HI713293	entero		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Kealakekua Bay	HIW00149	PO4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Kuki'o Bay	HIW00154	PO4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Manini'owali	HI720408	PO4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.

HAWAII					
Assement Location	**Assmt ID**	**Pollutant**	**Decision Action**	**Summary Rationale**	**Reason for Changes of Category**
Paaoao Point to Keawekaheka Point	HIW00145	Turb	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for turbidity, resulting in a category change from 5 to 2.
		PO4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Pine Trees	HI320616	PO4		NND, A2	**Assign cat. 2**; The assessment of new data documents indicate that applicable WQS are being attained.
Pine Trees-Honokohau	HIW00146	Turb	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		chl-a	Delist Pollutant	NND, DL	**DELIST: cat. 2**; The assessment of data documents indicate that applicable WQS are now being attained for chl-a, resulting in a category change from 5 to 2.
		PO4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Waiulua Bay to Anaehoomalu Bay	HIW00148	chl-a	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
		PO4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.
Wawaloli Beach-Pine Trees	HIW00147	PO4	List Pollutant	NND, NL	**ASSIGN cat. 5**; The assessment of new data documents indicate that applicable WQS are not being attained.

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Chapter 2
Inland Waters

CHAPTER 2 TABLE OF CONTENTS

PART A. SCOPE OF WATERS 4

PART B. MONITORING AND ASSESSMENT.....4

B.1. Assessment Methodology 4

Basic Attainment Decision Unit 4

Tiered Approach 4

Decision Unit Rationale and Implementation.....4

Decision Unit Delineation, Naming, Coding, and Geolocation.....5

Application of Criteria to Attainment Decisions 5

Methodology for Attainment Decisions.....6

Data Source Reviewed.....8

Quality Assurance/Quality Control Consideration 8

B.2. Assessment Results 8

B.2.1. Review of Data.....8

B.2.2. Hawaii's 2008/2010 303(d) List 8

B.3. Wetlands Program 8

B.4. Public Health Issues 8

LIST OF TABLES

TABLE 1. Applicable Water Quality Criteria and Decision Unit Boundaries for Inland Fresh Waterbodies 6

PART A. SCOPE OF WATERS

This chapter of the 2008/2010 Integrated Report covers all waters fresh waters of salinity less than 0.5 parts per thousand. Assessment units for the 2008/2010 Integrated Report remain the same as the assessment units applied in the previous report. Inland waters are partitioned according to the Hawaii Administrative Rules (HAR) §11-54 by type. Please see methodology section in Part B.1. for details regarding decision units for attainment decisions.

There were no new inland water data assessed for this 2008/2010 Integrated Report.

PART B. MONITORING AND ASSESSMENT

B.1. Assessment Methodology

Basic Attainment Decision Unit
As in previous Clean Water Act Section 303(d) listing cycles, the basic (Tier I) attainment decision unit (hereafter "ADU" or "decision unit") for fresh inland Hawaii waters of salinity <0.5 ppt is the entire network (EN in report tables) of hydrologically connected freshwater segments associated with a single listed stream, stream segment, or stream tributary. These freshwater segments, and thus the basic ADU, can include one or more waterbody types as defined by HAR 11-54, including, but not limited to intermittent streams, reservoirs, and wetlands (see Table 1).

Tiered Approach
A tiered approach, linked with the assessment decision criteria first adopted in the 2002 303(d) listing cycle, was used in past assessments to refine decision units for freshwater stream networks. Tier I ADUs are used for initial attainment decisions as governed by the current 303(d) listing criteria and for defining the geographic scope of "legacy" listings based on visual assessments. Tier II decision units encompass segments and partial segments that can be more narrowly defined and assessed based on existing monitoring locations, data, and boundaries between waterbody types, and are used for attainment decisions on a case-by-case basis. Tier III decision units are those established for TMDL development and other intensive monitoring and analysis purposes. Tier IV decision units are part of Tier III decision units that can be defined based on the most detailed assessment information.

Decision Unit Rationale and Implementation
HIDOH's current focus on defining ADUs for stream is based on:

> (a) an assumption that streams are the most widespread and important fresh inland waterbody type to assess for reaching marine water quality goals;
> (b) the lack of numeric water quality standards criteria for conventional chemical and physical pollutants in most other fresh waterbody types;
> (c) the unavailability of a complete comprehensive waterbody inventory and present limitations for monitoring and assessing all waterbodies, water quality criteria, and use attainment within each waterbody type.

ADUs for fresh inland waterbodies do not include marine waters or inland brackish or saline waterbody types, such as estuaries and anchialine pools.

Decision unit boundaries for other fresh inland waterbody types are defined on a case-by-case basis when monitoring data and other assessment information is available, but generally encompass the entire waterbody.

Decision Unit Delineation, Naming, Coding, and Geolocation

Numerous conventions for naming, coding, and geolocating Hawaii waterbodies and decision unit boundaries discussed above have been designed and used over time. Building a comprehensive statewide waterbody inventory that standardizes these conventions for use by HIDOH and others is an ongoing intergovernmental resource management task. Waterbody IDs for freshwater decision units are based on the Hawaii Steam Assessment (HSA) Coding System (Hawaii Cooperative Park Service Unit, 1990) with some modifications, as noted in the 2006 Integrated Report.

Geolocation of freshwater decision units is based upon various public domain digital coverages, HIDOH field data (GPS coordinates, station description, field mapping, stream surveys, and stream assessments) and similar spatial location data submitted with third-party data packages.

Application of Criteria to Attainment Decisions

The 303(d) listings apply to the entire freshwater (salinity <0.5 ppt) portion of a stream system, including all hydrologically-connected reaches, unless a case is documented in which small decision units are justified. The same method also applies to other waterbody types.

We urge non-HIDOH entities conducting similar monitoring, analysis, and planning activities to consult with HIDOH about sampling designs and information management protocols that will facilitate HIDOH's ability to use secondary data for attainment decisions. The entire hydrologic network within a watershed is the largest possible unit of decision for inland fresh waterbodies, and may include the boundaries of the following waterbody types as defined by HAR 11-54-1.

HIDOH encourages monitoring, analysis, and planning activities that acknowledge and consider the regulatory boundaries between specific waterbody types and demonstrate a rationale for segmenting each waterbody into smaller decision units. The EPA's 2006 Integrated Report Guidance provides a summary of factors to consider in developing these rationales. Water quality criteria and decision unit boundaries for the various waterbody types are shown in Table 1.

TABLE 1. Applicable Water Quality Criteria and Decision Unit Boundaries for Inland Fresh Waterbodies

Waterbody Type[1]	Applicable Water Quality Criteria[2]	Decision unit boundary[3]
Flowing seep	Basic/Recreational	Flowpath/Flow Surface
Flowing spring	Basic/Recreational	Flowpath/Flow Surface
Elevated wetland	Basic/Recreational/Wetland	1978 Corps delineation[4]
Low wetland	Basic/Recreational	1978 Corps delineation[4]
Intermittent stream	Basic/Recreational/Water Column/Bottom	Entire network or sub-network[5]
Perennial stream	Basic/Recreational/Water Column/Bottom	Entire network or sub-network[5]
Natural freshwater lake	Basic/Recreational	Lake
Freshwater impoundment[6]	Basic/Recreational	Impoundment
Reservoir	Basic/Recreational	Reservoir
Ditch	Basic/Recreational	Ditch
Flume	Basic/Recreational	Flume
Drainage ditch[7]	Basic/Recreational	Drainage ditch
Canal[7]	Basic/Recreational	Canal

[1]Inland freshwater (salinity <0.5 ppt) waterbody types as defined by HAR §11-54-1. These definitions are applied to the definition of decision units.
[2]Basic criteria (Narrative "free of" and numeric standards for toxic pollutants) established by HAR §11-54-4; Specific (numeric) criteria for inland recreational waters established by HAR §11-54-8(a); Specific (numeric) criteria for stream water column established by HAR §11-54-5.2(b); Specific (numeric) criteria for stream bottom established by HAR §11-54-5.2(b)(2); Specific (numeric) criteria for elevated wetlands established by HAR §11-54-5.2(c).
[3]HAR §11-54-5.1(a) establishes a system of waterbody classification (waterbody class is defined by underlying land use classification) and associated designated uses.
[4]HAR §11-1: "...the identification and delineation of wetland boundaries shall be done following the procedures described in the U.S. Army Corps of Engineers Wetland Delineation Manual (USACE 1987)."
[5]According to HAR §11-54-1 "'Stream systems', means the aggregate of water features comprising or associated with a steam, including the stream itself and its tributaries, headwaters, ponds, wetlands, and estuary. A stream system is geographically delimited by the boundaries of its drainage basin or watershed." For stream attainment decision purposes, "associated" is interpreted as "hydrologically connected" and estuaries, ditches, flumes, drainage ditches, and canals are not included in the assessment.
[6]This waterbody type is not defined by rule but is included in the definition of "Standing waters".
[7]This waterbody type is not defined by rule but is included in the definition of "State waters".

Methodology for Attainment Decisions

While there are no changes from the 2006 List of impaired waters, it is important to provide both documentation and consistency when making listing decisions. Use of standardized criteria will enable HIDOH to periodically collect and assess datasets for use in waterbody assessments. Photos are required for inland waters to ensure location information is correct. Since many places in Hawaii are named identically, photos help to identify the exact location of the sampling event.

Please note that the same information requirements apply to delisting as well as listing decisions. Datasets and supporting documentation are evaluated against both numeric and narrative criteria

where applicable. Listings for inland waters generally apply to the entire freshwater (salinity <0.5 ppt) portion of a stream system unless a case is documented in which the watershed approach is not applicable.

State Water Quality Standards (WQS) set in HAR §11-54 for conventional pollutants, such as nutrients and sediments, are expressed in a statistical format that presents criteria in the form of geometric means not to be exceeded by the geometric mean values computed from datasets. Two storm event allowances are included through the 10% and 2% geometric means not to be exceeded by more than 10% and 2% of the sample values, respectively. The WQS are further divided into "wet" and "dry" criteria, which, for inland waterbodies, refer to the "wet" season as November through April, and "dry" season as May through October. For embayments and coastal waters, these terms refer to the amount of freshwater discharge per shoreline mile.

For statistical significance, "10% of the time" criteria will be evaluated with a minimum sample size of 100 samples, allowing for 10+ samples to exceed the 10% threshold. The "2% of the time" criteria will be evaluated with a minimum sample size of 500 samples, allowing for 10+ samples to exceed the 2% threshold.

In accordance with priority ranking and listing/delisting criteria, waterbodies are sorted into one of three priority categories. Priority 1 waters have sufficient data to clearly support a listing/delisting decision based on separate wet and/or dry conditions. Priority 2 waters have limited data, which requires HIDOH to use a weight-of-evidence approach. Priority 3 waters have extremely limited data and require future monitoring before a listing decision can be made. For conventional pollutants, a minimum of ten samples from the wet and ten samples from the dry season is required for Priority 1. A minimum of ten samples from a combined grouping of wet and dry conditions is required for Priority 2a, and five to nine samples for Priority 2b. Any fewer than five samples result in the assignment of the waterbody and its numeric data into Priority 3.

For toxic pollutants, such as pesticides and heavy metals, which often require expensive analyses, a minimum sample size of three is required for eligibility for Priority 1. Toxic pollutants for freshwaters are characterized by acute and chronic concentration criteria and fish consumption criteria.

Enterococci are the indicator bacteria now used in freshwaters to evaluate waters for public health risks. Enterococci counts are evaluated using data within a 25 to 30 day temporal increment, and compared to applicable geometric mean and the single sample maximum value.

Biological surveys of aquatic communities, fish consumption advisories, and reports of contaminated sediments are also eligible sources of listing information. These surveys are most likely to be placed in Priority 3. Datasets for evaluation of narrative criteria must include at least three sampling events and represent conditions in both wet and dry seasons. These narrative criteria may be evaluated using HIDOH-approved habitat or biological assessment methodologies as long as they can be directly correlated to specific narrative criteria in HAR §11-54-04. Also, in accordance with HAR §11-54-04(b)(2)(A), acute toxicity standards for the contamination of sediment may be evaluated using broadly accepted standards such as those

developed in Canada and New York, provided that HIDOH deems them appropriate for use in the Hawaiian environment (CCME 1999; NYSDEC 1999).

Data Sources Reviewed
There were no new data reviewed for the 2008/2010 cycle.

Quality Assurance/Quality Control Consideration
Quality Assurance/Quality Control (QA/QC) procedures document data quality by describing data collection and analysis procedures. HIDOH's Clean Water Branch and Laboratory operate under the terms of the "Quality Management Plan for Surface Water Quality Monitoring" approved by EPA Region IX (December 9, 1999).

Other data submitted from sources outside the HIDOH will be evaluated against the Quality Assurance Project Plan (QAPP).

B.2. Assessment Results

B.2.1. Review of Data

There were no new data reviewed for the 2008/2010 cycle.

B.2.2. Hawaii's 2008/2010 303(d) List

The 2008/2010 303(d) List contains the waterbodies that were in the 2006 List of Impaired Waterbodies. There are no newly listed streams in the current list. Complete assessment decisions are found in Chapter 3. Waterbodies are prioritized as High, Medium, or Low for Total Maximum Daily Load (TMDL) development. High, medium, or low priorities were assigned to each waterbody based on the number of parameters listed and the severity of exceedances.

B.3. Wetlands Program

Responsibilities for wetland protection are diffused among various federal, state, and county authorities. There is no formal wetland program in HIDOH.

B.4. Public Health Issues

<u>Leptospirosis Threat</u>
Leptospirosis is not included as a specific water quality standard parameter. However, all freshwaters within the state are considered potential sources of Leptospirosis infection by the epidemiology section of the HIDOH. No direct tests have been approved or utilized to ascertain the extent of the public health threat through water sampling. Epidemiologic evidence has linked several illness outbreaks to contact with freshwater, leading authorities to issue blanket advisories for all fresh waters of the state.

Fish Consumption Advisory

Several locations have been identified and posted as areas where fish and shellfish should not be consumed. These areas include: Pearl Harbor, Ala Wai Canal, and urban streams of Honolulu. Contamination of fish and shellfish include organochlorine pesticides and/or PCBs and lead.

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Chapter 3
2008/2010 Waterbody Assessment Decisions [Integrated 303(d) List/305(b) Report for Hawaii]

- New 303(d) listing are shaded, **bold** and ***italicized*** in the table, as are any changes for previously listed waters.
- **Stream codes:** EN = Entire Network, EE = Entire Estuary, ER = Entire Reservoir, EW = Entire Wetland, EL = Entire Lake.
- **Marine Codes:** B = Bay (as specified within HAR 11-54-6), C = Open Coastal (fronting areas within 1000' and 100 fathoms of specified area), E = Estuary, K = Kona (All marine waters of Hawaii Island from Loa Point, South Kona District, clockwise to Malae Point, North Kona District, excluding Kawaihae Harbor and Honokohau Harbor, and for all areas from the shoreline at mean lower low water to a distance 1000m seaward (see HAR 11-54-6)), P = Pearl Harbor; * = Listings from previous reporting cycles which, at that time, were then listed as separate entities from similar named sampling stations, convention continued for this cycle.
- **Decision Codes:** ? = unknown, N = not attained, A = Attained, Ac = Attained (with combined season data), Nc = Not attained (with combined season data), N1 = not attained (by 2 times the standard), N1c = not attained (by combined data, 2 times the standard), V = visual listing from 2001-2004, L = previous listing from 1998 or earlier.
- **Parameter Codes:** Total N = total nitrogen; NO3+NO2 = nitrate+nitrite nitrogen; Total P = total phosphorus; TURB = turbidity; TSS = total suspended solids; chl-a = chlorophyll a; NH4 = ammonium nitrogen; PO4 = phosphate.
- **Category:** 1 = All uses attained, 2 = Data show some uses attained, 3 = Not enough data to evaluate, 4 = Data show at least one use not attained, but no TMDL needed, 5 = Data show at least one use not attained, TMDL needed.
- **TMDL Priority Codes:** High (H), Medium (M), and Low (L) priority for initiating TMDL development within the current monitoring and assessment cycle (through December 31, 2009), based on current and projected resource availability for completing the TMDL development process. IP = TMDL development in progress.
- For this report, assessed water bodies were sorted by island (north to south), then into the streams category (salinity below 0.5 ppt) or the coastal category (salinity above 0.5 ppt).

KAUAI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Aakukui	Stream	EN	2-4-02		?	?	?	?	?	TSS (?)	3	
Aliomanu	Stream	EN	2-1-36		?	?	?	?	?	TSS (?)	3	
Anahola	Stream	EN	2-2-01	Dry	?	Ac	A	A	N	TSS (A)	3,5	L
Anahola	Stream	EN	2-2-01	Wet	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L
Hanakapiai	Stream	EN	2-1-10		?	?	?	?	?	TSS (?)	2,3	
Hanalei	Stream	EN	2-1-19	Dry	***L***	A	A	A	***L***	TSS (A)	2,***4a***	***TMDLs approved 2008 (Turb, bacteria)***
Hanalei	Stream	EN	2-1-19	Wet	***L***	A	A	A	A	TSS (A)	2,***4a***	***TMDLs approved 2008 (Turb, bacteria)***
Hanamaulu	Stream	EN	2-2-12	Dry	?	?	?	?	N	TSS (?)	3,5	L
Hanamaulu	Stream	EN	2-2-12	Wet	?	?	?	?	N	TSS (?)	3,5	L
Hanapepe	Stream	EN	2-3-07	Dry	?	A	A	A	N	TSS (A)	3,5	L
Hanapepe	Stream	EN	2-3-07	Wet	?	Ac	Ac	Ac	V	TSS (Ac)	3,5	L
Huleia	Stream	EN	2-2-15	Dry	***L***	***L***	***L***	***L***	***L***	***TSS (L)***	***4a***	***TMDLs approved 2008***
Huleia	Stream	EN	2-2-15	Wet	***L***	***L***	***L***	***L***	***L***	***TSS (L)***	***4a***	***TMDLs approved 2008***
Kalihiwai	Stream	EN	2-1-25		?	?	?	?	?	TSS (?)	3	
Kapaa	Stream	EN	2-2-04	Dry	?	A	A	A	N	TSS (A)	3,5	L
Kapaa	Stream	EN	2-2-04	Wet	?	A	A	A	N	TSS (A)	3,5	L
Kilauea	Stream	EN	2-1-28	Dry	?	A	A	A	N	TSS (A)	3,5	L
Kilauea	Stream	EN	2-1-28	Wet	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L

KAUAI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Kipu	Stream	EN	2-3-01		?	?	?	?	?	TSS (?)	3	
Lawai	Stream	EN	2-3-04	Dry	?	N	N	A	N	TSS (A)	3,5	L
Lawai	Stream	EN	2-3-04	Wet	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L
Limahuli	Stream	EN	2-1-12	Dry	?	A	N	A	?	TSS (A)	2,3,5	L
Limahuli	Stream	EN	2-1-12	Wet	?	?	?	?	Ac	TSS (?)	2,3	
Lumahai	Stream	EN	2-1-15		?	?	?	?	?	TSS (?)	3	
Mahinauli	Stream	EN	2-4-01		?	?	?	?	?	TSS (?)	3	
Manoa	Stream	EN	2-1-13	Dry	?	Ac	Ac	Ac	N1	TSS (Ac)	3,5	L
Manoa	Stream	EN	2-1-13	Wet	?	Ac	Ac	Ac	Nc	TSS (Ac)	3,5	L
Moloaa	Stream	EN	2-1-34	Dry	?	A	A	A	N	TSS (A)	3,5	L
Moloaa	Stream	EN	2-1-34	Wet	?	?	?	?	N	TSS (?)	3,5	L
Nawiliwili	Stream	EN	2-2-13	Dry	***L***	***L***	***L***	***L***	***L***	***TSS (L)***	***4a***	***TMDLs approved 2008***
Nawiliwili	Stream	EN	2-2-13	Wet	***L***	***L***	***L***	***L***	***L***	***TSS (L)***	***4a***	***TMDLs approved 2008***
Papaa	Stream	EN	2-1-35	Dry	?	N1	N1	Ac	N1	TSS (Ac)	3,5	L
Papaa	Stream	EN	2-1-35	Wet	?	?	?	?	?	TSS (?)	3	
Puali	Stream	EN	2-2-14	Dry	***L***	***L***	***L***	***L***	***L***	***TSS (L)***	***4a***	***TMDLs approved 2008***
Puali	Stream	EN	2-2-14	Wet	***L***	***L***	***L***	***L***	***L***	***TSS (L)***	***4a***	***TMDLs approved 2008***
Uhelekawawa	Stream	EN	2-2-Uhelekawawa		?	?	?	?	V	TSS (?)	3,5	L
Wahiawa	Stream	EN	2-3-06	Dry	?	N1	N1	A	N1	TSS (A)	3,5	L
Wahiawa	Stream	EN	2-3-06	Wet	?	Nc	Nc	Ac	Nc	TSS (Ac)	3,5	L

KAUAI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Waikomo	Stream	EN	2-3-02	Dry	?	Nc	N1	Ac	N1	TSS (Ac)	3,5	L
Waikomo	Stream	EN	2-3-02	Wet	?	Nc	Nc	Ac	Nc	TSS (Ac)	3,5	L
Wailua	Stream	EN	2-2-08	Dry	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L
Wailua	Stream	EN	2-2-08	Wet	?	?	?	?	?	TSS (?)	3	
Waimea	Stream	EN	2-4-04	Dry	?	A	A	N	N	TSS (A)	3,5	L
Waimea	Stream	EN	2-4-04	Wet	?	Ac	Ac	Ac	V	TSS (Ac)	3,5	L
Waimea	Estuary	EE	2-4-04-E		?	?	?	?	V	TSS (?)	3,5	L
Wainiha	Stream	EN	2-1-14	Dry	?	Ac	Ac	Ac	Ac	TSS (Ac)	2,3	
Wainiha	Stream	EN	2-1-14	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	2,3	
Waioli	Stream	EN	2-1-18	Dry	?	A	A	A	A	TSS (A)	2,3	
Waioli	Stream	EN	2-1-18	Wet	?	?	?	?	?	TSS (?)	3	
Waipa	Stream	EN	2-1-17	Dry	?	A	A	A	***L***	TSS (A)	2,3,***4a***	***TMDL approved 2008 (Turb)***
Waipa	Stream	EN	2-1-17	Wet	?	?	?	?	?	TSS (?)	3	

KAUAI Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Aliomanu Beach	HI710019	wet	?	?	?	?	?		3	
C	Anahola Beach	HI823433	wet	A	?	?	?	?		2,3	
C	Anahola Beach	HI270737	wet	?	?	?	?	?		3	
C	Anini Beach	HI338804	wet	?	?	?	?	?		3	
C	Anini Beach Park	HI418744	wet	A	?	?	?	N		2,3,5	L
C	Beach House Beach	HI156238	dry	A	?	?	?	?		2,3	
C	Brennecke Beach	HI166521	dry	A	?	?	?	?		2,3	
C	Donkey Park	HI853903	wet	?	?	?	?	?		3	
C	Gillin's Beach	HI976083	dry	?	?	?	?	?		3	
C	Glass Beach	HI949505	wet	?	?	?	?	?		3	
C	Haena Beach Park	HI554189	wet	A	?	?	?	N		2,3,5	L
C	Hanakapi'ai Beach	HI797414	wet	?	?	?	?	?		3	
B	Hanalei Bay (Landing)	HIW00093	wet	N	?	?	?	N		3,5	H (IP)
B	Hanalei Bay (Pavilion)	HIW00092	wet	***A***	?	?	?	N		***2,***3,5	H
B	Hanalei Bay (Waioli Beach)	HIW00091	wet	A	?	?	?	N		2,3,5	H
B	Hanalei Bay Mooring station*	HIW00157	wet	N	?	?	?	?		3,5	H
E	Hanalei Bay upstream of Dolphin*	HIW00160	wet	?	?	?	?	N		3,5	H (IP)
E	Hanalei River	HI385259	wet	N	?	?	?	***L***		3,***4a,***5	***M(bacteria &Turb TMDLs approved 2008)***
B	Hanama'ulu Bay	HIW00063	wet	?	?	?	?	N		3,5	L
B	Hanama'ulu Bay (Beach)	HIW00094	wet	N	?	?	?	?		3,5	L
B	Hanapepe Bay	HIW00095	wet	?	?	?	?	?		3	
B	Hanapepe Bay- from breakwater to shore and nearshore waters to 30' from Puolo Point to Paakehi Point	HIW00048	wet	?	L	L	L	?	nutrients	3,5	L
C	Haula Beach	HI277808	dry	?	?	?	?	?		3	

KAUAI Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Kahili Beach	HI533519	wet	?	?	?	?	?		3	
C	Kalalau Beach	HI908803	wet	?	?	?	?	?		3	
C	Kalihiwai Bay	HI264001	wet	N	?	?	?	?		3,5	L
C	Kapa'a Beach Co. Park	HI972832	wet	***A***	?	?	?	?		***2***,3	
C	Kauapea Beach (Secret Beach)	HI669328	wet	?	?	?	?	?		3	
C	Kawailoa Beach	HI698776	dry	?	?	?	?	?		3	
C	Kealia	HI402035	wet	?	?	?	?	?		3	
C	Kee Beach	HI124511	wet	A	?	?	?	A		2,3	
C	Kekaha Beach Co. Pk.	HI530569	dry	A	?	?	?	?		2,3	
C	Kepuhi Beach	HI344813	wet	?	?	?	?	?		3	
B	Kikiaola Boat Harbor	HIW00112	dry	?	?	?	?	?		3	
C	Kilauea Pt. Nat. Wildlife Ref.	HI471488	wet	?	?	?	?	?		3	
C	Kipu Kai	HI266627	wet	?	?	?	?	?		3	
C	Koloa Landing	HI955435	dry	N	?	?	?	?		3,5	L
B	Kukuiula Bay	HIW00113	dry	?	?	?	?	?		3	
C	Larsens Beach	HI860960	wet	?	?	?	?	?		3	
C	Lawa'i Kai	HI434882	wet	?	?	?	?	?		3	
C	Lumaha'i Beach	HI889639	wet	?	?	?	?	?		3	
C	Lydgate Park	HI798758	wet	N	?	?	?	?		3,5	L
C	Maha'ulepu Beach	HI533799	dry	?	?	?	?	?		3	
C	Miloli'i	HI333210	dry	?	?	?	?	?		3	
C	Moloa'a Bay	HI547745	wet	?	?	?	?	?		3	
C	Na Pali Coast State Park	HI709808	dry	?	?	?	?	?		3	
B	Nawiliwili Bay (Kalapaki Beach)	HIW00114	wet	N	***A***	***N***	***A***	?	***chl-a(A), NH4(A)***	***2***,3,5	M
B	Nawiliwili Bay (Nawiliwili Harbor)	HIW00115	wet	N	***A***	***N***	***A***	?	***chl-a(A), NH4(N)***	***2***,3,5	M

KAUAI Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
B	Nawiliwili Bay (Offshore)	HIW00116	wet	?	?	N	?	N	chl-a(N), NH4(N)	3,5	M
B	Nawiliwili Bay- from breakwater to shore	HIW00059	wet	?	L	L	L	L	nutrients	3,5	M
C	Nu'alolo	HI945520	dry	?	?	?	?	?		3	
C	Nukolii Beach Park	HI502794	wet	A	?	?	?	?		2,3	
C	Pacific Missile Range Facility	HI176480	dry	?	?	?	?	?		3	
C	Pakala (Makaweli)	HI468251	wet	?	?	?	?	?		3	
C	Palama Beach (Nomilu)	HI665178	wet	?	?	?	?	?		3	
C	Papa'a Bay	HI130639	wet	?	?	?	?	?		3	
C	Pila'a Beach	HI363048	wet	?	?	?	?	?		3	
C	Po'ipu Beach Co. Park	HI396850	dry	***A***	?	?	?	?		***2***,3	
C	Polihale State Park	HI247403	dry	A	?	?	?	?		2,3	
B	Port Allen Boat Harbor	HIW00120	wet	?	?	?	?	?		3	
B	Port Allen Boat Harbor (Port Allen Pier)	HIW00026	wet	?	***A***	***N***	***A***	N	***chl-a(A), NH4(N)***	***2***,3,5	L
C	Prince Kuhio Park	HI742228	dry	?	?	?	?	?		3	
C	Princeville	HI520271	wet	?	?	?	?	?		3	
C	Salt Pond Beach Co. Park	HI701008	wet	***A***	***A***	***N***	***A***	?	***chl-a(N), NH4(N)***	***2***,3,5	L
C	Sheraton Beach	HI542569	dry	?	?	?	?	?		3	
C	Shipwreck Beach	HI358435	dry	?	?	?	?	?		3	
C	Spouting Horn Beach Co. Park	HI951651	dry	?	?	?	?	?		3	
C	Tunnels Beach	HI936087	wet	?	?	?	?	?		3	
C	Wahiawa Bay	HIW00121	wet	?	?	?	?	?		3	
C	Waiakalua Iki Beach	HI505816	wet	?	?	?	?	?		3	
C	Waiakalua Nui Beach	HI371632	wet	?	?	?	?	?		3	
E	Waikoko Estuary	HIW00162	wet	?	?	?	?	***L***		3,***4a***	***TMDL approved 2008 (Turb)***
E	Wailua (Wailua River Station)	HI606168	wet	N	?	?	?	?		3,5	L

KAUAI Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Waimea Bay Beach (Near River station)	HI862821	na	N	?	?	?	?		3,5	L
C	Waimea Bay Beach- nearshore waters to 18' from Kekaha Oomano Pt. - 1.5 miles SE of Mahinaui Stream	HIW00057	wet	?	?	?	?	L	susp. solids	3,5	L
C	Waimea Rec. Pier St. Pk.	HI245235	dry	?	?	?	?	?		3	
C	Wainiha Bay	HI417823	wet	?	?	?	?	?		3	
C	Wai'ohai Beach	HI392082	dry	?	?	?	?	?		3	
E	Waioli Stream Estuary	HIW00163	wet	?	?	?	?	***L***		3,***4a***	***TMDL approved 2008 (Turb)***
E	Waipa Stream Estuary	HIW00164	wet	?	?	?	?	***L***		3,***4a***	***TMDL approved 2008 (Turb)***
C	Waipouli Beach	HI682678	wet	A	?	?	?	?		2,3	

OAHU Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Ahuimanu	Stream	EN	3-2-07.03	Wet	?	?	?	?	V	TSS (?)	3,5	L
Ahuimanu	Stream	EN	3-2-07.03	Dry	?	?	?	?	V	TSS (?)	3,5	L
Aiea	Stream	EN	3-4-03	Wet	?	N1c	N1c	?	V	Trash	3,5	H (IP)
Aiea	Stream	EN	3-4-03	Dry	?	N1c	N1c	?	V	Trash	3,5	H (IP)
Anahulu	Estuary	EE	3-6-08-E		?	V	V	V	V	TSS (?)	3,5	L
Halawa	Stream	EN	3-4-02		?	V	V	V	V	TSS (?)	3,5	H (IP)
Heeia	Stream	EN	3-2-08	Dry	?	N	N	A	A	TSS (A)	3,5	L
Heeia	Stream	EN	3-2-08	Wet	?	A	N	A	N	TSS (A)	3,5	L
Helemano	Stream	EN	3-6-07.02		?	V	V	V	V	TSS (?)	3,5	L
Honouliuli	Stream	EN	3-4-11		?	?	?	?	?	TSS (?)	3	
Kaaawa	Stream	EN	3-1-19		?	V	V	V	V		3,5	L
Kaalaea	Stream	EN	3-2-05	Dry	?	N	N	A	N	TSS (A)	3,5	L
Kaalaea	Stream	EN	3-2-05	Wet	?	N	N	A	A	TSS (A)	3,5	L
Kaelepulu	Stream	EN	3-2-14		?	V	V	V	V	TSS (?)	3,5	H (IP)
Kahaluu	Estuary	EE	3-2-07-E		?	?	?	?	V		3,5	L
Kahaluu	Stream	EN	3-2-07.02	Dry	?	A	N	A	N	TSS (A)	3,5	L
Kahaluu	Stream	EN	3-2-07.02	Wet	?	?	?	?	V	TSS (?)	3,5	L
Kahana	Stream	EN	3-1-18	Dry	?	A	N	A	N	TSS (A)	3,5	M
Kahana	Stream	EN	3-1-18	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	3	
Kahawainui	Stream	EN	3-1-07		?	V	V	V	V		3,5	L
Kaipapau	Stream	EN	3-1-10		?	?	?	?	?	TSS (?)	3	
Kalauao	Stream	EN	3-4-04-01	Dry	?	N1	N1	?	N	TSS (?)	3,5	H (IP)
Kalauao	Stream	EN	3-4-04-01	Wet	?	N	N	?	Ac	TSS (?)	3,5	H (IP)
Kalihi	Stream	EN	3-3-11	Dry	?	?	N	A	N	TSS (A), Trash	3,5	H
Kalihi	Stream	EN	3-3-11	Wet	?	N	N	A	A	TSS (A), Trash	3,5	H

OAHU Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Kaluanui	Stream	EN	3-1-13		?	?	?	?	?	TSS (?)	3	
Kamooalii (Trib to Kaneohe Stream)	Stream	Kamooalii Trib	3-2-10.01	Dry	?	V	V	V	N	TSS (?)	3,5	H (IP)
Kamooalii (Trib to Kaneohe Stream)	Stream	Kamooalii Trib	3-2-10.01	Wet	?	V	V	V	?	TSS (?)	3,5	H (IP)
Kaneohe	Stream	EN	3-2-10	Dry	?	V	V	V	N	TSS (?), Dieldrin	3,5	H (IP)
Kaneohe	Stream	EN	3-2-10	Wet	?	V	V	V	N	TSS (?), Dieldrin	3,5	H (IP)
Kapaa	Stream	EN	3-2-13-Kapaa		?	L	L	L	L	TSS, Metals (L); Lead	3,4a,5	M (nutrient & sediment TMDLs approved 2007)
Kapakahi	Stream	EN	3-4-Kapakahi	Wet	?	N	N	N	?	TSS (?), Trash	3,5	H (IP)
Kapakahi	Stream	EN	3-4-Kapakahi	Dry	?	?	?	?	V	TSS (?), Trash	3,5	H (IP)
Kapalama	Stream	EN	3-3-10		?	V	V	V	V	Trash	3,5	L
Kaukonahua	Stream	EN	3-6-06.02	Dry	?	N	N	A	N1	TSS (A)	3,5	M
Kaukonahua	Stream	EN	3-6-06.02	Wet	?	N	N	A	N1	TSS (A)	3,5	M
Kaupuni	Stream	EN	3-5-05		?	V	V	V	V	TSS (?), Trash	3,5	L
Kawa	Stream	EN	3-2-11		?	L	L	L	L	TSS (L)	3,4a	TMDLs approved 2002, 2005
Kawailoa	Stream	EN	3-6-08.01		?	V	V	V	V	TSS (?)	3,5	L
Kawainui	Stream	EN	3-2-13		?	?	?	?	?	TSS (?)	3,5	M
Kawainui Marsh	Wetland	EW	3-2-13-W		?	?	?	?	?	TSS (?)	3,5	M
Kawela	Stream	EN	3-1-04		?	?	?	?	?	TSS (?)	3	
Keaahala	Stream	EN	3-2-09	Dry	?	N	N	N	N	TSS (A), Trash	3,5	L
Keaahala	Stream	EN	3-2-09	Wet	?	N	N	A	A	TSS (A). Trash	3,5	L

OAHU Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Kiikii	Estuary	EE	3-6-06-E		?	?	?	?	?	TSS (?)	3,5	L
Koloa	Stream	EN	3-1-09	Both	?	?	?	?	?	TSS (?)	3	
Makiki	Stream	EN	ALWS06	Dry	?	N	?	N	?	TSS (?)	3,5	L
Manoa	Stream	EN	3-3-07.01		?	V	V	V	V	TSS (?), Dieldrin, Chlordane	3,5	L
Maunawili	Stream	EN	3-2-13.01		?	V	V	V	V	TSS (?), Trash	3,5	M
Moanalua	Stream	EN	3-3-12.01	Dry	?	Nc	Ac	Ac	N1	TSS (Ac), Trash	3,5	L
Moanalua	Stream	EN	3-3-12.01	Wet	?	Nc	Ac	Ac	Ac	TSS (Ac), Trash	3,5	L
N. Fork Kaukonahua	Stream	EN	3-6-06.02.2		?	V	V	V	V	TSS (?)	3,5	H (IP)
Nuuanu	Stream	EN	3-3-09	Dry	?	N	N	N	N	TSS (N), Trash, Dieldrin, Chlordane	3,5	M
Nuuanu	Stream	EN	3-3-09	Wet	?	N	N	A	N	TSS (A), Trash, Dieldrin, Chlordane	3,5	M
Opaeula	Stream	EN	3-6-07.01		?	V	V	V	V	TSS (?)	3,5	L
Palolo	Stream	EN	3-3-07.01.1		?	?	?	?	?	TSS (?), Trash	3,5	L
Paukauila	Estuary	EE	3-6-07-E		?	V	V	V	V	TSS (?)	3,5	L
Poamoho	Stream	EN	3-6-06.01		?	V	V	V	V	TSS (?)	3,5	M
Punaluu	Stream	EN	3-1-16	Dry	?	A	A	A	A	TSS (A)	2,3	
Punaluu	Stream	EN	3-1-16	Wet	?	A	Ac	A	A	TSS (A)	2,3	
S. Fork Kaukonahua	Stream	EN	3-6-06.02.1		?	V	V	V	V	TSS (?)	3,5	H (IP)
Salt Lake	Lake	EL	3-3-12-SaltLake		?	?	?	?	N	Trash	3,5	L
Wahiawa Reservoir	Reservoir	ER	3-6-06.02-R		?	V	V	V	V	TSS (?)	3,5	H (IP)
Waiahole	Stream	EN	3-2-04	Dry	?	A	N	N	A	TSS (A)	3,5	L
Waiahole	Stream	EN	3-2-04	Wet	?	Ac	Nc	Ac	Ac	TSS (Ac)	3,5	L
Waiawa	Stream	EN	3-4-06	Wet	?	A	A	A	V	TSS (A), Trash	3,5	H (IP)
Waiawa	Stream	EN	3-4-06	Dry	?	V	V	V	V	TSS (?),Trash	3,5	H (IP)

OAHU Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Waihee	Stream	EN	3-2-07.01	Wet	?	V	V	V	?	TSS (?)	3,5	L
Waihee	Stream	EN	3-2-07.01	Dry	?	N	N	A	N	TSS (A)	3,5	L
Waikane	Stream	EN	3-2-02	Dry	?	A	N	A	A	TSS (A)	3,5	L
Waikane	Stream	EN	3-2-02	Wet	?	Ac	Nc	Ac	Ac	TSS (Ac)	3,5	L
Waikele	Stream	EN	3-4-10	Dry	?	N1	N1	?	?	TSS (?)	3,5	H (IP)
Waikele	Stream	EN	3-4-10	Wet	?	N1	N1	?	N	TSS (?)	3,5	H (IP)
Wailele	Stream	EN	3-1-08	Wet	?	?	?	?	N1	TSS (?)	3,5	L
Waimalu	Stream	EN	3-4-05	Wet	?	?	?	?	N1	TSS (?)	3,5	H (IP)
Waimanalo	Stream	EN	3-2-15		?	L	L	L	L	TSS (?)	3,4a	TMDLs approved 2001
Waimano	Stream	EN	3-4-06.01		?	?	?	?	V	TSS (?)	3,5	H (IP)
Waiola	Stream	EN	3-2-07.04	Wet	?	?	?	?	V	TSS (?)	3,5	L
Waiola	Stream	EN	3-2-07.04	Dry	?	?	?	?	V	TSS (?)	3,5	L

OAHU Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Ala Moana Beach (Center)	HIW00001	wet	A	***A***	***A***	***A***	N	chl-a(N), ***NH4(A)***	2,5	***L***
C	Ala Moana Beach (Diamond Hd)	HIW00002	wet	A	***A***	***A***	***A***	?	***chl-a(N), NH4(N)***	2,3,***5***	L
C	Ala Moana Beach (Ewa)	HI473893	wet	A	?	?	?	?		2,3	
B	Ala Wai Boat Harbor (Ala Moana Bridge stn)	HIW00125	wet	N	N	?	N	N	chl-a(N)	3,5	L
E	Ala Wai Canal and Boat Harbor	HIW00050	na	L	L	L	L	L	Nutrients, pathogens, metals, suspd solids (L); organochlorine pesticides, lead	3,4a,5	TMDLs completed for canal nutrients. L – others
E	Ala Wai Canal and Harbor (Canal-Dmd Hd stn)	HIW00085	na	N	N	?	N	N	chl-a(N)	3,5	L
E	Ala Wai Canal and Harbor (Manoa & Palolo KHS stn)	HIW00036	na	?	N	?	N	N	chl-a(N)	3,5	L
E	Ala Wai Canal and Harbor (Manoa strm fork stn)	HIW00035	na	?	N	?	?	N	fecal	3,5	L
E	Ala Wai Canal and Harbor (Manoa-Palolo strm mouth stn)	HIW00087	na	?	N	?	N	N	chl-a(N)	3,5	L
E	Ala Wai Canal and Harbor (McCully Bridge stn)	HIW00086	na	N	?	?	?	?		3,5	L
E	Ala Wai Canal and Harbor (Palolo strm fork)	HIW00034	na	?	N	?	?	N	fecal	3,5	L
C	Aukai Beach Co. Park	HI145110	dry	?	?	?	?	?		3	
C	Banzai Beach	HI908378	dry	?	?	?	?	?		3	
C	Barbers Point Beach Co. Pk.	HI593573	wet	?	?	?	?	?		3	
B	Barbers Point Harbor	HIW00088	dry	?	?	?	?	?		3	
C	Bellows Field Beach Co. Pk. (N. runway)	HI798011	wet	N	?	?	?	?		3,5	M
C	Bellows Field Beach Co. Pk. (Waimanalo strm mouth)	HIW00081	wet	N	?	?	?	?		3,5	M
C	Camp Harold Erdman	HI309544	dry	?	?	?	?	?		3	
C	Chun's Reef	HI950962	wet	A	?	?	?	?		2,3	
C	Diamond Head	HI431723	dry	A	?	?	?	?		2,3	
C	Ehukai Beach Co. Pk.	HI531535	dry	?	?	?	?	?		3	
C	Ewa Beach	HI767464	wet	?	?	?	?	?		3	
C	Ewa Beach Park	HI319095	wet	A	***A***	***A***	***A***	N	chl-a(N), ***NH4(N)***	2,5	L

OAHU Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Fort DeRussy Beach	HI045715	wet	A	?	?	?	?		2,3	
C	Fort Hase Beach	HI410735	dry	?	?	?	?	?		3	
C	Gray's Beach	HI941499	wet	A	N	?	?	N	chl-a(N)	2,3,5	L
B	Haleiwa Ali'i	HI451176	wet	***A***	?	?	?	?		***2,***3	
B	Haleiwa Beach Park	HI994019	wet	***A***	N	?	N	?	chl-a(N)	***2,***3,5	L
B	Hale'iwa Boat Harbor	HIW00127	wet	?	?	?	?	?		3	
C	Halona Cove	HI132946	dry	?	?	?	?	?		3	
C	Hanaka'ilio Beach	HI646411	dry	?	?	?	?	?		3	
B	Hanauma Bay	HIW00058	dry	?	?	?	?	?	trash	3,5	M
B	Hanauma Bay (Beach)	HIW00096	dry	***A***	***A***	***N***	***A***	N	***chl-a(A), NH4(N)***	***2,***5	M
B	Hanauma Bay (oceanic)	HIW00017	dry	?	?	N	?	?	chl-a(N), NH4(N)	3,5	M
C	Hauula Beach Park	HI854492	dry	A	?	?	?	?		2,3	
B	Hawaii Kai station	HIW00117	dry	***A***	?	?	?	?		***2,***3	
C	Hawaiian Electric Beach Park	HI628972	dry	***A***	?	?	?	?		***2,***3	
B	Heeia Kea Small Boat Harbor	HIW00097	wet	***A***	N	?	?	?	chl-a(N)	***2,***3,5	L
B	Honolulu Harbor	HIW00100	wet	?	?	?	?	?		3	
B	Honolulu Harbor & Shore area-Honolulu Waterfront-Aloha Tower	HIW00061	wet	?	?	?	?	N	Trash	3,5	L
B	Honolulu Harbor & Shore area-Kewalo Basin	HIW00051	wet	?	L	L	L	N	Nutrients, suspd. solids (L); trash	3,5	L
B	Honolulu Harbor-nearshore waters to 30' from 1 mile NW of Honolulu Harbor/Sand Island channel to Waikiki Beach	HIW00049	wet	L	L	L	L	N	Nutrients, pathogens, metals, suspd solids (L)	3,5	L
C	Ihilani Honu Lagoon	HI815093	dry	?	?	?	?	?		3	
C	Ihilani Kohola Lagoon	HI515191	dry	***A***	?	?	?	?		***2,***3	

OAHU Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Ihilani Naia Lagoon	HI685981	dry	?	?	?	?	?		3	
C	Ihilani Ulua Lagoon	HI550240	dry	?	?	?	?	?		3	
C	Iroquois Pt.	HI412839	wet	?	?	?	?	?		3	
C	Kaaawa Beach Park	HI580360	wet	***A***	?	?	?	?		***2,***3	
C	Ka'alawai Beach	HI253930	dry	?	?	?	?	?		3	
E	Kaelepulu Stream-Kailua Bch	HIW00182	na	N	N	?	N	N	chl-a(N)	3,5	H (IP)
C	Ka'ena Pt.	HI645485	dry	?	?	?	?	?		3	
C	Kahala Beach Shoreline	HI514582	dry	***A***	?	?	?	?		***2,***3	
C	Kahala Hilton Beach	HI173325	dry	***A***	?	?	?	?		***2,***3	
B	Kahana Bay Park	HIW00102	wet	N	N	?	N	N		3,5	M
B	Kahana Bay-nearshore waters to 30' from Mahie Point to a point one mile north of Kahana Bay station	HIW00062	wet	?	?	?	?	N	Suspd. solids (L)	3,5	M
B	Kahana Park	HIW00103	wet	N	?	?	?	?		3,5	M
C	Kahanamoku Beach	HI366432	wet	***A***	***A***	***A***	***A***	?	***chl-a(N), NH4(A)***	***2,***3,5	L
C	Kahanamoku Lagoon	HIW00003	wet	N	?	?	?	?		3,5	L
C	Kahe Pt. Beach Co. Pk.	HI548986	dry	?	?	?	?	?		3	
E	Kahuku Golf Course	HI989341	na	?	?	?	?	?		3	
B	Kaiaka Bay	HIW00106	wet	A	N	N	?	N	chl-a(N), NH4(N)	2,3,5	L
C	Kaihalulu Beach	HI668562	dry	?	?	?	?	?		3	
C	Kailua Beach Park	HI482719	wet	A	***A***	***A***	***A***	N	chl-a(N), ***NH4(N)***	2,5	L
C	Kaiona Beach	HI234342	dry	***A***	?	?	?	?		***2,***3	
C	Kaipapa'u Beach	HI787959	dry	?	?	?	?	?		3	
C	Kakaako Waterfront	HI302297	wet	***A***	?	?	?	?		***2,***3	
C	Kalae oio Beach Park	HI860454	wet	?	?	?	?	?		3	
C	Kalama Beach	HI071892	dry	A	?	?	?	?		2,3	

OAHU Marine Waters											
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C	Kaloko (Queens) Beach	HI353985	dry	?	?	?	?	?		3	
C	Kaluanui Beach	HI410842	dry	?	?	?	?	?		3	
C	Kanenelu Beach	HI196120	wet	***A***	?	?	?	?		***2,***3	
B	Kaneohe Bay (Beach Park)	HIW00004	wet	?	N	?	N	N	chl-a(N)	3,5	L
B	Kaneohe Bay (Central Region)	HIW00013	dry	?	N	N	?	N	NH4(N)	3,5	L
B	Kaneohe Bay (Kokokahi Pier)	HIW00005	wet	N	N	?	N	N	chl-a(N)	3,5	L
B	Kaneohe Bay (Northern Region)	HIW00012	dry	?	N	N	?	N	NH4(N)	3,5	L
B	Kaneohe Bay (Southern Region)	HIW00011	dry	N	N	N	?	N	NH4(N)	3,5	L
B	Kaneohe Bay-nearshore waters at mouths of Kaneohe and Kawa streams	HIW00054	wet	?	L	L	L	N	nutrients, susp. solids (L)	3,5	L
C	Kapaeloa Beach	HI904851	wet	?	?	?	?	?		3	
C	Kapi'olani Park	HI733929	wet	?	?	?	?	?		3	
C	Kaunala Beach	HI622160	dry	?	?	?	?	?		3	
C	Kaupo Beach Co. Park	HI791127	dry	***A***	?	?	?	?		***2,***3	
C	Kawaiku'i Beach Park	HI304424	dry	***A***	?	?	?	?		***2,***3	
C	Kawailoa Beach	HI312049	wet	?	?	?	?	?		3	
C	Kawela Bay	HI698581	dry	***A***	N	?	N	N	chl-a(N)	***2,***3,5	L
C	Kea'au Beach Co. Park	HI730738	dry	?	?	?	?	?		3	
C	Kealia Beach	HI612698	dry	?	?	?	?	?		3	
B	Keehi Lagoon	HIW00009	wet	A	?	?	?	?		2,3	
B	Keehi Lagoon (Point X)	HIW00010	wet	N	N	?	N	?	chl-a(N)	3,5	L
B	Keehi Lagoon waters and nearshore waters to30' from lagoon mouth to Pearl Harbor	HIW00055	wet	?	L	L	L	N	nutrients, susp. solids (L)	3,5	L
C	Kewalo Basin	HIW00126	wet	?	N	?	N	N	chl-a(N)	3,5	L
B	Ko Olina	HIW00089	dry	?	?	?	?	?		3	
C	Kokololio Beach	HI467112	dry	***A***	?	?	?	?		***2,***3	

OAHU Marine Waters											
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C	Kualoa Co. Regional Park	HI848207	wet	***A***	***N***	***N***	***A***	?	***chl-a(N), NH4(N)***	***2***,3,5	L
C	Kualoa Sugar Mill Beach	HI484535	wet	?	?	?	?	?		3	
C	Kuhio Beach	HI681782	wet	N	***A***	***N***	***A***	?	***chl-a(A), NH4(N)***	***2***,3,5	L
C	Kuhio Beach (Public Bath)	HI851298	wet	A	***A***	***A***	***A***	N	chl-a(N)***, NH4(A)***	2,5	L
C	Kuilei Cliffs Beach Park	HIW00064	dry	?	?	?	?	?		3	
C	Kuilima Cove	HI412224	dry	***A***	?	?	?	?		***2,***3	
C	Laie Bay	HI472847	dry	A	N	?	N	N	chl-a(N)	2,3,5	L
C	Laniakea Beach	HI183312	wet	***A***	?	?	?	?		***2,***3	
C	Lanikai Beach	HI596989	wet	A	?	?	?	?		2,3	
C	Laniloa Peninsula (Beach)	HI201901	dry	?	?	?	?	?		3	
C	Laukinui Beach	HI739818	dry	?	?	?	?	?		3	
C	Lualualei Beach Co. Park	HI800877	dry	?	?	?	?	?		3	
C	Magic Island	HI529142	wet	A	?	?	?	?		2,3	
C	Ma'ili Beach Park	HI627464	dry	A	?	?	?	?		2,3	
C	Maipalaoa Beach	HI280966	dry	***A***	?	?	?	?		***2,***3	
C	Makaha Beach	HI632106	dry	A	***A***	***N***	***A***	N	chl-a(N)***, NH4(N)***	2,5	L
C	Makao Beach	HI542752	dry	?	?	?	?	?		3	
C	Makapuu Beach	HI723399	dry	A	?	?	?	?		2,3	
C	Makaua Beach Co. Park	HIW00066	wet	?	?	?	?	?		3	
C	Makua Beach	HI915061	dry	A	?	?	?	?		2,3	
C	Malaekahana State Park	HI137325	dry	A	?	?	?	?		2,3	
C	Mamala Bay (Oceanic)	HIW00015	wet	?	N	?	?	?	chl-a(N)	3,5	L
C	Mamala Bay (Sand Isl. Offshore)	HIW00014	wet	***A***	***A***	***A***	***A***	***A***	***chl-a(A), NH4(A)***	***2***	
C	Manner's Beach	HI717740	dry	?	?	?	?	?		3	
C	Mauna Lahilahi Beach	HI639551	dry	***A***	?	?	?	?		***2,***3	

OAHU Marine Waters											
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B	Maunalua Bay	HIW00016	wet	?	N	N	?	?	chl-a(N), NH4(N)	3,5	L
C	Mokule'ia Beach	HI908786	dry	?	?	?	?	?		3	
C	Mokule'ia Beach Co. Park	HI220308	dry	?	?	?	?	?		3	
C	Nanaikapono Beach	HI504242	dry	A	?	?	?	?		2,3	
C	Nanakuli Beach Park	HI467413	dry	A	?	?	?	?		2,3	
C	Nimitz Beach	HI682233	wet	A	?	?	?	?		2,3	
C	Niu	HI157026	dry	?	?	?	?	?		3	
C	North Beach	HI426406	dry	?	?	?	?	?		3	
C	Ocean Pointe C	HIW00132	wet	?	N	N	A	N	chl-a(N), NH4(N)	2,3,5	L
C	Ocean Pointe Control	HIW00129	wet	?	N	N	A	N	chl-a(N), NH4(A)	2,3,5	L
C	Ocean Pointe E	HIW00130	wet	?	N	N	A	N	chl-a(N), NH4(A)	2,3,5	L
C	Ocean Pointe W	HIW00131	wet	?	N	N	A	N	chl-a(N), NH4(A)	2,3,5	L
C	Ohikilolo Beach (Barking Sands)	HI731423	dry	?	?	?	?	?		3	
C	Oneawa Beach	HI952205	dry	***N***	N	?	N	N	chl-a(N)	3,5	L
C	Oneula Beach Park	HI825419	wet	A	?	?	?	?		2,3	
C	Outrigger Canoe Club Beach	HI943325	wet	?	?	?	?	?		3	
C	Pahipahi'alua Beach	HI575467	dry	?	?	?	?	?		3	
C	Paiko Lagoon	HI598745	dry	?	?	?	?	?		3	
B	Paiko Peninsula to Koko Hd	HIW00118	dry	?	?	?	?	?		3	
C	Papa'iloa Beach	HI478834	wet	?	?	?	?	?		3	
C	Papaoneone Beach	HI990625	dry	?	?	?	?	?		3	
P	Pearl Harbor	HIW00006	na	?	N	?	N	N	chl-a(N)	3,5	H
P	Pearl Harbor-Harbor waters and nearshore waters to 30' from Keehi Lagoon to Oneula Beach	HIW00119	na	?	L	L	L	N	nutrients, susp. Solids (L); PCBs, fish consumption advisory	3,5	H

OAHU Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Pipeline, The	HI188157	dry	?	?	?	?	?		3	
C	Point Panic	HI197311	wet	***A***	?	?	?	?		***2,***3	
B	Pokai Bay	HIW00007	dry	A	***A***	***N***	***A***	?	***chl-a(N), NH4(N)***	2,3,***5***	***L***
B	Pokai Bay (oceanic)	HIW00019		?	N	?	?	?	chl-a(N)	3,5	L
B	Pokai Bay (open coastal)	HIW00018		?	N	?	?	?	chl-a(N)	3,5	L
C	Pounders Beach	HI587568	dry	?	?	?	?	?		3	
C	Punaluu Beach Park	HI148836	wet	A	?	?	?	?		2,3	
C	Pupukea Beach Co. Park	HI193495	wet	?	?	?	?	?		3	
C	Pu'uiki	HI437024	dry	?	?	?	?	?		3	
C	Pu'uohulu Beach	HI960731	dry	?	?	?	?	?		3	
C	Queen's Surf Beach Park	HIW00069	wet	?	?	?	?	?		3	
C	Royal-Moana Beach	HI898947	wet	A	***A***	***N***	***A***	?	***chl-a(N), NH4(N)***	2,3,***5***	***L***
C	Sand Island Pt.#2	HI714359	wet	A	N	?	?	N	chl-a(N)	2,3,5	L
C	Sand Island Pt.#3	HIW00181	wet	?	N	?	?	N	chl-a(N)	3,5	L
C	Sandy Beach	HI776760	dry	A	N	***N***	***A***	N	chl-a(N)***, NH4(N)***	2,5	L
C	Sans Souci	HI617815	wet	A	***A***	***N***	***A***	?	***chl-a(A), NH4(N)***	2,3,***5***	***L***
C	Sunset Beach	HI860544	dry	A	***A***	***N***	***A***	?	***chl-a(N), NH4(N)***	2,3,***5***	***L***
C	Swanzy Beach Co. Park	HI151343	wet	?	?	?	?	?		3	
C	Tongg's	HI248913	wet	***A***	?	?	?	?		***2,***3	
C	Turtle Bay	HI776670	dry	?	?	?	?	?		3	
C	Ulehawa Beach	HI784010	dry	***A***	?	?	?	?		***2,***3	
C	Wai'alae Beach Co. Park	HI997368	dry	***A***	?	?	?	?		***2,***3	
C	Waiale'e	HI109657	dry	?	?	?	?	?		3	
B	Waialua/Kaiaka Bays Nearshore waters to 60' from Puaena Point to a point 1.5 miles W of Kaiaka Pt.	HIW00083		?	L	L	L	N	nutrients, susp. Solids (L)	3,5	L

OAHU Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
B	Waianae Boat Harbor	HIW00124	dry	?	?	?	?	?		3	
C	Wai'anae Regional Park	HI668527	dry	?	?	?	?	?		3	
C	Waikiki Beach Center	HI244505	wet	A	?	?	?	?		2,3	
C	Wailupe Beach Park	HI432476	dry	?	?	?	?	?		3	
C	Waimanalo Bay St. Rec. Area (Park)	HIW00008	dry	A	?	?	?	?		2,3	
C	Waimanalo Bay station (Waimanalo Beach Co. Park North)	HIW00175	dry	A	?	?	?	?		2,3	
C	Waimanalo Beach Co. Park (South)	HIW00174	dry	***A***	***N***	***N***	***A***	?	***chl-a(N), NH4(N)***	***2,***3,5	M
C	Waimea Bay	HIW00128	wet	***A***	?	?	?	?		***2***,3	
C	War Memorial Natatorium	HI624259	wet	?	?	?	?	?		3	
C	Wawamalu Beach Park	HI329454	dry	***A***	?	?	?	?		***2,***3	
C	White Plains Beach	HI267023	wet	A	?	?	?	?		2,3	
C	Yokohama Bay	HI269028	dry	A	?	?	?	?		2,3	

MOLOKAI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Honoulimaloo	Stream	EN	4-2-02		?	?	?	?	?	TSS (?)	3	
Honouliwai	Stream	EN	4-2-03	Wet	?	?	?	?	Ac	TSS (?)	2,3	
Kamalo	Stream	EN	4-2-14		?	?	?	?	?	TSS (?)	3	
Pelekunu	Stream	EN	4-1-09	Dry	?	?	?	?	A	TSS (?)	2,3	
Waialua	Stream	EN	4-2-04	Wet	?	A	A	A	A	TSS (A)	3	
Waialua	Stream	EN	4-2-04	Dry	?	Ac	Ac	Ac	N1	TSS (Ac)	3,5	L
Wailau	Stream	EN	4-1-15		?	?	?	?	?	TSS (?)	2,3	

MOLOKAI Marine Waters											
Waterbody Type	Scope of Assessment	Geocode ID	Wet/Dry Criteria	enterococci	Total N	NO3+NO2	Total P	TURB	Other Pollutants	Category	TMDL Priority
C	Awahua Beach	HI702920	dry	?	?	?	?	?		3	
C	Fagans Beach	HI571680	dry	?	?	?	?	?		3	
C	Halawa Beach Park	HI928793	wet	?	?	?	?	?		3	
B	Hale O Lono Harbor	HIW00090	dry	?	?	?	?	?		3	
C	Halena Beach	HI417163	dry	?	?	?	?	?		3	
C	Honouli Malo'o	HI783671	dry	?	?	?	?	?		3	
C	Honouli Wai	HI376731	dry	?	?	?	?	?		3	
C	Iliopi'i Beach	HI681345	dry	?	?	?	?	?		3	
C	Kahalepohaku Beach	HI191374	dry	?	?	?	?	?		3	
C	Kakahai'a Beach Park	HI939514	dry	?	?	?	?	?		3	
C	Kamaka'ipo Beach	HI923737	dry	?	?	?	?	?		3	
C	Kanalukaha Beach	HI559049	dry	?	?	?	?	?		3	
C	Kapukahehu Beach	HI941577	dry	?	?	?	?	?		3	
C	Kapukuwahine Beach	HI565164	dry	?	?	?	?	?		3	
B	Kaunakakai Boat Harbor	HIW00109	dry	?	?	?	?	?		3	
B	Kaunakakai Harbor	HIW00110	dry	?	?	?	?	?		3	
C	Kaunala Beach	HI726225	dry	?	?	?	?	?		3	
C	Kaupoa Beach	HI481092	dry	?	?	?	?	?		3	
C	Kawa'aloa Bay	HI384043	dry	?	?	?	?	V		3,5	L
C	Kawakiunui	HI114962	dry	?	?	?	?	?		3	
C	Kepuhi Beach	HI287930	dry	?	?	?	?	?		3	
C	Kiowea Park (Kamehameha Coconut Grove)	HI206014	dry	?	?	?	?	?		3	
C	Kolo Wharf	HI928768	dry	?	?	?	?	?		3	
C	Lighthouse Beach	HI934213	dry	?	?	?	?	?		3	
C	Mo'omomi Beach	HI204811	dry	?	?	?	?	V		3,5	L
C	Murphy Beach Park	HI138494	dry	?	?	?	?	?		3	

MOLOKAI Marine Waters											
Waterbody Type	Scope of Assessment	Geocode ID	Wet/Dry Criteria	enterococci	Total N	NO3+NO2	Total P	TURB	Other Pollutants	Category	TMDL Priority
C	Oneali'i Beach Park	HI904462	dry	?	?	?	?	?		3	
C	Papalaua	HI462219	wet	?	?	?	?	?		3	
C	Papaloa Beach	HI301825	dry	?	?	?	?	?		3	
C	Papohaku Beach	HI556777	dry	?	?	?	?	?		3	
C	Pelekunu	HI443237	wet	?	?	?	?	?		3	
C	Pohaku Mauliuli Beach	HI268134	dry	?	?	?	?	?		3	
C	Po'olau Beach	HI454004	dry	?	?	?	?	?		3	
C	Puko'o	HI665969	dry	?	?	?	?	?		3	
C	Sandy Beach	HI329518	dry	?	?	?	?	?		3	
C	South Molokai Coast-nearshore waters to 18' from SW point-Waialua	HIW00052		?	L	L	L	L	nutrients, suspd. Solids (L)	3,5	L
C	Wailau	HI603285	wet	?	?	?	?	?		3	

LANAI Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Awehi	HIW00134	dry	?	***N***	A	A	N	***chl-a(N), NH4(A)***	2,3,5	L
C	Halepalaoa Beach	HI297944	dry	?	?	?	?	?		3	
C	Hulupoe Bay	HIW00177	dry	?	***N***	A	A	A	chl-a(A), NH4(A)	2,3,***5***	***L***
C	Kahemano Beach	HI801428	dry	?	A	A	A	N	chl-a(A), NH4(N)	2,3,5	L
C	Kaluakoi Point to Huawai Bay	HIW00135	dry	?	***N***	A	A	A	chl-a(A), ***NH4(A)***	2,3,5	L
B	Kaumalapau Harbor	HIW00108	dry	?	?	?	?	?		3	
C	Kaunolu Bay	HI923988	dry	?	?	?	?	?		3	
C	Kawaiu Gulch-Makole Pt.	HIW00133	dry	?	***N***	A	A	A	***chl-a(N), NH4(A)***	2,3,5	L
C	Keomuku Beach	HI854690	dry	?	?	?	?	?		3	
C	Lopa Beach	HI735036	dry	?	?	?	?	?		3	
C	Mahanalua	HIW00136	dry	?	***N***	A	A	N	***chl-a(N), NH4(A)***	2,3,5	L
C	Manele Bay Beach	HIW00178	dry	?	***N***	A	A	A	chl-a(A), NH4(A)	2,3,***5***	***L***
B	Manele Boat Harbor	HIW00179	dry	?	A	***A***	A	N	chl-a(N), ***NH4(A)***	2,3,5	L
C	Naha Beach	HI225961	dry	?	?	?	?	?		3	
C	Polihua Beach	HI845453	dry	?	?	?	?	?		3	
B	Puu Pehe Beach	HIW00180	dry	?	?	?	?	?		3	
C	Shipwreck Beach	HI362906	dry	?	?	?	?	?		3	

MAUI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Alelele	Stream	EN	6-5-20		?	?	?	?	?	TSS (?)	2,3	
E. Wailuaiki	Stream	EN	6-4-16		?	?	?	?	?	TSS (?)	3	
Haipuaena	Stream	EN	6-4-07		?	?	?	?	?	TSS (?)	3	
Hanawi	Stream	EN	6-4-22		?	?	?	?	?	TSS (?)	2,3	
Hanehoi	Stream	En	6-3-11		?	?	?	?	?	TSS (?)	3	
Hawawana	Stream	EN	6-3-13		?	?	?	?	?	TSS (?)	3	
Hoalua	Stream	EN	6-3-12		?	?	?	?	?	TSS (?)	3	
Honokohau	Stream	EN	6-1-11	Dry	?	A	A	A	A	TSS (A)	2,3	
Honokohau	Stream	EN	6-1-11	Wet	?	Ac	Ac	Ac	A	TSS (Ac)	2,3	
Honokowai	Stream	EN	6-1-07		?	?	?	?	V	TSS (?)	3,5	M
Honolua	Stream	EN	6-1-10		?	?	?	?	?	TSS (?)	3	
Honomanu	Stream	EN	6-4-09		?	?	?	?	?	TSS (?)	3	
Honopou	Stream	EN	6-3-08	Wet	?	?	?	?	A	TSS (?)	3	
Hoolawa	Stream	EN	6-3-09		?	?	?	?	?	TSS (?)	3	
Iao	Stream	EN	6-2-09		?	?	?	?	V	Trash	3	M
Kaaiea	Stream	EN	6-4-02		?	?	?	?	?	TSS (?)	3	
Kahakuloa	Stream	EN	6-2-03	Dry	?	A	A	A	A	TSS (A)	2,3	
Kahakuloa	Stream	EN	6-2-03	Wet	?	?	?	?	A	TSS (?)	2,3	
Kahana	Stream	EN	6-1-08		?	?	?	?	V	TSS (?)	3,5	M
Kahoma	Stream	EN	6-1-05		?	?	?	?	V	TSS (?)	3,5	M
Kailua	Stream	EN	6-3-14		?	?	?	?	?	TSS (?)	3	
Kakipi	Stream	EN	6-3-07		?	?	?	?	?	TSS (?)	3	
Kauaula	Stream	EN	6-1-04		?	?	?	?	?	TSS (?)	3	
Kaupakulua	Stream	EN	6-3-03		?	?	?	?	?	TSS (?)	3	
Kolea	Stream	EN	6-4-03		?	?	?	?	?	TSS (?)	3	

MAUI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Kopiliula	Stream	EN	6-4-17		?	?	?	?	?	TSS (?)	3	
Kuaiaha	Stream	EN	6-3-02		?	?	?	?	?	TSS (?)	3	
Launiupoko	Stream	EN	6-1-03		?	?	?	?	?	TSS (?)	3	
Makamakaole	Stream	EN	6-2-06	Dry	?	A	A	A	N	TSS (A)	3,5	L
Makamakaole	Stream	EN	6-2-06	Wet	?	A	A	A	A	TSS (A)	3	
Maliko	Stream	EN	6-3-01	Wet	?	?	?	?	N1	TSS (?)	3,5	L
Manawaiiao	Stream	EN	6-3-04		?	?	?	?	?	TSS (?)	3	
Nuaailua	Stream	EN	6-4-10		?	?	?	?	?	TSS (?)	3	
Oheo	Stream	EN	6-5-13	Dry	?	A	A	A	Ac	TSS (A)	2,3	
Oheo	Stream	EN	6-5-13	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	2,3	
Ohia	Stream	EN	6-4-12		?	V	V	V	V	TSS (?), Trash	3,5	L
Olowalu	Stream	EN	6-1-02		?	?	?	?	?	TSS (?)	3	
Oopuola	Stream	EN	6-4-01		?	?	?	?	?	TSS (?)	3	
Piinaau	Stream	EN	6-4-11		?	?	?	?	?	TSS (?)	3	
Punalau	Stream	EN	6-4-08		?	?	?	?	?	TSS (?)	3	
Puohokamoa	Stream	EN	6-4-06		?	?	?	?	?	TSS (?)	3	
Uaoa	Stream	EN	6-3-05		?	?	?	?	?	TSS (?)	3	
Ukumehame	Stream	EN	6-1-01	Dry	?	A	N	A	A	TSS (A)	3,5	L
Ukumehame	Stream	EN	6-1-01	Wet	?	Ac	Ac	Ac	A	TSS (Ac)	3	
W. Wailuaiki	Stream	EN	6-4-15		?	?	?	?	?	TSS (?)	3	
Waiakamilo	Stream	EN	6-4-13		?	?	?	?	?	TSS (?)	3	
Waiehu	Stream	EN	6-2-08		?	?	?	?	?	TSS (?)	3	
Waihee	Stream	EN	6-2-07	Dry	?	A	A	A	A	TSS (A)	3	
Waihee	Stream	EN	6-2-07	Wet	?	V	V	V	A	TSS (Ac)	3,5	L
Waihikuli	Stream	EN	6-1-06		?	?	?	?	?	TSS (?)	3	

MAUI Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Waikamoi	Stream	EN	6-4-04		?	?	?	?	?	TSS (?)	3	
Waikapu	Stream	EN	6-2-10	Dry	?	Ac	?	Ac	Nc	TSS (Ac)	3,5	L
Waikapu	Stream	EN	6-2-10	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	3	
Waiolai	Stream	EN	6-2-05		?	?	?	?	?	TSS (?)	3	
Waipio	Stream	EN	6-3-10	Wet	?	?	?	?	N1	TSS (?)	3,5	L

MAUI Marine Waters											
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B	Ahihi-Kina'u Natural Area Reserve	HIW00084	dry	?	?	?	?	?		3	
C	Alaeloa Beach	HI616569	dry	?	?	?	?	?		3	
C	Awalua Beach	HI839739	dry	?	?	?	?	?		3	
C	Father Jules Papa	HI525524	dry	?	?	?	?	?		3	
C	Fleming Beach North	HI253548	dry	A	?	?	?	N	chl-a(N)	2,3,5	M
C	H.A. Baldwin Beach Co. Pk.	HI846900	dry	***A***	?	?	?	N		***2***,3,5	L
C	Hamoa	HI287670	dry	?	?	?	?	?		3	
C	Hana Bay	HI996835	dry	?	?	?	?	?		3	
C	Hanaka'o'o Beach Co. Pk.	HI797917	dry	N	?	N	?	N		3,5	M
C	Hanaka'o'o station*	HIW00165	dry	?	?	N	?	N		3,5	M
C	Honokeana Bay	HI229021	dry	?	?	?	?	?		3	
C	Honokohau Bay	HI432902	dry	?	?	?	?	?		3	
C	Honokowai Beach Co. Pk. (Hale Onoloa Condo)	HI412391	dry	?	?	?	N	N	chl-a(N)	3,5	M
C	Honokowai Pt. to Kaanapali	HIW00139	dry	?	N	A	A	A	chl-a(A), NH4(N)	2,3,5	M
C	Honolua Bay	HI280286	dry	?	?	?	?	?		3	
C	Honomanu Bay	HI985873	wet	N	?	?	?	?		3,5	L
C	Ho'okipa Beach Co. Pk.	HIW00024	dry	A	?	?	?	N		2,3,5	L
C	H-Poko Papa	HI901232	dry	?	?	?	?	?		3	
C	Huakini Bay	HI385800	dry	?	?	?	?	?		3	
C	Ka'anapali (Kahekili Beach)	HI643627	dry	A	?	?	?	N		2,3,5	M
C	Ka'anapali (Sheraton Kaanapali Shoreline)	HIW00022	dry	?	?	?	?	N	chl-a(N)	3,5	M
C	Kahana (Mahinahina Condo Shoreline)	HI160433	dry	?	?	?	N	N	chl-a(N)	3,5	M
B	Kahului Harbor	HIW00104	dry	***A***	?	?	?	N		***2,***3,5	L
B	Kahului Harbor (Bay)	HIW00105	dry	?	N	N	?	N	chl-a(N), NH4(N)	3,5	L
B	Kahului Harbor- inshore of breakwater	HIW00053	dry	?	V	V	V	N	Turb (L)	3,5	L

MAUI Marine Waters											
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C	Kaihalulu Bay	HI432263	dry	?	?	?	?	?		3	
C	Ka'ili'ili Beach	HI641844	dry	?	?	?	?	?		3	
C	Kalama Beach Co. Park (Beach)	HIW00023	dry	***A***	N	N	?	N	chl-a(N), NH4(N)	***2***,3,5	L
C	Kalama Beach Co. Park (Cove Park)	HI705118	dry	A	?	?	?	?		2,3	
C	Kalama Beach station*	HIW00168	dry	?	N	N	?	N	chl-a(N), NH4(N)	3,5	L
C	Kalepolepo (Waimahaihai)	HIW00141	dry	***A***	***N***	***N***	N	N	chl-a(N), ***NH4(N)***	***2,***5	L
C	Kalepolepo Beach	HI647373	dry	?	?	?	?	?		3	
C	Kamaole Beach 1	HI761092	dry	A	?	?	?	N	chl-a(N)	2,3,5	L
C	Kamaole Beach 2	HI097179	dry	A	?	?	?	N	chl-a(N)	2,3,5	L
C	Kamaole Beach 3	HI496115	dry	***A***	?	?	?	N	chl-a(N)	***2,***3,5	L
C	Kanaha Beach	HI797225	dry	A	?	?	N	N	chl-a(N)	2,3,5	L
C	Kanaha Beach (Kaa Shoreline)	HIW00020	dry	?	?	?	N	N	chl-a(N)	3,5	L
C	Kanaio Beach	HI404881	dry	?	?	?	?	?		3	
C	Kapalua (Fleming's) Beach	HI391006	dry	***A***	***N***	***N***	***A***	N	chl-a(N), ***NH4(N)***	***2,***5	M
C	Kapoli Beach Co. Park	HI599968	dry	?	?	?	?	?		3	
C	Kea'a Beach	HI593477	dry	?	?	?	?	?		3	
C	Ke'anae	HI959746	wet	?	?	?	?	?		3	
C	Keawakapu Beach	HI607763	dry	A	?	?	?	N	chl-a(N)	2,3,5	L
C	Keonenui Beach	HI199865	dry	?	?	?	?	?		3	
C	Kihei Coast- nearshore waters to 60' from Kihei North - Kalama Beach	HIW00056	dry	?	L	L	L	N	nutrients, TSS (L)	3,5	L
C	Kihei Coast-Cove Park*	HIW00167		?	N	N	?	N	chl-a(N)	3,5	L
C	Kihei Coast-Estuary Boat Ramp	HIW00166		?	N	N	?	N		3,5	L
C	Kihei Coast-Kalepolepo	HIW00039		?	N	N	?	N	chl-a(N)	3,5	L
E	Kihei Coast-Kaonoulu Estuary	HIW00040		?	N	N	?	N	chl-a(N)	3,5	L
E	Kihei Coast-Kealia Pond	HIW00070		?	?	?	?	?	chl-a(N)	3,5	H

MAUI Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Kihei Coast-Keawakapu*	HIW00074		?	?	N	?	?	chl-a(N)	3,5	L
C	Kihei Coast-Kulanihakoi	HIW00043		?	N	N	?	N	chl-a(N), NH4(N)	3,5	L
C	Kihei Coast-Lipoa-South	HIW00072		?	?	?	?	N	chl-a(N)	3,5	L
C	Kihei Coast-Luana Kai	HIW00041		?	N	N	?	N	chl-a(N), NH4(N)	3,5	L
C	Kihei Coast-Maui Coast	HIW00073		?	?	N	?	N	chl-a(N)	3,5	L
C	Kihei Coast-Mokulele	HIW00042		?	N	N	?	N	chl-a(N)	3,5	L
C	Kihei Coast-South Kam II	HIW00071		?	?	N	?	?	chl-a(N)	3,5	L
C	Koki Beach Park (VFW)	HI650469	dry	?	?	?	?	?		3	
C	Ku'au Bay	HI276573	dry	?	?	?	?	?		3	
C	Kuiaha Bay	HI852861	dry	?	?	?	?	?		3	
C	La Perouse Bay	HI674004	dry	?	?	?	?	?		3	
C	Lahaina Harbor	HIW00137	dry	?	?	?	?	N		3,5	M
C	Launiupoko St. Wayside Park	HI558359	dry	***A***	?	?	?	N		***2***,3,5	M
C	Leho'ula Beach	HI884223	dry	?	?	?	?	?		3	
C	Lower Pa'ia (Pa'ia Outfall station)	HI864937	dry	A	?	?	?	N		2,3,5	L
C	Ma'alaea Beach	HI058731	dry	A	?	?	?	N	chl-a(N)	2,3,5	L
C	Ma'alaea Boat Harbor station*	HIW00082	dry	?	N	N	?	N	chl-a(N)	3,5	L
B	Ma'alaea Small Boat Harbor	HIW00140	dry	?	?	?	?	N	chl-a(N)	3,5	L
C	Mai Poina Oe Iau Beach Co. Pk.	HIW00025	dry	***A***	?	?	?	N		***2,***3,5	L
C	Mai Poina Oe Iau Beach Co. Pk. (Kihei N. station)	HI715975	dry	?	?	?	N	N	chl-a(N)	3,5	L
C	Maka'alae Pt.	HI978171	dry	?	?	?	?	?		3	
C	Makena Landing Beach	HI245556	dry	?	?	?	?	?		3	
C	Makena Landing-Maluaka Beach	HIW00142	dry	?	N	N	***A***	***A***	chl-a(N), NH4(N)	***2,***3,5	L
C	Mala Wharf	HIW00171	dry	N	?	?	N	N	chl-a(N)	3,5	M
C	Mala Wharf area	HIW00138	dry	?	N	N	A	N	chl-a(N), NH4(N)	2,3,5	L

MAUI Marine Waters											
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C	Mala Wharf-West Maui Coast	HIW00123	dry	?	?	?	?	N	chl-a(N)	3,5	M
C	Maliko Bay	HI423064	dry	?	?	?	?	?		3	
C	Malu'aka Beach	HI847607	dry	?	?	?	?	?		3	
C	Mantokuji Bay	HI482300	dry	?	?	?	?	?		3	
C	McGregor Pt.	HI227321	dry	?	?	?	?	?		3	
C	Mokapu Beach Park	HI861961	dry	?	?	?	?	?		3	
C	Mokulau	HI519980	wet	?	?	?	?	?		3	
C	Mokule'ia Beach	HI977299	dry	?	?	?	?	?		3	
C	Nahiku	HI983172	wet	?	?	?	?	?		3	
C	Napili Bay	HI764060	dry	?	?	?	?	?		3	
C	Nu'u Bay	HI176594	dry	?	?	?	?	?		3	
C	Olowalu (Shorefront)	HIW00021	dry	?	?	?	?	N	chl-a(N)	3,5	L
C	Olowalu (Teen Challenge)	HI491359	dry	A	?	?	?	N		2,3,5	L
C	Oneloa Beach (Big Beach) (Makena Bch Station)	HI279887	dry	?	?	?	?	N	chl-a(N)	3,5	L
C	Oneloa Beach (Big Beach)-Ahihi-Kinau	HIW00144	dry	?	N	N	***A***	***A***	chl-a(N), NH4(N)	***2,***3,5	L
C	Oneuli Beach	HI756040	dry	?	N	N	A	***A***	chl-a(N), NH4(N)	2,3,5	L
C	Palauea Beach Park	HI997014	dry	?	?	?	?	?		3	
C	Papalaua	HIW00065	dry	?	?	?	?	?		3	
C	Pepeiaolepo Bay	HI136430	wet	?	?	?	?	?		3	
C	Polo Beach Park	HI339656	dry	?	?	?	?	?		3	
C	Po'olenalena Beach	HI684864	dry	?	?	?	?	?		3	
C	Poolenalena-Makena Landing	HIW00143	dry	?	N	N	A	***A***	chl-a(N), NH4(N)	2,3,5	L
C	Puamana Beach Co. Park	HI167153	dry	?	?	?	?	?		3	
C	Punalau	HI641109	dry	?	?	?	?	?		3	
C	Pu'u ola'i (Small Beach)	HI157533	dry	?	?	?	?	?		3	

MAUI Marine Waters											
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C	Pu'unoa Beach	HI373055	dry	A	?	?	?	N		2,3,5	M
C	Spreckelsville	HI789952	dry	A	?	?	?	N		2,3,5	L
C	Ukumehame Beach Co. Pk.	HI814309	dry	N	?	?	?	?		3,5	L
C	Ulua Beach Park	HI588333	dry	?	?	?	?	N	chl-a(N)	3,5	L
C	Wahikuli State Wayside Park	HI169380	dry	?	?	?	?	N	chl-a(N)	3,5	M
C	Wai'anapanapa State Park	HI118874	dry	?	?	?	?	?		3	
C	Waiehu Beach Co. Park	HI916183	wet	?	?	?	?	?		3	
C	Waihe'e	HI343702	wet	?	?	?	?	?		3	
C	Waikoloa Beach	HI796679	dry	?	?	?	?	?		3	
C	Wailea Beach Park	HI278988	dry	A	?	?	?	N		2,3,5	L
C	Waimaha'ihai Beach	HI236756	dry	?	?	?	?	?		3	
C	West Maui Coast-Hanakeana Cove	HIW00044		?	N	N	?	N	chl-a(N)	3,5	M
C	West Maui Coast-Kahana Cove	HIW00045		?	N	N	?	N	chl-a(N)	3,5	M
C	West Maui Coast-Kahana Sunset	HIW00075		?	?	N	?	N	chl-a(N)	3,5	M
C	West Maui Coast-Kahana Village	HIW00076		?	?	?	?	N	chl-a(N)	3,5	M
C	West Maui Coast-Kaopala Bay	HIW00046		?	N	N	?	N	chl-a(N), NH4(N)	3,5	M
C	West Maui Coast-Lokelani	HIW00077		?	?	N	?	N	chl-a(N)	3,5	M
C	West Maui Coast-Napili Bay	HIW00078		?	?	N	?	N	chl-a(N)	3,5	M
C	West Maui Coast-nearshore waters to 60' from Honolua - Lahaina	HIW00060		?	L	L	L	N	nutrients, TSS (L)	3,5	M
C	West Maui Coast-S-Turns (Pohaku)	HIW00047		?	N	N	?	N	chl-a(N)	3,5	M
C	West Maui-Papakea	HIW00079		?	?	?	?	N	chl-a(N)	3,5	M
C	West Maui-Puamana	HIW00080		?	?	?	?	N	chl-a(N)	3,5	M

HAWAII (BIG ISLAND) Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Aamakao	Stream	EN	8-1-12	Dry	?	A	A	A	N	TSS (A)	3,5	L
Aamakao	Stream	EN	8-1-12	Wet	?	A	A	A	A	TSS (A)	3	
Alenaio	Stream	EN	8-2-61.01.1		?	V	V	V	?	TSS (?)	3,5	H (IP)
Hakalau	Stream	EN	8-2-32		?	V	V	V	V	TSS (?)	2,3,5	M
Halawa	Stream	EN	8-1-11		?	?	?	?	?	TSS (?)	3	
Halelua	Stream	EN	8-1-10	Wet	?	?	?	?	N1c	TSS (?)	3,5	L
Hanaula	Stream	EN	8-1-06		?	?	?	?	?	TSS (?)	3	
Hapahapai	Stream	EN	8-1-07		?	?	?	?	?	TSS (?)	3	
Honolii	Stream	EN	8-2-56	Dry	?	A	A	A	N	TSS (A)	3,5	L
Honolii	Stream	EN	8-2-56	Wet	?	A	A	A	A	TSS (A)	3	
Kaieie	Stream	EN	8-2-49	Dry	?	A	A	A	?	TSS (A)	3	
Kaieie	Stream	EN	8-2-49	Wet	?	V	V	V	?	TSS (?)	3,5	L
Kalaoa	Stream	EN	8-2-47	Both	?	Ac	Ac	Ac	Ac	TSS (Ac)	2,3	
Kalaoa	Stream	EN	8-2-47	Dry	?	Ac	Ac	Ac	A	TSS (Ac)	2,3	
Kapehu	Stream	EN	8-2-37	Dry	?	Ac	N	A	N	TSS (A)	3,5	L
Kapehu	Stream	EN	8-2-37	Wet	?	A	A	A	A	TSS (A)	3	
Kapue	Stream	EN	8-2-53	Dry	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L
Kapue	Stream	EN	8-2-53	Wet	?	Ac	Ac	Ac	?	TSS (Ac)	3	
Kapulena	Stream	EN	8-1-52		?	?	?	?	?	TSS (?)	3	
Kawaikalia	Stream	EN	8-1-53		?	?	?	?	?	TSS (?)	3	
Kolekole	Stream	EN	8-2-33	Dry	?	A	A	A	A	TSS (A)	3	
Kolekole	Stream	EN	8-2-33	Wet	?	A	A	A	A	TSS (A)	3	
Kumakua	Stream	EN	8-1-03		?	?	?	?	?	TSS (?)	3	
Lalakea	Stream	EN	8-1-45	Dry	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L
Lalakea	Stream	EN	8-1-45	Wet	?	Ac	Ac	Ac	A	TSS (Ac)	3	

HAWAII (BIG ISLAND) Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Maili	Stream	EN	8-2-57	Dry	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L
Maili	Stream	EN	8-2-57	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	3	
Nanue	Stream	EN	8-2-27		?	?	?	?	?	TSS (?)	2,3	
Nienie	Stream	EN	8-1-61		?	?	?	?	?	TSS (?)	3	
Niulii	Stream	EN	8-1-13	Dry	?	A	A	A	N	TSS (A)	3,5	L
Niulii	Stream	EN	8-1-13	Wet	?	A	A	A	A	TSS (A)	3	
Paheehee	Stream	EN	8-2-34	Dry	?	Ac	Ac	Ac	A	TSS (Ac)	2,3	
Paheehee	Stream	EN	8-2-34	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	2,3	
Pali Akamoa	Stream	EN	8-1-08		?	?	?	?	?	TSS (?)	3	
Pololu	Stream	EN	8-1-15	Dry	?	?	?	?	?	TSS (?)	3	
Pololu	Stream	EN	8-1-15	Wet	?	?	?	?	Ac	TSS (?)	3	
Pukihae	Stream	EN	8-2-59	Dry	?	Ac	Ac	Ac	A	TSS (Ac)	2,3	
Pukihae	Stream	EN	8-2-59	Wet	?	Ac	Ac	Ac	Ac	TSS (Ac)	2,3	
Waiakea	Stream	EN	8-2-61		?	V	V	V	?	TSS (?)	3,5	H (IP)
Waialeale	Stream	EN	8-1-50		?	?	?	?	?	TSS (?)	3	
Waikama	Stream	EN	8-1-14	Dry	?	A	A	A	N	TSS (A)	3,5	L
Waikama	Stream	EN	8-1-14	Wet	?	A	A	A	A	TSS (A)	3	
Waikoloa	Stream	EN	8-1-51		?	?	?	?	?	TSS (?)	3	
Wailoa	Estuary	EE	8-2-61-E		?	V	V	V	V	TSS (?)	3,5	M
Wailoa/Waipio	Stream	EN	8-1-44	Dry	?	N	N	N	A	TSS (A)	3,5	L
Wailoa/Waipio	Stream	EN	8-1-44	Wet	?	Nc	N1	Ac	A	TSS (Ac)	3,5	L
Wailuku	Stream	EN	8-2-60	Dry	?	A	N	A	A	TSS (A)	3,5	L
Wailuku	Stream	EN	8-2-60	Wet	?	A	A	A	A	TSS (A)	3	
Wainaia	Stream	EN	8-1-09	Dry	?	Ac	Ac	Ac	?	TSS (Ac)	3	
Wainaia	Stream	EN	8-1-09	Wet	?	Ac	Ac	Ac	N	TSS (Ac)	3,5	L

HAWAII (BIG ISLAND) Stream Waters												
Assessed Waterbody	**Waterbody Type**	**Scope of Assessment**	**Geocode ID**	**Season**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
Waipunahoe	Stream	EN	8-1-49		?	?	?	?	?	TSS (?)	3	
Waipunalau	Stream	EN	8-1-77		?	?	?	?	?	TSS (?)	3	
Waiulili	Stream	EN	8-1-47	Dry	?	?	?	?	?	TSS (?)	3	
Waiulili	Stream	EN	8-1-47	Wet	?	?	?	?	Ac	TSS (?)	3	

HAWAII (BIG ISLAND) Marine Waters											
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K	2nd Beach (next to Mahaiula)	HI616452	na	?	?	?	?	?		3	
K	Anaeho'omalu Bay	HI326172	na	A	?	?	?	?		2,3	
C	Analani Pond (Puala'a)	HI707059	dry	A	?	?	?	?		2,3	
K	Banyan's Surfing Area	HI713314	na	A	?	?	?	?		2,3	
C	Hakalau Co. Pk.	HI138086	wet	?	?	?	?	?		3	
C	Halape Shelter	HI645539	dry	?	?	?	?	?		3	
K	Hapuna Beach St. Rec. Area	HI621002	na	A	***N***	***N***	***N***	N	chl-a(N), ***NH4(N)***	2,5	L
B	Hilo Bay (Boat Landing)	HIW00027	wet	?	?	?	?	?	chl-a(N)	3,5	L
B	Hilo Bay (Canoe Beach)	HI315019	wet	N	?	?	?	N		3,5	L
B	Hilo Bay (Coconut Isle)	HI977673	wet	A	?	?	?	?		2,3	
B	Hilo Bay (Exit of Ice Pond)	HI659453	wet	A	***N***	***N***	N	?	***chl-a(A), NH4(A)***	2,3,5	L
B	Hilo Bay (Lighthouse)	HIW00028	wet	N	***A***	***N***	***A***	N	chl-a(N)***, NH4(N)***	***2,***5	L
B	Hilo Bay (Offshore)	HIW00031	wet	?	?	N	?	N	chl-a(N), NH4(N)	3,5	L
B	Hilo Bay- inshore of breakwater and nearshore waters from Wainaku to Paukaa	HIW00098	wet	?	V	V	V	N	nutrients	3,5	L
K	Honaunau Bay	HIW00176	na	?	?	?	?	?		3	
K	Honokohau Beach	HI315174	na	?	N	N	***N***	***N***	chl-a(A), ***NH4(N), PO4(N)***	2,3,5	L
B	Honokohau Boat Harbor	HIW00099		?	?	?	?	?		3	
C	Honoli'i Beach Co. Park	HI857411	wet	N	?	?	?	N		3,5	L
K	Ho'okena	HI152572	na	?	?	?	?	?		3	
E	James Kealoha Park	HI670254	wet	A	?	?	?	?		2,3	
C	Ka Lae (South Point)	HI107517	dry	?	?	?	?	?		3	
K	Kahalu'u Beach Co. Pk.	HI013290	na	A	?	?	?	?		2,3	
K	Kahoiawa Bay	HIW00150	na	?	N	A	A	N	chl-a(A), NH4(A)	2,3,5	L
K	Kahoiawa Bay-Makalawena	HIW00151	na	?	N	A	A	N	chl-a(A), NH4(A)	2,3,5	L

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K	Kahuwai Bay	HI990843	na	?	?	?	?	?		3	
K	Kahuwai Bay-Mano Pt.	HIW00153	na	?	N	A	A	***N***	chl-a(A), NH4(A), ***PO4(A)***	2,3,5	L
K	Kakapa Bay	HIW00152	na	?	N	A	A	N	chl-a(A), NH4(A)	2,3,5	L
C	Kalapana Beach (new) (Harry K. Brown Beach Co. Park)	HI542822	dry	?	?	?	?	?		3	
K	Kaluhika'a Beach	HI327989	na	?	?	?	?	?		3	
K	Kamakaokahonu	HIW00032	na	N	?	?	?	?		3,5	L
K	Kamakaokahonu (Kailua Pier A-1)	HI261474	na	A	?	?	N	?		2,3,5	L
K	Kamoa Pt.	HI602472	na	?	?	?	?	?		3	
C	Kapoho Bay	HI391407	dry	?	?	?	?	?		3	
C	Kapoho Tidepools (Vacationland)	HI122881	dry	A	?	?	?	N		2,3,5	L
K	Kapu'a Bay	HIW00067	na	?	?	?	?	?		3	
K	Kauna'oa Beach	HI261869	na	***A***	?	?	?	?		***2,***3	
K	Ka'upulehu	HI770607	na	?	?	?	?	?		3	
C	Kawa Bay	HI535602	dry	?	?	?	?	?		3	
K	Kawaihae Harbor	HI978783	na	A	?	?	?	?		2,3	
K	Kawaihae Harbor/Pelekane Bay	HIW00155	na	?	?	?	?	N		3,5	L
K	Keahou Bay (Kona)	HI713293	na	***A***	?	?	?	?		***2,***3	
K	Kealakekua Bay	HIW00149	na	?	N	N	N	N	chl-a(A), NH4(A), ***PO4(N)***	2,3,5	L
K	Kealakekua Bay (Off Curio Stand)	HIW00183	na	?	?	?	?	N		3,5	L
K	Kealia Beach	HI514168	na	?	?	?	?	?		3	
E	Keaukaha Beach Park	HI849313	wet	A	?	?	?	?		2,3	
K	Keawaiki	HI929053	na	?	?	?	?	?		3	
K	Ke'ei	HI858729	na	?	?	?	?	?		3	
C	Kehena	HI459942	dry	?	?	?	?	?		3	

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C	Keokea Beach C. Pk.	HI784200	dry	?	?	?	?	?		3	
C	Kolekole Beach Co. Park	HI693485	wet	N	?	?	?	N		3,5	L
K	Kuki'o Bay	HIW00154	na	?	N	N	N	N	chl-a(A), NH4(N), ***PO4(N)***	2,3,5	L
C	Lapakahi St. Hist. Park	HI490010	dry	?	?	?	?	?		3	
C	Laupahoehoe Beach Co. Park	HI380623	wet	?	?	?	?	?		3	
E	Lehia Beach	HI691720	wet	?	?	?	?	?		3	
E	Leleiwi Beach Co. Pk.	HI540868	wet	A	?	?	N	?		2,3,5	L
E	Leleiwi Beach Co. Pk. (Richardson Ocean Ctr.)	HIW00030	wet	A	?	?	?	N	chl-a(N)	2,3,5	L
K	Mahai'ula Bay	HI694255	na	?	?	?	?	?		3	
C	Mahukona Beach Co. Park	HI273526	dry	?	?	?	?	?		3	
K	Makalawena	HI901744	na	?	?	?	?	?		3	
K	Makole'a Beach	HI223059	na	?	?	?	?	?		3	
K	Manini'owali	HI720408	na	?	N	A	A	N	chl-a(A), NH4(A), ***PO4(A)***	2,3,5	L
K	Mau'umae Beach	HI120357	na	?	?	?	?	?		3	
K	Miloli'i Beach	HI470112	na	?	?	?	?	?		3	
C	Ninole	HI124561	dry	?	?	?	?	?		3	
K	Ohai'ula Beach	HI143737	na	?	?	?	?	?		3	
K	Old Kona Airport St. Rec. Area	HI256093	na	?	?	?	?	?		3	
C	Onekahakaha Beach Co. Pk.	HI862286	wet	A	?	?	?	?		2,3	
C	Onekahakaha Beach Co. Pk. (Puhi Bay #3)	HIW00029	wet	?	?	?	?	N	chl-a(N)	3,5	L
K	Paaoao Point to Keawekaheka Point	HIW00145	na	?	N	A	A	***A***	chl-a(A), NH4(A), ***PO4(A)***	2,3,5	L
K	Pahoehoe Beach Co. Pk.	HI935352	na	?	?	?	?	?		3	

HAWAII (BIG ISLAND) Marine Waters											
Waterbody Type	**Scope of Assessment**	**Geocode ID**	**Wet/Dry Criteria**	**enterococci**	**Total N**	**NO3+NO2**	**Total P**	**TURB**	**Other Pollutants**	**Category**	**TMDL Priority**
C	Papa'i (King's Landing)	HI112071	dry	?	?	?	?	?		3	
K	Pine Trees	HI320616	na	?	N	A	A	A	chl-a(A), NH4(A), ***PO4(A)***	2,3,5	L
K	Pine Trees-Honokohau	HIW00146	na	?	N	N	N	***N***	***chl-a(A),*** NH4(N), ***PO4(N)***	2,3,5	L
C	Pohoiki Beach	HI316864	dry	A	?	?	?	?		2,3	
K	Puako	HI668132	na	A	?	?	?	?		2,3	
K	Puako Bay	HIW00033	na	A	?	?	?	?		2,3	
K	Pueo Bay	HI930479	na	?	?	?	?	?		3	
C	Punalu'u	HI224651	dry	?	?	?	?	?		3	
K	Pu'uhonua o Honaunau	HI478461	na	?	?	?	?	?		3	
C	Road to the Sea	HI849236	dry	?	?	?	?	?		3	
K	Spencer Beach Co. Pk.	HI936372	na	A	?	?	?	N	chl-a(N)	2,3,5	L
K	Waialea Bay	HI381812	na	?	?	?	?	?		3	
E	Wailoa River (Boat Ramp)	HIW00172	wet	N	?	?	?	?		3,5	M
C	Waipi'o Bay	HI534434	wet	?	?	?	?	?		3	
K	Waiulua Bay to Anaehoomalu Bay	HIW00148	na	?	N	N	N	N	***chl-a(N),*** NH4(N), ***PO4(N)***	3,5	L
K	Wawaloli Beach	HI643938	na	?	?	?	?	?		3	
K	Wawaloli Beach-Pine Trees	HIW00147	na	?	N	A	A	N	chl-a(A), NH4(A), ***PO4(N)***	2,3,5	L
K	White Sands Beach Co. Pk. (Magic Sands)	HI436267	na	A	?	?	?	N	chl-a(N)	2,3,5	L
C	Whittington Beach Co. Pk.	HI720900	dry	?	?	?	?	?		3	

APPENDIX A: Data Intake Log

Date Received	Submitter	Organization	Waterbody Area	Description of Data
01/13/2011	via Sara Roser (EPA)	City and County of Honolulu	Sand Island, Oahu	excel doc; bacteria for 2007
01/13/2011	via Sara Roser (EPA)	City and County of Honolulu	Sand Island, Oahu	excel doc; bacteria for 2008
01/13/2011	via Sara Roser (EPA)	City and County of Honolulu	Sand Island, Oahu	excel doc; bacteria for 2009
01/18/2011	Steve Dollar	Marine Research Consultants	Makena, Maui	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Hokulia, Hawaii	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Kukio, Hawaii	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Maniniowali, Hawaii	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Kapulehu, Hawaii	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Kohanaiki, Hawaii	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Waikoloa, Hawaii	excel doc; nutrients
01/31/2011	Richard Brock	Environmental Assessment Co.	Manele, Lanai	excel doc; nutrients
06/23/2011	Kenneth Tenno	City and County of Honolulu	Sand Island, Oahu	excel doc; nutrients
10/06/2011	via Sara Roser (EPA)	City and County of Honolulu	Sand Island, Oahu	excel doc; bacteria for 2006

APPENDIX B: Public Comments Log

ID	Name	Affiliation	email	Address
01	Michele P. Hoke		maui.basket@juno.com	133 Haloa Rd., Haiku, HI 96709
02	Brad Porter	University of Hawaii	bradp@hawaii.edu	
03	Pam Palencia		kachina@mauigateway.com	
04	PM Wylie		prentisentina@yahoo.com	
05	Laily Chowdry		crystal01@clearwire.net	64 Ehiku Loop, Kihei, HI 96754
06	Liz Foote	The Coral Reef Alliance	lfoote@coral.org	
07	Bonnie Marsh		naturadoc@gmail.com	
08	Michelle Johanning		loveartmichelle@live.com	Kihei
09	Bryan Brey		bryanbrey@gmail.com	Kihei
10	Mike Moran		MMMMahalo2000@aol.com	Maui
11	Pam Daoust		daoust@hawaii.rr.com	190 Hau'oli St, #395, Wailuku, HI 96793
12	Gary Lani-Montira	University of Hawaii	lani7@hawaii.edu	
13	Drew Sulock	Pacific Whale Foundation	drewsulock@pacificwhale.org	300 Ma'alaea Rd., Suite 211, Wailuku, HI 96793
14	Carole Burstein		cbaloha@gmail.com	
15	Melinda Long		hikingmelinda@yahoo.com	Kihei
16	Tamara Paltin	Save Honolua Coalition	tampaltin@gmail.com	
17	Laura Binstock		leilah@ipuka.org	Haiku, HI 96708
18	Christina Wine	University of Hawaii	cmlwine@hawaii.edu	

ID	Name	Affiliation	email	Address
19	Patricia Hoskin	Humpback Whale Sanctuary	pattylou9@gmail.com	2495 S. Kihei Rd., #163, Kihei, HI 96753
20	Mary Malone		marymalone2@aol.com	69 North Church Street, Wailuku, HI 96793
21	Robin Knox	Water Quality Consulting, Inc.	robin@wqcinc.com	
22	Daniel Kanahele		tookie49_2004@yahoo.com	P.O. Box 648, Kihei, HI 96753
23	Jodi Sussman		jodisussman33@gmail.com	P.O. Box 2331, Kihei, HI 96753
24	Clare Apana		ahkada@aol.com	
25	Janet Hashimoto	EPA, Region 9		75 Hawthorne Street San Francisco, CA 94105-3901
26	Chittaranjan Ray	University of Hawaii WRRC		2500 Dole Street Krauss Annex 19 Honolulu, HI 96822
27	Mia Charleston	Maui Nui Marine Resource Council	admmnmrc@yahoo.com	
28	John Seebart		seebartj001@hawaii.rr.com	
29	Liz Foote		lfoote@hawaii.rr.com	160 Kinohi Loa Loop, Wailuku, HI 96793
30	Robin Knox		robin@wqcinc.com	28 Waikalani Place, Kihei, HI 96753
31	Jennifer O'Connell			1588 A'a Street, Lahaina, HI 96761

APPENDIX C: Public Comments and Responses

Commenter IDs	Summary of Comments	Response
1 thru 22	Request for extension of Public Comment period. (original comment period scheduled to end on 12/13/2011)	The Public Comment period was extended to January 31, 2012. Document titled "Background Information 2008-2010 Integrated Report and Current Ongoing Studies at West Maui" was also attached to responses. (see Attachment A below)
20 thru 23	The Hawaii Department of Health failed to submit this report to Congress during 2008, so this is the first update since the 2006. The report however does not consider any new monitoring locations since 2006, but instead updates the assessment using the data from January 2006 to December 2009. Ten coastal beach segments were taken off the impaired list for recreational use impairments, however none of them were in Maui County. The state changed the goal, increasing the allowable fecal indicator bacteria concentration in the water. (now 35 colonies per 100 ml of water verse 7 colonies per 100 ml). There are 10 beaches that were taken off the impaired waters list due only to the change in criteria.	DOH failed to submit the 2008 and 2010 report to Congress as required by the Clean Water Act. The Environmental Planning Office was responsible for the completion and submission of the 2008 and 2010 reports. However, since the reorganization, the responsibility now falls upon the Clean Water Branch. In agreement with EPA, the 2008/2010 IR is just an updated place holder for the 2012 report. We will produce a more robust 2012 report.

Commenter IDs	Summary of Comments	Response
21 thru 23	For Maui the assessments delist for Entercoccus bacteria impairment Kahului Harbor, Kalama Park, and Kalepolepo Beach Park. Both of these areas are in the effluent plume of the Kihei sewage injection wells. The County is not required to disinfect the sewage effluent in Kihei before injection and often injects effluent without disinfection of any kind. These areas also exhibit impairments due to high turbidity and high chlorophyll A. These water quality conditions encourage the growth of microorganisms including pathogens. High turbidity blocks the penetration of sunlight that would kill bacteria and high nutrient concentrations provide nourishment for microbes. Your Department of Health allows the injection of sewage effluent that has not been treated to remove microbial pathogens into this microbe nurturing environment. Previously these waters were on the list as having impairments (not meeting the bacterial criteria). Are these water bodies being delisted because they are safe to swim in or because you raised the criteria concentration?	In 2010, CWB sampled 50 coastal stations from Mala Wharf to Hawea Point under the EPA National Coastal Condition Assessment Protocol. In 2011, another 50 different stations from Mala Wharf to Hawea Point were sampled under the same protocols. CWB is aware of the Lahaina injection well. Samples from the seeps have been collected and tested for bacteria and water quality parameters. Beginning 2012, samples from the Lahaina seeps are hoped to be collected for pharmaceuticals, waste water compounds, nutrients, and molecular markers. CWB also monitors Maui's beaches three times a week for bacteria levels.

Commenter IDs	Summary of Comments	Response
24	I would like to have public information sessions be made available to all islands so that questions and clarity of found results can be explained. how come criteria is getting less stringent when more problems with the beach waters seem to be occurring?	CWB is open to holding meetings with any group as long as there is interest. Due to tight budgets and layoffs, it is not feasible to hold open public meetings and hope that the public comes. CWB prefers to hold discussions with individuals, groups, or associations so that we get the most for our tax dollars. Since you have showed interest, you will be notified when the 2012 report is available for comment. Document titled "Background Information 2008-2010 Integrated Report and Current Ongoing Studies at West Maui" was also attached to responses. (see Attachment A below)
26	Suggest provide greater detail about (1) spacial decision units; (2) data packages that DOH received; (3) timelines and assessment methodologies.	We will consider your comments and make appropriate changes where applicable.
27 thru 30	Runoff, wastewater, poor management on West Maui are strangling reefs and flooding towns. Lahaina wastewater treatment and injection well. Request information meetings be held around the state on the various islands, and in there various communities, explaining the report in order to facilitate public participation.	We monitor the beaches at West Maui weekly and have been doing additional monitoring since 2010. Upon completion of the West Maui studies, you will be invited to attend a presentation discussing the results. Document titled "DOH Maui Monitoring Activities Recent and Ongoing" was also attached to response. (see Attachment B below)

Commenter IDs	Summary of Comments	Response
28	I am very unhappy that water quality standards have been reduced here in Hawaii. The people of this state and the leading industry in the state depend on our environment. We market the "pristine" waters of beaches on the various islands. Therefore lowering of our once high standards seems deceptive, and detrimental to our health and ultimately to our tourist based businesses.	Bacteria standards were revised to match the EPA national standard and were approved by EPA. Numerous studies have shown that having the enterococci standard at 7 colony forming units/100 mL was too low and that enterococci were being questioned as a reliable indicator. We use another tracer, *Clostridium perfringens*, in determining human fecal concerns in our recreational waters. Link to studies: http://www/great-lakes.net/mailman/swish.cgi?query=enterococci&listname=beachnet&submit=Search&sort=swishrank&metaname=swishdefault
29	Kahekili in West Maui has insufficient data for some parameters. I am hoping you can ensure that the minimal amount of sampling can be conducted over the next reporting period.	In 2010 and 2011, under a United States Environmental Protection Agency sponsored West Maui Priority Watershed Project, 50 coastal stations from Kapalua to Wahikuli were monitored and sampled by the DOH under a probabilistic monitoring design. Since January of 2012, monthly sampling has been underway at Kahekili, targeting the underwater seeps associated with the Lahaina Wastewater Reclamation Facility. In addition, since at least 2010, the DOH has been sampling twice a month at Kahekili/Airport 2 (Mahinahina), Airport Beach (Kahekili), and Black Rock.

Commenter IDs	Summary of Comments	Response
30	I request that the Department of Health not delist enterococcus as a pollutant for any water body based solely on the change in state water quality standard that relaxed the enterococcus geomean criterion from 7 cfu/100ml to 35 cfu/100 ml. I request that delisting for enterococcus be allowed only where there is a documented statistically significant improvement in water quality as evidenced by decrease in enterococcus concentration from the levels that originally led to the waterbody being listed as impaired. The previous water quality criterion for enterococcus of 7 cfu/100 ml was sensitive enough to discern the impairment. The new criterion of 35 cfu/100 ml is not sensitive enough to discern the obvious impairments to recreation in these waters.	Our bacteria standards were revised to match the EPA national standard, and were approved by the EPA. Studies have shown that having the enterococci standard at seven (7) colony forming units/100 ml was low and that enterococci was being questioned as a reliable indicator. That is why we use another secondary tracer, Clostridium perfringens, in determining human fecal contamination in our recreational waters. In addition, we are funding a study, looking at the survivability of enterococci and other human pathogens in tropical sand. Dr. Tao Yan, University of Hawaii School of Civil and Environmental Engineering is conducting the study under the Kualoa SEP.
31	Cross contamination in prominent areas and being kept secret. If the solution is to merely sanitize/treat the sewage prior to it being pumped into the ocean, I cannot imagine why that measure would be ignored. West side of Maui, Kahekili beach.	Presently, the County of Maui is disinfecting the effluent that is discharged into the injection wells at the Lahaina Waste Treatment Facility. CWB monthly Lahaina Seep monitoring of Kahekili Beach indicate very low levels of indicator bacteria from ambient waters and the injection well connected underwater seeps. In addition, we sample twice a month at Black Rock, Kahekili Beach Park, and fronting the Airport. Bacteria levels at these sites have been very low. Document titled "DOH Maui Monitoring Activities Recent and Ongoing" was also attached to response. (see Attachment B below)

APPENDIX D: <u>Attachment A</u>

Background Information 2008-2010 Integrated Report and Current Ongoing Studies at West Maui

Thank you for your interest in the 2008-2010 Integrated Report(IR). Some refer to this as the "Impaired Waters" report. This report is a requirement of the Clean Water Act.

In August 2010, in a re-organization of the Environmental Planning Office and the Clean Water Branch: the 303(d)Impaired Waters, Total Maximum Daily Load, and Water Quality(WQ) Standards Programs were moved to the Clean Water Branch, Monitoring & Analysis Section.

The 303(d) Program produces the IR and was late in the 2008 and 2010 reports. The person in charge resigned before the move to Clean Water Branch(CWB). The position was immediately filled and work was started on producing an updated 2008/2010 IR report. In an agreement with EPA, an update IR was allowed, mainly as a "place holder" for a more robust 2012 IR report that is due April 1, 2012.

Total Maximum Daily Load Program (TMDL) was also behind schedule and as goals and objectives were not met, the TMDL Coordinator was terminated and the position was recently filled and the program is moving along.

WQ Standards Program was vacant for more than 5 years but filled with the bumping that occurred during the reduction in force in 2010. The program is catching up, pesticides amendments to our standards are moving along to other agencies and the legislature for review, and certain typos in standards have been corrected.

Getting back to the IR, I ask that you continue your interest in it but keep in mind that this report is just a place holder and save comments for the 2012 IR report due April 1, 2012. The 2012 report will be a more robust report and will share information of recently completed and ongoing activities occurring in West Maui. We have completed the 2011 West Maui Priority Watershed Sampling(nutrients, bacteria, physical parameters,etc.) of 50 coastal stations in early September 2011. In 2010, a similar study was done at 50 different stations in West Maui.

We are involved in the Lahaina Tracer Study and have taken samples from the seeps for bacteria analysis and have taken physical WQ measurements. In late January/early February, we will begin pharmaceutical, molecular(qPCR), and nutrient sampling of the seeps and adjacent areas. Beach monitoring will continue in the area as normal. Pharmaceutical (schedule 2080) and wastewater compounds (schedule 4433) samples will be analyzed by USGS lab. qPCR will target feral pig, cow, bird, human, and enterococci markers and will be performed by Dr. Alexandria Boehm's lab at Stanford University.
Although I have data available, I am not at liberty to share any of the data at the moment but will do so at a later date, when all studies are completed, data analyzed, and a draft final is written. A lot of time, money, and work is being put forth for the West Maui Priority Watershed and we ask for your patience to allow us to do our work.

Attachment B

DOH Maui Monitoring Activities Recent and Ongoing

The DOH, Clean Water Branch is actively continuing West Maui monitoring activities. In 2010, 50 coastal stations from Hawea Point to Mala Wharf were selected under a probabilistic monitoring design and monitored under EPA National Coastal Condition Assessment (NCCA) protocol. In 2011, the monitoring was repeated on another 50 different stations.

In January 2012, DOH Clean Water Branch (CWB) began monthly sampling at underwater seeps identified by the University of Hawaii (UH) as the sites where effluent from the Lahaina Wastewater Reclamation Facility are discharging treated effluent into coastal waters. CWB is being assisted by Meghan Dailer of the UH. Samples are being analyzed for nutrients, bacteria, EPA toxics, and chlorine residual. In addition, water quality parameters are being measured. In April 2012, CWB began collecting samples for molecular (qPCR) analysis at the seeps and other nearby areas. In the very near future, pharmaceutical samples will also be collected at the seeps and nearby areas. The seep monitoring will continue to the end of 2012, data will be analyzed and a report will be written.

After the report is released, CWB will present the results to the West Maui Community. All persons who have shown an interest in the water quality of West Maui will be invited to the presentation.

APPENDIX E: Public Notice Announcement

(Note: Original Public Notice was published in 6 local newspapers on Sunday, November 13, 2011. Public Comment period was 30 days. Due to numerous email requests for extension, the comment period was extended to January 31, 2012, for a total of 79 days.)

NOTICE OF PUBLIC COMMENT PERIOD FOR DRAFT REPORT ON HAWAII'S 2008/2010 LIST OF ASSESSED WATERBODIES

Under §303(d) of the Federal Clean Water Act, the Department of Health (DOH), State of Hawaii, requests public comments on the draft report titled "2008/2010 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b)." The draft report is available for public inspection Monday through Friday between 7:45 a.m. and 4:30 p.m. in the Clean Water Branch (CWB), Department of Health, 919 Ala Moana Blvd., Rm. 301, Honolulu, 96814. For a copy of the draft report, contact CWB at 586-4309, send an email to cleanwaterbranch@doh.hawaii.gov, fax a request to 586-4352, visit our website at http://hawaii.gov/health/environmental/water/cleanwater/index.html, or mail a request to the CWB address above. The District Health Offices (DHOs) on Hawaii, Kauai and Maui also have copies of this document available for review:

Hawai`i DHO, 1582 Kamehameha Ave., Hilo, HI 96720, (808) 933-0401

Kealakekua Health Office, 79-7595 Haukapila St., Rm. 109, Kealakekua, HI 96750, (808) 322-1507

Kaua`i DHO, 3040 Umi St., Lihue, HI 96766, (808) 241-3323

Maui DHO, 54 High St., Wailuku, HI 96793 (808) 984-8230

All comments must be transmitted in writing by 12/13/2011 to Alec Wong, Clean Water Branch, Department of Health, 919 Ala Moana Blvd., Third Floor, Honolulu, HI 96814.

Loretta Fuddy, A.C.S.W., M.P.H.
Director of Health