State of Maine

Department of Environmental Protection

2010 Integrated Water Quality Monitoring and Assessment Report

DEPLW-1187

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Notice to Readers: Anti-SPAM Measure

Recent trends in junk e-mail (a.k.a. SPAM) indicate that these nuisance solicitations are finding their way into e-mail accounts with ever increasing frequency. Studies indicate that one of the leading ways spammers obtain legitimate e-mail addresses is through the use of "spam-bots", which are specialized computer programs that automatically harvest e-mail addresses from web pages and other documents that are posted online (just like this report). Once a valid e-mail address has been located and distributed to other “spammers” there is sure to be a dramatic increase in the amount of spam received by that e-mail address.

In this report, we have taken a measure to help protect the e-mail addresses that are listed inside. The text "SPAM-ZAP" (without quotation marks) has been inserted directly after the "@" symbol in each e-mail address in this report – an example of this format follows: john.smithSPAM-ZAP@maine.gov. Inserting this "SPAM-ZAP" text creates a bogus e-mail address that will cause any automatically generated SPAM e-mail to be sent to the invalid address instead of to the real e-mail address. Ultimately, any e-mail messages that are sent to that bogus address will not make it through to the intended recipient – this is true of both legitimate messages as well as SPAM.

Instructions for readers who wish to e-mail a contributor to this report:

1) Click on the desired e-mail address or copy the address into a new message inside your e-mail client.

2) Remove the capitalized words "SPAM-ZAP" (there will be no quotation marks) from the e-mail address.

3) Write your message and send it out as you normally would.

Thank you for your understanding of this issue and for your willingness to work with any minor inconveniences associated with our use of this anti-spam method. We hope that readers will support our efforts to eliminate this document as a potential source of e-mail addresses that could be used by spammers, while still providing a means for the public to contact individual contributors to this report.

Sincerely,

Marianne DuBois and Susan Davies

CHAPTER 1 PREFACE

Contact: Susan Davies, DEP BLWQ, Division of Environmental Assessment (DEA)

Tel: (207)441-9271 email: Susan.p.davies@SPAM-ZAPmaine.gov

The following report is submitted to simultaneously fulfill requirements of the Clean Water Act (CWA) particularly the Section 305(b) Report, Section 303(d) List, and information requested under Section 314, and, also to serve as a biennial report to the Maine Legislature as required under 38 MRSA Section 464.3.A. The Maine Department of Environmental Protection (The Department or MDEP) assembles these reports with input from many sources and recognizes that the Section 305(b) Report and Section 303(d) List are important ways of regularly communicating information on the health, current status and trends of the State's waters.

For the 2010 Integrated Report the Department has updated tabular summaries of water quality status (Appendices; Chapter 4 and Chapter 8) that appeared in the 2008 Integrated Report. Where needed, Department staff and external contacts have also updated narrative content, including programmatic descriptions and summary information. For more in-depth background information about specific water quality programs please refer to the 2006 Integrated Water Quality Report, available on the web at:
http://www.maine.gov/dep/blwq/docmonitoring/305b/index.htm

Maine waterbodies are assigned to one of five categories (or sub-categories) that describe water quality status in the Integrated Report (Executive Summary, page 9 and Ch 4). Those waters that are currently listed under category 5 represent U.S. Clean Water Act (CWA) §303d list "impaired waters" and require development and submission of Total Maximum Daily Load (TMDL) report to the United States Environmental Protection Agency.

The 2010 Integrated Report provides:

- Delineation of water quality assessment units (AUs), identified by their 10-digit HUC (Hydrologic Unit Code) followed by a waterbody-specific code (Appendices II-IV);
- Water quality attainment status for river, lake and marine Assessment Units (Appendices II-IV);
- First time attainment status reporting for wetland assessment units (Chapter 5 and Appendices)
    - Summary of wetland assessment methodology
- First time attainment status reporting based on assessment of river and stream algal assemblages (Chapter 4 Assessment Criteria and Appendices)
    - Summary of algal assessment methodology
- Basis for the water quality standard attainment determinations for river, stream, lake and marine Assessment Units (Chapter 4 and Appendices);
- Schedules for additional monitoring planned for certain Assessment Units (Appendices II-IV);
- Identification of Assessment Units requiring Total Maximum Daily Load (TMDL) determinations and a schedule (priority) for those waters (Chapter 8 and Appendices II-IV);

The 2010 Integrated Report presents State of Maine water quality assessment summaries for rivers, streams and lakes that have been generated by the Assessment Database (ADB). ADB is public domain software developed by EPA to improve states' ability to track and document water quality assessment results. Though marine and wetland assessment data are not currently stored in Maine's ADB, assessment results are reported in the 2010 Appendices.

DATA SOURCES AND ACKNOWLEDGEMENTS

SOURCES OF RIVER AND STREAM ASSESSMENT DATA

The Department generates much of the data for the assessment through the various monitoring programs it conducts, notably the Biomonitoring Program, Surface Water Ambient Toxics Monitoring Program, the Dioxin Monitoring Program, and the Atlantic Salmon Recovery Plan. Additionally, data are provided from a variety of professional and volunteer monitoring groups. These include other state agencies and resources (Department of Inland Fisheries and Wildlife, Atlantic Salmon Commission, Department of Health and Human Services, University of Maine System), federal agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, National Park Service), other governmental agencies (Saco River Corridor Commission, St. Croix International Waterway Commission), tribes (Penobscot Indian Nation, Houlton Band of Maliseet Indians) and a number of volunteer watershed groups and conservation organizations that are working cooperatively with Department staff and that follow an EPA approved Quality Assurance Project Plan, or that follow monitoring practices specifically approved by MDEP (Watershed councils of the Dennys, East Machias, Machias, Pleasant, Narraguagus, Ducktrap and Sheepscot Rivers, Presumpscot River Watch, Royal River Conservation Trust, Sheepscot Valley Conservation Association, The Nature Conservancy, Friends of Merrymeeting Bay).

SOURCES OF LAKE ASSESSMENT DATA

The Department's Lake Assessment Section manages much of the data collected from lakes within the state. A strong partnership with the Maine Volunteer Lakes Monitoring Program (VLMP, Inc.) assures the quality and comparability of the data collected through numerous regional entities and local lake associations. Regional entities include Cobbossee Watershed District, Lakes Environmental Association, St. Croix International Waterway Commission, Allagash Wilderness Waterway, Penobscot Indian Nation, Portland Water District, Auburn Water District, Acadia National Park, and Rangeley Lakes Heritage Trust. Data has also been acquired from private consultants (such as Lake and Watershed Resource Management Assoc., Biodiversity Research Institute, Florida Power and Light as part of regulatory requirements) and water utilities that belong to the Maine Water Utility Association. Additional data is acquired through the Maine Department of Inland Fisheries & Wildlife (DIF&W) and through cooperative projects with the University of Maine System, Colby College, Unity College, Soil and Water Conservation Districts and similar entities. Data collected under probability based studies conducted within EPA Region I and as part of the National Lake Assessment Study being conducted by EPA Headquarters is also considered.

Sources of Marine Assessment Data

The Maine Department of Environmental Protection, the Department of Marine Resources (DMR), the Maine Healthy Beaches Program, the Casco Bay Estuary Partnership (CBEP) and a variety of volunteer monitoring groups monitor Maine's coastal waters. DEP monitors toxic contaminants in tissues and assesses water quality using data collected by DEP, especially the Surface Water Ambient Toxics program, and others. DEP participates in the Gulf of Maine Council's Gulfwatch Project that surveys toxic contamination in mussel tissue in the Gulf of Maine. DMR monitors for indicators of human pathogens (fecal coliforms) and biotoxins (Paralytic Shellfish Poisoning). The purpose of the DMR monitoring is to protect human health by managing shellfish harvest areas. The Maine Healthy Beaches Program monitors ocean beaches in order to provide protection of swimmer health. The Casco Bay Estuary Project (CBEP), funded by EPA's National Estuary Program, also monitors and supports monitoring in Casco Bay and coordinates the National Coastal Assessment for the entire Maine coast. CBEP data for the current reporting cycle will be available in late May 2010 in an updated State of the Bay report (http://www.cascobay.usm.maine.edu/).

Sources of Wetlands Assessment Data

The Department generates most of its assessment data for wetlands through the Biological Monitoring Program (see Chapter 5 for additional information). Wetland biomonitoring is coordinated with the State's river and stream biomonitoring program using a 5-year rotating basin schedule. At present, annual wetland monitoring is primarily focused on freshwater lacustrine and riverine fringe wetlands. Under Maine's Water Classification Program, wetlands are classified with associated surface waters. Wetlands that are part of great ponds or natural lakes and ponds less than 10 acres in size are considered GPA waters. All freshwater wetlands not classified as GPA waters are classified under Sections 467 and 468 (Classification of Major River Basins and Classification of Minor Drainages) according to the drainage basin in which they occur and the classification of associated water bodies. The 2010 305(b) report includes provisional class attainment status for monitored wetlands based on the State's narrative biological criteria. Data for permitted wetland gains and losses is provided through the DEP Wetland Loss Tracking System by the Division of Land Resource Regulation.

CHAPTER 2 EXECUTIVE SUMMARY AND RESPONSE TO COMMENTS

EXECUTIVE SUMMARY

SURFACE WATERS

This report continues to base assessments of streams & rivers, lakes & ponds, and marine & estuarine waters on the five main listing categories that were initially established for these waters in the 2002 305b Report. These five main assessment categories are as follows:

Category 1: Attaining all designated uses and water quality standards, and no use is threatened.

Category 2: Attains some of the designated uses; no use is threatened; and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained).

Category 3: Insufficient data and information to determine if designated uses are attained (with presumption that one or more uses may be impaired).

Category 4: Impaired or threatened for one or more designated uses, but does not require development of a TMDL (Total Maximum Daily Load) report.

Category 5: Waters impaired or threatened for one or more designated uses by a pollutant(s), and a TMDL report is required.

Section 4-1 on Assessment Methodology contains more detailed information on the listing categories and sub-categories.

SUMMARY OF CHANGES

The size and percentage results from the 2002 through 2010 Integrated Reports are not exactly comparable due to changes in assessment and mapping technology over the years, but they can give an idea of changes in the approximate amounts of waters in each category. This information is displayed in Table 2-1.

Table 2-1 shows that 75 river and stream miles have been delisted from Category 5 for the 2010 cycle. Most of the decrease in Category 5A is due to approval of the Maine Statewide Bacteria TMDL that moved many waterbodies to Category 4A. Increases in Category 2 waters also occurred due to new TMDL monitoring data that confirmed that certain segments are now attaining uses. TMDL monitoring confirmed attainment of bacteria criteria for five previously listed waterbodies. Table 2-1 reveals that the lakes and ponds of Maine were relatively stable (as a percent of total assessed waters) with respect to their listing categories during the 2008 to 2010 time frame. This period saw a major reduction in category 3 and an increase in category 2, 4a and 5a waters.

Table 2-1 Summary of Changes to Surface Water Assessment Categories – 2008 to 2010

Note: These figures do not include waters listed under Category 4A for atmospheric deposition of mercury

Rivers and Streams						
31,217= Total Miles Assessed in 2008						
31,215=Total Miles Assessed in 2010						
	2008 Miles in Category*	% of Total 2008 Assessed Miles	2010 Miles in Category**	% of Total 2010 Assessed Miles	% Change '08-'10	Change in Miles '08 - '10
Category 1	4,347	14	4,338	14	0	-9
Category 2	25,371	81	25,378	81	0	+7
Category 3	295	1	314	1	0	+19
Category 4	214	<1	461	1.4	0	+247
Category 5	990	3	730	2	0	-260
Lakes						
986,952 = Total Acres Assessed in 2008						
986,952 = Total Acres Assessed in 2010						
	2008 Acres in Category	% of Total 2008 Assessed Acres	2010 Acres in Category	% of Total 2010 Assessed Acres	Change in Acres '08-'06	Change in Acres '10-'08
Category 1	295,443	29.9	295,443	29.9	0	0
Category 2 *	596,474	60.5	606,236	61.4	387	9,,762
Category 3	17,777	1.8	410	0.04	-387	-17,367
Category 4	73,600	7.5	76,714	7.8	1,312	3,114
Category 5	3,658	0.4	8,783	0.9	-1,312	5,125
Marine Waters (Acres)						
1,821,434 = Total Acres Assessed in 2008						
1,821,434 = Total Acres Assessed in 2010						
	2008 Acres in Category	% of Total 2008 Assessed Acres	2010 Acres in Category	% of Total 2010 Assessed Acres	% Change '08 - '10	Change in Acres '08 - '10
Category 1	0.00	0.00	0.00	0.00	0.00	0.00
Category 2	1,718,509	94.35	1,718,509	94.35	0.00	0.00
Category 3	2,835	0.16	3,979	0.22	0.06	1144.2
Category 4	0.00	0.00	98,380	5.41	5.41	98,380
Category 5	100,089	5.50	1,709	0.09	-4.41	98,380
Marine Waters (Square Miles)						
2,846 = Total Square Miles Assessed in 2008						
2,846 = Total Square Miles Assessed in 2010						
	2008 Square Miles in Category	% of Total 2008 Assessed Square Miles	2010 Square Miles in Category	% of Total 2010 Assessed Square Miles	% Change '08 - '10	Change in Square Miles '08 - '10
Category 1	0.00	0.00	0.00	0.00	0.00	0.00
Category 2	2685.17	94.35	2685.17	94.35	0.00	0.00
Category 3	4.43	0.16	6.22	0.22	0.06	1.79
Category 4	0.00	0.00	153.72+***	5.41	5.41	153.72
Category 5	156.39	5.50	2.67	0.09	-4.41	153.72+***

*Single-Category Reporting miles as generated by final 2008 cycle ADB

**Single-Category Reporting miles as generated by final 2010 cycle ADB

***Variable additional miles due to Combined Sewer Overflow waters

All freshwaters in Maine are listed for an impaired Fish Consumption Use caused by mercury from sources beyond the region; miles affected by this statewide listing are not recorded in Table 2-1. These waters were listed in Sub-Category 5C in the 2006 Integrated Report. These waters have now been moved to Category 4A because of US EPA's approval, on December 20, 2007, of a Regional Mercury Total Maximum Daily Load. The New England States and New York developed the regional mercury TMDL to address mercury impairments that are caused by sources beyond the

Region. The State of Maine has already taken aggressive action to reduce sources of mercury within the State's jurisdiction. Further mercury reductions will be required from sources outside the State's boundaries to provide the desired reduction of mercury in Maine's waters. Category 5D, Legacy Pollutants, includes many mainstem river segments that are listed for non-attainment of the Fish Consumption use due to PCBs in fish tissue. In September of 2009 EPA approved a Statewide Maine Bacteria Total Maximum Daily Load that resulted in the removal of 205 bacteria-impaired segments from Category 5A and 5B to Category 4A or Category 2. The TMDL addressed bacteria impairments caused by Eschericia coli in freshwaters and Enterococcus in estuarine and marine waters. These 205 segments are located in 13 of Maine's 21 major watersheds (8-digit hydrologic unit code basins). Sixty-two of the delisted waterbodies are river and stream segments and 143 are estuarine and marine assessment units.

WETLANDS

Maine DEP began development of a biological monitoring and assessment program for freshwater wetlands in 1998 as part of the biomonitoring program. The Biological Monitoring Program provides water quality information for a wide array of programs, and includes ambient monitoring, evaluation of water quality classification attainment, and assessment of risks and impacts.

The wetlands initiative currently focuses on aquatic macroinvertebrates as indicators of wetland ecological integrity, and plans to build capacity to assess multiple biological assemblages including algae and plant communities. Beginning with the current reporting cycle, the Biological Monitoring Report will include provisional assessments for wetland attainment of water quality standards.

GROUND WATER

The Groundwater Program is described in Chapter 6. Responsibility for ground water resource assessment and protection is shared among the Department of Environmental Protection, the Department of Health and Human Services' Division of Environmental Health, the Maine Geological Survey in the Department of Conservation and the U. S. Geological Survey. Several other agencies, particularly the Department of Transportation, Department of Agriculture, and State Planning Office may investigate ground water contamination problems in certain areas and they also contribute to ground water protection through development of ordinances and management practices that are designed to reduce the risk of harming ground water quality.

A significant portion of Maine's ground water may be threatened by contamination, particularly in unforested areas, which comprise approximately 11% of the State. Drinking water quality is an issue that carries significant public concern for both private and public well supplies. Public interest in ground water is primarily focused on its use as a drinking water supply (ground water provides 60% of all human demand and 75% of livestock demand statewide) and on its use as a source of process water for industry. Numerous wells in Maine have been made unpotable by pollution from specific point sources and also from nonpoint source pollution. Important sources of ground water contamination in Maine include disposal activities such as septic systems and landfills, leaking storage facilities, agriculture, spilled hazardous materials or previously unregulated activities.

Monitoring of ground water in Maine is either site-specific or generalized. Monitoring at a particular site is typically done to gather data on water quality impacts of particular activities, and may or may not be research-related. Most of the ground water data collected in Maine is the result of permit conditions, enforcement agreements or impact assessments. With the advent of the Environmental and Geographic Analysis Database (EGAD) at the DEP, many of these data which are potentially useful for research purposes are now readily made available to the public or other agencies in report or map form. This effort enhances the ability of the DEP to communicate and report ground water and other data to the EPA and other state or federal agencies.

Ambient monitoring refers to large area, long-term monitoring conducted to obtain trend information on ground water quality or quantity. The MGS and the USGS carry out these types of monitoring projects under several cooperative agreements. The USGS and MGS maintain a statewide network of ground water observation wells to track changes in water quality and quantity. For the purpose of this report, data derived from the DHHS Public Water Supply Monitoring Program are used as ambient ground water quality data. These water tests are from single-source untreated public water supply wells.

Major impediments to effective ground water protection in Maine include; the lack of data to quantify the impact of some nonpoint pollution sources and general public unfamiliarity with key ground water concepts and issues. Public misconception about ground water is probably the major factor contributing to degradation of this resource. The development of a comprehensive and accessible database for water data (EGAD) has increased the accessibility of the wide variety of data collected on water quality by various state agencies. Continuing use of this database will improve operations at the agencies responsible for ground water protection and assessment, and provide a resource for increasing the general public's awareness of ground water issues. Relative to ground water protection the principal uses of this database are to (1) help design clean-up strategies in areas of known contamination; (2) plan future development that better provides for protection of public health and safety; (3) assist in prioritizing protection of sensitive ground water and surface water bodies, wetlands, and other resources; (4) enhance understanding of the spatial relationships between water resources and population as they relate to potential or known pollution sources; and (5) assess the flow and transport interrelationships between surface and ground water quality, in order to evaluate ground water impacts on surface water bodies and on ground water dependent habitat.

Response to Comments

Process to Solicit Public Comments

The following subsections detail the actions taken by the Department of Environmental Protection to promote the public's knowledge of the existence and availability of the draft version of the 2010 Integrated Water Quality Monitoring and Assessment Report (commonly known as the 305b Report). This process was undertaken in order to gain comments from the public on the contents and conclusions of the draft report. The official period of time that the Report was available for public comment was from July 29, 2010 to the close of business on August 27, 2010.

In addition to the public comment process outlined below, the draft version of the 2010 305b Report was reviewed internally by Department staff as well as by US EPA staff in order to produce the final version of the Report.

Report Posting on the Department's Website:

On July 29, 2010 the Department posted the draft 2010 305b Report as two digital files in the Adobe® Portable Document Format (PDF) on the public comments section of its Bureau of Land and Water Quality website. Hardcopies of the draft report are made available to the public on request.

Postal Mailing to the Agency Rulemaking Subscription Service List:

The Department offers a subscription service that provides notification of both rulemaking changes and rule adoption for all department rules. Subscribers to this service include both individual citizens and representatives of organizations that wish to be contacted when the DEP releases rulemaking information. During the week of July 29, 2010 the Department mailed out approximately 150 letters to people and entities on the Agency Rulemaking Subscription Service List, including all other natural resource agencies within state government. The text of that letter follows and is italicized in order to differentiate it from other text contained in this Report.

Maine's DRAFT 2010 Integrated Water Quality Monitoring and Assessment Report

Available for Public Comment until August 27, 2010

The Department of Environmental Protection has prepared a draft 2010 Integrated Water Quality Monitoring and Assessment Report for submission to the U.S. Environmental Protection Agency as required of Sections 305(b) and 303(d) of the Clean Water Act, and in fulfillment of the reporting requirements of 38 M.R.S.A. Section 464.3.A of the State of Maine's Water Classification Program.

This report is available for public comment untilAugust 27, 2010. Reviewers of the document should pay particular attention to the categories and listing methods required by the USEPA for the surface water assessments in this report. These methods are described in Chapter 4. Specific surface waterbody attainment and impairment assignments can be found in the Appendices (a separate file). The appendices are broken into three waterbody types: rivers/streams, lakes, and estuarine/marine waters. Categories 1-3 are for waters that are not impaired, categories 4 and 5 are for water segments that are impaired for one or more uses.

The draft documents (pdf files) can be found on the Department's website at:
[www maine.gov/dep/blwq/docmonitoring/305b/draft.htm]

We encourage you to review the document and provide comment on this year's report. Comments become part of the public record and are published in the final version of the Report. Comments should be sent to:

Email: 305b.Comments@maine.gov
Fax: 207-287-7826

Contact:
Susan Davies, Maine Department of Environmental Protection
State House #17
Augusta, ME 04333
susan.p.davies@maine.gov

LEGAL NOTICE:

During the week of July 29, 2010 the Department prepared a legal notice that ran in four daily newspapers located around the state. Those newspapers (and current weekday circulations) were as follows: The Bangor Daily News (62,730), The Kennebec Journal (14,877), The Lewiston Sun Journal (34,278), and The Portland Press Herald (75,577). The text of that legal notice follows and is italicized in order to differentiate it from other text contained in this Report.

Legal Notice

Maine Department of Environmental Protection

Notice of Public Comment Opportunity for the Draft "2010 Integrated Water Quality Monitoring and Assessment Report"

The Department of Environmental Protection has prepared the draft "2010 Integrated Water Quality Monitoring and Assessment Report" for submission to the U.S. Environmental Protection Agency as required of Sections 303(d) and 305(b) of the Clean Water Act, and in fulfillment of the reporting requirements of 38 M.R.S.A. Section 464.3.A of the State of Maine's Water Classification Program. This report is available for public comment until 5:00 PM, August 27, 2010. Reviewers of the document should pay particular attention to the listing methods required by the USEPA for surface water assessments for this report. These methods are described in Chapter 4 of the document. Specific waterbody attainment and impairment assignments can be found in the Appendices.

The report (pdf files) may be found on the Department's website at:
[www maine.gov/dep/blwq/docmonitoring/305b/draft.htm]

Comments become part of the public record and are published in the final version of the Report. All comments should be sent to:
by fax: 207-287-7826
by email: 305b.Comments@maine.gov

Susan P. Davies

Maine Department of Environmental Protection
State House #17
Augusta, ME 04333

PRESS RELEASE:

On July 29, 2010 the Department of Environmental Protection issued a press release designed to inform the public of the availability of the draft 2010 305b Report. This release also described how the DEP was seeking public comment on water quality listings in the Report. Between fifteen and eighteen radio, television and print outlets around the state received the press release and it was also linked to a news headline on the Department's homepage. The release also went to the Associated Press, which places the release on its "wire" for other media outlets to run, if they so choose. The text of that press release follows and is italicized in order to differentiate it from other text contained in this Report.

DEP Seeks Comment on Water Quality

(AUGUSTA)—The Maine Department of Environmental Protection (DEP) is soliciting public comment on the latest review of the health of Maine's lakes, streams, rivers, estuaries and coastal waters. Once the review receives final Environmental Protection Agency approval, the water quality ratings in the 2010 Integrated Water Quality Monitoring and Assessment Report help to determine planning and funding priorities for water quality improvements. The DEP is asking the public to comment on the draft report now posted on the web:
http://www.maine.gov/dep/blwq/docmonitoring/305b/draft.htm

Comments become part of the public record and are printed in the final version of the report. The comment deadline is 5:00 PM, August 27, 2010.

The Department encourages the public to review and comment on the evaluations contained in the Integrated Water Quality Report. . "These assessments drive decisions as to how particular public waters will be managed into the future. Feedback from the public on the accuracy of our evaluations is important to this process" says David Courtemanch, Director of the Division of Environmental Assessment

The report, also known as the "305b Report", a requirement of the federal Clean Water Act, is a water quality snapshot. Prepared every two years, the public can look back to see if and how the assessment of their favorite lake or stream has changed. One section lists waters determined to be "impaired" due to problems that affect one or more officially assigned "uses" of the waterbody such as support of 'Aquatic Life', 'Water Contact Recreation' or 'Fish Consumption'.

"An 'impaired' listing can set into motion the preparation of a specific management plan detailing activities designed to bring a water body back into full-use compliance," notes Courtemanch. "Those activities can range from more vigilant monitoring to complete abatement of a pollutant."

The 2010 Integrated Water Quality Monitoring and Assessment Report is based on information gathered by the DEP along with other state, federal, tribal, local agencies, non-government organizations and volunteer monitoring groups. DEP analyzes data to assess the capacity of

Maine waters to support drinking water, fishing, recreation (such as swimming) and their ability to sustain aquatic life as defined in Maine's water classification laws. The report also provides extensive information on the status of Maine's groundwater and wetland resources.H ighlights of this year's report include the delisting of a total of 205 bacteria-impaired river and marine waters due to completion and federal approval of a Statewide bacteria restoration plan for Maine. Three Maine lakes have also been delisted due to attainment of water quality standards. One lake and four streams have been added to the impaired waters list for the 2010 Report.

Summary of Public Comments and Responses

The Department received public comments from the parties listed below. Issues raised by comments from these organizations or individuals are either quoted or paraphrased and are presented in italic typeface. The DEP response to that comment follows the comment and summarizes any actions taken by the the Department in response to the comment. If the text does not indicate that any changes were made to the Draft Integrated Report, then none were made.

Support for the decision to list the Androscoggin River as Impaired by a Non-pollutant, due to inadequate passage of American shad at the Brunswick Dam,

Paraphrased Comments from:

- Greg D'Augustine, citizen
- Nick Bennett, Natural Resources Council of Maine
- Landis Hudson, Maine Rivers
- Sean Mahoney, Conservation Law Foundation

The Department has made an appropriate decision to list the Lower Androscoggin River in Category 4C (impaired by a non-pollutant). As documented by the Maine Department of Marine Resources, the Brunswick Dam on the Androscoggin River has been a virtually impassable barrier to indigenous populations of American shad for many years, resulting in decimation of the shad population in the River above the dam. Class C waters in Maine must "support all species of fish indigenous to the receiving waters" (38 MRSA §465(4)(C)). The Lower Androscoggin clearly fails to do this due to problems with the fishway at the Brunswick Dam, thus an "Impaired" listing is appropriate.

MDEP Response:

In March 2010 the Androscoggin River Alliance requested that the Department list the Lower Androscoggin River in Category 4C. The Department agrees that shad passage is a long-standing problem at this Federal Energy Regulatory Commission (FERC)-licensed facility. The fish passage device at the Brunswick dam has repeatedly failed to allow passage of a sufficient number of shad to establish a sustainable population in the river above the dam. The FERC license requires fish passage at the Brunswick Dam in support of a State of Maine anadromous fish restoration plan for the Androscoggin. For this reason the Department agrees and has listed the River in Category 4C.

West Branch Sheepscot River, bacteria impairments

Paraphrased comments from:

- Jennie Bridge, United States Environmental Protection Agency, Region 1

This waterbody was listed as impaired for bacteria in the 2002 Integrated Report but has not been officially delisted. Documentation of attainment of bacteria standards is needed for delisting.

MDEP Response:

We have confirmed that the bacteria impairment was erroneously dropped in the 2004 Report. This segment has been re-listed in Category 5A for excursions of Class AA bacteria criteria and will be included in the next update of the Statewide Bacteria TMDL.

Invasive Aquatic Plant Program

Paraphrased comments from:

- Peter Lowell, Lakes Environmental Association

The section on Invasive Aquatic Plants should be broadened to mention all key elements of the state program: Courtesy Boat Inspector training and grants, the role of Maine COLA's, Lakes Environmental Association, and the Maine Milfoil Initiative and plant control projects and grants.

MDEP Response:

The language under Invasive Aquatic Plants in the report has been revised to included reference to boat inspector training and the grant program available for local inspection and invasive plant removal projects. Maine COLA and Lakes Environmental Association are recognized as coordinators of inspector training. The Maine Milfoil Initiative, which began in the 2009 calendar year, will be included since this reporting cycle is 2007 and 2008.

Eelgrass loss in the Piscataqua River Estuary

Paraphrased comments from:

- Philip Trowbridge, New Hampshire Department of Environmenatl Services

MDEP has listed the Piscataqua River as Category 3 for eelgrass loss reported by NH Dept. Environmental Services. The report indicates that eelgrass in the Piscataqua River has not been surveyed. However, eelgrass on the Maine side of the Piscataqua River has been mapped by NH every year for a decade. The only areas not assessed by NH are the tidal creeks, such as Spinney Creek, Spruce Creek, and Chauncey Creek.

MDEP Response:

The Department agrees with this comment and has changed the Draft 2010 Report to reflect the existence of survey data collected by NH. The Department has begun to collaborate with NH DES and others to assemble existing data on eelgrass losses in the Piscataqua River Estuary.

Dioxin

Paraphrased comments from:

- Nick Bennett, NRCM

Dioxin should not be characterized as a "legacy pollutant". Although the process is termed "chlorine-free", bleaching of wood pulp with chlorine dioxide, by the paper industry, creates an interim product (HOCl) that release Cl_2 when it reacts with pulp.

MDEP Response:

MDEP agrees that absolute elimination of the production of dioxin secondary to the bleaching process has probably not been accomplished and is impossible to measure. Results of DEP's Above/Below test documented (by 2004 for 4 of 5 bleached kraft pulp and paper mills, and by 2005 for the last mill) that there was no *measurable* difference in dioxin concentrations in fish above and below each mill. If a small unmeasurable discharge is still occurring, it is not significant with respect to bioaccumulation in fish compared to the MCDC's Fish Tissue Action Level.

Algae blooms in the Penobscot River

Paraphrased comments from:

- Dan Kusnierz Penobscot Indian Nation

Water quality data collected by the Penobscot Indian Nation and Maine DEP indicate that nutrient enrichment and algae blooms begin in Dolby Pond on the West Branch of the Penobscot. Blooms have occurred in 2001, 2004 and 2007. The significant algae bloom documented in 2007 resulted in a consent agreement imposed by MDEP on Penobscot River dischargers to reduce levels of phosphorus discharged to the River. The entire Penobscot River from Dolby Pond on the West Branch down to the Penobscot River Estuary and Penobscot Bay should be included in the Category 5A listing for dissolved oxygen impairment and nutrient enrichment and biological indicators.

MDEP Response:

The Department agrees that the Penobscot River has exhibited water quality problems, especially for nutrients in 2007. We do not have documentation that there have been excursions of dissolved oxygen below Class C standards in the segments of the Penobscot above the Mattawamkeag River, though Class B segments do have criteria excursions. The Department has previously listed 2 mainstem segments (Penobscot mainstem between the Mattawamkeag confluence and the Piscataquis confluence) in Category 5A due to dissolved oxygen and nutrient issues. More intensive analysis of

2007 monitoring data has confirmed that additional segments (see below) exceeded draft nutrient criteria in 2007. Furthermore, segments below the confluence with the Piscataquis River also showed excursions of dissolved oxygen criteria in 2007. In response to this confirmation and PIN's comments, the final 2010 Integrated Report has been changed to list several new sections in Category 4B- *"Rivers and streams impaired by pollutants- Pollution control requirements reasonably expected to result in attainment"* and to list other segments in Category 5A-"Impaired by a pollutant; TMDL required". A Category 4B listing requires that enforceable controls be in place. Due to a November 2007 consent agreement issued by MDEP that imposed reductions in phosphorus loads from the Katahdin Paper Company, the segments between Dolby Pond and the Mattawamkeag River have enforceable controls in place and are expected to attain water quality standards. Therefore the following segments have been moved to Category 4B – "Impaired/Expected to Attain Uses" :

- West Branch Penobscot below Millinocket Stream (including Dolby Pond) AU# 0102000109_205R01
- Penobscot River mainstem above confluence with Mattawamkeag River AU# 0102000512_229R

Additional segments have been changed from Category 2 (attaining for dissolved oxygen and Nutrients/eutrophication biological indicators) to Category 5A - *Impaired by a pollutant; TMDL required"* Assessment of data from 2007 confirms excursions of Class B dissolved oxygen criteria and Nutrients/eutrophication biological indicators. Because these segments are affected by discharges not covered by the consent agreement the following segments have been placed in Category 5A, rather than 4B:

- Penobscot river mainstem from Piscataquis River confluence to Orson Island AU# 0102000506_232R
- Penobscotr River mainstem from Orson Island to Veazie Dam AU# 0102000509_233R01
- Penobscot River mainstem, Veazie Dam to Reeds Brook AU# 0102000513_234R02

The Penobscot River classification changes from riverine Class B to Estuarine Class SC at Reeds Brook in Hampden and we do not have documentation that there have been excursions of dissolved oxygen below Class SC standards in the estuarine segments. Completion of an updated Penobscot River water quality model is a top priority for the Department. Once the model is completed (draft expected in December 2010) new licenses will be issued, based on the pollutant loading limits prescribed by the model such that the Penobscot can be expected to attain water quality standards. Current conditions in the River are already much improved over 2007 due to the phosphorus reductions and suspension of operations at the Katahdin Paper mill in Millinocket.

CHAPTER 3 BACKGROUND

STATE ATLAS AND WATER QUALITY STANDARDS

Contact: Vicki Schmidt, DEP BLWQ, Division of Environmental Assessment (DEA)

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The State of Maine has a total surface area of over 35,000 square miles, the most in New England; with dry land occupying almost 31,000 square miles and the larger surface waters occupying about 4,500 square miles. With a population of about 1.3 million people, Maine also is the least densely populated state in New England. However, since most of the population is concentrated in the southern and coastal portions of the State and into bands on both sides of Interstate 95, regional population densities may vary considerably from the state's average population density.

Maine's 5,780 lakes and ponds cover 986,952 acres, an area that is somewhat larger than the State of Rhode Island. There are over 7,000 perennial brooks, streams and rivers in Maine, ranging in length from less than two miles to nearly 200 miles, with an estimated total length of 53,456 miles.

In 2009 the State of Maine began making the switch to the use of the National Hydrography Dataset (NHD) for measuring and categorizing our coastline, rivers, streams, lakes and ponds. The higher resolution of the NHD and changes in data definitions has contributed to differences from earlier reports. The NHD defines the coastline as the shoreline extending to the mouth of rivers and streams. The previous version of the Geographic Information System (GIS) boundary data layer defined the coastline as extending along the shoreline up rivers and streams to the head of tide. This created a smaller overall figure for shoreline miles (2,756 using the NHD compared to 5,261) and a larger figure for total miles of rivers and streams (53,456 using the NHD compared to 45,176). The higher resolution data changes the overall calculated length of the combined shoreline, rivers and streams from 50,437 to 56,212 miles.

The United States Fish and Wildlife Service's National Wetlands Inventory of inland and coastal wetlands in Maine calculated a total wetland area of more than 3,300,000 acres. Also noteworthy is that at least 1,281 square miles of the state are underlain by significant sand and gravel aquifers (up from 1,241 square miles as reported in 2004).

Table 3-1 The 2010 305(b) Report State of Maine Atlas

Population or Natural Resource Category	Value Reported for 2010 [1]	Percent	Value Reported in 2008 [2]
State Population (July 1, 2005 US Census Estimate)	**1,321,505**	**100%**	**1,321,505**
Total State Area (square miles) [3]	**35,236.4**	**100.0%**	**35,236.4**
Total Fields (square miles) [3]	**1,546.5**	**4.4%**	**1,546.5**
Blueberry Fields	100.9	0.3%	100.9

Total Fields – con't. (square miles) [3]			
Grassland / Herbaceous	57.9	0.2%	57.9
Pastureland / Hayland	644.8	1.8%	644.8
Cultivated Crops	742.9	2.1%	742.9
Total Forest (square miles) [3]	**24,666.9**	**70.0%**	**24,666.9**
Recent Clearcut	163.6	0.5%	163.6
Regenerating Forest (Post 1995)	720.3	2.0%	720.3
Light Partial Cut (Post 1995)	2,285.1	6.5%	2,285.1
Heavy Partial Cut (Post 1995)	1,199.9	3.4%	1,199.9
Deciduous Forest	4,745.5	13.5%	4,745.5
Mixed Forest	8,899.4	25.3%	8,899.4
Evergreen Forest	6,653.0	18.9%	6,653.0
Total Scrub-Shrub (square miles) [3]	**1,186.4**	**3.4%**	**1,186.4**
Total Wetlands (square miles) [3]	**2,376.9**	**6.7%**	**2,376.9**
Wetlands	816.1	2.3%	816.1
Forested Wetland	1,560.8	4.4%	1,560.8
Total Open Water Surface Area (square miles) [3]	**4,210.7**	**11.9%**	**4,210.7**
Total Saltwater Surface Area (square miles) [4]	not reported	n/a	not reported
Total Unconsolidated Earth-Material Shorelines (square miles) [3]	**225.3**	**0.6%**	**225.3**
Total Developed Lands and Paved Ways (square miles) [3]	**972.0**	**2.8%**	**972.0**
Developed - Open Space	175.1	0.5%	175.1
Developed - Low Intensity	169.1	0.5%	169.1
Developed - Med Intensity	95.4	0.3%	95.4
Developed - High Intensity	98.5	0.3%	98.5
Road / Runway	433.9	1.2%	433.9
Total Alpine / Tundra (square miles) [3]	**10.3**	**0.0%**	**10.3**
Total Bare Ground (square miles) [3]	**41.5**	**0.1%**	**41.5**
Total Miles of Coastline (including tidal rivers & shorelines of islands) [7]	**2,756.6**	**100%**	**5261.0**
Total Miles of Border Coast, Lakes & Rivers Shared with CN and NH [5]	**338.9**	**100%**	**338.9**
Maine – Canadian Border (coastal water miles out to the "3 mile" limit)	39.4	12%	39.4
Maine – Canadian Border (lake miles)	33.0	10%	33.0
Maine – Canadian Border (river miles)	206.2	61%	206.2
Maine – Canadian Border (total water miles) [5]	**278.6**	**82%**	**278.6**
Maine – Canadian Border (total land and water miles)	*608.7*	*N/A*	*608.7*
Maine – New Hampshire Border (coastal water miles out to the "3 mile" limit)	17.3	5%	17.3
Maine – New Hampshire Border (lake miles)	17.7	5%	17.7
Maine – New Hampshire Border (river miles)	25.4	7%	25.4
Maine – New Hampshire Border (total water miles) [5]	**60.3**	**18%**	**60.3**
Maine – New Hampshire Border (total land and water miles)	*188.8*	*N/A*	*188.8*
Total Miles of Rivers and Streams in Maine [7]	**53,455.8**	**100%**	**45,176.8**
Miles of perennial streams (subset)	29,907	56%	25,643.2
Miles of intermittent [non-perennial] streams (subset)	15,615	29%	13,463.0
Miles of rivers (subset)	7933.8	15%	6,070.6

Miles of Rivers and Streams by Water Class [7]					Miles	Percent	Miles
Water Class	*Streams*	*(% of Stream Miles)*	*Rivers*	*(% of River Miles)*	*Class Totals*	*n/a*	*Class Totals*
Class AA	1,336	3.42%	1,182	20.4%	2,518	5.6%	2,938.0
Class A	17,296	44.34%	2,331	40.22%	19,627	43.8%	20,756.0
Class B	20,244	51.9%	1,794	30.96%	22,038	49.2%	20,875.0
Class C	133	0.34%	488	8.42%	621	1.4%	608.0
Totals	*39,009*	*100%*	*5,795*	*100%*	***44,804***	***100%***	***45,177.0***
Number of Lake, Pond and Reservoir Features in DEP's GIS Datalayer [5]					33,119	100%	33,119
Number of Lakes, Ponds and Reservoirs assigned a MIDAS ID Number and tracked in ADB (subset)					5,780	18%	5,780
Number of Significant Publicly Owned Waterbodies (subset)					2,314	7%	2,314
Total Areas of the Waterbodies Described Below:					**Square Miles**	**Acres**	**Square Miles**
Lake, Pond & Reservoir Features in the Maine DEP's GIS Datalayer [5]					1,563.3	1,000,527.2	1,563.3
Lakes, Ponds & Reservoirs with an assigned MIDAS Number and tracked in ADB (subset, areas from ADB)					1,542.1	986,952	1,542.1
Significant Publicly Owned Lakes, Ponds & Reservoirs (subset) [5]					1,477.4	945,506.2	1,477.4
Total Area of Near Shore Waters and Tidal Rivers (square miles and acres) [5]					**2,846.1**	**1,821,473.9**	**2,846.1**
Total Area of Bays, Estuaries and Harbors					2,717.3	1,739,051.0	2,717.3
Total Area of Tidal Rivers					128.8	82,422.9	128.8
Total Area of Near Shore Waters and Tidal Rivers by Water Class [5]					**Square Miles**	**Acres**	**Square Miles**
SA					211.0	135,009.0	211.0
SB					2,606.3	1,668,047.8	2,606.3
SC					28.8	18,417.1	28.8
Total Area of Wetlands [6]					**5,196**	**3,325,418**	**4,972.8**
Total Area of Saltwater Wetlands [6]					**381.3**	**244,095**	**404.3**
Estuarine					271.9	174,046	239.8
Marine					109.4	70,049	164.5
Total Area of Freshwater Wetlands [6]					**4,814.6**	**3,081,323**	**4,568.5**
Lacustrine					1,486.6	951,408	1,466.6
Palustrine					3,172.6	2,030,484	2,954.0
Riverine					155.4	99,430	147.9
Total Area of Mapped Sand and Gravel Aquifers [5]					**1,281.0**	**794,624.0**	**1,281.0**

1 These figures were the most current that were available to the DEP in 2009.

2. These figures were the most current that were available to the DEP in early 2006. The summary was not updated for the 2008 Report.

3. Derived from the 2004 MeLCD (Maine LandCover Dataset) that has a 25 square meter (5m X 5m) spatial resolution.

4. Derived from the Maine GAP Landcover Analysis Dataset (based on the 1991 NLCD – National LandCover Dataset) that has a 900 square meter (30m X 30m) spatial resolution. Some categories were combined to allow a more direct comparison with figures derived from the 2004 MeLCD. 2006 report figures are derived from the higher resolution Maine Landcover Dataset (MELCD) 2004

5. Derived from MeDEP's GIS hydrography, geology and state boundary datasets (Source: Digitized 1:24,000 USGS 7.5" Quadrangles and Digital Raster Graphics). Significant Lakes are defined as publicly owned, have bathymetric/morphometric surveys, vulnerability modeling was performed or some trophic data has been gathered.

6. Derived from the U.S Fish and Wildlife Service National Wetland Inventory (NWI) dataset – updated 5/22/2009.

7. Derived from the National Hydrography Dataset (Source: U.S. Geological Survey (USGS) and the U.S. Environmental Protec ion Agency (USEPA) 24K High Resolution NHD, 2007. http://nhd.usgs.gov/index html.

WATER QUALITY STANDARDS PROGRAM

Contact: Susan P. Davies, DEP BLWQ, Division of Environmental Assessment (DEA)

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Related Website: www.maine.gov/dep/blwq/docmonitoring/classification/index.htm

The water quality of Maine is described in terms of physical, chemical and biological characteristics associated with the state's water classification program. As established in Maine statute (38 MRSA Sections 464-470), the classification program consists of designated uses (e.g. drinking water supply, recreation in and on the water, habitat for fish and other aquatic life), criteria (e.g. bacteria, dissolved oxygen and biological criteria), and characteristics (e.g. natural, free flowing) that specify levels of water quality necessary to maintain the designated uses. All State waters have a classification assignment (Lakes: GPA. Rivers and streams: AA, A, B, C. Marine and estuarine: SA, SB, SC). Wetlands are classified the same as other associated surface waters. Wetlands that are part of great ponds or natural lakes and ponds less than 10 acres in size are GPA waters. All freshwater wetlands not classified as GPA waters are class AA, A, B or C under Sections 467 and 468 according to the watershed in which they occur. Coastal wetlands are classified SA, SB or SC according to the provisions of Section 469 (Classification of Estuarine and Marine Waters).

The classification program is reviewed every three years by the Department and the Board of Environmental Protection (Board). The Department and the Board conducted a water classification review process in 2009 with the result that the Maine State Legislature raised the water quality classifications (goals) for 16 rivers and streams and one marine waterbody. The Board also recommended, and the Legislature approved, that changes be made to clarify the classification of six other waterbody segments, and that a Use Attainability Analysis be conducted on one stream.

HIGHLIGHTS FOR POINT SOURCE POLLUTION CONTROL PROGRAMS

Contact: Brian Kavanah, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/docstand/wastepage.htm

Maine uses multiple approaches to ensure that point source discharges of wastewater receive adequate treatment prior to their release to waters of the State including: licensing, compliance inspections coupled with technical assistance in operations and maintenance, and enforcement where necessary. A number of financial assistance programs support new facility construction, elimination of discharges, as well as upgrades or additions to existing facilities. Highlights for 2008 - 2009 for these programs are summarized below or referenced by links to other documents.

TECHNICAL ASSISTANCE / POLLUTION PREVENTION PROGRAM

Contact: Sterling Pierce, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/engin.htm

Department staff participate in both industrial and municipal based technical assistance and pollution prevention projects.

Highlights for 2008-2009

The compliance & technical assistance section of the Division of Water Quality Management provided on-site training and technical assistance to the operators of several publically owned wastewater treatment plants that discharge directly to Casco Bay or to rivers that empty into the Bay to assess the level of nitrogen removal that could be achieved through optimization of the operation of the existing systems. Most existing public wastewater treatment facilities can remove a substantial fraction of the total nitrogen in the wastewater, but each facility requires some examination and experimentation to find the optimum nitrogen removal rates at the lowest cost. DWQM staff assisted in collection of effluent water quality data from seven facilities and visited two treatment facilities to assist the operators of those facilities to determine the best way to optimize nitrogen removal without upsetting conventional treatment or incurring significant additional costs.

CONSTRUCTION OF WASTEWATER TREATMENT FACILITIES

Contact: Steve McLaughlin, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/grants.htm

Clean Water State Revolving Fund and Maine Construction Grants Program: SRF program monies are used to provide low-interest loans (2% below market rates) to communities and sanitary districts to upgrade treatment facilities. The program depends on a yearly Federal Capitalization Grant which must be matched with a 20% State Grant. Construction grants help fund wastewater projects in communities where user charges are too high to borrow money.

Between January 2008 and May 2009, the Maine DEP Construction Grants Program provided grants to 9 projects and the Clean Water State Revolving Fund (SRF) funded 24 projects, some with assistance from the United States Department of Agriculture (USDA) Rural Development program grants/loans and Community Development Block Grant (CDBG) grant money. These projects included new facilities, upgrades, additions, modifications, abatement of combined sewer overflows and refinancing for a total cost of approximately $8,504,019 in State grants and $36,679,608 in SRF loans.

Maine Combined Sewer Overflow Program

Contact: John True, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: http://www.maine.gov/dep/blwq/doceng/csotech.htm

Thirty-five Maine communities are served by combined sewer systems, which convey a combination of sanitary and storm water flows to wastewater treatment facilities. During dry weather, all of the sewage in a combined system is conveyed to the treatment plant for adequate treatment. However, during rainstorms or snow-melt periods, stormwater mixes with the sanitary sewage, causing flows that exceed the capacity of the sewer system. This results in combined sewer overflows (CSOs), which vary extensively in pollutant types, concentrations and loads, as well as in volume of overflow and severity of impact to the receiving waterbodies. Maine has established an aggressive program, coordinated with EPA's CSO program, to assist communities in evaluating the design, condition, activity, and effects of combined sewer systems and overflows.

Highlights for 2010

- Two of Maine's CSO communities, Dover-Foxcroft and East Millinocket, have completed their CSO abatement projects since the last Integrated Report and no longer have permitted CSOs.
- Through a joint permit with the City of South Portland, Portland Water District and Cape Elizabeth, the Department permitted the one CSO (at the Ottawa Road Pump Station) that discharges to the Atlantic Ocean (Danford Cove) in Cape Elizabeth.

Table 3-2 CSO Program Summary Statistics

Parameter	End of Report Year 2006	End of Report Year 2008	Increase/(Decrease)
Number of CSO Communities	37	35	(2) or (5%)
Number of CSO Discharge Points	193	177	(16) or (8%)
Total of Annual Discharge Days for Communities	816	792	(24) or (3%)
Total Annual Volume of CSOs (Billion Gallons)	3.2	2.4	(1.3) or (41%)
Yearly Precipitation (Inches)	57	57	(0) or (0%)
Million Gallons Discharged per Inch of Yearly Precipitation (MG/Inch)	56	42	(6) or (11%)

Small Community Facilities Program

Contact: Tim MacMillan, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/docgrant/scgpara2.htm

From its inception in 1982, the Small Community Grant Program (SCGP) has disbursed $25.2 million dollars in grant monies and is estimated to have cumulatively eliminated the discharge of over 1.3 million gallons of untreated wastewater every day.

Although state bond issues usually fund this grant program, in the past it has also received some funding directly from state appropriations. These funds have been used to assist municipalities with the construction of individual or cluster-type wastewater treatment systems that were designed to eliminate heavily polluted discharges from either already malfunctioning systems or non-existing system ("straight pipes"). This amount of funding has resulted in the construction of new wastewater treatment facilities in over 300 communities throughout the state. The total estimated value of the facilities built with Small Community Grants is approximately $30 million dollars.

Currently, requests for assistance outweigh available funding. Between 2008-2009, we disbursed grants totaling approximately $0.9 million dollars to 69 communities to replace 97 systems as detailed below.

Highlights 2008 - 2009

2008 - 36 systems were replaced removing 9,720 gallons of untreated discharges.
2009 - 61 systems were replaced removing 16,470 gallons of untreated discharges.
Table 3-3 provides a summary of information about the program on a year-by-year basis.

Table 3-3 Yearly Summary of SCGP Activities

Small Community Grants Program Year-by-Year Summary				
Calendar Year	**Grant Amount Disbursed**	**Total Facility Value**	**Systems Installed**	**Wastewater Treated (Gal/Day)**
1999	$769,086	$926,610	122	32,940
2000	$1,370,528	$1,651,238	251	67,770
2001	$1,142,009	$1,375,914	167	45,090
2002	$1,354,130	$1,631,482	208	56,160
2003	$1,086,265	$1,308,753	183	49,410
2004	$795,327	$958,225	136	36,720
2005	$399,078	$480,817	64	17,280
2006	$587,517	$707,852	72	19,440
2007	$547,262	$637,039	66	17,820
2008	$293,961	$356,577	36	9,720
2009	$583,333	$718,440	61	16,470
Totals:	**$25,277,038**	**$30,449,986**	**4,838**	**1,306,260**

Please refer to page 32 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further discussion of the Small Community Grant Program and yearly summaries for years 1982-1998.
http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

LICENSING OF WASTEWATER DISCHARGES

Contact: Gregg Wood, DEP BLWQ, Division of Water Quality Management

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Related Website: www.maine.gov/dep/blwq/docstand/wastepage.htm

The Division of Water Quality Management is responsible for the licensing and re-licensing of all surface wastewater discharges, whether industrial, commercial, municipal or residential. In Maine, the vast majority of wastewater discharge sources have previously been licensed. Therefore, the licensing program is focused largely upon renewal of existing licenses, rather than development of new licenses.

Please refer to pages 32-33 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further discussion of Water Discharge Licensing Program. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

OVERBOARD DISCHARGE GRANT PROGRAM

Contact: Tim MacMillan, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/docgrant/obdpara.htm

As of December 31, 2009 Maine has 1,339 licensed overboard discharges (OBDs). OBDs are discharges of wastewater from individual homeowners or businesses to surface waters (typically marine waters) where existing lots are unsuitable for subsurface disposal and no municipal system is available. OBDs typically lead to closures of shellfish growing and harvesting areas.

In 1989 an OBD Removal Grant Program was established. The priorities of the grant program are to eliminate discharges that either causes the closure of shell fishing areas or that cause a public nuisance. Since the beginning of the program, approximately $6.5 million dollars have been spent in the process of removing 574 systems. The total acreage opened to shellfish harvesting since the start of the OBD Grant Program is over 18,000 acres. According to the DMR, opening and fully utilizing this much shellfish harvesting area has the potential to release a harvest with a retail value of over $4.4 million dollars annually.

Highlight 2008 - 2009

A total of 96 OBD systems were removed in 2008-2009. The Maine Department of Marine Resources indicates that 126 acres of shellfish habitat attributable to the OBD Grant Program were re-opened to shellfish harvesting in 2007-2008.

Please refer to pages 33-34 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further discussion of Water Discharge Licensing Program. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

COMPLIANCE EVALUATION

Contact: Sterling Pierce, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/docstand/wastepage.htm

The Department uses a three-part program to evaluate the compliance of wastewater treatment facilities. The compliance evaluation program involves on-site inspections of wastewater treatment facilities, occasional sampling of their effluent quality on a selective basis, and monthly evaluation of the licensees' self-monitoring reports. Discharge licenses also require immediate reporting of any major malfunctions, bypasses or exceedances of license limits to DEP inspectors.

Highlight for 2008 - 2009

The compliance & technical assistance unit, along with the Bureau's data management unit, undertook a project to improve the flow of effluent monitoring data from the regulated facilities to the DEP, and then on to the US EPA. In the past, all data was recorded on hardcopy sheets and mailed in to the DEP. Those data were then hand entered into our database, and then shipped electronically to the US EPA. The Department contracted to have a web based interface constructed to allow license holders to access the site, and submit their data to the DEP electronically. Staff from the compliance & technical assistance unit trained operational and management staff at each of the licensed facilities to be able to utilize the web based system. Many facilities have taken advantage of this system and are now submitting their data to the DEP electronically. This system allows for the use of warning and error codes to assist the user in completing the necessary fields before submitting the information. This system has enhanced the quality of the data that is housed in both the DEP and EPA databases.

Enforcement of Water Quality Laws

Contact: Brian Kavanah, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/enforcement.htm

The general philosophy of the DEP, BLWQ is to gain compliance and resolve problems at the least formal level that is appropriate, and to maximize the spirit of cooperation between the DEP and the regulated community. By fostering voluntary compliance with Maine's water pollution control laws, the overall effectiveness of the enforcement program is maximized and unnecessary litigation is avoided. Formal enforcement actions become necessary when violations of environmental laws are severe enough to warrant action regardless of the remediation effort, or when the violator is not responsive in preventing violations or refuses to cooperate with the DEP.

Highlights for 2008 - 2009

A total of 15 water discharge enforcement formal cases were settled in 2008 and 2009. In addition to the penalties collected that provide a deterrent to violation of water quality laws and recover any economic benefit that may have been gained, the enforcement actions also included a variety of corrective actions that will improve water quality such as: upgrades to wastewater treatment facilities, elimination of discharges and Supplemental Environmental Projects.

Extent of Nonpoint Sources of Pollutants and Program Recommendations

THE MAINE NPS WATER POLLUTION CONTROL PROGRAM

Contact: Norm Marcotte, DEP BLWQ, Division of Watershed Management (DWM)

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Related Website: www.maine.gov/dep/blwq/docwatershed/npscontrol.htm

Maine's Nonpoint Source (NPS) Water Pollution Management Program (38 M.R.S.A. §410-I) helps restore and protect water resources from NPS pollution. The basic objective of the NPS program is to promote the use of state agency-defined "best management practice guidelines" (BMPs) to prevent water pollution. DEP administers the NPS program in coordination with state, federal, and local governments as well as non-government organizations. State agencies conduct programs that: (1) implement state laws or rules that require people to comply with performance standards governing certain land use activities to protect water quality; and (2) promote voluntary usage of best management practices.

Maine's BMP guidance manuals are available online:
www.maine.gov/dep/blwq/training/index.htm

The 2008 NPS Management Program Annual Report and 2009 NPS Management Program Annual Report summarize the highlights and accomplishments of DEP's Nonpoint Source Program activities. Both reports are available at the following URL: http://www.maine.gov/dep/blwq/docgrant/319_files/reports/index.htm

COASTAL NONPOINT SOURCE PRIORITY WATERSHEDS

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The Department designates priority watersheds for preferential treatment. The 319 program may award grants based on the priority watersheds (Table 3-4), designated Atlantic salmon watersheds (Table 3-5) and those waters that have approved TMDLs (Total Maximum Daily Load) or are scheduled for TMDLs (Table 8-6). Listed waterbodies have both significant value from a regional or statewide perspective, and water quality that is either impaired or threatened to some degree due to nonpoint source pollution from land use activities in the watershed. Table 3-4 lists the coastal priority waters and key water quality problems that are affected. Many of these waters were previously determined by a Maine Watershed Management Committee in the 1990s. Three general impairment categories are listed. Previous lists included waters that are impaired due to high bacteria concentrations. In 2009, the USEPA approved a bacteria TMDL that applies to all state waters and those waters therefore all have priority due to the TMDL and are no longer specifically included in this list. Table 3-5 lists watersheds where there is identified critical habitat for Atlantic salmon.

Table 3-4 Priority coastal waters with impaired or threatened water quality due to Nonpoint Source Pollution.

Coastal Water*	Water Quality Impairment or Threat		
	Dissolved Oxygen	Toxics	Nutrients
Piscataqua River estuary	X		X
Spruce Creek	X		
York River estuary	X		
Ogunquit River estuary	X		
Webhannet River estuary	X		
Mousam River estuary	X		
Fore River		X	X
Royal River estuary	X		

Maquoit Bay			X
New Meadows River estuary	X		
Weskeag River	X		
Rockland Harbor		X	

*some waters are listed in 2010 Section 303(d) impaired waters list

Table 3-5: Atlantic Salmon River Watersheds	
Dennys River	Cove Brook
East Machias River	Penobscot River
Machias River	Ducktrap River
Narraguagus River	Sheepscot River
Pleasant River	Kennebec-Androscoggin Watershed

Watershed Management for Stormwater Programs

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Related Website: www.maine.gov/dep/blwq/docstand/stormwater/index.htm

Stormwater Standards for Development and Construction

Stormwater Law Maine manages stormwater through administration of the Storm Water Management Law. Rules were last revised in 2006; another revision will be scheduled for 2010. For more information about the Maine Stormwater Management Law and Rules, including a brochure that has further information about the changes to the rules, go to the stormwater program website: www.maine.gov/dep/blwq/docstand/stormwater/index.htm.

Stormwater Standards for Post-Construction

Long Creek watershed The Department continued working on development of a general permit for stormwater discharges in the Long Creek watershed. On December 3, 2008, EPA Region 1, in consultation with the State of Maine, determined that a designation of certain stormwater discharges in the Long Creek watershed was appropriate because they are contributing to applicable water quality violations. This preliminary designation was published in the Federal Register on December 31, 2008 (http://www.restorelongcreek.org/docs/FR_notice_12-31-08.pdf). The preliminary designation requires that property with one acre or more of impervious area that discharges to Long Creek obtain a permit under the Clean Water Act.

In 2006, prior to EPA's designation determination, the City of South Portland had received an EPA grant to develop a comprehensive watershed management plan for Long Creek. A steering committee was established, consisting of both private and public sector stakeholders. Sub-committees were also established to work through the technical and policy issues for Long Creek. Participants sought to develop a plan that would provide an economically efficient approach to restoring water quality in Long Creek. EPA's determination caused participants to become interested in developing a plan to provide an implementation scheme that would allow for complying with permit requirements. The Plan describes tiers of restoration projects that will be carried out over a 10 year period to restore Long Creek. The Plan is to be funded primarily by landowners in the watershed, whose participation will qualify them for coverage under the general permit. During the winter and spring of 2009, the Department prepared a draft of the general permit, which was subsequently issued for public comment on July 1, 2009 and became final on November 6, 2009. EPA's October 28, 2009 final residual designation determination requires that storm water discharges from impervious areas equal to or greater than one acre in the Long Creek watershed be authorized by a permit under the federal Clean Water Act because those discharges contribute to a violation of water quality standards in Long Creek. Because enforceable standards have been established for stormwater discharges in the Long Creek watershed, which have been determined to be the primary cause of the stream's impaired status, Long Creek's listing has been moved to Category 4b.

Stormwater Standards for Municipal Separate Storm Sewer Systems (MS4s) and Industrial Stormwater Discharges

Maine DEP reissued its MS4 general permit in July 2008 for 28 municipalities and 10 non-municipal entities which include state or federal facilities, Maine DOT, and Maine Turnpike Authority within the Urbanized Area as determined by the 2000 census (Table 3-6). This reissuance regulates two additional non municipal MS4s in the Greater Bangor Area, and has increased requirements for Urban Impaired Stream Watersheds.

Table 3-6 Maine's regulated MS4's

MS4 Municipalities by geographic cluster
Kittery; Eliot; South Berwick; Berwick
Biddeford; Saco; Old Orchard Beach; Scarborough; Cape Elizabeth; South Portland; Portland; Westbrook; Gorham; Windham; Falmouth; Cumberland; Yarmouth; Freeport
Auburn; Lewiston; Sabattus
Hampden; Brewer; Bangor; Veazie; Orono; Old Town; Milford
Non-traditional or "nested" MS4's
Transportation: Maine Department of Transportation; Maine Turnpike Authority
State or Federal Entities: Portsmouth Naval Ship Yard (Kittery); Southern Maine Community College (S. Portland); University of Southern Maine (Gorham Campus); Eastern Maine Community College (Bangor); Dorthea Dix Psychiatric Center (Bangor); Bangor Air National Guard (Bangor); University College of Bangor (Bangor); University of Maine (Orono)

Please refer to page 41 of the 2006 Integrated Water Quality Monitoring and Assessment Report for information on stormwater standards for MS4 communities.

Related Website: http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

LAND USE AND GROWTH MANAGEMENT

Contact: Jim Cassida, DEP BLWQ, Division of Land Resource Regulation (DLRR)

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Related Websites: Site Law www.maine.gov/dep/blwq/docstand/sitelawpage.htm

NRPA www.maine.gov/dep/blwq/docstand/nrpapage.htm

Shoreland Zoning Act www.maine.gov/dep/blwq/docstand/szpage.htm

Please refer to page 41 of the 2006 Integrated Water Quality Monitoring and Assessment Report for other information on the Shoreland Zoning Act, Site Location of Development Law, and the Natural Resources Protection Act. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

EDUCATION AND OUTREACH

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Related Website: www.maine.gov/dep/blwq/education.htm

Since much of the degradation to the environment comes from individual actions, public education is vital to the mission of the Maine DEP. The Department has a responsibility to educate the public about the environment, requirements of environmental laws, and how to protect Maine's natural resources. To accomplish these goals, the Department must help to foster and encourage greater stewardship. In order to affect the behavior changes we need from our citizens, some programs are adopting social marketing principles including: determining target audiences and message, gathering research data on target audiences, determining effective outreach tools, and assessing the effectiveness of campaigns.

Target Audiences:

Youth and Teachers- The DEP conducts 50 - 70 classroom visits (over 1,500 students), Envirothon, field days (over 1,200 students), Bug Mania and Earth Science Day (both with about 2,000 students). In addition DEP funds 3-5 watershed grants per year to students and their teachers who partner with local organizations to protect a local water resource. The DEP also sponsors and organizes Water Festivals for 800 students and their teachers in the southern part of the state each year and every other year in northern Maine. The DEP conducts teacher training, both pre-service and in-service training. The DEP hires AmeriCorps interns to assist with these programs.

General Public- The DEP divides the public into categories based on the message of the campaign: homeowners for yard care practices, businesses for better commercial practices, etc. For example, the MS4 (Municipal Separate Storm Sewer System) communities conducted pilot projects to encourage targeted BMPS (i.e., yard care in some communities and pet waste pick-up in others) in targeted neighborhoods with evaluation as part of their permits. In addition the DEP is partnering with the MS4s and other NGOs on a mass media campaign, “ThinkBlue; Clean Water Starts with You”. Assessment shows that the campaign has been very effective. LakeSmart is another example of reaching out to a subsection of the public. LakeSmart is an educational program that offers free opportunities for lakeshore homeowners to learn how to manage their home and yard to protect the water quality of their lake. In January 2008, the Maine Legislature passed a law requiring all retailers to post a sign discouraging the use of phosphorus lawn products unless reseeding or starting a new lawn. In June 2008 a statewide survey of 87 stores (23% of the 386 stores selling fertilizer) showed that 87% of the surveyed stores had posted the required sign. The law has decreased the use of phosphorus containing fertilizer and increased the use of phosphorus free fertilizer.

Contractors, Municipal Officials, and Other Targeted Groups- Through the NonPoint Source Training Center, the DEP reaches out to contractors, landscapers, and code enforcement officers to bring technical assistance, certification, and new training. DEP staff also train wastewater treatment plant operators, planning boards, realtors, CEO code enforcement and other audiences as needed.

Assessment:

We continue to include assessment in our projects to be sure we are using our resources where we can have measurable results. We evaluate programs (the number of workshops held or number of brochures handed out) but we also consider impact - what did we accomplish on the ground (or in the water) and context – who is doing what and why. This assessment makes us more effective and efficient and we know whether we are making concrete changes on the ground. Assessing whether our programs actually impact water quality will be the next step.

THE ENVIRONMENTAL IMPACT AND ECONOMIC & SOCIAL COSTS/BENEFITS OF EFFECTIVE WATER QUALITY PROGRAMS

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Assessment of the many costs and benefits associated with water quality changes is usually a very difficult task. While it is usually possible to determine that an improvement in water quality has been gained and to indicate a qualitative sense of the benefits observed; often there is no easy way to directly assign a dollar figure to the changes and quantify this information in terms of the monetary value of benefits to human health or the environment.

The economic tools that would be useful in helping to estimate the costs and benefits of improvement in water quality have not yet been fully developed. As future environmental problems grow in complexity and cost, and as public budgets tighten, demonstrating the benefits of water-quality related programs will be necessary to maintain support for continued investment in the improvement of water resources.

Continued development of sophisticated economic tools for measuring the benefits of environmental projects and methods is essential.

The following sections contain brief summaries of selected water quality programs.

NONPOINT SOURCE MANAGEMENT

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Related Website: www.maine.gov/dep/blwq/docwatershed/npscontrol.htm

Table 3-7 summarizes costs for NPS (non-point source) pollution programs involving Federal grants under section 319 of the Clean Water Act in addition to non-federal matching funds. This summary does not include other State agency funding of personnel or programs conducting NPS control activities. Table 3-7 is a summary of Section 319(h) Clean Water Act Grant Awards to Maine DEP for Federal Fiscal Years (FFY) 2003 to 2009.

Table 3-7 Section 319(h) Clean Water Act Grant Awards to Maine

Grant Year (FFY)	Federal 319 Award	Base	Incremental	Non-Federal Match	Total
2003	$2,740,732	$1,572,554	$1,168,178	$1,827,155	$4,567,887
2004	$2,670,204	$1,502,081	$1,168,123	$1,780,890	$4,451,094
2005	$2,318,844	$1,151,519	$1,167,325	$1,546,669	$3,856,513
2006	$2,303,829	$1,136,597	$1,167,232	$1,545,896	$3,849,725
2007	$2,256,543	$1,077,063	$1,167,066	$1,504,362	$3,760,905
2008	$2,247,537	$1,082,056	$1,165,481	$1,934,529	$4,182,066
2009	$2,244,129	$1,084,415	$1,159,714	$1,496,086	$3,740,315

The Pollution Prevention (P2) Program

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Related Website: http://www.state.me.us/dep/innovation/p2/

The Pollution Prevention (P2) Program is based on the practical notion that it is far more protective of the environment (in addition to being far more cost-effective) to eliminate or reduce pollution at its source rather than to clean up pollution that has already been released into an ecosystem. The P2 program works with businesses and also provides input to DEP programs that provide BMPs for minimizing pollution sources such as stormwater runoff. The P2 Program engages in a proactive approach that utilizes the common ideals of increased efficiency, conservation of resources, reduced waste (and costs), etc. to identify those points in a process that generate pollution. Once identified, the P2 Program also utilizes many approaches like forming good habits, purchasing new products and implementing new technologies to analyze, zero in on and help to correct those portions of a process that generate preventable pollution. Then the Program uses some or all of these tools to reduce or eliminate that source of pollution.

Please refer to pages 45-48 of the 2006 Integrated Water Quality Monitoring and Assessment Report for information on costs/benefits of the Pollution Prevention Program. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

CHAPTER 4 SURFACE WATER MONITORING & ASSESSMENTS

ASSESSMENT METHODOLOGY

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LISTING METHODOLOGY FOR THE 2010 305B / 303D INTEGRATED REPORT LIST

Determination of water quality attainment is based on a waterbody meeting all standards and criteria established for its assigned classification (38 MRSA Section 465, 465-A, 465-B). Waters are listed by Assessment Unit (HUC) and/or waterbody segment in one of five categories of attainment (see category descriptions below). All waters in Maine are subject to a Statewide fish consumption advisory due to "Impairment caused by atmospheric deposition of mercury". On December 20, 2007 US EPA approved a Regional Mercury Total Maximum Daily Load (TMDL) that moved all Maine freshwaters into Category 4A (TMDL is completed"). Other category listings are established independently from the statewide mercury advisory listing, thus all waters are listed in Category 4-A for mercury and in at least one other category.

All marine waters are listed by narrative in Category 5-D "Legacy Pollutants" as well as in one other category, (see Marine explanation below[†]). Each listing provides the Assessment Unit, Waterbody Number, Name, Size, Classification, Monitored Date, and depending on assessment determination, information on impairment, notes on previous listings, or other information. Listings for all surface waters are found in Appendices II-V.

LISTING CATEGORIES (1-5)

Category 1:

Attaining all designated uses and water quality standards, and no use is threatened.

Highest level of attainment, waters in the assessment unit attains all applicable standards. Assessment is based on combined evaluation of the following information.

1. Current data (collected within five years) indicates attainment, with no trend toward expected non-attainment within the listing period.

2. Old data (greater than five years) indicates attainment and no change in any associated conditions.

3. Water quality models predict attainment under current loading, with no projected change in loading that would predict non-attainment.

† All estuarine and marine waters in Maine have an advisory for the consumption of shellfish (lobster tomalley) due to the presence of PCBs and dioxins presumed to be from atmospheric deposition or historical sources. The advisory is based on probability data that shellfish (lobster tomalley) inhabiting estuarine or marine waters may exceed the advisory action level for these substances. This Integrated Water Quality Monitoring and Assessment Report does not consider this statewide advisory in establishing other category listings.

4. Qualitative data or information from professional sources indicating attainment of standards and showing no identifiable sources (e.g. detectable points of entry of either licensed or unlicensed wastes) of pollution, low impact land use (e.g. intact riparian buffers, >90% forested watershed, little impervious surface), watershed within state or federal reserve land, park, wilderness area or similar conservation protection, essentially unaltered habitat, and absence of other potential stressors.

5. Determination that the direct drainage area has a human population of <0.1 per square mile according to U.S. Census data obtained in 2000 and watershed conditions as described in item 4, above. For lakes, determinations are based on census data at the town level and consider all towns in the direct drainage of larger (referred to in previous 305(b) reports as "significant") lakes. Populations for the remaining lakes (generally less than ten acres) are determined for the town listed as the point-of-record for the water according to the Department of Inland Fisheries and Wildlife Lake Index database.

Category 2:

Attains some of the designated uses; no use is threatened; and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained).

Assessment is based on combined evaluation of the following information.

1. Current data (collected within five years) for some standards indicating attainment, with no trend toward expected non-attainment within the listing period, or an inadequate density of data to evaluate a trend.

2. Old data (greater than five years) for some standards indicating attainment, and no change in associated conditions.

3. Water quality models that predict attainment under current loading for some standards, with no projected change in loading that would predict non-attainment.

4. (For lakes) Probabilistic-based monitoring that indicates a high expectation of use attainment for certain classes of waters based on random monitoring of that class of waters.

5. Insufficient data for some standards, but qualitative data/information from professional sources indicate a low likelihood of impairment from any potential sources (e.g. high dilution, intermittent/seasonal effects, low intensity land use).

Category 3:

Insufficient data and information to determine if designated uses are attained (with presumption that one or more uses may be impaired).

Assessment is based on combined evaluation of the following information. Monitoring schedules are assigned to these waters.

1. Insufficient or conflicting data that does not confirm either attainment or non-attainment of designated uses.

2. Qualitative data or information from professional sources showing the potential presence of stressors that may cause impairment of one or more uses; however, no quantitative water quality information confirms the presence of impairment-causing stressors.

3. Old data, with:

   a. low reliability, no repeat measurements (e.g. one-time synoptic data),

   b. a change of conditions without subsequent re-measurement; or

   c. no evidence of human causes or sources of pollution to account for observed water quality condition (natural conditions that do not attain water quality standards are allowed by 38 M.R.S.A. Section 464.4.C).

4. (For lakes) Current data indicates a return to (or a trend towards) attainment standards over the past few years but requires confirmation; or conversely, that trophic or dissolved oxygen profile evaluation suggests deteriorating conditions requiring further study and verification. (Since lakes respond over a longer period of time and can be highly influenced by weather attributes, it is appropriate to recommend additional monitoring before attainment is determined.) Note that many lakes have been removed from this category during this cycle to better comply with EPA recommendations for placement of waters into this category; only one lake remains).

Category 4:

Impaired or threatened for one or more designated uses, but does not require development of a TMDL.

A water body is listed in Category 4 when impairment is not caused by a pollutant; or, if impairment is caused by a pollutant, but where a Total Maximum Daily Load (TMDL) has already been completed, or where other enforceable controls are in place. An impaired waterbody will be listed in Category 5 if both a pollutant and a non-pollutant are involved that would independently cause an impaired or threatened condition. Waters are listed in one of the following Category 4 sub-lists when:

1. Current or old data for a standard indicates either impaired use, or a trend toward expected non-attainment within the listing period, but also where enforceable management changes are expected to correct the condition,

2. Water quality models that predicted impaired use under loading for some standard, also predict attainment when required controls are in place, or,

3. Quantitative or qualitative data/information from professional sources indicates that the cause of impaired use is not from a pollutant(s) (e.g. habitat modification).

4-A: TMDL is completed. A TMDL is complete but insufficient new data exists to determine that attainment has been achieved.

> **Note 1:** As of the 2008 cycle the 4A category now includes all freshwaters in Maine that were listed in previous cycles in a narrative Category 5-C "Impairment caused by atmospheric deposition of mercury" due to the Statewide fish consumption advisory due to mercury. On December 20, 2007 US EPA approved a Regional Mercury TMDL for the Northeast.
>
> **Note 2:** See also the section titled "Summary of Statewide River and Stream Attainment Status" below for comments about the 2009 US EPA approval of a Statewide Maine Bacteria TMDL.

4-B: Other pollution control requirements are reasonably expected to result in attainment of standards in the near future. Waterbodies where enforceable controls have a reasonable expectation of attaining standards, but where no new data are available to determine that attainment has been achieved. (Enforceable controls may include: new wastewater discharge licenses issued without preparation of a TMDL, other regulatory orders, contracts for nonpoint source implementation projects, regulatory orders or contracts for hazardous waste remediation projects).

4-C: Impairment is not caused by a pollutant. Waters impaired by habitat modification that is a result of human activity.

> **Note**: Natural conditions that do not attain water quality standards and criteria are allowed by 38 M.R.S.A. Section 464.4.C. Waters that show impairment due to natural phenomena are listed in Categories 1 through 3.

Category 5:

Waters impaired or threatened for one or more designated uses by a pollutant(s) and a TMDL is required.

Waters are listed in one of the Category 5 sub-lists when:

1. Current data (collected within five years) for a standard either indicates impaired use, or a trend toward expected impairment within the listing period, and where quantitative or qualitative data/information from professional sources indicates that the cause of impaired use is from a pollutant(s),

2. Water quality models predict impaired use under current loading for a standard, and where quantitative or qualitative data/information from professional sources indicates that the cause of impaired use is from a pollutant(s), or,

3. Those waters have been previously listed on the State's 303(d) list of impaired waters, based on current or old data that indicated the involvement of a pollutant(s), and where there has been no change in management or conditions that would indicate attainment of use.

5-A: Impairment caused by pollutants (other than those listed in 5-B through 5-D). A Total Maximum Daily Load is required and will be conducted by the State of Maine. TMDL schedules are assigned based on the value of a particular water (considering size, public use, proximity to population centers, and level of public interest for water quality improvement), the nature of the impairment and the source(s) of the problem, available information to complete the TMDL, and availability of staff and contractual resources to acquire information and complete the TMDL study. Projected schedules for TMDL completion are included in Chapter 8 as well as in the Appendices.

5-B: Impairment is caused solely by bacteria contamination. A TMDL is required. Certain waters impaired only by bacteria contamination may be high priority resources, such as shellfish areas, but a low priority for TMDL development if other actions are already in progress that will correct the problem in advance of TMDL development (e.g. better compliance). Certain small streams that are impaired solely by bacteria contamination but where recreation (swimming) is impractical because of their small size are listed in 5-B. A projected schedule of TMDL completion is included where applicable. Waterbodies impaired only by Combined Sewer Overflows, where current CSO Master Plans (Long-Term Control Plan) are in place, will be monitored to demonstrate that water quality standards are attained and that provisions are in place for both funding and compliance timetables. See the section titled "Summary of Statewide River and Stream Attainment Status" below for comments about the 2009 US EPA approval of a Statewide Maine Bacteria TMDL.

5-C: Impairment caused by atmospheric deposition of mercury and a regional scale TMDL is required. Due to EPA approval of a regional scale TMDL for the control of mercury all of Maine's Category 5C waters have been administratively moved to Category 4A.

5-D: Impairment caused by a "legacy" pollutant. This sub-category includes:

1. waters impaired only by PCBs, dioxins, DDT, or other substances already banned from production or use. It includes waters impaired by contaminated sediments where there is no additional extrinsic load occurring. This is a low priority for TMDL development since there is no controllable load.

2. coastal waters that have a consumption advisory for the tomalley (hepatopancreas organ) of lobsters due to the presence of persistent bioaccumulating toxics found in that organ. This is a low priority for TMDL development since there is no identifiable and controllable load.

DELISTING FROM AN IMPAIRED TO AN UNIMPAIRED CATEGORY.

Because there are a number of listing options available in the integrated list, some waterbodies may be removed from the previous "impaired waters" list, i.e., 303(d) list,, however, only under certain circumstances. The State must provide new information, to EPA's satisfaction, as a basis for not listing specific waters that had been previously included on a 303(d) list. Acceptable reasons for not listing previously listed waters as provided in 40 CFR 130.7(b) may include situations where:

- The assessment and interpretation of more recent, more accurate or paleolimnological data demonstrates that the applicable water quality standard(s) is being met (list in Category 1, 2).
- The results of more refined water quality modeling demonstrate that the applicable water quality standard(s) is being met (list in Category 1 or 2).
- It can be demonstrated that errors or insufficiencies in the original data and information led to the water being incorrectly listed (list in Category 1 or 2).
- It can be documented that there are changes in the conditions or criteria that originally caused the water to be impaired and therefore originally led to the listing. For example, new control equipment has been installed, a discharge has been eliminated, or new criteria adopted (list in Category 1, 2, or 4-B).
- The State has demonstrated pursuant to 40 CFR 130.7(b)(1)(ii), that there are effluent limitations required by State or local authority, which are more stringent than technology-based effluent limitations, required by the Clean Water Act, and that these more stringent effluent limitations will result in the attainment of water quality standards for the pollutant causing the impairment within a reasonable time (list in Category 4-B).
- The State has demonstrated pursuant to 40 CFR 130.7(b)(1)(iii), that there are other pollution control requirements required by State, local, or federal authority that will result in attainment of water quality standards for a specific pollutant(s) within a reasonable time (list in Category 4-B).

- The State included on a previous Section 303(d) list some Water Quality Limited Segments beyond those that are required by EPA regulations, e.g., waters where there is no pollutant associated with the impairment (list in Category 4-C).
- A TMDL has been approved or established by EPA since the last 303(d) list (list in Category 4-A).

Chapter 8 Tables 8-1a, 8-1b, 8-2 and 8-3 present waters that have been delisted from Maine's 2008 impaired waters (303d) list.

ASSESSMENT CRITERIA

Tables 4-1 through 4-3 provide the designated use categories and the criteria (with references) used to assess a water's attainment of the use. A determination of non-attainment is only made when there is documented, quality assured, evidence (e.g. monitoring data) indicating that one or more criteria are not attained. Such data are also weighed against evidence that there are plausible human-caused factors that may contribute to the violation of criteria (38 MRSA Section 464.4.C).

Table 4-1 Maine Designated Uses and Criteria for Rivers and Streams

RIVERS AND STREAMS

Designated Use	Criteria for Attainment
Drinking water supply after disinfection / treatment	• Ambient Water Quality Criteria (Maine DEP Chapter 530) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A) • Maine CDC's Maximum Exposure Guidelines (MEGs)
Aquatic life use support[1]	• Biomonitoring- lotic benthic macroinvertebrates: numeric biocriteria (Maine DEP Rule Chapter 579) • Biomonitoring- lotic algae: narrative aquatic life use standards and provisional algal linear discriminant model • Biomonitoring- wetland macroinvertebrates: narrative aquatic life use standards and provisional assessment analysis protocols • Habitat suitability (38 MRSA Section 464.13, 465.1-4) • Dissolved oxygen (38 MRSA Section 464.13, 465.1-4) • Ambient Water Quality Criteria (Maine DEP Chapter 530.5) • Support of indigenous species • Wetted habitat (Maine DEP Chapter 581) • General provisions: floating/settleable solids, pH, radioactive substances (38 MRSA Section 464.4.A)
Fishing/Fish Consumption	• Support of indigenous fish species • Absence of fish consumption advisory (instituted by Maine CDC) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Recreation in and on the water[1]	• *E. coli* bacteria (38 MRSA Section 465, geometric mean) • Water color (38 MRSA Section 414-C) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Navigation, hydropower, agriculture / industrial supply	• General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)

1 – DEP has proposed ambient nutrient criteria for fresh surface waters (Draft Chapter 583) that relate to existing aquatic life and recreational designated uses. The rule is scheduled for the public rulemaking process with the Board of Environmental Protection during 2010. For more information, please visit the following website: http://www.maine.gov/dep/blwq/rules/Other/nutrients_freshwater/index.htm

Table 4-2 Maine Designated Uses and Criteria for Lakes and Ponds

LAKES AND PONDS

Designated Use	Criteria for Attainment
Drinking water supply after disinfection / treatment	• Ambient Water Quality Criteria (Maine DEP Rule Chapter 530.5) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Aquatic life use support[1]	• Trophic state (38 MRSA Section 465-A, DEP Chapter 581) • Ambient Water Quality Criteria (Maine DEP Chapter 530.5) • Aquatic life (38 MRSA Section 465-A, 464.9) • Biomonitoring (wetland habitats)- wetland macroinvertebrates: narrative aquatic life use standards and provisional data analysis • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A) • Hydropower GPA impoundments (38 MRSA Section 464.9)
Fishing	• Support of indigenous fish species • No fish consumption advisory (instituted by Maine CDC) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Recreation in and on the water[1]	• *E. coli* bacteria (38 MRSA Section 465-A, geometric mean) • Trophic state (38 MRSA Section 465-A, DEP Rule Chapter 581) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Navigation, hydropower, agriculture / industrial supply	• General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)

1 – DEP has proposed ambient nutrient criteria for fresh surface waters (Chapter 583) that relate to existing aquatic life and recreation designated uses. The rule is scheduled for the public rulemaking process with the Board of Environmental Protection during 2010. For more information, please visit the following website: http://www maine.gov/dep/blwq/rules/Other/nutrients_freshwater/index.htm

Table 4-3 Maine Designated Uses and Criteria for Estuarine and Marine Waters

ESTUARINE AND MARINE WATERS

Designated Use	Criteria for Attainment
Marine life use support	• Ambient Water Quality Criteria (Maine DEP Chapter 530.5) • Dissolved oxygen (38 MRSA Section 465-B) • Narrative biological standards (38 MRSA Section 465-B) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
[1]Shellfish propagation and harvest	• National Shellfish Sanitation Program (as assessed by DMR) • No shellfish consumption advisory (instituted by Maine CDC) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Aquaculture	• General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Fishing	• Support of indigenous fish species

[1]Applies to estuarine/marine waters with high enough salinity to naturally support shellfish propagation and harvest

	• No fish consumption advisory (instituted by Maine CDC) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Recreation in and on the water	• Enterococcus bacteria (38 MRSA Section 465-B, geometric mean) • General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)
Navigation, hydropower, industrial supply	General provisions: floating/settleable solids, pH, radioactive substances, (38 MRSA Section 464.4.A)

DATA INTERPRETATION

It is not common to have complete and consistent water quality data; therefore, some interpretation of data is required in making a final assessment. Data from unique events such as a spill, an accident, a short-duration license exceedance, or a drought or flood are not used in an assessment determination. The following general principles for each criteria type are used in making an assessment:

Biological Criteria: River, stream, and wetland benthic macroinvertebrate and algal samples are collected in accordance with the Biomonitoring Program Quality Assurance Project Plan. Stream macroinvertebrate and algal assessments are based on statistical models that predict attainment of tiered aquatic life uses (Classes AA/A, Class B, and Class C). The stream macroinvertebrate model is described in Maine DEP Rule Chapter 579: *Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams*. For streams and rivers, aquatic life criteria are deemed to be attained when the applicable biocriterion is met with probability greater than 0.60. Final determination of attainment may in some cases be made by professional judgment, applied in accordance with the procedures described in Maine DEP Chapter 579. The Biological Monitoring Program recently completed an algal bioassessment model applicable to wadeable streams and rivers with rocky substrates. The Department is implementing initial use of the provisional stream algal model, along with the existing stream macroinvertebrate model, to assess attainment of aquatic life criteria in the 2010 Integrated Report. Chapter 579 will be amended to include the algal model, following standard public review protocols, after it has been adequately tested. The Program also is currently developing a predictive model using macroinvertebrates to evaluate wetland attainment of aquatic life criteria. In the interim, The Department has used wetland macroinvertebrate data and provisional metrics to interpret attainment of narrative aquatic life criteria for wetlands for the 2010 Report (Appendix IV). Ambient water quality criteria, whole effluent toxicity testing, and other biological sampling are also used to determine if other components of the biological community, such as fish, meet the aquatic life uses.

Lake Trophic State: Assessment is based on measures of transparency, chlorophyll a, total phosphorus and color (Table 4-4). When lakes lack this information, a trophic determination made by DIF&W is used, if available. Their determination is more subjective and generally applies to the lake system as a whole including adjacent wetlands and fisheries productivity. Trophic determination is tracked by source (DEP or DIF&W) in the assessment database.

Table 4-4 Lake Trophic State Parameters and Guidelines

Numerical Guidelines for Evaluation of Trophic Status in Maine *	
(Note: Dystrophy is not often evaluated as a trophic category separately from categories below.)	
	Trophic Status

Parameter[1]	Oligotrophic	Mesotrophic[2]	Eutrophic
SDT[3]	> 8 meters	4-8 meters	< 4 meters
CHL a	< 1.5 ppb	1.5 – 7 ppb	> 7 ppb
Total Phosphorus[3]	< 4.5 ppb	4.5 – 20 ppb	>20 ppb
TSI[3,4]	0-25	25-60	>60 and/or repeated algal blooms

[1] SDT, CHL a, and Total Phosphorus based on long-term means.
[2] No repeated nuisance algal blooms.
[3] If color is > 30 Standard Platinum Units (SPU) or not known, chlorophyll a concentration (CHL a), dissolved oxygen and best professional judgment used to assign trophic category.
[4] TSI = Trophic State Indices are calculated when adequate data exists and color is at or below 30 SPU.
* This table is a duplicate of Table 4-26 in the Lakes Section of this Chapter (appears twice for convenience).

Support of Indigenous Species: Assessment based on the known absence of a species that previously was documented as indigenous to a waterbody in historical records collected by state or federal agencies or through published scientific literature; or based on non-attainment of water quality criteria or absence of critical habitat necessary to support indigenous species.

Dissolved Oxygen: Assessment of dissolved oxygen is based on the results of repeated measurements, collected over time. Single excursions of the criterion or excursions within the range of sampling or instrument error (as established in a Quality Assurance Project Plan) may not be used in every case unless there is corroborating evidence of reasonable potential for impairment of a use. Assessment may also be based on the use of water quality models (e.g. QUAL2E) based on present or expected loadings. New legislation provides that dissolved oxygen in the thermocline and deeper waters of a riverine impoundment will not be used for measurement of water quality attainment.

Ambient Water Quality Criteria: Assessment is based on measured exceedance of Statewide Water Quality Criteria (or Site-specific criteria where they may exist), or reasonable potential to exceed the criteria following EPA's Principle of Independent Applicability and Technical support document. Single excursions of the criterion or excursions within the range of sampling or instrument error (as established in a Quality Assurance Project Plan) may not be used in every case unless there is corroborating evidence of reasonable potential for impairment of a use. Assessment may also be based on the use of water quality models (e.g. dilution models) based on present or expected loadings.

Nutrient/Eutrophication Biological Indicators: The Department is proposing nutrient criteria for evaluating attainment of water quality standards for fresh surface waters. Nutrient enrichment can cause negative environmental impacts to surface waters, such as algal blooms, low dissolved oxygen concentrations, excessive growths of filamentous algae or bacteria, and generation of cyanotoxins. Methods described in the proposed rule (Chapter 583: *Use Attainment Evaluation Using Nutrient Criteria for Surface Waters*) will be used to make decisions about attainment or impairment of designated and existing uses of surface waters under the State's water quality classificationlaw. This proposed rule also describes how the Department will use the attainment determinations in the listing of impaired waterbodies and the establishment of nutrient discharge limits in National Pollutant Discharge Elimination System permits. The rule is scheduled for the public rulemaking process with the Board of Environmental Protection during 2010. For more information, please visit the following website: http://www.maine.gov/dep/blwq/rules/Other/nutrients_freshwater/index.htm.

Non-numeric listing criteria for this cause of Aquatic Life Use (ALU) impairment consist of documentation of abnormal biological findings that indicate nutrient enrichment in rivers and streams. Excess nutrients impair ALU through alteration of habitat, changes in dissolved gases like oxygen, from excessive growths of plants and algae, resulting in diurnal dissolved oxygen sags, and alteration of benthic macroinvertebrate assemblage structure.

Bacteria: Assessment is based on repeated measurements to establish an annual geometric mean. Instantaneous (single sample) criteria are not used for water quality assessment due to the high variability associated with a single measurement. There must be a plausible human or domestic animal source of the bacteria for an impairment determination to be made (38 M.R.S.A Section 465, 465-A, 465-B).

Water Color: Assessment based on repeated measurements of discharge performance data (pulp and paper discharges only).

General Provisions: pH based on repeated measurement (between 6.0 and 8.5 for freshwaters; 7.0 and 8.5 for marine waters), however, certain naturally occurring waterbody types (e.g. bogs, aquifer lakes, high elevation lakes) or events may naturally have low pH and affect downstream waters. Use impairment from solids is subjectively determined. Radioactivity in surface water is not presently monitored.

INTEGRATED REPORT LISTS OF CATEGORIES 1 THROUGH 5

Table 4-5 Summary of State Waters Attaining and Not Attaining Standards

Waterbody Type	Total Assessed for Attaining of WQ Standards – Assessed for Designated Uses	Total with Insufficient Data for Assessment – Not Assessed for Any Designated Uses (Category 3)	Total Attaining All WQ Standards - Supporting All Designated Uses (Category 1)	Total Attaining At Least One Standard – Supporting at Least One Use, But Not All Standards Assessed (Category 2)	Total Not Attaining One or More WQ Standards – Not Supporting One or More Uses – But Not Needing a TMDL (Category 4)	Total Not Attaining One or More WQ Standards – Not Supporting One or More Uses – and TMDL is Needed (Category 5)
River & Stream Miles‡	31,215	294	4,347	25,374	293**	907
Number of Lakes/Ponds	5,780 *	1	2,857	*2,890	29*	3
Lake & Pond Acres	986,952 *	410	295,443	606,780*	76,080*	8,239
Estuarine/Ocean Square Miles	2,846	6.2	0.0	2,685	154	2.67°
Estuarine/Ocean (Acres)	1,821,434	3,979	0.0	1,718,509	98,380	1710 °
Freshwater Wetland Stations	82	9	0	75	2	5
Freshwater Wetland Acres	size undeter-mined	size undeter-mined	0	size undeter-mined	size undeter-mined	size undeter-mined
Tidal Wetland Acres	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]

‡River and Stream mile summaries for each reporting category were generated by the Maine Assessment Database (ADB) and may be somewhat different from river and stream miles reported in Table 3-1.
* Includes 6 Category 2 lakes (22 acres) on coastal islands, all 6 lakes are not assigned to mainland HUCs.
** These figures do not include those waters listed under Category 4A for atmospheric deposition of Mercury.
° All estuarine and marine waters capable of naturally supporting lobster propagation are affected by a shellfish (lobster tomalley) consumption advisory due to the presence of PCBs and dioxins. These Category 5 totals do not include coastal waters under the statewide consumption advisory.
[1] "N/A" means "Not Assessed".

Table 4-6 Individual Use Support Summary for Maine Rivers and Streams *

USE	Total Size	Size Assessed	Size Fully Supporting	Size Fully Supporting and Threatened	Size Not Supporting	Size with Insufficient Info
Drinking Water Supply After Disinfection	20,085	4,400	4,400	0	0	15,685
Drinking Water Supply After Treatment	10,960	1067	1063	0	3	9,878
Fish and Other Aquatic Life	31,049	30,601	29,905	0	696	446
Fish Consumption **	31,221	5,540	4,895	0	645	25,659
Fishing	31,045	5,460	5,453	0	8	25,564
Hydroelectric Power Generation	20,832	1,677	1,677	0	0	19,136
Industrial Process and Cooling Water Supply	20,832	1,677	1,677	0	0	19,136
Navigation	31,045	5,455	5,450	0	4	25,560

USE	Total Size	Size Assessed	Size Fully Supporting	Size Fully Supporting and Threatened	Size Not Supporting	Size with Insufficient Info
Primary Contact Recreation	31,045	5,443	5,257	0	186	25,382
Secondary Contact Recreation	31,045	5,441	5,270	0	170	25,384

*River and stream mile summaries were generated by the Maine Assessment Database (ADB)

** All freshwaters are listed for a fish consumption advisory due to mercury (Category 4A-EPA approved Regional Mercury TMDL). The fish consumption (other) listing is for additional consumption advisories beyond than that caused by mercury (these waters also have a mercury advisory).

Table 4-7 Individual Designated Use Support Summary for Maine Lakes

CWA Goals	Designated Use	Size Fully Supporting – Attaining WQ Standards (Acres)	Size Not Supporting – Not Attaining WQ Standards (Acres)	Size Not Attainable – UAA Performed
Protect & Enhance Ecosystems	Aquatic Life Support	892,295*	85,497	9,160**
Protect & Enhance Public Health	Fish Consumption (Hg)	0	986,952	0
	Swimming	962,588	24,364	0
	Secondary Contact	986,952	0	0
	Drinking Water Source Water	986,952	0	0
Social & Economic	Agricultural	986,952	0	0
	Industrial	986,952	0	0
	Cultural or Ceremonial	986,952	0	0
	State Defined: 1. Hydropower & Navigation	986,952	0	0

*Includes Fully Supporting (Cat. 1:295,443 acres) and Insufficient Information but assumed to be Fully Supporting (Cat. 2: 596,474 acres) less UAA acreage.

**Includes acreages of Ragged (2,712 acres) and Seboomook (6,448 acres) Lakes

Table 4-8 Individual Designated Use Support Summary for Estuarine and Marine Waters

CWA Goals	Designated Use	Size Fully Supporting – Attaining WQ Standards (square miles)	Size Not Supporting – Not Attaining WQ Standards (square miles)	Size Not Attainable – UAA Performed (square miles)
Protect & Enhance Ecosystems	Aquatic Life	2,842.83	3.16	0
Protect & Enhance Public Health	Fish Consumption[1]	0	2,845.99	0
	Shellfish Consumption[2] (excluding lobster tomalley)	2,692.44	153.7	0
	Shellfish Consumption[3] (lobster tomalley)	0	2,845.99	0
	Swimming (primary and secondary contact)	2,845.97	0.02	0
Social & Economic	Aquaculture	2,845.99	0	0
	Navigation	2,845.99	0	0
	Industrial supply water	2,845.99	0	0
	Hydropower	2,845.99	0	0

[1] Based on a statewide fish/shellfish consumption advisory (striped bass and bluefish advisory).

[2] Does not include statewide advisories for PCBs or dioxin in lobster tomalley.

[3] Based on a statewide consumption advisory for lobster tomalley for waters naturally capable of supporting lobster.

Table 4-9 Total Sizes of Category 4 and 5 Impaired Rivers and Streams by Listing Causes/Stressors *

Cause/Stressor Type	Size Impaired (miles)
Pathogens (E. coli)	168
NPS + CSO-sources	(variable miles)
Aquatic Life Criteria	**413**
(integrated effects including biocriteria, habitat and nutrient biological indicators)	
Oxygen depletion	**477**
Dissolved oxygen	455
BOD	32
Altered flow regime	**30**
Fish passage barrier	4.5
Nutrients	**260**
Nutrient-eutrophication, biological indicators	191
Toxic inorganics (metals)	**39**
Toxic organics	**433**
Dioxin	381
Polychlorinated biphenyls	392
Pesticides	**217**
pH/Acidity/Caustic conditions	**1**
Sedimentation	**15**
Harmful algae blooms	**8**

* River and stream mile summaries were generated by the Maine Assessment Database (ADB)

Table 4-10 Total Sizes of Category 4 and 5 Lakes Impaired by Listing Causes/Stressors (Total acreage)

Cause/Stressor Type	Size Impaired (acres)
Habitat Assessment (Lakes)	48,964
Methylmercury	986,952
Oxygen, Dissolved	634
Phosphorus (Total)	36,533
Secchi Disk Transparency	35,899
Turbidity	7,865

Table 4-11 Total Sizes of Category 4 and 5 Lakes Impaired by Listing Causes/Stressors (by Category)

Listing Category	Cause/Stressor Type	Size Impaired (acres)	Number Impaired
4A	Methylmercury	986,952	5780
	Oxygen, Dissolved	634	1
	Phosphorus (Total)	27,750	25
	Secchi disk transparency	27,116	24
4C	Habitat Assessment (Lakes)	48,964	5
	Turbidity	7,865	1
5A	Secchi disk transparency	8,783	3
	Phosphorus (Total)	8,783	3

Table 4-12 Total Sizes of Category 4 and 5 Impaired Estuarine and Marine Waters by Causes/Stressors

Cause/Stressor Type	Size Impaired (square miles)
Bacteria	153.7 (Category 4-A)
Bacteria (CSOs)	Variable
Dissolved Oxygen	0.3
Sediment Oxygen Demand	0.3
Toxics	-
Metals-copper	0.9
PAHs	0.5
PCBs	2,846
Dioxins	2,846
Aquatic Life	2.67

Table 4-13 Total Sizes of Category 4 and 5 Waters Impaired by Source for Rivers and Streams

Source Category	Size Impaired (miles)
Agriculture aquaculture	**337** 10
Atmospheric deposition (mercury deposition)	**53,455**
Habitat modification- non-hydromodification	**26**
Hydromodification- dams and impoundments	**91**
Industrial permitted discharges	**223**
Land application waste sites- RCRA, illegal dumps, abandoned mines	**18**
Legacy pollutants-dioxin, PCBs, DDT	**606**
Municipal discharges, permitted	**205**
Stormwater, Permitted	**185**
Other unspecified urban stormwater including impervious surface runoff	**142**
Upstream source	**26**
Other including Non-point sources	**502**

* River and stream mile summaries were generated by the Maine Assessment Database (ADB)

Table 4-14 Total Sizes of Waters Impaired by Sources for Maine Lakes

Source Category	Size Impaired (acres)
Atmospheric Deposition – Toxics	986,952
Crop Production (Crop Land or Dry Land)	7,030
Flow Alterations from Water Diversions	30
Impacts from Hydrostructure Flow Regulation/modification	48,964
Industrial Land Treatment	1,820
Internal Nutrient Recycling	11,490
Landfills	29
Livestock (Grazing or Feeding Operations)	5,093
Municipal Point Source Discharge	4288
Natural Sources	9,734
Non-irrigated Crop Production	10,532
Residential Districts	13,358
Rural (Residential Areas)	22,119
Unspecified Unpaved Road or Trail	11,535
Unspecified Urban Stormwater	11,535

Table 4-15 Total Sizes of Waters Impaired by Sources for Maine Lakes by Listing Category

Listing Category	Source	Size Impaired (acres)	Number of Lakes
4A	Atmospheric Deposition - Toxics	986,952	5780
	Crop Production (Crop Land or Dry Land)	7,030	7
	Flow Alterations from Water Diversions	30	1
	Industrial Land Treatment	1,820	2
	Internal Nutrient Recycling	11,490	7
	Landfills	29	1
	Livestock (Grazing or Feeding Operations)	5,093	5
	Municipal Point Source Discharges	4288	1
	Natural Sources	1,869	2
	Non-irrigated Crop Production	10,532	5
	Residential Districts	5,119	3
	Rural (Residential Areas)	22,119	18
	Unspecified Unpaved Road or Trail	3,296	2
	Unspecified Urban Stormwater	3,296	2
4C	Impacts from Hydrostructure Flow Regulation/modification	48,964	5
	Natural Sources	7,865	1
5A	Crop Production (Cropland or Dryland)	461	1
	Natural	461	1
	Residential Districts	8,239	1
	Rural (Residential Areas)	461	1
	Unspecified Unpaved Road or Trail	8,239	1
	Unspecified Urban Stormwater	8,239	1
	Upstream/Downstream Eutrophic Lake	83	1

Table 4-16 Total Sizes of Waters Impaired by Sources for Estuarine and Marine Waters

Source Category (examples)	Size Impaired (square miles)
Legacy Pollutants	2,846
Municipal Point Sources / Overboard Discharge	153.72
Combined Sewer Overflows	Variable
Urban Runoff/Storm Sewers	51.70
Sediment Oxygen Demand	0.30
Nonpoint Source	153.55

RIVERS / STREAMS

WATER CLASSIFICATION PROGRAM

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Related Website: www.maine.gov/dep/blwq/docmonitoring/classification/index.htm

Maine has four water quality classes of rivers and streams: AA, A, B, and C (38 M.R.S.A. Section 465). Each classification assigns designated uses and water quality criteria (narrative and numeric), and may place specific restrictions on certain activities (Table 4-1 and 4-16) such that the goal conditions of each class may be achieved or maintained. Definitions of terms used in the classification are provided in 38 M.R.S.A. Section 466.

Class AA waters are managed for their outstanding natural ecological, recreational, social, and scenic qualities. Direct discharge of wastewater, dams, and other significant human disturbances are prohibited. Tiered aquatic life use goals in water quality standards direct that the biological condition of this classification be approximately Tier 1-2 on the Biological Condition Gradient (Davies and Jackson 2006; USEPA 2005)

Class A waters are managed for high quality with limited human disturbance allowed; aquatic life use goal approximately Tier 1-2 on the Biological Condition Gradient. Direct discharges are allowed but highly restricted. Physical and chemical characteristics should be similar to natural conditions.

Class B waters are general-purpose waters and are managed to attain good physical, chemical and biological water quality; aquatic life use goal approximately Tier 3 on the Biological Condition Gradient. Well-treated discharges with ample dilution are allowed.

Class C waters are managed to attain at least the swimmable-fishable goals of the federal Clean Water Act, including protection of spawning for indigenous fish species. Aquatic life standards require maintenance of the structure and function of the biological community; aquatic life goal approximately Tier 4 on the Biological Condition Gradient.

Table 4-17 Maine Water Quality Criteria for Classification of Fresh Surface Waters (38 MRSA §465)

	Dissolved Oxygen Numeric Criteria	Bacteria (*E. coli*) Numeric Criteria	Habitat Narrative Criteria	Aquatic Life (Biological) Narrative Criteria
Class AA	as naturally occurs	as naturally occurs	Free flowing and natural	No direct discharge of pollutants; ***as naturally occurs*** **
Class A	7 ppm; 75% saturation	as naturally occurs	Natural	***as naturally occurs*** **
Class B	7 ppm; 75% saturation	64/100 ml (g.m.*) or 236/100 ml (inst.*)	Unimpaired	Discharges ***shall not cause adverse impact*** to aquatic life in that the receiving waters shall be of sufficient quality to ***support all aquatic species indigenous to the receiving water without detrimental changes to the resident biological community.*** **
Class C	5 ppm; 60% saturation 6.5 ppm (monthly average) at 22° and 24°F	126/100 ml (g.m.*) or 236/100 ml (inst.*)	Habitat for fish and other aquatic life	Discharges ***may cause some changes*** to aquatic life, provided that the receiving waters shall be of sufficient quality to ***support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.*** **

* "g.m." means geometric mean and "inst." means instantaneous level

** Numeric criteria in Chapter 579, Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams

Maine law requires that once every three years, the Department review the classification system and make recommendations to the Board of Environmental Protection for any needed changes in the water quality classifications assigned to specific waterbodies. The last triennial review of water quality standards and classifications was completed in 2009. The Department conducted statewide workshops and direct mail and telephone outreach to obtain public input and to solicit proposals for consideration to change the management classification assigned to specific waterbodies. The Board held hearings that resulted in recommendations to the Maine State Legislature for the upgrade of part or all of 16 rivers and streams and one marine waterbody. The Board recommended and the Legislature also approved changes to statutory language to clarify the classifications of 6 other waterbodies, and to conduct a Use Attainability Analysis on 1 impaired stream to determine its highest attainable goal condition. The current distribution of waters assigned to these four water quality classes is summarized in Table 4-18:

Table 4-18 Percent Distribution of River/Stream Water Classes

Class	Percent of Major* Mainstem River Miles	Percent of Total River and Stream Miles
AA	27.5 %	5.6 %
A	22.3 %	43.8 %
B	29.6 %	49.2 %
C	20.6 %	1.4 %

* Major mainstem rivers are rivers that have a watershed of >500 square miles.

SUMMARY OF STATEWIDE RIVER AND STREAM ATTAINMENT STATUS

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The Integrated Assessment Water Quality Report to Congress requires the assignment of each Assessment Unit into one of five categories (Section 4-1, Assessment Methodology). A water is determined to be impaired if one or more of the uses assigned by its classification in not attained, as determined by the criteria assigned to that water class. An overall use attainment summary is provided in Tables 4-6 and 4-19. The 2010 use attainment assessment reports on assessment units amounting to 31,215 miles of rivers and streams that are tracked in the Assessment Database (ADB). Information on the status of individual assessment units may be found in Listings on Individual Waters, Appendix II, Categories 1-5.

Table 4-19 Summary of Changes to Surface Water Assessment Categories – 2008 to 2010

Rivers and Streams						
31,217= Total Miles Assessed in 2008						
31,215=Total Miles Assessed in 2010						
	2008 Miles in Category*	% of Total 2008 Assessed Miles	2010 Miles in Category**	% of Total 2010 Assessed Miles	% Change '08-'10	Change in Miles '08 - '10
Category 1	4,347	14	4,338	14	0	-9
Category 2	25,371	81	25,378	81	0	+7
Category 3	295	1	314	1	0	+19
Category 4	214	<1	461	1.4	0	+247
Category 5	990	3	730	2	0	-260

*Single-Category Reporting miles, as generated by final 2008 cycle Maine ADB;
** Single-Category Reporting miles as generated by 2010 cycle Maine ADB

Category 1 (*Appendix II Category 1*). The 2010 assessment assigned 4,338 miles (14%) of rivers and streams to Category 1 (fully attaining all uses other than statewide mercury advisory as explained in Category 5C below). The Department has determined through monitoring and evaluation that large areas of the state should be included in this category where there is significant protection afforded by either state or private conservation efforts. Maine is fortunate to have entire sub-watersheds where there is little to no human habitation, few roads and only minimal disturbance (typically well managed forestry operations that are well buffered to protect water quality) or significant conservation ownership.

Category 2 (*Appendix II Category 2*). The 2010 assessment assigned 25,378 (81%) miles of rivers and streams to Category 2 (fully attaining all uses other than statewide mercury advisory as explained in Category 5C below). The increase was primarily due to new bacteria data, collected under the Statewide Bacteria TMDL, showing attainment of recreational uses

Category 3 (*Appendix II Category 3*). The 2010 assessment assigned 314 (1%) miles of rivers and streams to Category 3 (insufficient information to determine attainment). Most of these segments have been assigned to Category 3 because of inconclusive or conflicting monitoring data. One new segment was added to Category 3 in 2010 because an initial evaluation of potential non-attainment requires re-sampling to confirm.

Category 4 *(Appendix II Category 4*). Category 4 impaired waters do not require the development of a Total Maximum Daily Load (TMDL). In September of 2009 EPA approved a Statewide Maine Bacteria Total Maximum Daily Load that resulted in the removal of 34 bacteria-impaired segments from Category 5A and 5B to Category 4A. An additional 28 segments were also removed for 2010 due to either determinations of full attainment (ie, Category 2) or due to ongoing impairments of other uses (Category 5). The TMDL addressed bacteria impairments caused by Eschericia coli in freshwaters. The waters covered by the Statewide Bacteria TMDL are located in 13 of Maine's 21 major watersheds (8-digit hydrologic unit code basins).

Category 4 has been administratively increased by 247 miles in 2010 due to approval of the Statewide Bacteria TMDL, among other reasons. Waters in Category 4 are placed into one of three subcategories:

- 4-A for waters that already have a TMDL that has been approved by EPA
  - 34 new segments have been added to Category 4-A as compared to the 2008. All of these waterbodies have bacteria impairments and have been moved from Category 5-A or 5-B to Category 4-A due to their inclusion in the Maine Statewide Bacteria TMDL, approved by US EPA in September 2009.,
- 4-B for waters where there is an enforceable mechanism in place to bring the water into attainment (e.g. new or re-newed wastewater discharge license; court order, etc.)
  - 2 segments have been moved into Category 4-B due to existence of enforceable mechanisms to bring the waters into attainment,
- 4-C for waters where there is no pollutant involved in the impairment problem
  - One new segments has been added to 4-C since 2008

Two segments on the West Branch and upper mainstem Penobscot River (to the confluence with the Mattawamkeag River) have been moved directly from Category 2 to Category 4B. Analysis of 2007 monitoring data during this reporting cycle documented non-attainment of dissolved oygen and nutrient/eutrophication biological indicators. The Board of Environmental Protection issued an Administrative Consent Agreement on January 17, 2008 requiring reductions in phosphorus loading and establishing that enforceable controls are in place so the segments were delisted to Category 4B.

Category 5 (*Appendix II Category 5*)**.** Impaired waters that require the development of a Total Maximum Daily Load (TMDL) determination. The 2010 assessment assigned 730 miles (2%) of rivers and streams to Category 5 (impaired for one or more uses as well as statewide mercury advisory as explained in Category 5C below). This is a net decrease of 260 miles in Category 5.

Waters in Category 5 are placed into one of four subcategories:

- 5-A - waters impaired by pollutants; a priority for TMDL development,
  - The reduction of Category 5-A river and stream miles between 2008 and 2010 is almost entirely due to **removal of 34 bacteria impairmented segments as noted above**. Twenty-five miles on the mainstem Penobscot have been added to Category 5A.
  - **Final draft TMDLs** for 7 non-point source affected segments and two point source affected segments are scheduled to be submitted to EPA in fiscal year 2010.
- 5-B- waters impaired by no causes other than bacteria from Combined Sewer Overflows or other sources (except statewide mercury advisory as explained in Category 5C below); a lower priority for TMDL development.

  - no new segments have been added to 5B and existing 5-B segments have been removed to Category 4-A for bacteria impairments
- 5-C- waters impaired by atmospheric deposition of mercury (*Inactive Category due to EPA approved Regional Mercury TMDL*).
  - All freshwaters in Maine have an advisory for the consumption of fish due to the presence of mercury presumed to be from atmospheric deposition. A Regional Mercury TMDL was approved by US EPA making these waters Category 4A.
  - This Integrated Water Quality Monitoring and Assessment Report does not consider this statewide advisory in establishing other category listings.
  - The advisory is based on probability data that a stream, river, or lake may contain some fish that exceed the advisory action level (Maine uses a lower action level of 0.2 mg/kg (edible portion) than that established by the USEPA). Any freshwater may contain both contaminated and uncontaminated fish depending on size, age, and species occurrence in that water. The advisory applies to all freshwaters because it may be impossible for someone eating a fish to be able to tell where the fish originated and whether or not it has a high level of mercury.
- 5-D for waters impaired by the residuals of "legacy" activities.
  - No new segments have been added to Category 5-D as compared to 2008.

Number of Segments that have been Delisted.

Due to EPA approval of the Statewide Bacteria TMDL, sixty-one river and stream segments impaired by Escherichia coli bacteria have been removed from the Category 5-A list and placed on the Category 4-A or Category 2 lists for 2010. Six additional waters have been delisted to either Category 2 or Category 4-B due to control or elimination of other pollutant causes

As with any assessment of this kind, the identification of impaired waters or delisted waters cannot be considered complete but rather is a reflection of the findings at a particular point in time, relative to the level of monitoring effort expended by the agency and other cooperating contributors.

LISTING CAUSES, STRESSORS AND SOURCES OF IMPAIRMENT

Cause and stress information for rivers and streams is provided in Table 4-9. Sources of impairment are provided in Table 4-13. Maine DEP uses the EPA Assessment Database (ADB) to track changes in water quality for Maine rivers, streams and lakes. The ADB is enabling increasingly accurate and consistent tracking of causes, stressors and sources as the database is populated and updated from cycle to cycle.

Causes (Table 4-9): The greatest number of impaired miles (689) is due to toxic contamination, including legacy pollutants such as DDT, dioxin and PCBs. For most mainstem river segments that are affected by pulp and paper mill discharges, dioxins have been listed in Category 4-B since 2004. While absolute elimination of the production of dioxin from the pulp and paper bleaching process has probably not been accomplished, measureable differences above and below sources of dioxin are no longer detectable. However, those same segments are listed in Category 5-D for legacy sources of PCB and dioxin contamination found in fish tissue.

Non-attainment of aquatic life criteria, as determined by observations of biological effects, accounts for 298 miles of impairment. Most of these miles were assessed via benthic macroinvertebrate biocriteria. Two stream segments have been placed on the impaired waters list this cycle due to assessments using algal indicators of impaired aquatic life uses. Oxygen depletion accounts for 368 miles.

Sources (Table 4-13): Atmospheric deposition of mercury affects all waters of the State and is the largest single source of pollution. Legacy pollutant sources such as dioxin, PCBs and DDT affect 606 miles. General agricultural NPS sources affect 337 miles. It is important to understand that miles attributed to causes and sources in Tables 4-9 and 4-13 may be listed more than once if a waterbody is subjected to several different types of disturbance.

MAIN STEMS OF MAJOR RIVERS

Most of the mainstem rivers are in good condition and are attaining their classification (mostly Class B or C quality). Significant segments of the St. John, Allagash, East and West Branches of the Penobscot, St. Croix, and Kennebec Rivers are Class AA and A). The primary impairment issue on the larger rivers is non-attainment of the Fish Consumption use, with segments of the Androscoggin, Kennebec, Penobscot, Salmon Falls and Sebasticook Rivers listed in either Category 4 or Category 5. Tissue monitoring studies have found legacy PCB and dioxin contamination in mainstem rivers. Needed monitoring has had to be re-scheduled for some mainstem river segments due to lack of appropriately low flow levels required for water quality modeling (e.g., Penobscot, Sandy River, lower Androscoggin River). 2010 was a low flow year allowing collection of several needed monitoring datasets.

Two segments on the West Branch and upper mainstem Penobscot River (to the confluence with the Mattawamkeag River) have been moved directly from Category 2 to Category 4B. Analysis of 2007 monitoring data during this reporting cycle documented non-attainment of dissolved oygen and nutrient/eutrophication biological indicators. The Board of Environmental Protection issued an Administrative Consent Agreement on January 17, 2008 requiring reductions in phosphorus loading from upstream mills thus establishing enforceable controls for these segments, so they have been delisted to Category 4B. An additional three Class B segments below the confluence with the Piscataquis River to Reeds Brook (where water quality classification changes to marine SC) have been listed as impaired for dissolved oxygen and Nutrients/eutrophication biological indicators. A water quality model with updated monitoring data is currently in development by the Department (See Response to Comments)

Data submitted by the Houlton Band of Maliseet Indians Water Resources program documented high algal growth and large diurnal swings in dissolved oxygen on the Meduxnekeag River mainstem, at some locations affected by extensive agricultural land use. Downstream portions of the Meduxnekeag are currently in Category 4A due to US EPA approval of a TMDL in 2001 to address elevated phosphorus. The segment upstream of the TMDL study area has been listed in Category 3 for 2010 indicating a need for further investigation.

Three (3) of Maine's Combined Sewer Overflow (CSO) communities (Dover-Foxcroft, East Millinocket, and Milo) have completed their CSO abatement projects and no longer have permitted CSOs in the Penobscot watershed. CSOs continue to occur on segments of other major rivers. In 2009, the Department completed a statewide bacteria TMDL that establishes a restoration and management plan for all sources of bacteria, including CSOs.

In 2007, the Board of Environmental Protection was petitioned by dischargers and environmental advocates to rescind permits that had been issued following EPA approval of a TMDL for the Gulf Island Pond segment of the river. As a consequence of that process, the water quality models for that segment were recalculated and recalibrated. Permits are presently being revised. Since 2006 when the new permits came into effect, the impoundment has not experienced algae blooms, however it continues to have episodes of low dissolved oxygen (http://www.maine.gov/dep/blwq/topic/gip/index.htm). Revised permits and proposed improvements to the instream oxygenation facility are projected to bring Gulf Island Pond into attainment.

In 2009, the Lower Androscoggin River (Lisbon Falls to Brunswick) was proposed for upgrade from Class C to Class B. The Board of Environmental Protection declined to recommend the upgrade, as did the Maine State Legislature. However, a Resolve was passed by the Legislature directing the Department to accelerate monitoring and modeling on this segment in the interest of reviewing this proposal in the future. Monitoring and assessment could not be conducted in 2009 due to excessive flows but will be attempted again in 2010. Also concerning the lower Androscoggin River, the mainstem segment between the Pejepscot Dam and the Brunswick Dam, is listed in Category 4C (Impaired by non-pollutant). Information provided to the Department from the Department of Marine Resources indicates the segment fails to support American shad. The dam at Brunswick and the fish passage device repeatedly fail to allow passage of a sufficient number of shad to establish a sustainable population in the river above the dam. This facility is a FERC licensed facility with a requirement for fish passage as part of a State-adopted restoration plan for this species.

TOXICS

DIOXIN MONITORING PROGRAM

Contact: Barry Mower, DEP BLWQ, Division of Environmental Assessment (DEA)

Tel: (207) 287-3901 email: Barry.F.Mower@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dep/dioxin/

- Please refer to the 2006 report for latest information on this subject. There was no monitoring in 2009, but expected to be resumed in 2010.

SURFACE WATER AMBIENT TOXICS (SWAT) MONITORING PROGRAM

Contact: Barry Mower, DEP BLWQ, Division of Environmental Assessment (DEA)

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Related Website: www.maine.gov/dep/blwq/docmonitoring/swat/index.htm

- Please refer to the website for annual reports on this subject.

AQUATIC LIFE MONITORING

Biological Monitoring of Rivers and Streams

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Related Website: www.maine.gov/dep/blwq/docmonitoring/biomonitoring/index.htm

The Biological Monitoring Program assesses the health of rivers, streams, and wetlands by evaluating the composition of the resident biological communities. In the 1980s, the Maine Legislature passed the Water Classification Law and made an initial assignment of each river and stream reach in the state to one of four established classes (AA, A, B, and C Table 4-17). Subsequent Water Quality Reclassification initiatives since 1986 have reassigned waterbodies to more appropriate (usually higher quality) management classifications Class AA and Class A have the same aquatic life criteria and biological expectations ("as naturally occurs"). Data collected in accordance with Maine's biocriteria protocol are analyzed to predict the likelihood of a waterbody attaining the aquatic life criteria of its assigned class (i.e. AA/A, B, and C). In 2003, MDEP adopted numeric biocriteria in rule Ch. 579 (for rivers and streams) which describes the process used to make aquatic life decisions using the benthic macroinvertebrate community. MDEP recently completed biological assessment methods for benthic algal communities of wadeable streams and rivers with rocky substrates. MDEP used the provisional algal model, along with the stream macroinvertebrate model to evaluate attainment of aquatic life criteria for rivers and streams for the 2010 Report (Appendix II). MDEP is also currently testing biological assessment methods for wetland macroinvertebrate and algal communities and provisional assessments of wetland condition are provided for the first time in this 2010 Integrated Report (Appendix IV). More detailed information on wetland monitoring and assessment is described in Chapter 5. Biomonitoring station locations and associated biological and physical data can be found at www.maine.gov/dep/blwq/docmonitoring/biomonitoring/data.htm.

Reports of Fish Kills

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The Department of Environmental Protection documents all pollution-caused fish kills. For the 2007-08 reporting period, there were no documented fish kills due to pollution effects.

Achieving Comprehensive Assessment of All Streams: Probability-based Design Monitoring

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- Please refer to the 2006 report for information about streams. There have been no changes since the 2006 report.
- Biomonitoring staff is participating on the National Wetland Monitoring and Assessment workgroup in preparation for the National Wetland Condition Assessment currently scheduled for 2011. Biomonitoring staff previously participated in planning for national surveys of wadeable streams and large rivers.

LAKES / PONDS

Contact: Linda Bacon, DEP BLWQ, Division of Environmental Assessment (DEA), Lake Assessment Section

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Related Website: www.maine.gov/dep/blwq/lake.htm

This section of the 2010 Integrated Report provides an update to information contained in the 2006 & 2008 Integrated Reports, links to which can be found at: http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

Information included in the 2006 report (pages 75 – 91) includes:

Physical Extent of lakes
Statutory Classification of lakes
Attainment of Classification
Attainment Evaluation Criteria for each Designated Use
How Attainment Status relates to Listing Categories
Past use of Probability-based Designs
Summary of Listing Category changes for 2006
Criteria Used to Change Listing Status
An overview of Maine's Invasive Aquatic Plant program
Economic Contribution of lakes to Maine.

Additional topics required under Section 314 addressed in the 2006 report include:

Maine's definition of Significant Lakes
Trophic Status of Significant Publicly Owned Lakes
Lake Rehabilitation Techniques
Acid Effects on Lakes
Toxics in Maine lakes
Trend analyses and Climate considerations.

A number of tables reappear in this report at the request of EPA Region I staff.

Monitoring of Maine lakes continues to include reliance on a strong volunteer-based program, the Maine Volunteer Lake Monitoring Program (www.mainevolunteerlakemonitors.org) as well as both targeted and probability based monitoring performed by state staff. The Lake Assessment Section participated in a US EPA Region I probability-based lake monitoring effort in 2006 as well as the National Lake Assessment (NLA) effort in 2007. The results of the NLA survey help to put the overall condition of Maine lakes in perspective nationally and add additional data on the lakes visited by the EPA-State teams. The NLA reinforced the conclusions that our lightly developed watersheds continue to support lakes in full attainment of most designated uses.

ATTAINMENT OF CLASSIFICATION

The state designated a subset of the total population of lakes as 'Significant Lakes' as requested by EPA under Section 314 in the early 1990s. Table 4-20 summarizes numbers and acreages for all lakes having an identification number as well as the subset of Significant Lakes.

Table 4-20 "All" and "Significant" Lake Category Information

Maine Lake Population Summary		
	Number	**Acres**
All Lakes	5,784 (100%)	986,952 (100%)
Significant Lakes	2,313 (40%)	958,977 (97%)

Designated uses actively assessed to determine classification attainment status are: Aquatic Life Support, Fish Consumption, Recreation In/On, and Drinking Water Supply (after disinfection/treatment). Table 4-21 summarizes how lake attainment status relates to specific Listing Categories used in the 2010 report.

Table 4-21 Summary of Listing Categories and Subcategories used in the 2010 Assessment of Maine lakes.

Listing Category	Category Summary
1	Attaining all standards
2	Attaining some standards; assumed to attain others
3	Attaining some standards; Insufficient / no data / info to determine if standard(s) are met for use that may be impaired
4a	TMDL complete
4b	Expected to meet standards
4c	Not impaired by a pollutant
5a	TMDL needed
5c	Regional TMDL needed due to airborne Hg deposition

Brief summaries of lakes by Listing Category follow. Lake specific changes are included in Chapter 8, "Summary of 2010 Category Changes" as well as in the appendix.

Category 1: Lake waters attaining all designated uses and water quality standards, and no use is threatened.

For the purposes of this assessment, lakes having no population in their direct watersheds have been listed in 'Category 1, Attaining all standards', with the exception of four lakes which are listed in category 4c, in non-attainment of the Aquatic Life Use (habitat) due to non-pollutant (hydrologic modification). The number of lakes listed in Category 1 is 2,857, totaling 295,443 acres. Waters are summarized by the 10-digit HUC (Hydrologic Unit Code) within which they are located (Appendix

III, Category 1). No lakes have moved in or out of this Listing Category since the 2008 reporting cycle.

Category 2: Lake waters attaining some of the designated use(s), no use is threatened, and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained).

The Department is highly confident that these waters attain the following designated uses: drinking water (after disinfection / treatment), recreation in/on the water, fishing (excluding fish consumption), and as habitat for fish and other aquatic life. Category 2 contains 2,890 lakes or 606,236 lake acres. Waters are summarized by the 10-digit HUC within which they are located (Appendix III, Category 2). Nine lakes (9,762 acres were moved from Categories 3, 4a and 5a into this category because additional data or information indicates that they are in attainment of some designated uses and presumed to be in attainment of the others.

Category 3: Lake waters with insufficient data and information to determine if designated uses are attained (with presumption that one or more uses may be impaired).

There is currently 1 lake covering 410 acres listed in Category 3 (Appendix III, Category 3) designated as 'Significant'. This lake has a deteriorating trophic state and may or may not be in attainment of 'aquatic life' and/or 'primary contact' criteria. This lake (Cochnewagon) was treated with alum nearly 25 years ago. The treatment improved water quality for about one decade; data collected over the last 15 years suggest that the lake has returned to its former trophic state. A sediment core has been obtained to determine the historic trophic state so the Department can better establish a trophic target. Eight of these lakes (9,128 acres) were moved to Category 2 and one lake (8,239 acres) was moved to Category 5A during this assessment. No lakes were moved into this Category in 2010.

Category 4: Lake waters that are impaired or threatened for one or more designated uses, but do not require development of a TMDL.

There are currently 29 lakes covering 76,080 acres listed in Category 4. These lakes fall into two subcategories: waters on which TMDLs have been completed (4A) and waters with impairments not caused by a pollutant (4C). Category 4A contains 24 lakes totaling 27,116 acres. This includes the addition of 2 lakes (3,658 acres) for which TMDL studies have been completed since the 2008 report. Completed TMDL documents for these waters are posted on the DEP website at the following URL: www.maine.gov/dep/blwq/docmonitoring/tmdl2.htm

Five lakes (48,964 acres) continue to be listed in Category 4C, lake water impairment not caused by a pollutant. All of these lakes are in non-attainment of aquatic life (habitat) standards due to hydromodification (drawdown).

Note: For the 2008 and 2010 cycles the 4A category now includes all freshwaters in Maine that were listed in previous cycles in a narrative Category 5-C "Impairment caused by atmospheric deposition were of mercury" due to the Statewide fish consumption advisory due to mercury. On December 20, 2007 US EPA approved a Regional Mercury TMDL.

Category 5: Lake waters that are impaired or threatened for one or more designated uses by a pollutant(s), TMDL development is required.

Three sub categories have been designated under Category 5; however lakes have been listed in only one.

Category 5A includes 3 lakes (8,783 acres) which are designated as 'Significant' (lakes impaired by pollutants, and require a TMDL to be conducted by the State of Maine). This total reflects the movement of 2 lakes (3,114 acres) to Category 4A. Appendix III, Category 5A indicates target dates for TMDL completions. Table 4-22 summarizes individual use support for the lakes in Category 5A.

Table 4-22 Individual Use Support Summary for Lake (acres) in Category 5a (TMDL Needed)

Designated Use	Non-Attainment	Attainment
Drinking Water Supply (after disinfection/treatment)	0	8,239
Aquatic Life use Support	8,783	0
Fishing (other than fish consumption covered in Cat. 4a)	0	8,239
Recreation In / On	5440	8,239
Navigation, Hydropower, Agriculture & Industrial Supply	0	8,239

Causes or Stressors resulting in non-attainment and Sources are summarized for all impaired waters in Tables 4-10 and 4-14 in Section 4-3 of this document. Tables 4-11 and 4-15 provide Causes / Sources organized by Listing Category.

For more information on Lake TMDL projects:

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Related Website: www.maine.gov/dep/blwq/docmonitoring/tmdl2.htm

VARIOUS TABLES AND ADDITIONAL UPDATES REGARDING MAINE LAKES

Section 314 requires a summary of trophic classification for Maine's 'Significant' lakes. This summary is compiled using the numerical criteria in Table 4-4. Table 4-23 summarizes the trophic distribution of Maine Lakes.

Table 4-23 Trophic Status of Maine Lakes

Trophic Category	Significant Lakes		All Lakes	
	Number	Acres	Number	Acres
Assessed	1,743	927,330	1,923	929,966
Dystrophic	2	34	2	34
Eutrophic	593	150,955	670	151,477
Mesotrophic	1,023	664,841	1,122	666,908

Oligotrophic	125	111,500	129	111,547
Unknown	570	31,647	3,857	56,986

Table 4-24 summarizes techniques used to rehabilitate lakes.

Table 4-24 Lake Rehabilitation Technique Summary (Section 319 Projects)

Rehabilitation Technique
Watershed Treatments BMPs associated with Public & Private Road Management BMPs associated with Shoreline Erosion Control / Bank Stabilization
Other Lake Protection/Restoration Controls Public Information/Education Program/Activities

Section 314 requires reporting on Acid Effects on lakes. Maine is fortunate to be located a considerable distance from many sources of atmospheric deposition that result in acidification of surface waters. Some smaller headwater and seepage lakes having naturally low pH are likely slightly more acidic due to such atmospheric inputs but not to levels that have conclusively altered the biota or caused Maine to consider mitigation activities.

Recovery from acidic deposition is apparent in lakes in the northeast, including the high elevation lakes of Maine (HELM). Regionally, approximately half of the acidic lakes in the 1980s are now non-acidic (pH > 5). In the High Elevation lakes, only four of the 12 lakes acidic in the 1980s were acidic in 2009. An important response to decreased acid rain has been an increase in the amount of dissolved organic carbon (DOC) in recovering surface waters across the northern hemisphere. This result has led to a shift in the source of acidity from inorganic sources (acid rain), to natural (DOC) sources. This shift in acidity is responsible for the relatively unchanged pH status of acid sensitive waters despite significant decreases in inputs of acid rain to the systems. While recovery in ANC appears to still be incomplete, recovery in pH is much more complete. This conclusion is consistent with ample paleolimnological evidence. Because data collected after April of 2009 is not included in this report, the following table has yet to be updated.

Table 4-25 provides a summary of acidity assessment efforts in Maine lakes and Table 4-26 summarizes source estimates for high acidity in Maine lakes.

Table 4-25 Acid Effects on Maine Lakes

	Number of Lakes *	Acreage of Lakes *	%Acreage *
Assessed for Acidity	~1,150	~797,000	~80%
Impacted by High Acidity	~65	~750	~0.08%
Vulnerable to Acidity	Unknown	Unknown	Unknown

*Totals include all lakes in the state, not only 'significant' lakes

Table 4-26 General Sources of Acidity in Acidic Maine Lakes

Source of Acidity	Percent of Acidic Lakes	Percent of All Maine Lakes*
Acid Deposition	60%	0.62%
Natural Sources	30%	0.31%
Combination of Acid Deposition and Natural Sources	10%	0.1%
Total	**100%**	**1.3%**

* Includes all lakes in the state, not only 'significant' lakes

INVASIVE AQUATIC PLANTS

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Related Website: www.maine.gov/dep/blwq/topic/invasives/index.htm

The Department's formal program to prevent spread and control existing infestations of invasive aquatic plants was in its eighth and ninth years of existence in 2008 and 2009, respectively. The Lake and River Protection Sticker, the funding mechanism for the Department's work on invasive aquatic species, was merged in 2008 with the freshwater watercraft registration to reduce administrative costs and therefore increase funds to lake groups conducting invasive plant prevention and control projects. Any boater with out-of-state registration is still required to purchase the Lake and River Protection sticker to affix next to their out-of-state registration before launching on freshwater.

As of December 2009, 31 inland bodies of water are infested with invasive aquatic plants. Of bodies of water, 26 are infested with variable milfoil (*Myriophyllum heterophyllum*), two with Eurasian water milfoil (*Myriophyllum spicatum*), two with hydrilla (*Hydrilla verticillata*), and one with curly-leaf pondweed (*Potamogeton crispus*).

New infestations since the 2008 report include Eurasian water milfoil in Salmon Lake in Belgrade and hydrilla in Damariscotta Lake in Jefferson, the second known Maine infestation for each species. Each infestation is confined to a relatively small portion of the lake and the Department is working to prevent spread and manage the respective infestations. The Damariscotta infestation was the first in the state to be discovered by a volunteer trained by Maine Volunteer Lake Monitoring Program's Invasive Plant Patrol Program which is funded by revenues from the Lake and River Protection Sticker, required on all motorized watercraft launched on Maine inland water.

As in 2007, nearly 50,000 Courtesy Boat Inspections were conducted in 2008 (2009 inspection data are being processed as of December 2009). Inspectors recorded at least 114 "saves" in 2008, instances where an inspector found and removed a confirmed invasive aquatic plant from a boat before entering or after leaving the water. Maine's statewide Courtesy Boat Inspection Program is managed by Lakes Environmental Association (LEA), a regional watershed protection organization based Bridgton, under a contract with the Department. Training of boat Inspectors is done jointly by LEA and the statewide Maine Congress of Lake Associations.

The Department offers annual grants to local groups coordinating boat inspection programs and removing invasive aquatic plants from lakes and ponds. The source of funding for these grants is revenue from the Lake and River Protection Sticker. The grant program is administered by LEA through the aforementioned contract. Cash and in-kind match from local lake groups and municipalities exceeds the amount granted by the Department.

The diatom *Didymosphenia geminata* (didymo) still has not been documented in Maine as of December 2009. The Department and Maine Department of Inland Fisheries and Wildlife produced and distributed signs warning of the didymo threat and advising anglers how to prevent spread and the Department has been distributing information about preventing spread through much of our outreach materials and events. Both Departments collaborated with Fly Fishing in Maine to erect three pilot self-service angler equipment wash stations in Maine in 2009.

ESTUARIES / OCEAN

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Related Website: www.maine.gov/dep/blwq/coastal.htm

BACKGROUND

Maine has three classes for the management of estuarine and marine waters: SA, SB, and SC. SA waters are managed for high water quality with limited human interference allowed. No direct discharges of pollutants, including those from finfish aquaculture, are allowed in SA waters. SB waters are general-purpose waters and are managed to attain good quality water. Well-treated discharges of pollutants that have ample dilution are allowed. SC waters are managed for the lowest water quality, but they must be fishable and swimmable as well as maintain the structure and function of the biological community. Well-treated discharges of pollutants are allowed in SC waters. Each class is managed for designated uses and each has dissolved oxygen, bacteria and aquatic life standards (see Table 4-27 below).

Table 4-27 Maine's Estuarine and Coastal Waters Classification Standards

Class	Designated Use	Dissolved Oxygen	Bacteria	Aquatic Life
SA	Habitat for fish and estuarine and marine life Recreation in and on the water Fishing Aquaculture (excludes finfish) Propagation and harvesting shellfish Navigation	As naturally occurs	As naturally occurs	As naturally occurs
SB	Habitat for fish and estuarine and marine life Recreation in and on the water Fishing Aquaculture Propagation and harvesting shellfish Navigation Industrial process and cooling water supply Hydroelectric power generation	Not less than 85% of saturation	Enterococcus of human and domestic animal origin not higher than geometric mean 8/100ml or instantaneous of 54/100ml from 5/15 to 9/30 Not exceed criteria of National Shellfish Sanitation Program for shellfish harvesting	Support all indigenous estuarine and marine species Discharge not to cause closure of shellfish beds
SC	Habitat for fish and estuarine and marine life Recreation in and on the water Fishing	Not less than 70% of saturation	Enterococcus of human and domestic animal origin not higher than geometric mean	Maintain structure and function of the

	Aquaculture Propagation and restricted shellfish harvesting Navigation Industrial process and cooling water supply Hydroelectric power generation		14/100ml or instantaneous of 94/100ml from 5/15 to 9/30 Not exceed criteria of National Shellfish Sanitation Program for restricted shellfish harvesting	resident biological community Support all indigenous fish species

Maine law requires that once every three years, the Department review the classification system and make recommendations to the Board of Environmental Protection for any needed changes in the water quality classifications assigned to specific waterbodies. The last triennial review of water quality standards and classifications was completed in 2009. The Department conducted statewide workshops and direct mail and telephone outreach to obtain public input and to solicit proposals for consideration to change the management classification assigned to specific waterbodies. The Board held hearings that resulted in recommendations to the Maine State Legislature for the upgrade, from Class SB to Class SA, of one marine waterbody (The Basin in Phippsburg). The current distribution of waters assigned to three marine water quality classes is summarized in Table 4-28:

Table 4-28 Area and Percentage of Marine and Estuarine Waters in Each Classification

Class	Square Miles	Percentage
SA	218	7.66 %
SB	2,599	91.32 %
SC	29	1.02 %
Total	2,846	100.00 %

This chapter provides an assessment of the degree to which water quality supports the designated use defined by the State of Maine statutes for the protection of aquatic life. Designated uses in this chapter and in Chapter 7 (Public Health – Related Assessments) are divided into two broad use categories: protection of human health and protection of aquatic life. The protection of these uses will result in the protection of other uses (e.g. navigation, industrial process and cooling supply). Applicable monitoring results and attainment assessments are summarized within each of these two categories in this chapter as well as in Chapter 7.

Sources of Marine Monitoring Data

The Maine Department of Environmental Protection (DEP), the National Coastal Assessment/University of Southern Maine/DEP, the BioDiversity Research Institute (BRI), the Department of Marine Resources (DMR), the Maine Healthy Beaches Program, the Casco Bay Estuary Partnership (CBEP), and a variety of volunteer monitoring groups such as the Friends of Casco Bay and Spruce Creek Association monitor Maine's coastal waters.

DEP monitors toxic contaminants in tissues and assesses water quality using data collected by DEP and other organizations. DEP also participates in the Gulf of Maine Council's Gulfwatch Project that surveys toxic contamination in mussel tissue in the Gulf of Maine. In 2005 and 2006, DEP monitored lobsters along the Maine coast for metal contamination under the EPA's National Coastal Program. BRI monitored toxic contaminants in the eggs of three species of birds collected in Casco Bay in 2008.

DMR monitors for indicators of human pathogens (e.g., fecal coliforms) and biotoxins (e.g., Paralytic Shellfish Poisoning). The purpose of DMR monitoring is to protect human health by managing shellfish harvest areas (see Chapter 7 of this report).

During the current reporting cycle, the Maine State Planning Office Coastal Program and University of Maine Cooperative Extension/Sea Grant were responsible for managing and coordinating the Maine Healthy Beaches Program in partnership with numerous local beach managers and volunteers (see Chapter 7 of this report). The Healthy Beaches Program was transferred from the Maine State Planning Office to DEP on January 1, 2009.

The Casco Bay Estuary Partnership (CBEP), funded by EPA's National Estuary Program, monitors and also supports other monitoring efforts in the Bay, through Friends of Casco Bay (FOCB) and other entities and coordinates the National Coastal Assessment for the entire Maine coast with the assistance of Maine DEP. The CBEP did not submit new data for inclusion in this report. The 2010 State of the Bay report, which follows-up on the 2005 report, will be available in late May 2010 at the CBEP website: http://www.cascobay.usm.maine.edu/ .

The GoMOOS (Gulf of Maine Ocean Observation System) program, which is now part of the GMRI (Gulf of Maine Research Institute), provides, compiles and analyses data on the Gulf of Maine that is collected from buoys, satellites and radar. Since most of the buoys are located in offshore waters, the data were not used for this assessment. Nearshore buoys are maintained and operated by Bowdoin College in Harpswell and by the University of New England in Saco Bay. GoMOOS also had a buoy at the mouth of the New Meadows estuary but at present it is not in operation. The buoy off Casco Bay is not in service at this time. The data are useful in determining signals coming from the Gulf rather than land. DEP would benefit from the placement of more nearshore buoys in order to better monitor and understand nearshore waters and land/water interactions, especially related to nutrients.

Results from these various monitoring sources provide the basis for determining attainment of classification and designated uses. One of the biggest challenges ahead is to get all the data that is collected into a central location and into useable, universally-translatable formats. The DEP is working on this at present.

SUMMARY OF STATEWIDE STATUS

This Integrated Assessment report requires the assignment of each Assessment Unit into one of five categories (see Methodology). Specific waters are determined to be impaired if they do not attain one or more of the uses assigned by their classification (as determined by the criteria assigned to that classification).

Over the past two years, the Maine DEP has been engaged with DMR in revising the way that water quality data is reported, including the development of Assessment Units (similar to what is used in the ADB for freshwaters), and in digitizing maps; these new assessment units will be used in the 2012 reporting cycle and will make reporting more consistent and easier to track. Overall use attainment summary for 2010 is provided below and in Table 4-8.

Category 1: The 2010 assessment assigns no estuarine and marine waters to Category 1 because there were no waters where all Classification Standards were monitored adequately in a waterbody segment to determine if all standards were being met.

Category 2: The 2010 assessment assigns 2,685.17 (94.35%) square miles of estuarine and marine waters to Category 2 (fully attaining*).

Category 3: The 2010 assessment assigns 6.619702 square miles (0.22%) of estuarine and marine waters to Category 3 (impairment risk; attainment undetermined due to insufficient information*). Category 3 has been increased by 2.19 miles with the listing of the Piscataqua River estuary for potential eelgrass impairment and the delisting (from coast-wide Category 5D) of the upper tidal section of the Penobscot River for PCB contamination of lobster tomalley..

Category 4: Category 4 waters are impaired for one or more uses* but do not require the development of a Total Maximum Daily Load (TMDL) either because a TMDL is already completed, pollutant of concern is otherwise controlled, or impairment is due to a nonpollutant. Category 4 has been administratively increased from 0 to 153.7 square miles in 2010 because all Category 5-B-1 estuarine and marine waters in Maine (waters impaired by bacteria only) were moved from Category 5 B-1 to Category 4-A (TMDL for impaired use completed) due to USEPA approval, on September 28, 2009, of a Statewide Bacteria TMDL. Furthermore, a number of assessment units without segment sizes were moved from category 5-B-2 (waters impaired by bacteria from Combined Sewer Overflows) to Category 4-A because of the same statewide bacteria TMDL. Categories 4-B-1 and 4-C remains unchanged for estuarine and marine waters.

Category 5: The 2010 assessment assigns 2.67 (0.09%) square miles of estuarine or marine waters to Category 5 (impaired for one or more uses*). This Integrated Water Quality Monitoring and Assessment Report does not consider the statewide lobster tomalley consumption advisory that is in place (for all estuarine waters capable of supporting lobster) due to the potential presence of PCBs and dioxin*. Category 5 impaired waters require the development of a Total Maximum Daily Load (TMDL) determination. Waters are placed in one of four subcategories: 5-A for waters impaired by pollutants, 5-B-1 for waters impaired only by bacteria, 5-B-2 for waters affected by bacteria from Combined Sewer Overflows (CSO), 5-D for waters impaired by the residuals of “legacy” activities. Bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shellfish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (i.e., waters of high enough salinity for propagation of shellfish. Category 5-A remains unchanged for estuarine and marine waters at 2.67 square (0.09 %) miles. All previous listings in categories 5-B-1 and 5-B-2 have been moved to Category 4-A due to the completion of a statewide bacteria TMDL. Category 5-D remains unchanged at 2,846 square miles (coast-wide)*.

As with any assessment of this kind, the identification of impaired waters cannot be considered complete but rather is a reflection of the findings (to date) relative to the level of effort expended by the agency and other cooperating contributors.

* All Maine estuarine and marine waters capable of supporting lobster, assigned to any Integrated Report categories have an advisory for the consumption of shellfish (lobster tomalley) due to the presence of PCBs and dioxins. The advisory is based on probability data that shellfish (lobster tomalley) inhabiting estuarine or marine waters may exceed the advisory action level for these substances.

CAUSES AND SOURCES OF IMPAIRMENT IN CATEGORIES 4 AND 5

Cause and stress type information is provided in Table 4-12, while information on sources of impairment is provided in Table 4-16.

The general category of "toxics" is by far the cause/stressor that impairs the largest area of marine and estuarine waters in the State. In fact, the "toxics" subcategories of PCBs and dioxins impaired all 2,846 square miles of marine/estuarine waters that were assessed in 2010 due to the statewide lobster tomalley consumption advisory described in the previous section. By comparison, each of the other remaining general causes is responsible for impairing areas of a few square miles or less.

Improved management of bacterial sources of impairment that cause shellfish closures should result from development and approval of the Statewide bacteria Total Maximum Daily Load. Bacterial contamination was the listed cause of impairment for approximately 154 square miles of estuarine waters.

Industrial point sources have been the largest contributing source category for dioxin. Recently there has been no measurable difference in dioxin concentrations in fish above and below each mill. Though small, unmeasurable discharges still may be occurring these are not significant with respect to bioaccumulation in fish compared to the MCDC's Fish Tissue Action Level. Some industrial loads that are treated through municipal point sources are additional sources although pretreatment is required in most cases. These industrial sources account for most of the shellfish (lobster tomalley) consumption listed waters where dioxins remain the primary contaminant.

TOXICS

The removal of combined sewer overflows over the past several years has improved environmental quality in some of Maine's harbors. However, many locations, for example Kittery, Portland, Boothbay Harbor, Rockland and Searsport, still have toxic pollution problems from past activities. These activities include papermaking, shipbuilding, energy production (e.g., gasworks), tanning, and metal working. Toxics derived from these industries include dioxin, pesticides such as DDT, metals, and PCBs. Landfills were also often located on the coast (e.g., Eastern Promenade in Portland) and continue to be sources of toxic pollutants. More recent elevations in toxic pollution, especially from PAHs (polycyclic aromatic hydrocarbons) and metals (e.g., lead, copper, zinc), are related to increases in urban development and boat related activities. Direct untreated discharges through combined sewer overflows still deliver toxic pollutants and bacteria to Maine's coastal waters during and after storms. Some toxic pollutants (e.g., PAHs, mercury) are deposited from the air.

SURFACE WATER AMBIENT TOXICS (SWAT) MONITORING PROGRAM

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Related Website with annual reports:

http://www.state.me.us/dep/blwq/docmonitoring/swat/index.htm

A two-year (2005-2006) cooperative study funded by the federal Environmental Protection Agency (EPA) under the National Coastal Assessment Program and SWAT examined contaminants (including mercury, cadmium, and lead) in lobster tomalley along the Maine coast. Elevated mercury levels in tomalley appear to persist in Penobscot Bay. Lead levels in tomalley appear to be decreasing. See the 2007 SWAT report for more information.

In 2007 and 2008, blue mussel (*Mytilus edulis*) tissue was collected from 26 sites (13 per year) along the Maine coast and analyzed for metals. Elevated lead levels were detected at ten sites, but the lead levels appear stable or reduced when compared to past data. Elevated mercury levels were detected at four sites. Comparison to historic mercury data is difficult due to data quality issues with older data. Additional sampling should be undertaken to provide trend analyses for all metals of interest. See the 2008 SWAT report for more information.

An analysis of polychlorinated biphenyls (PCBs) in five bluefish (*Pomatomus saltatrix*) collected in Saco Bay near Old Orchard Beach in 2008 showed that the concentration was well above Maine CDC's Fish Tissue Action Level of 11 ng/g. The concentrations were also similar to previous data from Saco Bay and all recent data since 2001 in Maine. See the 2008 SWAT report for more information.

In 2008, the SWAT program funded the BioDiversity Research Institute (BRI) and collaborators to expand upon the 2007 broad-based contaminant study on Maine birds, measuring both historical and emerging chemicals. Out of the 23 species studied in the first year, it was determined that three required additional study in 2008: common loon (*Gavia immer*), peregrine falcon (*Falco peregrines*), and piping plover (*Charadrius melodus*). These species were selected because loons act as bioindicators of lacustrine habitat throughout Maine, and peregrines and plovers are potentially at risk of bioaccumulating contaminants at levels above adverse effects thresholds. The compounds analyzed in nine egg composites were mercury (Hg), polychlorinated biphenyls (PCBs, including coplanar congeners), polybrominated diphenyl ethers (PBDEs), perfluorinated compounds (PFCs), and organochlorine pesticides (OCs). Preliminary findings are:

- Hg, PCBs, PBDEs, PFCs, and OCs continue to be detected in birds living in diverse habitats across Maine; PFCs were detected in all samples.
- Hg was detected in loons and peregrine falcons at levels above adverse effects thresholds.
- PFOS (perfluorooctane sulfonate, used as a fabric protector and in paints and cleaning agents) in common loons was detected at levels above adverse effects thresholds suggested for chickens. Androscoggin Lake had the highest level.
- The peregrine falcon sample from Mount Desert Island had the highest contaminant load, potentially from feeding on terns.
- Piping plovers continue to have contaminant levels higher than we expected for an invertivore, an animal that feeds on insects and other invertebrates.
- The loon samples did not show a specific spatial pattern, suggesting that within the lacustrine ecosystem, contaminant levels may be dictated by point sources, watershed characteristics, and/or food web dynamics.
- Like the 2007 results, PCB, PBDE, PFC, and OC levels are positively correlated, indicating that birds with high levels of one compound tend to have higher levels of the others. PBDEs and PCBs have one of the strongest relationships.

- DecaBDE is found in all three species, but not within each sample.

See the 2008 SWAT report for more information. The full report can be accessed at: http://www.briloon.org/contaminants/documents/Goodale_contaminants_2009.pdf

NUTRIENTS

A principal indicator of nutrient enrichment in Maine's coastal waters is green macroalgae, *Ulva* (formerly known as *Enteromorpha*) *intestinales* that looks somewhat like green spaghetti. If temperatures, sunlight levels and nutrients (nitrogen) are sufficiently high, green algae proliferates, especially in more protected areas such as on mudflats, around piers and docks, and in protected harbors. This alga reproduces by releasing gametes into the water, which when present in sufficient concentrations may create conditions resembling a phytoplankton bloom. Green algae has become more apparent and more widespread in the past few years and its density and distribution may be increasing. It has been present in some extremely protected areas for many years. In 2009, green algae was not as prominent because of the cool summer with limited sunlight, which may have limited the growth of the algae.

In Maine between Kittery and Bar Harbor there is now evidence of nutrient enrichment. From Bar Harbor east to the Eastport area, the principal source of nitrogen is offshore; this nitrogen from outside the Gulf of Maine promotes green algae growth on some of the more protected flats in Cobscook Bay near Eastport. Nitrogen is distributed down the coast by the Maine coastal current which usually turns offshore in the waters off Penobscot Bay. However, during certain weather conditions (e.g., northeast winds), the current may extend further down the coast. "Red Tide" is also carried in this current; Red Tide is discussed in Chapter 7 under Toxic Algae. A survey of the extent of *Ulva* along the Maine coast will be conducted in 2010.

In 2008, the Maine DEP provided a report to the Maine Legislature on the development of marine and estuarine nutrient criteria.

http://www.maine.gov/dep/blwq/report/2008/nutrient_criteria_report_2008.pdf

That report incorporates data from numerous sources including the Friends of Casco Bay, the National Coastal Assessment, and other EPA data (Gibson 2004, 2005) as well as other studies of sources of nutrients. Since that report, additional data has been collected with the assistance of EPA Region I. The Department has set a target date of 2012 to develop draft criteria.

PROTECTION OF MARINE LIFE (DESIGNATED USE: HABITAT FOR FISH AND ESTUARINE / MARINE LIFE)

ATTAINMENT OF DISSOLVED OXYGEN STANDARDS

Three water body segments are listed as impaired waters (three in Category 5-A and one in Category 4) because they do not attain state standards for dissolved oxygen. The reasons for non-attainment are varied and include natural factors such as benthic respiration and physical circulation factors, as well as potential loadings from point and nonpoint sources. The draft Royal River Waste Load Allocation Study recommends delisting the estuary for dissolved oxygen. The estuary will remain in Category 5 because of high bacteria counts and closure of the shellfishery. The draft Mousam River Waste Load Study indicates that the majority of oxygen loss is due to benthic respiration and circulation factors and that the Kennebunk treatment facility has only a very marginal effect. Upgrades are occurring at that facility and the estuary will be reevaluated after those occur. The upper New Meadows estuary and "Lake" (estuarine salinity) does not meet dissolved oxygen standards. The presumed cause is the partial impoundment on Old Route 1 at the Brunswick-West Bath town line. A modeling study is being conducted to better understand causes and determine solutions. The Piscataqua River estuary has a completed TMDL however implementation in ME and NH is incomplete.

Generally, data from various studies and volunteer monitoring show oxygen levels along the cost to be adequate to protect marine life. Some estuaries have oxygen levels that do not meet their classification criteria and MDEP has concluded that many of these instances where criteria are not attained are a result of natural processes. The Maine DEP is initiating a study in cooperation with the USEPA to assess benthic respiration in a number of high quality / least impacted estuaries to assess expected background values.

EELGRASS HABITAT

The State of New Hampshire has listed the Piscataqua River Estuary (Lower Piscataqua River, NH Assessment Units NHEST600031001-02-01 and NHEST600031001-02-02) in its 2010 Impaired Waters List (303(d)) list for Aquatic Life impairment for due to loss of eelgrass. Maine DEP has not yet completed analysis of available eelgrass data to assess whether there is a similar problem on the Maine side of the Piscataqua River estuary. Maine has not yet developed marine nutrient criteria that might be used to interpret effect of nutrients on eelgrass. For these reasons, Maine has elected to list the Piscataqua River Estuary under Category 3 with a planned monitoring date of summer 2010.

OCEAN ACIDIFICATION

Ocean acidification is a topic of mounting concern worldwide as a consequence of rising atmospheric CO_2. For the 2008 Integrated Report, and again for this 2010 report, the Center for Biodiversity has petitioned coastal states to list their coastal waters as threatened, in Category 5, due to information they have gathered indicating that marine ecosystems may already be experiencing declines in ocean pH. Maine is not listing any coastal waters due to acidification because there is no evidence that Maine waters are currently affected. Waters are listed in Category 5 as threatened when there is an expectation that impairment of a designated use is anticipated in the next listing cycle. Maine waters are not expected to show impairment of use in that timeframe. Nevertheless, Maine agrees that ocean acidification may be a significant concern for the future. The USEPA, in an agreement with the Center for Biodiversity, is taking public comment on the topic of ocean acidification and future listing of coastal waters.

The webpage with the copy of the signed Federal Register Notice re.
Ocean Acidification and the 303(d) Program is now public at:
http://www.epa.gov/owow/tmdl/oceanfrMarch_2010/

Chapter 5 Wetlands

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Related Websites: www.maine.gov/dep/blwq/wetlands/index.htm

http://www.maine.gov/dep/blwq/docmonitoring/biomonitoring/index.htm

Background

Federal Regulation

EPA Contact: Jeanne Voorhees, EPA Region I, Office of Ecosystem Protection

Tel: (617) 918-1686 email: voorhees.jeanne@SPAM-ZAPepa.gov

Related Website: (EPA) www.epa.gov/owow/wetlands/regs/

ACE Contact: Ruth Ladd, ACE New England Region, Regulatory Division

Tel: (978) 318-8818 email: ruth.m.ladd@SPAM-ZAPusace.army.mil

Related Website: (ACE) www.usace.army.mil/inet/functions/cw/cecwo/reg/index.htm

Lead Agencies: EPA Region I and the U.S. Army Corp of Engineers (ACE) – Maine Project Office

The Clean Water Act provides for wetland protection and regulation through a number of federal programs, most of which are administered by EPA. The Section 404 regulatory program is jointly administered by EPA and the U.S. Army Corps of Engineers. Key elements of the federal wetland protection framework are described in more detail in the Chapter 5 of Maine's 2006 Water Quality Assessment.

Wetlands Regulatory Program in Maine's Organized Towns

Contact: James Cassida, DEP BLWQ, Division of Land Resource Regulation (DLRR)

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Related Website: (NRPA) www.maine.gov/dep/blwq/docstand/nrpapage.htm

Maine DEP regulates wetland alterations in the organized townships under the Natural Resources Protection Act 38 M.R.S.A., Section 480-A et seq. (NRPA) and Chapter 310 Wetlands and Waterbodies Protection Rules. Additional information on the DEP wetlands regulatory program is available at the above web site.

New Initiatives:

As a result of Legislative direction, the Division was required to amend its rules relating to stream crossings, Chapter 305 Permit by Rule Standards, Section 10 Stream crossings. These rules are major substantive rules which mean that any amended rule is subject to final approval by the Legislature. The Division developed new crossing standards after reviewing other efforts across the country and the Army Corps of Engineers regulatory program. Chapter 305 amendments were provisionally adopted by the Board of Environmental Protection in December 2009 and are currently pending before the Legislature. The Legislature has the option of amending the rule, limiting its application or delaying its implementation. Final action by the Legislature is expected by June 2010.

WETLANDS REGULATORY PROGRAM IN UNORGANIZED TERRITORIES

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The Maine Land Use Regulation Commission (LURC) uses a land use planning approach to regulate wetlands in unorganized portions of the State, in accordance with the provisions of Title 12, Sections 681-689 (Use Regulation) and Chapter 10 of LURC rules (Land Use Districts and Standards). Details about LURC's wetlands regulatory program may be found in Chapter 5 of Maine's 2006 Water Quality Assessment, or by contacting Marcia Spencer-Famous.

DEVELOPMENT OF WETLAND WATER QUALITY STANDARDS

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Related Websites: (EPA)

(Wetland Water Quality) www.epa.gov/owow/wetlands/regs/quality.html

(General Water Quality Standards) www.epa.gov/ost/standards/

Background:

In Maine, wetlands are included in the definition of "Waters of the State" contained in the Protection and Improvement of Waters Act, 38 M.R.S.A. Section 361-A, and are further defined as either "fresh surface waters" or "estuarine and marine waters". As waters of the State, wetlands are subject to all pertinent provisions of the Maine Water Classification Program statute (38 M.R.S.A. Section 464 et al.) including designated uses, narrative biological criteria and the State's anti-degradation policy. Wetlands that are part of great ponds or natural lakes and ponds less than 10 acres in size are considered GPA waters. All freshwater wetlands not classified as GPA waters are classified under Sections 467 and 468 (Classification of Major River Basins and Classification of Minor Drainages) according to the drainage basin in which they occur and the classification of associated water bodies. Where not otherwise specified, wetlands assume the default classifications listed for tributaries, since virtually all wetlands in the State drain to other water bodies via surface and/or ground water.

Coastal wetlands are classified according to the provisions of 38 M.R.S.A. Section 469 (Classification of Estuarine and Marine Waters).

For the purpose of determining attainment of designated uses for the current Integrated Report, DEP is considering only aquatic life use at this time. The following is a summary of pertinent narrative aquatic life criteria:

Class GPA waters, including wetlands associated with great ponds and natural ponds and lakes less than 10 acres in size:

> Habitat for fish and aquatic life must be characterized as natural. Must have stable or decreasing trophic state, subject to natural fluctuations, and be free of culturally induced algal blooms which impair use and enjoyment.

Fresh surface waters not classified GPA, including wetlands associated with rivers and streams:

> Class AA: Habitat for fish and aquatic life must be characterized as free-flowing and natural. Aquatic life shall be as naturally occurs.

> Class A: Habitat for fish and aquatic life must be characterized as natural. Aquatic life shall be as naturally occurs.

> Class B: Habitat for fish and aquatic life must be characterized as unimpaired. Must support all indigenous aquatic species without detrimental changes in the resident biological community.

> Class C: Some changes to aquatic life allowed. Must support all indigenous fish species. Structure and function of the resident biological community must be maintained.

The Maine DEP Biomonitoring Program assesses the condition of rivers, streams and freshwater wetlands by evaluating resident aquatic macroinvertebrate and algal communities. River and stream biomonitoring data have been used successfully for many years to inform a variety of programs, owing to the existence of carefully developed tiered aquatic life numeric biocriteria based on sound statistical modeling. Examples of programmatic applications of biological information include ambient monitoring and trend analysis, evaluation of water quality classification attainment, impact assessment from point and non-point sources, land use activities, toxic contaminants and hydropower projects, and providing data for TMDL development.

Use of wetland biomonitoring data for regulatory and management decisions has been limited in comparison to river and stream data, however in recent years requests to the Biomonitoring Program for assessments of potential wetland water quality impacts from regulated activities have increased. Although Maine has narrative biological criteria for all surface waters, DEP staff relies heavily on best professional judgment when interpreting the criteria for wetlands. The Biomonitoring Program is developing wetland-specific biological criteria based on tiered aquatic life uses to provide other programs with consistent assessments of wetland condition and impacts from regulated activities. A standardized approach to determine wetland class attainment will allow the Department to fully integrate wetlands into its water quality monitoring program, and to fulfill federal reporting requirements under Sections 305(b) and 303(d) of the Clean Water Act.

Wetland Aquatic Macroinvertebrate Biocriteria Development

Data Collection:

The Biological Monitoring Program is currently working to develop biological criteria for wetland macroinvertebrates. Over the past 2 years, DEP biologists evaluated macroinvertebrate data collected from Maine wetlands between 2000 and 2008. Sites were targeted to encompass a gradient of human disturbance including reference (minimally disturbed) sites and severely degraded wetlands. Monitored sites were typically lacustrine or riverine fringe wetlands containing areas of emergent and/or aquatic bed vegetation. Associated physical/chemical data, water and algae samples and habitat information were collected at all sites. In addition, human disturbances observed at each site were recorded and scored in the field to identify potential environmental stressors and enable biologists to estimate the relative degree of wetland and watershed alteration. The resulting DEP Human Disturbance Score encompasses sub-categories for hydrologc and vegetative modifications in the wetland and surrounding buffer, evidence of chemical contaminants, relative degree of impervious surface in the watershed, and other observed potential non-point sources of pollutuion. The DEP Human Disturbance Ranking Form and all other field and laboratory methods are available on the DEP Biological Monitoring Program web site at http://www.maine.gov/dep/blwq/docmonitoring/biomonitoring/material.htm.

Reference Site Criteria and Ordination:

Fifty-one minimally-disturbed reference sites were selected using the following objective criteria:

- Watershed land use 95% or greater “natural” (ie forest or wetland) based on GIS analysis;
- Total DEP Human Disturbance Score 10 or less, with no single disturbance category greater than 5; and
- Specific conductance less than 100 uS/cm (only 8 of the 51 sites exceeded 50 uS/cm).

In addition, candidate reference sites were screened for atypical habitat characteristics and potential causes of impairment observed in the field that might warrant exclusion from the reference set. This reference set was used in subsequent statistical analyses to develop biological metrics, impairment thresholds and other tools described below to inform DEP biologists' expert judgment water quality class attainment determinations.

Ordination of macroinvertebrate relative abundance data for reference sites was performed using non-metric multidimensional scaling to identify potential patterns in species composition due to wetland types sampled (lacustrine or riverine fringe) or ecoregions. Results indicated no significant differences in macroinvertebrate community composition among ecoregions or between wetlands associated with lakes and ponds vs. rivers and streams for the wetland types sampled.

Biological Metric Development:

Over 100 macroinvertebrate community attributes were tested as potential metrics of wetland condition. Quantile plots of reference and non-reference data sets were compared to determine if cumulative distributions differed significantly. For attributes expected to increase with human disturbance, the 95th percentile of reference data was generally used to define the upper limit of the range of natural conditions. The 5th percentile of reference data was used to define the lower limit of natural conditions for attributes that decreased with human disturbance. In a few cases, biologists adjusted the upper or lower limit based on individual patterns observed in reference distributions. Biologists also examined scatter plots of macroinvertebrate attributes in relation to data representing various human disturbance gradients including total percent watershed and buffer alteration, percent watershed imperviousness, specific conductance and the DEP Human Disturbance Score to identify portential metrics and biological thresholds.

Taxa Optima, Tolerance Values and Maine Tolerance Index:

Environmental stressor variables and macroinvertebrate data were used to calculate weighted average taxa "optima". Optima values indicate preferred environmental conditions for individual taxa, and predict whether a species is typically found in high quality or degraded waters. Taxa optima values were calculated for specific conductance, total phosphorus, percent impervious surface and total human altered area within a 1000 meter buffer, and the DEP Human Disturbance Score. Optima values for these 5 environmental variables were used to calculate individual taxa tolerance values. A community level weighted-average index was then calculated from individual taxa tolerance values. The resulting Maine Tolerance Index (MTI) is similar in concept to the Hilsenhoff Biotic Index for aquatic macroinvertebrates commonly used in stream bioassessments, but uses only Maine data.

Environmental Inference Models:

Macroinvertebrate data and taxa optima values were used to build statistical models that predict individual stressor levels and infer site-specific environmental conditions at sampled locations. The inference models will be used to help diagnose stressors and determine the relative impact of multiple stressors. Inference models were calculated for specific conductance, total phosphorus, percent impervious surface and total human altered area within a 1000 meter buffer, and the DEP Human Disturbance Score.

Wetland Biological Condition Gradient Model:

In addition to wetland class attainment determinations, the Biomonitoring Program developed a wetland Biological Condition Gradient (BCG) model[2] to provide a common scale for comparing biological condition among different aquatic resource types. The BCG model describes how 10 ecological attributes change in response to increasing levels of environmental stressors. It encompasses taxonomic composition and tolerance, non-native taxa, organism condition, ecosystem functions, scale dependent factors, spatial/temporal extent of impacts and ecosystem connectance. The BCG is divided into 6 condition tiers, ranging from “natural” (Tier 1) to severely altered conditions (Tier 6).

***A priori* Class Attainment and BCG Model Determinations:**

DEP biologists evaluated 201 wetland macroinvertebrate samples and assigned Maine water quality attained class using narrative biological criteria as guidance. Narrative desciptions in the Biological Condition Gradient model were also used to assign a BCG tier for each site. Supporting data to inform this process included macroinvertebrate taxa lists, metrics, impairment thresholds, individual tolerance values, the Maine Tolerance Index, and environmental inference model results. Initial class and BCG tier attainment determinations were made independently by each biologist, and the rationale for attainment decisions was documented. This process was conducted without knowledge of site locations or physical/chemical data to allow for an objective evaluation of biological condition. Once all individual determinations were made, a consensus process was used to determine the attained class prior to revealing the site locations if results varied among the team members. Consensus results were then cross checked with site locations, field notes and physical/chemical data to verify that biologists’ attainment decisions made sense based on all available data.

DEP will use these data and associated expert judgment class assignments as a baseline to develop and calibrate a statistical model to predict the attained water quality class of new wetland samples. This process is similar to those used for stream macroinvertebrates and stream algae, and will include extensive peer-review during development. When completed, DEP plans to incorporate the predictive model into the state’s water quality standards and criteria program.

INTEGRITY OF WETLAND RESOURCES

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Related Website:
http://www.maine.gov/dep/blwq/docmonitoring/biomonitoring/index.htm

[2] Susan P. Davies and Susan K. Jackson, Ecological Applications, 16(4), 2006, pp. 1251-1266.

Wetland Biological Monitoring and Assessment

Wetland biological monitoring and assessment are performed by DEP's Biological Monitoring Program in the Division of Environmental Assessment. Wetland biomonitoring is coordinated with the State's river and stream biomonitoring program using a 5-year rotating basin schedule. DEP conducts sampling for aquatic macroinvertebrates, epiphytic algae and phytoplankton. Associated physical and chemical data are obtained through field measurements and analysis of water samples. Habitat descriptions, Cowardin classification, hydrogeomorphic setting, substrate, and dominant plant species/community type are also documented. In addition, the DEP Biomonitoring Program uses a Human Disturbance Score as part of a rapid assessment of environmental stressors. This information is used to characterize relative levels of human disturbance, identify sources and causes of degradation, and verify that candidate reference wetlands are actually minimally-disturbed. Currently, annual monitoring is focused primarily on emergent and aquatic bed wetland habitat, including freshwater lacustrine and riverine fringe wetlands. Additional wetland types may be monitored in the future as resources allow.

Annual Monitoring for 2008-2009:
In 2008, DEP conducted biological monitoring and assessment of 28 wetlands, focusing on the Androscoggin River basin. A subset of these sites was targeted in urban watersheds where river and stream biological data were also collected. This project was part of an effort to develop tools to improve the TMDL process for waterbodies that do not attain biological criteria. Nine wetland compensatory mitigation sites were also included in monitoring for 2008 to evaluate methods to assess biological integrity of restored, created and enhanced wetlands. Both the TMDL and wetland mitigation site assessment projects were funded by EPA Region 1 through 104(b)3 grants. Data analysis for these projects is currently underway, and results are expected to be available later in 2010.

Biological monitoring in 2009 focused on the Aroostook and St. John River basins, including 20 wetland sites. DEP Biomonitoring Program staff conducted cross-training with staff from the Houlton Band of Maliseet Indians to assist with their efforts to develop a tribal wetland monitoring program. DEP also collaborated with the York County Soil and Water Conservation District to monitor a wetland adjacent to an experimental forest and document baseline conditions prior to logging. The goal is to ensure that forestry management practices used will prevent adverse impacts on wetland health.

Summary of Wetland Aquatic Life Use Attainment

For the 2010 305(b)/303(d) Integrated Water Quality Assessment Report, DEP has included provisional water quality attainment determinations for 91 wetland assessment units. Attainment decisions are based only on narrative aquatic life use criteria and were made using the expert judgment process described above. In future years, it is anticipated that DEP will refine this process and will develop and test a statistical model for use as numeric biocriteria. EPA requires that each assessment unit is placed into one of five categories (Section 4-1, Assessment Methodology).

For this provisional wetland reporting cycle, DEP did not make assessments on 83 monitored sites that biologists agreed could not yet be assigned to an EPA listing category with high confidence. Various reasons not to assess a site in this reporting cycle include: 1) Macroinvertebrate sample abundance and/or taxa richness were below minimum values required by DEP's assessment protocols, resulting in an "indeterminate" attainment call; 2) Based on expert judgment consensus, a site barely attained or just missed attaining its legislative class by a small margin, and planned revisions of the assessment methodology are likely to result in a different attainment determination; 3) The monitored site was not typical of the wetland habitat appropriate for the assessment methodology; 4) Site conditions were highly atypical during the sampling event (i.e. extreme high or low water levels); 5) There were human errors in following monitoring protocols. DEP anticipates including additional sites in the 2012 report following refinements to the assessment method and collection of additional monitoring data.

A summary of wetland attainment status follows, and also appears in Table 4-5. Information on the status of individual wetland assessment units may be found in Appendix IV: Maine Wetlands Assessment

Category 1: Wetlands attaining all designated uses and water quality standards, and no use is threatened. No wetland segments are assigned to Category 1 since present assessment only addresses attainment of aquatic life use. Other designated uses were not evaluated and the DEP is still considering appropriate criteria and methods.

Category 2: Wetlands attaining some of the designated use(s), no use is threatened, and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained). DEP determined with high confidence that these waters attain their assigned aquatic life use based on aquatic macroinvertebrates. In addition, a review of other available data including physical/chemical attributes, field-based stressor information and spatial data do not indicate potential causes of impairment. Category 2 contains 75 wetland assessment units.

Category 3: Wetlands with insufficient data and information to determine if designated uses are attained (with presumption that one or more uses may be impaired). There are 9 wetland assessment units listed in Category 3. Wetlands assigned to this category have conflicting or insufficient available data to determine attainment status with relative certainty. For the sites listed, there is significant evidence of human stressors, with the presumed likelihood they are causing impairment of one or more uses.

Category 4: Wetlands impaired or threatened for one or more designated uses, but do not require development of a TMDL. Two wetland assessment units are listed in Category 4B (Expected to Attain Standards). These sites do not currently attain their aquatic life uses based on aquatic macroinvertebrate bioassessments, but pollution control requirements are expected to result in attainment once implemented. For both of these sites, the associated river and stream assessment units are also listed under category 4B.

Category 5: Wetlands that are impaired or threatened for one or more designated uses by a pollutant(s), TMDL development is required.

Five wetland assessment units are listed in Category 5A. These sites do not currently attain aquatic life uses based on aquatic macroinvertebrate bioassessments, and there are no pollution control requirements in place that are expected to result in attainment. For all 5 sites, associated river and stream assessment units are also listed under Category 5A. DEP anticipates that the required TMDLs will address attainment issues for both wetland and river/stream assessment units.

EXTENT OF WETLAND RESOURCES

WETLAND LOSS TRACKING IN MAINE'S ORGANIZED TOWNS

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Related Website: www.maine.gov/dep/blwq/wetlands/threats.htm

Maine DEP tracks permitted wetland losses and mitigation in the organized townships through an application tracking system. When applications for any wetland alterations are logged in, the amount of fill or area to be altered is also entered by wetland type and geographical location. This system enables the Department to monitor and report on annual wetland losses. Currently, the database is in need of quality assurance checks and possible data updates or revisions. DEP plans to complete this work as soon as feasible. Wetland mitigation and DEP permitted impacts for 2008 and 2009 are summarized in Tables 5-1 and 5-2 below, however these data should be considered provisional at this time.

Table 5-1. Wetland Mitigation Totals in the Organized Townships

(Source: Maine DEP Wetland Loss Tracking System)

Area of Mitigation (Acres) – 2008 (1/1/2008-12/31/2008)					
Wetland Type	**Creation**	**Enhancement**	**Preservation**	**Restoration**	**Total**
Forested	0	1.0	19.12	0	**20.12**
Other/Mixed	0.54	0.48	90.6	0	**91.62**
Emergent	0	0	0	0	**0**
Scrub-shrub	0	0	0	0	**0**
Open water	0	0	0	0	**0**
Riverine	0	0.01	0	0	**0.01**
Wet Meadow	0	0	0	0	**0**
Upland	0	0	42.55	0	**42.55**
Intertidal (other)	0	0	0	0	**0**
Subtidal (other)	0	0	0	0	**0**
Total	**0.54**	**1.49**	**152.27**	**0**	**154.30**

Table 5-1 (continued). Wetland Mitigation Totals in the Organized Townships

Area of Mitigation (Acres) – 2009 (1/1/2009-12/31/2009)					
Wetland Type	**Creation**	**Enhancement**	**Preservation**	**Restoration**	**Total**
Forested	0	0.58	5.0	0	**5.58**
Other/Mixed	0	0	184.47	0.12	**184.59**
Emergent	0	0	0	0	**0**
Scrub-shrub	0	0.28	3.79	0	**4.07**
Open water	0	0	0	0	**0**
Riverine	0	0	12.7	0	**12.7**
Wet Meadow	0	0	0	0	**0**
Upland	0	0.28	45.3	0.34	**45.92**
Intertidal (vegetated)	0	0.01	0	0.01	**.02**
Intertidal (mudflat)	0	0	0	0.06	**.06**
Subtidal (other)	0	0	0	0	**0**
Total	**0**	**1.15**	**251.26**	**0.53**	**252.94**

Table 5-2. Permitted Wetland Impact Totals in the Organized Townships

(Source: Maine DEP Wetland Loss Tracking System)

Area Impacted (Acres) – 2008 **(1/1/2008-12/31/2008)**										
Wetland Type	**Cranberry permit**		**Full NRPA permit**		**Tier I**		**Tier II**		**Total**	
	Filled	Altered	Filled	Altered	Filled	Altered	Filled	Altered	**Filled**	**Altered**
Emergent	0	0	0	0	0.4	0	0	0	**0.4**	**0**
Forested	0	0	0.44	0.61	8.78	0.59	2.76	0.59	**11.98**	**1.79**
Great Pond	X	X	0.02	0.84	X	X	X	X	**0.02**	**0.84**
Intertidal (mudflat)	X	X	0.01	0.09	X	X	X	X	**0.01**	**0.09**
Intertidal (other)	X	X	0.34	0.49	X	X	X	X	**0.34**	**0.49**
Intertidal (vegetated)	X	X	0.03	0.06	X	X	X	X	**0.03**	**0.06**
Open Water	0	0	0.0	0	0	0	0	0	**0**	**0**
Other/Mixed	0	0	0.34	0.0	2.07	0	3.4	0	**5.81**	**0**
Peatland	0	0	0	0	0	0	0	0	**0**	**0**
Riverine	X	X	0.01	0.0	X	X	X	X	**0.01**	**0**
Scrub-shrub	0	0	0.03	0	1.0	0	0	0	**1.03**	**0**
Subtidal (aquatic bed)	X	X	0.0	0.03	X	X	X	X	**0**	**0.03**
Subtidal (other)	X	X	0.04	4.49	X	X	X	X	**0.04**	**4.49**
Wet Meadow	0	0	0.08	0	1.39	0	0	0	**1.47**	**0**
Upland	0	0	0.01	0.0	0	0	0	0	**0.01**	**0**
Total	**0**	**0**	**1.35**	**6.61**	**13.64**	**0.59**	**6.16**	**0.59**	**21.15**	**7.79**

Table 5-2 (continued). Permitted Wetland Impacts in the Organized Townships.

Area Impacted (Acres) – 2009 (1/1/2009-12/31/2009)										
Wetland Type	**Cranberry permit**		**Full NRPA permit**		**Tier I**		**Tier II**		**Total**	
	Filled	Altered	Filled	Altered	Filled	Altered	Filled	Altered	**Filled**	**Altered**
Emergent	0	0	0.34	0.01	0.27	0.01	0	0	**0.61**	**0.02**
Forested	0	0	11.98	0.44	4.85	1.78	0.38	23.43	**17.21**	**25.65**
Great Pond	X	X	0.0	0.13	0	0	0	0	**0.0**	**0.13**
Intertidal (mudflat)	X	X	0.0	0.01	0	0	0	0	**0.0**	**0.01**
Intertidal (other)	X	X	0.23	0.44	0	0	0	0	**0.23**	**0.44**
Intertidal (vegetated)	X	X	0.34	0.35	0	0	0	0	**0.34**	**0.35**
Open Water	0	0	0	0	0	0.03	0	0	**0**	**0.03**
Other/Mixed	0	0	5.22	3.61	1.79	0.28	0.57	0.78	**7.58**	**4.67**
Peatland	0	0	0	0	0	0	0	0	**0**	**0**
Riverine	X	X	0.19	0.21	0	0	0	0	**0.19**	**0.21**
Scrub-shrub	0	0	0.5	0.03	0.66	0.16	0.44	0	**1.6**	**0.19**
Subtidal (aquatic bed)	X	X	0.0	321.79	0	0	0	0	**0**	**321.79**
Subtidal (other)	X	X	0.0	6.83	0	0	0	0	**0.0**	**6.83**
Wet Meadow	0	0	0.5	0	2.0	0.48	0	0	**2.5**	**0.48**
Upland	0	0	0.12	0.09	0	0	0	0	**0.12**	**0.09**
Total	**0**	**0**	**19.42**	**333.94**	**9.57**	**2.74**	**1.39**	**24.21**	**30.38**	**360.89**

X = Tier review not available for projects located in these resources

CHAPTER 6 GROUNDWATER MONITORING & ASSESSMENTS

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OVERVIEW

Maine's groundwater may be threatened by contamination, particularly in unforested areas, which comprise approximately 11% of the State. Important sources of groundwater contamination in Maine include disposal activities such as landfills and septic systems, leaking storage facilities, agriculture, and sites contaminated with spilled hazardous materials or by previously unregulated activities.

Generally, the ground water supply in Maine is adequate. The total withdrawal of ground water by all water users is less than one percent of the annual ground water recharge each year. The remaining annual ground water recharge is lost through evapotranspiration or discharges to ponds, lakes, rivers, and streams. Seasonal variations in water tables can lead to local ground water shortages. The Maine Drought Task Force (convened by the Maine Emergency Management Agency) publishes information on Maine ground water and surface water levels at the following website: www.maine.gov/mema/drought

Ground water is withdrawn from three basic types of aquifers in Maine: unconsolidated glaciofluvial deposits (stratified drift or sand and gravel aquifers), till, and fractured bedrock. The stratified drift deposits are the most favorable for development of large volume water supply wells, but these deposits are limited in size and distribution (less than about 10% of the state). Discontinuous bedrock aquifers underlie the entire state and are used for domestic, commercial, industrial and agricultural purposes, and for small public supplies such as schools, restaurants, and summer camps. Wells in till do not generally yield large quantities of water and are most often used for individual domestic water supplies.

BACKGROUND

The protection of Maine ground water is an issue of concern at all levels of government. Serious ground water pollution problems that have occurred throughout the State and elsewhere have heightened the need for protecting ground water supplies. A few municipalities and regional planning agencies have conducted ground water quality assessment studies, but programs for comprehensive assessment of the quality of ground water resources are needed. Maine's ground water protection programs emphasize three areas of effort:

1. State interagency coordination of ground water programs;

2. Assessment of ground water protection problems, including enhancement of the Environmental and Geographic Analysis Database (EGAD); and

3. Statutory changes and building upon implemented state ground water protection programs to increase ground water protection and risk reduction.

Please refer to page 124 of the 2006 Integrated Water Quality Monitoring and Assessment Report for a table of State groundwater protection programs (Table 6-1). http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

ASSESSMENT OF GROUND WATER QUALITY

In Maine, ground water is classified by its suitability for drinking water purposes. Under the Maine Water Classification Program, ground water is classified as either potable (GW-A) or unpotable (GW-B). Water is unpotable when the concentrations of chemical compounds detected exceed either the Maximum Contaminant Levels (MCL) or the Maximum Exposure Guidelines (MEG) as defined in the Rules Relating to Drinking Water administered by the Maine Department of Health and Human Services (DHHS). Although there are many localities where ground water is unpotable and highly contaminated, no ground water is currently classified GW-B. The state is not currently attempting to designate non-attainment areas.

AQUIFER RISK ASSESSMENT

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Related Website: http://www.maine.gov/dep/blwq/docgw/aqua_index/index.htm

The state is actively assessing ways to use existing groundwater data and spatial data discussed below to evaluate relative risk to existing and potential water supplies. An ongoing study is evaluating the cumulative impact of residential, commercial, and industrial development on 300 of the significant sand and gravel aquifers mapped by the Maine Geological Survey. The method provides a relative comparison of the risk of adverse impact through the Aquifer Quantitative Use Assessment, or AQUA, Index. Non-point source risks due to population and travel corridors are treated as a function of the density of impervious surface in the aquifer polygon, by subtracting the total road covered or road salt influenced acreage, evaluated as a 75 foot buffer on either side of the centerline of the road, from the total number of acres of an individual aquifer. This also uses road density as a surrogate for population density and a range of possible non-point discharges. The balance of the remaining acreage was divided by a factor based on the presence and relative risk of petroleum tanks (underground/aboveground storage tanks (USTs or ASTs)), former tank locations (i.e. possible legacy of contamination) and potential or actual sources of contamination to groundwater (as derived from Environmental Geographic Analysis Database (EGAD) Site Data). The resulting number, still in units of acres, is divided by the original acreage to give the dimensionless AQUA index, which can also be expressed as a percent. An AQUA index of 1 or 100% means no impact. In general, larger overall acreage in combination with remoteness or other limits on development result in a higher AQUA index. This index may be used to assess the relative risk to future or present municipal, private, or commercial drinking water uses and to identify those aquifers most at risk from commercial/industrial development or residential pressures. Overall, 77 high yield aquifer locations (26%) are non-impacted (4,881 acres or 16% of total acres), 145 (48%) are less than 50% impacted (8,540 acres or 29% of total acres), and 78 (26%) are more than 50% impacted (13,325 acres or 55% of total acres (29,746). Of the non-impacted high yield sand and gravel aquifers, 18% have public water supply wells. Of the aquifers with AQUA values between 1.0 and 0.5, 28% have public water supply wells, while of those with AQUA values less than 0.5, 38% have public water supply wells.

AQUIFER CHARACTERIZATION ACTIVITIES

Contact: Tom Weddle, DOC BGNA, Maine Geological Survey, Applied Geology Division Director, Hydrogeology Section

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Related Websites: Aquifer Fact Sheet

www.maine.gov/doc/nrimc/mgs/explore/water/facts/aquifer.htm

Aquifer Mapping: www.maine.gov/doc/nrimc/mgs/pubs/series/descrip-aq.htm

The Maine Geological Survey (MGS) is at the "average characteristics" stage in characterizing the physical and chemical attributes of the State's stratified drift aquifers. While site specific data do exist for some aquifers (primarily in the vicinity of ground water resource evaluation projects and contamination sites), complete physical pictures of most aquifer systems do not exist. Hard data on the exact natural chemical processes controlling ground water chemical evolution that occur along a flow path in sand and gravel aquifers are also lacking. MGS has some ambient water quality data but has not yet fully characterized any particular aquifer system.

Please refer to page 126 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further discussion of aquifer characterization activities. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

WATER RESOURCES PLANNING COMMITTEE

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In 2007 the Maine Legislature enacted “An Act Concerning the Sustainable Use of and Planning for Water Resources” (P.L. 2007, Chapter 399). This law created the Water Resources Planning Committee, which is chaired by Robert Marvinney, Director of the Maine Geological Survey. The Committee is presently focused on the work of the Maine Geological Survey to conduct water resource investigations in the Freeport watersheds that host the public water supply wells for the Town of Freeport. The law also created a new licensing requirement for “Significant Groundwater Wells” under the Natural Resources Protection Act. Under this provision large groundwater withdrawals are now regulated by the DEP.

SIGNIFICANT GROUNDWATER WELLS

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Related Website:
www.maine.gov/dep/blwq/docstand/nrpa/significant_groundwater_wells/index.htm

Although Maine has abundant water when recharge and use are averaged over the state, certain large wells may have local adverse effects on protected resources and wells on nearby properties. Installation and operation of these wells, with certain exceptions, is now regulated under the Natural Resources Protection Act. Applicants must demonstrate that the extraction of groundwater will not have an undue unreasonable effect on waters of the State, groundwater-related natural resources, and existing uses, including, but not limited to, public or private wells. Applicants must submit adequate background data, including stream flows and wetted perimeter and wetland water levels, pump test data and analysis, and a site-specific plan for monitoring groundwater elevation, precipitation, and other relevant hydrogeologic criteria. The Department must consider both the direct effects of the proposed withdrawal and its effects in combination with existing water withdrawals. Ongoing work by the Maine Geological Survey is evaluating whether or not the cumulative impacts of groundwater withdrawals in some larger watersheds may exceed the minimum amounts required to supply all existing uses, including both water supply and streamflow.

OVERVIEW OF GROUND WATER CONTAMINATION SOURCES

Most ground water contamination in Maine originates from nonpoint source pollution rather than point source pollution. The following discussion focuses primarily on nonpoint contamination sources that appear to be responsible for most ground water contamination in the State: agriculture, hazardous substance sites, spill sites, landfills, leaking underground storage tanks, septic systems, and shallow well injection. Please refer to the 2006 report beginning on page 127 for additional background information on other sources of contamination, and for additional information on the sources listed above. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

PETROLEUM STORAGE TANKS AND PRODUCT SPILLS

Underground Tanks

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Related Websites:

(General Information) www.maine.gov/dep/rwm/ust/

(Rules for UST Facilities) www.maine.gov/sos/cec/rules/06/096/096c691.doc

Leaking Underground Tanks and Drinking Water Wells

The Leaking Underground Storage Tank (LUST) Remediation Priority List tracks clean-up sites and provides an objective scoring system to determine which sites receive scarce clean-up dollars. In general, the higher the score, the more quickly resources are allocated to clean up a site. Table 6-1 shows the number of sites placed on this Priority List and the change since the previous 305b report.

Table 6-1 LUST Remediation Priority Sites – Number of Sites as of January 2010

Total Number of Sites Since 1994	Number of Sites Closed	Number of Active Sites
1995	1533	462
Numerical Change and Percent Change from 2 years ago (previous 305b report)		
284 / 17% increase	264 / 21% increase	20/ 4.5% increase

The sites on the priority list are limited to those contaminated by petroleum products (as opposed to all hazardous chemicals and all hazardous wastes), but it are not limited to USTs. Many of the sites on the priority list are home heating oil tanks which are typically aboveground storage tanks (ASTs). Table 6-2 shows the number of private water wells and public water supplies contaminated by petroleum products or threatened with contamination by petroleum products as of October 2009. Note that one active site can contaminate or threaten more than one well.

Table 6-2 Current (October 2009) LUST Remediation Priority Sites – Contamination Summary

Number of Contaminated Wells*	Number of Contaminated Public Water Supplies	Number of Threatened Wells*	Number of Threatened Public Water Supplies
213	3	657	5
Numerical Change and Percent Change from 2 years ago (previous 305b report)			
-64/ 23% decrease	-12 / 80% decrease	-2 / 0% change	-25 / 83% decrease

* Does not include public water supplies.

On December 1, 2009 new petroleum cleanup guidelines went into effect based on the toxicity of petroleum fractions in addition to target compounds typically found in petroleum. The remediation approach is based on the analytical method that fractionates petroleum using two different tests pioneered by Massachusetts. The tests are: Volatile Petroleum Hydrocarbons (VPH) and Extractable Petroleum Hydrocarbons (EPH). These tests will replace GRO (Gasoline Range Organics) and DRO (Diesel Range Organics) that have been used by Maine for the past 20 years or more. The new guidelines are described in a document titled "Remediation Guidelines for Petroleum Contaminated Sites in Maine", November 20, 2009.

Legislative Changes

For several years new underground petroleum storage tanks (USTs) in Maine have been prohibited from being installed within 300 feet of a private well and within 1000 feet of a public water supply well. In 2008, this restriction was applied to retail and distribution aboveground petroleum storage tanks (ASTs) as well. For several years new USTs have faced stringent siting requirements when the proposed location is on or over a sand and gravel aquifer. Although not yet final, these same restrictions are expected to be applied to retail and distribution ASTs as well in the year 2010.

In 2006, legislation closed a loophole that allowed the underground piping associated with a motor fuel AST to meet less stringent requirements than the underground piping associated with a UST. These stricter requirements became effective July 2007, with the exception of diesel ASTs with underground piping, which had a later deadline of July of 2009. A final deadline of January 2011 will take care of all "grandfathered" underground piping systems installed before June of 1991 that are not equipped with leak detection.

Above Ground Storage Tanks

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Related Website: www.maine.gov/dep/rwm/abovegroundtanks

Above Ground Storage Tank Spill Information

Maine averages over one heating oil spill per day from ASTs at single family residences (See Figure 6-1). One reason for this statistic is that ASTs are commonly used in Maine. The 2000 U.S. Census figures show that 80% of Maine households are heated with oil. The vast majority of these households have 275 gallon ASTs located either in the basement or outside the residence.

In 2008, the Maine Legislature passed a new law (Public Law 2008, chapter 569) to protect existing public and private water supplies, as well as future water supplies (i.e. sand and gravel aquifers), from the threats of spills and leaks from aboveground oil storage tanks as well as other types of businesses that have historically posed a significant risk to drinking water (junkyards, auto body repair and automobile maintenance , dry cleaners, metal finishers and commercial hazardous waste storage facilities).

As of October 1, 2008, Maine law (38 M.R.S.A § 1391-1399) prohibits the installation of new aboveground oil storage tank (AST) facilities, such as motor fuel storage facilities and bulk fuel plants, in areas where an installation is likely to pose a threat to drinking water. The specific prohibitions are:

- No new ASTs within the source water protection area of a public drinking water well, or within 1000 feet of the public water well (whichever is greater), and
- No new ASTs within 300 feet of a private well (except for a private water supply well located on the same property as a facility and serving only that facility).

The law applies to new petroleum storage facilities. Existing facilities or facilities under construction where the Department has determined a substantial amount of money or effort has been expended on the completion of the facility prior to the effective date of this law are exempt. Heating oil tanks for use on the premises are exempt. The law now places both AST and underground oil storage tank (UST) facilities under the same siting restrictions regarding proximity to public and/or private drinking water wells.

The statute also authorizes the Department to promulgate regulations restricting the location of new AST facilities and the other previous described business on significant sand and gravel aquifers mapped by the Maine Geologic Survey in a manner similar to existing restrictions on new UST facilities. Following input from stakeholders, these rules were adopted by the Maine Board of Environmental Protection on October 15, 2009. Since the law designated this rule as "Substantial" it has been submitted to the Legislature for review during the current session. The final rules should be out by early May of 2010.

Please refer to http://www.maine.gov/dep/rwm/abovegroundtanks/index.htm for further information on aboveground storage tanks in Maine.

Oil or Hazardous Materials Spills

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Related Websites: (Database Reports) www.maine.gov/dep/rwm/data/index.htm

2005 Spill Report
http://www.maine.gov/dep/rwm/emergspillresp/2005StatisticalReportFinal.pdf

The DEP BRWM Response Division responded to approximately 3071 reports of oil or hazardous material events between January of 2008 and December of 2008. Of these events, 915 do not have completed reports and, therefore, are not included in this discussion. An estimated 89% of these responses involved discharges of petroleum products to soil and/or groundwater. During this period, response services personnel discovered over 21 wells that had been contaminated from these spills. Due to further investigation and report completion, these figures are subject to change. Table 6-3 provides information on the 2,158 spills that had completed spill reports.

Table 6-3 Oil and Hazardous Materials Spills – January 2008 to December 2008

Spill Location Type	Percent of Total Spills	Number of Spills	Number of Wells Impacted
Business	22.94%	495	4
Government	4.87%	105	0
Other	2.59%	56	1
Residential	32.39%	699	14
School	1.44%	31	0
Terminal	9.78%	211	1
Transportation System	20.25%	437	0
Utility	5.75%	124	1
Total	**100%**	**2,158**	**21**

Please refer to page 130 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further information on oil spill reporting in Maine. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

AGRICULTURE

Contact: Matthew Randall, Maine Department of Agriculture, Office of Agricultural, Natural and Rural Resources, Agricultural Compliance Program

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Related Website: www.maine.gov/agriculture/narr/compliance.html

In 2002, the total estimated cropland in Maine was 536,839 acres. The agricultural community uses chemicals for pest control and weed eradication; in addition, many farmers apply chemical fertilizers and manure to their agricultural lands. These are all major potential sources of ground water contamination. The major areas of chemical application include potato fields in Aroostook County, blueberry barrens in Hancock and Washington Counties, and apple orchards and forage cropland in Central Maine. Pesticides and nitrates are the main categories of agricultural ground water contaminants.

Maine's Nutrient Management Law

Contact: Mark Hedrich, Nutrient Management Coordinator, Maine Department of Agriculture, Division of Animal Health and Industry

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Related Website: http://www.maine.gov/agriculture/narr/nutrientmanagement.html

Please refer to page 131 of the 2006 Integrated Water Quality Monitoring and Assessment Report for more information on the Maine Nutrient Management Program. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

Impacts of the Law: Implementing nutrient management on farms can better protect ground and surface water. By applying manure and other nutrients only in the amounts needed for crop production and in a way that will consider nearby sensitive resources, fewer nutrients will leave the site and impact water quality. Studies of Maine farms where nutrient management practices have been implemented show that water quality within a watershed can be significantly improved. For more information on Maine's Nutrient Management Law, follow the link above to the Nutrient Management Program webpage maintained by the Department of Agriculture.

Pesticides

Contact: Henry Jennings, Maine Department of Agriculture, Board of Pesticides Control (BPC)

Tel: (207) 287-2731 email: Henry.Jennings@SPAM-ZAPmaine.gov

Related Websites: www.maine.gov/agriculture/pesticides/water/index.htm

http://www.maine.gov/agriculture/pesticides/pdf/06rptGWhexazinone.rtf

Pesticides can infiltrate soils and reach aquifers as a result of applications to croplands, forests, rights of way, home lawns, etc., and also from accidental spills, leaks, or improper disposal.

Ground water monitoring as described in Maine's *Pesticides in Groundwater State Management Plan* is conducted every five to seven years. Randomly selected private drinking water wells within ¼ mile down gradient of active agricultural sites will be sampled during the next sampling round which will begin in the winter of 2011 (the Plan states sampling is to be conducted January- March).

Results for monitoring from 1994-2006 are summarized in Table 6-4, below:

Table 6-4 Hexazinone Monitoring - 1994 through 2006

Sampling Results	Spring 1994	Spring 1998	Spring 2002	Spring 2006
Total Number of Samples Collected	20	42	49	46
Number of Positive Detections	15	18	29	32
Percentage with Positive Detections	75%	42.8%	59.2%	69.6%
Mean Concentration*(ppb)	1.08	0.41	1.45	.98
Median Concentration (ppb)	0.31	ND	0.43	.34
Highest Reading (ppb)	5.97	2.15	11.41	8.43

*For statistical purposes only, mean concentration was calculated assuming that non detections (ND) were equal to half of the limit of quantification (LOQ). LOQ = 0.1 ppb for 2002 samples.

Please refer to pages 132-133 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further information on pesticides in groundwater. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

LANDFILLS

Contacts: Paula Clark, DEP BRWM, Division of Solid Waste Management

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and Ted Wolfe, DEP BRWM, Division of Remediation

Tel: (207) 287-8552 email: Theodore.E.Wolfe@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dep/rwm/solidwaste/index.htm

The Maine Department of Environmental Protection is directed by statute to regulate the location, establishment, construction, expansion and operation of all solid waste facilities in the state, including landfills.

Active Landfills

There are currently 41 active, licensed landfills in the state of Maine (Figure 6-1). The following link will take you to a current file of these active landfills: http://www.maine.gov/dep/rwm/solidwaste/landfillactive.xls

Inactive Landfills

Related Website: http://www.maine.gov/dep/rwm/landfillclosure/index.htm

A total of 415 municipal landfills have been identified in the state. As of December 2009, 397 of these landfills have been closed and capped (Figure 6-1).

Please refer to pages 133-136 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further information on Maine landfills and residual land applications. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

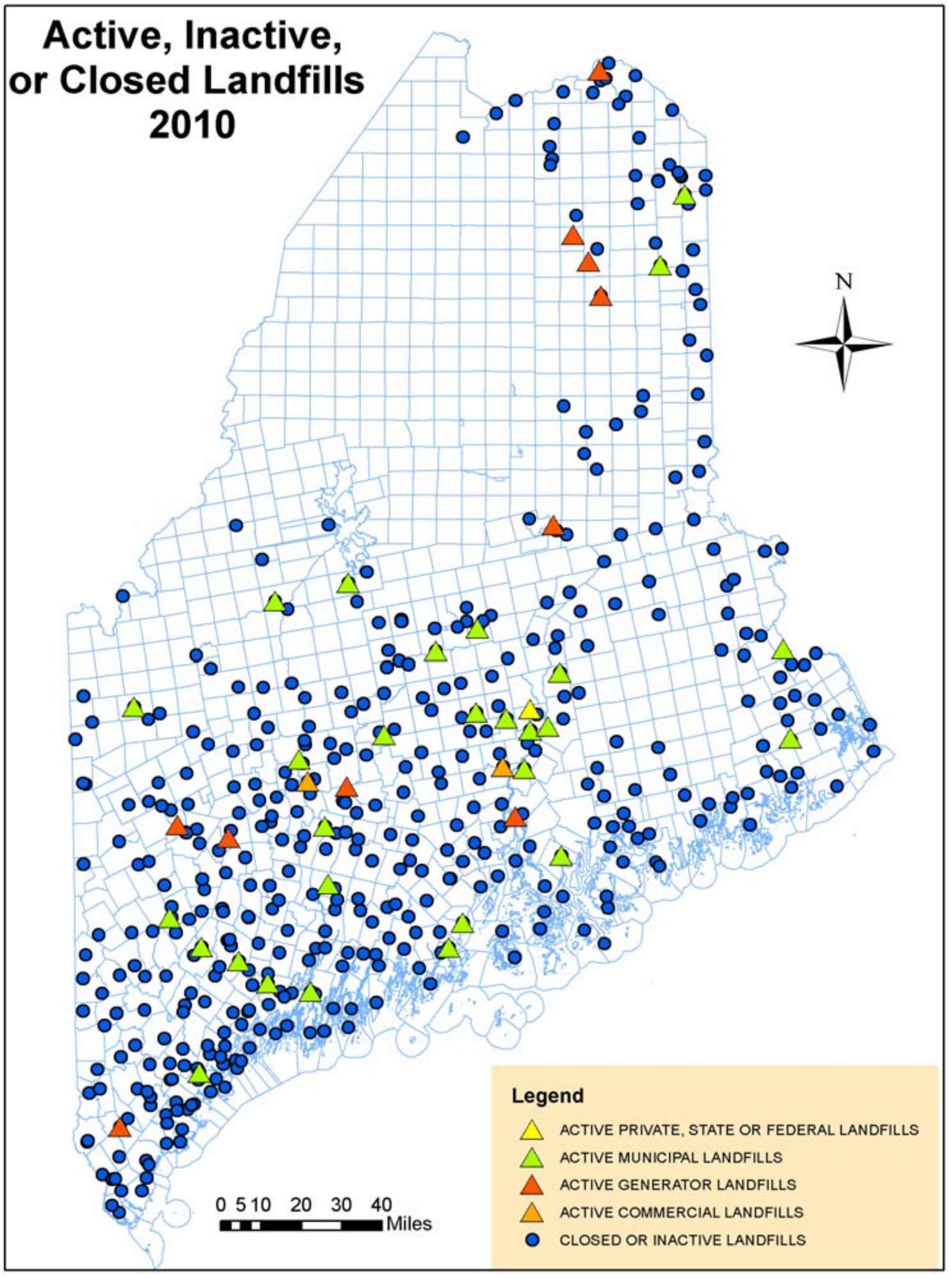

Figure 6-1 Active and Inactive Landfills in Maine

Road Salt

Contacts: Erich Kluck, DEP BLWQ, Division of Water Quality Management Regulation (DWQM)

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or Christine Olson, Maine Department of Transportation, Environmental Office

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Related Website: (Rules – Chapter 574) www.maine.gov/dep/blwq/574final.pdf

(Sand and Salt Piles) www.maine.gov/dep/blwq/docstand/sandsalt/index.htm

DEP is actively involved with siting of new sand-salt buildings and piles and continues to investigate contamination from sand-salt piles on a case-by-case basis. DEP's Sand-Salt Storage Area Rule (Chapter 574) prohibits siting of new sand-salt storage areas on significant sand and gravel aquifers, within source water protection areas of public water supplies and within 300 feet of a private domestic well. MDOT continues to handle complaints related to sand-salt piles that they operate, and roads they maintain.

Federal Facilities, Superfund and Hazardous Substance Sites

Contact: David Wright, DEP BRWM, Division of Remediation

Tel: (207) 287-2651 email: David.W.Wright@SPAM-ZAPmaine.gov

Related Websites: (Maine DEP Information) www.maine.gov/dep/rwm/rem/index.htm

(Federal EPA Information) www.epa.gov/ebtpages/cleasuperfund.html

As of January 31, 2008, DEP had identified 1388 potential hazardous substance sites & closed landfills in Maine. The Division of Remediation investigates and mitigates the risk posed to public health and the environment from these sites. The Department may undertake the investigation and clean-up themselves, but more often compels potential responsible parties to undertake the work, through either the state's uncontrolled sites program (for smaller sites) or via one of two federal programs: the federal RCRA program for recently operated sites, or the CERCLA program (the federal Comprehensive Environmental Response and Comprehensive Liability Act, aka Superfund) at sites where operators are not longer viable. Additionally, many sites are investigated and remediated under one of two voluntary programs: the Brownfields Program, which partially funds the work with federal dollars, and Maine's Voluntary Remedial Action Program (VRAP).

Please refer to pages 91-92 of the 2008 Integrated Water Quality Monitoring and Assessment Report for further information on the programs mentioned above. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

Resource Conservation and Recovery Act (RCRA) Sites

Contact: Stacy Ladner, DEP BRWM, Division of Oil and Hazardous Waste Facilities Regulation (OHWFR)

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Related Website: www.maine.gov/dep/rwm/hazardouswaste/index.htm

The DEP currently lists approximately 97 sites with Hazardous Waste Licenses and 60 sites with interim licenses. Over 70 sites are under investigation for possible ground water or surface water contamination. Thirty-six of these sites have ground or surface waters that have been contaminated by discharges of hazardous substances. Twenty-two of these 36 facilities have ongoing, active remediation.

SEPTIC SYSTEMS

Contact: James A. Jacobsen, DHHS MCDC&P, Division of Environmental Health, Drinking Water Program, Subsurface Wastewater Unit

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Related Website: www.maine.gov/dhhs/eng/plumb/index.htm

The Department of Health and Human Services, Maine Center for Disease Control and Prevention, Division of Environmental Health, Drinking Water Program, Subsurface Wastewater Unit and its antecedents have regulated onsite sewage disposal since 1926. This responsibility rests with DHHS because the treatment and disposal of human sanitary waste has been historically considered a public health issue. The Subsurface Wastewater Unit within the Division of Environmental Health promulgates and administers the Subsurface Wastewater Disposal Rules. The Program also maintains microfiche copies of all plumbing and subsurface wastewater permits that have been issued statewide from 1974 to 2004. During the period from January 2008 through May 2009 the Program processed approximately 16,400 internal and external plumbing and subsurface wastewater permits.

Nitrates and Septic Systems

The Health and Environmental Testing Laboratory (HETL) database contains the results of water tests done on private wells. This database provides the largest sample of private well nitrate concentrations in the state. Assuming that the HETL database for nitrate-N represents Maine ground water quality, data from January 2008 to May 2009 indicate approximately 98% of wells sampled have concentrations below 5 mg/L, well below the 10 mg/L drinking water standard for nitrate-N (Table 6-9). This percentage has remained steady for the past few reporting cycles.

Table 6-5 Nitrate-N Frequency Distributions

Nitrate-N (mg/L)	HETL Database[1] (percent)	HETL Database[2] (percent)	HETL Database[3] (percent)
0.00 to 2.50	93.9	93.7	91.9
2.51 to 5.00	4.2	4.5	5.6
5.01 to 7.50	1.2	1.1	2.0
7.51 to 10.00	0.4	0.5	0.5
Greater than 10.0	0.3	0.2	0.0
Number of Analyses	**6,000**	**7,100**	**2,197**

[1]HETL database for private well analyses between 1/1/08 and 5/31/09.
[2]HETL database for private well analyses between 1/1/06 and 5/31/07.
[3]HETL database for private well analyses between 1/1/04 and 5/31/05.

Bacteria

Private well testing for bacteria identifies a greater contamination potential from bacteria than from nitrate. In public and private drinking water supplies, coliform bacteria are used as the indicator of microbial contamination. The Primary Drinking Water Standard for total coliform bacteria is 0 colonies per 100 ml.

Table 6-7 shows that larger percentages of dug wells test positive for bacteria than drilled wells. This lends support to the belief that dug wells are more susceptible to bacterial contamination than drilled wells. Table 6-8 shows recent well testing data, however HETL no longer distinguishes between dug and drilled wells in its reporting.

Table 6-6 Wells testing positive for E. coli or total coliform

Well Type	HETL Database 1960-1990	HETL Database 1/04-5/05	HETL Database 6/06-8/06[3]
	% wells positive for total Coliform or E. Coli	% wells positive for total Coliform or E. Coli	% wells positive for total Coliform or E. Coli
Dug	52%	32%	35%
Drilled	24%	14%	16%

[1]Only Data available from HETL which distinguishes the well type was from this time period in 2006. HETL stopped collecting well type data after 2006.

Table 6-7 Wells testing positive for E. coli or total coliform 1/08-5/09

HETL Database 1/1/08-5/31/09		
Test Type	Total number of tests	% wells positive
Coliform	7715	25.7 %
E. Coli	7694	2.3 %

Please refer to pages 138-140 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further information on nitrates, bacteria, and septic systems in Maine. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

SHALLOW WELL INJECTION AND THE UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

Contacts: Erich Kluck, DEP BLWQ, Division of Water Quality Management (DWQM)

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Related Website: www.maine.gov/dep/blwq/docstand/uic/index.htm

The underground discharge of pollutants by shallow well injection has been illegal in Maine since 1983 when the State adopted the Federal Underground Injection Control (UIC) regulations. The revised rule for UIC was adopted by the BEP in September

2006 and the Primacy package was sent to the U.S. EPA in October of 2006. Table 6-8 lists information on numbers of inspections and registrations for the Federal Fiscal Years 2007-2009 (October 06- September 09).

Table 6-8 Underground Injection Control Program Information

Federal Fiscal Year	New Registrations	Inspections	Variances	Notices of Violation	Enforcement Referrals
FFY2007	10	26	9	12	0
FFY 2008	0	9	0	1	0
FFY2009	0	9	0	2	0

Other Programs

Please refer to pages 142-144 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further information on programs which may monitor for affects to groundwater from the following activities. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

Stormwater Infiltration

Contact: John Hopeck, DEP BLWQ, Division of Environmental Assessment (DEA)

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Use of infiltration as a stormwater management technique is common in many regions, but is practical in Maine only in the limited areas underlain by glacial sand and gravel deposits. Glacial aquifers in these materials contain large volumes of easily extracted water, but are highly vulnerable to contamination. Groundwater monitoring at large commercial and industrial sites shows that the volume of pollutants discharged to these infiltration systems generally exceeds the treatment capacity of the soil and aquifer. Chloride is the most common pollutant, but data also indicate that changes in chemical conditions in the infiltration systems can release accumulated metals and other pollutants to the underlying aquifer over time. These data are consistent with findings in other states and in the European Union, and have been cited by EPA in a recent summary of stormwater recharge methods. Ongoing work on stormwater management rules is intended to encourage infiltration, where geologically feasible, from low-pollutant sources, while discouraging concentrated discharges to groundwater from large areas of connected impervious surface. Groundwater monitoring will continue at currently-monitored sites.

Metallic Mining

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Related Website: www.maine.gov/dep/blwq/docstand/miningpage.htm

The only metallic mining activity conducted in the State during the reporting period was an exploratory drill program undertaken by Golden Hope Mines for a zinc-silver-copper-gold project at a prospect known as Big Hill in Pembroke, Washington County. The company has since completed its drilling program and plugged all of the drill holes. No additional work is planned for the site.

Gravel Pits

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Related Website: www.maine.gov/dep/blwq/docstand/miningpage.htm

The Maine DEP has licensed 723 mining sites (gravel pits & rock quarries). Within the last few years the department has seen an increase in the number of quarries licensed.

Recent changes to performance standards now include a variance provision for excavation into ground water. Previously, a separation distance of one to five feet was required between the base of the excavation and the seasonal high water table (SHWT). In general, prior to issuing any variance to excavate gravel from below the SHWT, the Department investigates the dewatering potential for adjacent wells and protected natural resources. The DEP has issued approximately 48 variances to excavate gravel and rock from below the water table. These sites are extensively monitored for both ground water levels and quality. Several groundwater studies for large rock quarries have indicated the potential to dewater adjacent streams. In a few cases, the Department has placed conditions on the operator's permit that require changes to the pumping rate or temporary cessation of dewatering to ensure that there are no unreasonable adverse impacts to protected natural resources or existing water supply wells. To date, the Department has not observed the direct dewatering of any protected natural resource due to mining from below the water table at these sites.

In 2008, the department experienced its first encounter with acid rock drainage from an aggregate quarry located in Northern Maine. The culprit rock unit was a sulfidic pelite containing pyrite, that was blasted through at the quarry. The blasted rock is now exposed to air and water and the acid generation is occurring. As a corrective measure, the reactive rock has been mixed with a layer of limestone and capped with clay. Water quality results prior to corrective action indicated high sulfate and iron concentrations with a specific conductance value of 2859 us. With the addition of alkaline material, the pH of the drainage is 5.36. The department continues to monitor the site for acid rock drainage.

Radioactive Waste Storage and Disposal Sites

Contact: Tom Hillman, DHHS Maine CDC, Division of Environmental Health, Radiation Control Program

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Related Website: www.maine.gov/dhhs/eng/rad/hp_waste.htm

SUMMARY OF GROUND WATER QUALITY

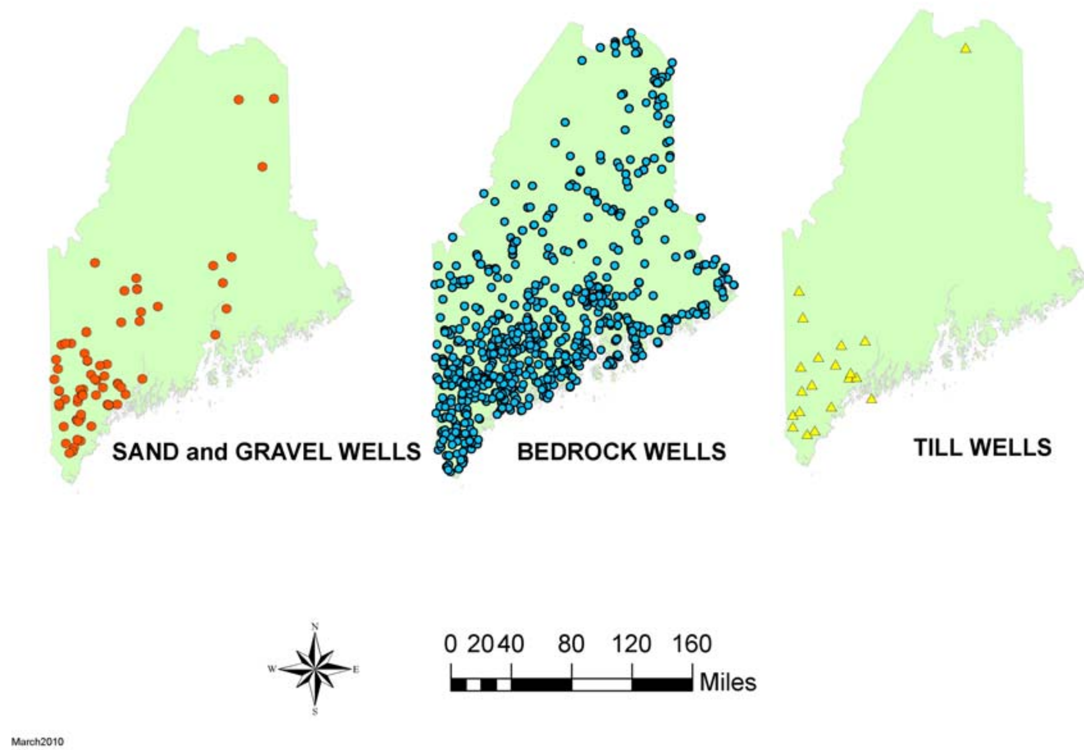

Figure 6-2 Distribution of Sole Source Public Water Supply Wells for the Ambient Water Quality Monitoring Network by Aquifer Type. Wells shown are those which were sampled.

For 2010 the ambient ground water quality monitoring network consists of 1206 public water supplies. Each of the selected public water supplies is provided by only one source of water: either a drilled well in bedrock; a dug well in glacial till; a drilled well, well point, or dug well in glacial outwash sand and gravel or recent sandy alluvium (Figure 6-2). Some of the wells are large community water supplies; some are non-transient, non-community water supplies. Analytical results for periodic, routine sampling of raw water were provided by the DWP. Not all the well samples were analyzed for the all the same chemical constituents every time they were obtained: frequency depends on the type of water supply and the population served. Nevertheless, the DEP believes that the selection represents ambient ground water quality in the three major geologic settings that provide ground water in Maine. Sand and gravel aquifers are often high yield water sources and are often found in developed areas, and are therefore vulnerable to contamination. Bedrock aquifers, though not usually hydrologically connected, underlie the whole state and are mostly used as private water supplies, as are glacial till aquifers. The locations of the wells used to indicate ambient water quality are shown in Figure 6-3 and a summary of the ambient water quality data is in Table 6-9. Figure 6-2 shows the distribution of these wells by aquifer type.

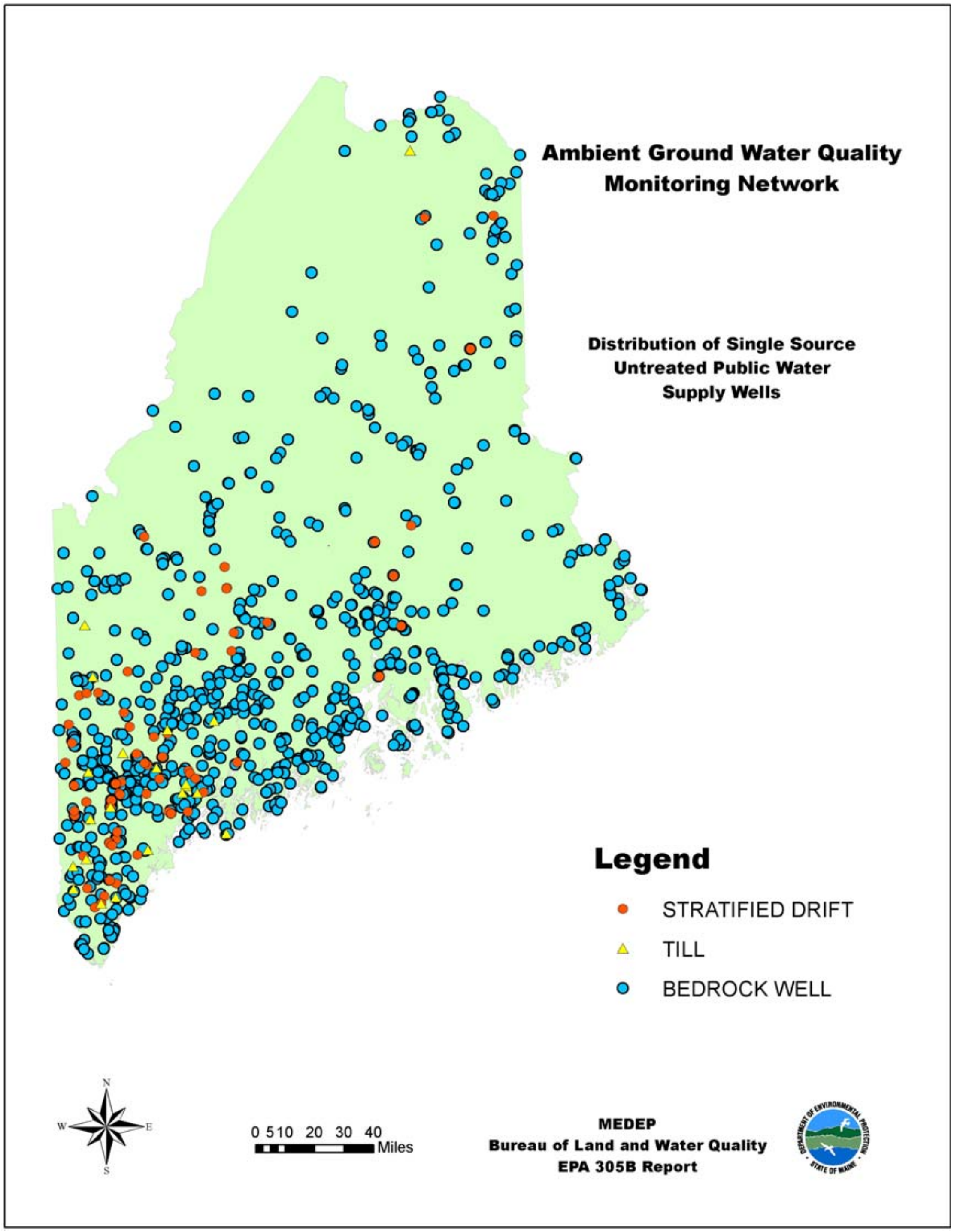

Figure 6-3 Ambient Water Quality Monitoring Network Well Location Map

Table 6-9 Ambient Aquifer Monitoring Data*

Ambient Ground Water Quality Monitoring Well Data

Aquifer Description: Till **Statewide** **Data Reporting Period:** Jan. 2008-May 2009

Monitoring data type *	Total number of wells used in assessment	Parameter groups	No detections of parameters above MDLs or background levels	No detections of parameters above MDLs or background levels and nitrate concentrations range from background levels to $\le$5 mg/l	Parameters are detected at concentrations exceeding the MDL, but are less than or equal to MCLs and/or nitrate ranges from >5 to $\le$10 mg/l	>10m/l	Parameters are detected at concentrations exceeding MCL's
Ambient (raw)	22	VOC	166	0	1	0	0
water quality		SVOC	no tests	no tests	no tests	na	na
data from public	# of Tests:	NO3[1]	72	25	0	0	0
water supply	290	Other	16	0	10	0	0
wells							

Ambient Ground Water Quality Monitoring Well Data

Aquifer Description: Bedrock **Statewide** **Data Reporting Period:** Jan. 2008-May 2009

Monitoring data type *	Total number of wells used in assessment	Parameter groups	No detections of parameters above MDLs or background levels	No detections of parameters above MDLs or background levels and nitrate concentrations range from background levels to $\le$5 mg/l	Parameters are detected at concentrations exceeding the MDL, but are less than or equal to MCLs and/or nitrate ranges from >5 to $\le$10 mg/l	.10m/l	Parameters are detected at concentrations exceeding MCL's
Ambient (raw)	1098	VOC	15443	0	53	0	6
water quality		SVOC	966	0	18	0	0
data from public	# of Tests:	NO3[1]	3478	1782	51	0	6
water supply	25912	Other	1813	0	2206	0	90
wells							

Major uses of aquifers or hydrologic units: X Public water supply ___ Irrigation ___ Commercial ___ Mining ___ Baseflow
X Private water supply ___ Thermoelectric ___ Livestock ___ Industrial ___ Maintenance

Uses affected by water quality problems units: X Public water supply ___ Irrigation ___ Commercial ___ Mining ___ Baseflow
X Private water supply ___ Thermoelectric ___ Livestock ___ Industrial ___ Maintenance

[1] Includes results from testing for parameters: Nitrate, Nitrate-Nitrite, and Nitrite

* data supplied by DHS/BH/DHE/Drinking Water Program, analysis by DEP/BLWQ/ Environmental Geology Unit

* data supplied by DHS/BH/DHE/Drinking Water Program, analysis by DEP/BLWQ/DEA/Enviromental Geology Unit

Table 6-9 Aquifer Monitoring Data (Continued)

Ambient Ground Water Quality Monitoring Well Data

Aquifer Description: Stratified Drift **Statewide**

Data Reporting Period: Jan. 2008-May 2009

Monitoring data type *	Total number of wells used in assessment	Parameter groups	No detections of parameters above MDLs or background levels	No detections of parameters above MDLs or background levels and nitrate concentrations range from background levels to $\leq$5 mg/l	Parameters are detected at concentrations exceeding the MDL, but are less than or equal to MCLs and/or nitrate ranges from >5 to $\leq$10 mg/l	.10m/l	Parameters are detected at concentrations exceeding MCL's
Ambient (raw)	86	VOC	1997	0	2	0	0
water quality		SVOC	291	0	5	0	0
water supply	3541	NO3[1]	168	198	2	0	0
wells		Other	407	0	463	0	8

Major uses of aquifer or hydrologic unit: X Public water supply___ Irrigation___ Commercial___ Mining___ Baseflow X Private water supply ___ Thermoelectric __ Livestock ___ Industrial___ Maintenance

Uses affected by water quality problems: X Public water supply___ Irrigation___ Commercial___ Mining___ Baseflow X Private water supply ___ Thermoelectric ___ Livestock ___ Industrial___ Maintenance

[1] Includes results from testing for parameters: Nitrate, Nitrate-Nitrite, and Nitrite

* data supplied by DHS/BH/DHE/Drinking Water Program, analysis by DEP/BLWQ/ Environmental Geology Unit

* data supplied by DHS/BH/DHE/Drinking Water Program, analysis by DEP/BLWQ/DEA/Enviromental Geology Unit

GROUNDWATER TRENDS

New occurrences of ground water contamination are documented in Maine each year. Although discovery of existing contamination is expected to continue, future reports of contamination are expected to decline as the State's ground water protection initiatives continue to be implemented. These programs stress contamination prevention rather than remediation.

Please refer to pages 149-153 of the 2006 Integrated Water Quality Monitoring and Assessment Report for further information on programs which may indicate ground water quality trends. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

CHAPTER 7 PUBLIC HEALTH – RELATED ASSESSMENTS

MAINE HEALTHY BEACHES PROGRAM

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Related Websites: (Maine Specific) www.mainehealthybeaches.org
(Federal) www.epa.gov/ost/beaches

The Maine Healthy Beaches Program (MHB) monitors ocean beaches in order to provide protection of swimmer health. During the current reporting cycle, the Maine State Planning Office Coastal Program managed the program through a partnership with the University of Maine Cooperative Extension (UMaine Extension) and Sea Grant and numerous local beach managers and volunteers. The Healthy Beaches Program was transferred from the Maine State Planning Office to DEP on January 1, 2009. All participating beaches, including State Parks, conduct routine monitoring of beach water quality from Memorial Day through Labor Day. When exceedances occur, resampling is conducted for those sites. Private beach owners are responsible for their own monitoring programs unless they are working with the local municipality and MHB. Often private beaches do not conduct any monitoring. In Maine, the monitoring of town owned beaches and providing public notification of beach status, is the jurisdiction of the municipality.

The U.S. Environmental Protection Agency (EPA) initiated the Beaches Environmental Assessment, Closure and Health (BEACH) Act of 2000 in response to the growing concern about public health risks posed by polluted coastal swimming beaches. MHB is a voluntary program and includes these components: water quality assessment and public notification of beach status, education and outreach, and working with communities and program partners to identify and remediate pollution sources through applied research and special studies.

The assessment program includes measurement of critical factors that affect the health of the beach environment as well as the health of people who visit them (for participating beaches only).

Table 7-1 Beaches Participating in Program

Beach Name	Managing Organization
Sand Beach	Acadia National Park
Hadley Point	Bar Harbor
Hulls Cove	Bar Harbor

Town Beach	Bar Harbor
Fortunes Rocks Beach	Biddeford
Gil Bouche Park/Biddeford Pool	Biddeford
Middle Beach (Biddeford)	Biddeford
Pemaquid Beach	Bristol
Laite Beach	Camden
Crescent Beach	Crescent Beach State Park
Kettle Cove Beach	Crescent Beach State Park
Ferry Beach (Saco)	Ferry Beach State Park
Winslow Park	Freeport
Higgins Beach	Higgins Beach Association
Hills Beach	Hills Beach Association
Goochs Beach	Kennebunk
Libby Cove Beach	Kennebunk
Middle Beach	Kennebunk
Mother's Beach	Kennebunk
Colony Beach	Kennebunkport
Goose Rocks	Kennebunkport
Crescent Beach (Kittery)	Kittery
Fort Foster	Kittery
Sea Point Beach	Kittery
Ducktrap River	Lincolnville
Lincolnville Beach Area	Lincolnville
Footbridge (Ogunquit)	Ogunquit
Little Beach	Ogunquit
Main (Ogunquit)	Ogunquit
Moody (Ogunquit)	Ogunquit
Riverside (Ogunquit)	Ogunquit
OOB - Central	Old Orchard Beach
OOB - North End	Old Orchard Beach
OOB - Ocean Park	Old Orchard Beach
Popham - Center Beach	Popham Beach State Park
Popham - East Beach	Popham Beach State Park
Popham - West Beach/Morse River	Popham Beach State Park
East End Beach	Portland
East Beach	Reid State Park
Half mile Beach	Reid State Park
Lagoon Beach	Reid State Park
Mile Beach	Reid State Park
Sandy Beach	Rockland
Goodies Beach	Rockport
Bay View	Saco
Kinney Shores	Saco
Ferry Beach (Scarborough)	Scarborough
Pine Point	Scarborough
Scarborough Beach	Scarborough Beach State Park
Willard Beach	South Portland
Casino Square	Wells
Crescent Beach (Wells)	Wells
Drakes Isl. Beach	Wells
Wells Beach	Wells
Wells Harbor	Wells

Laudholm Beach	Wells National Estuarine Research Reserve
Cape Neddick Beach	York
Long Sands Beach	York
Short Sands Beach	York
York Harbor Beach	York

Swimming Beach Advisories and Closures

Contact: Keri Lindberg, University of Maine Cooperative Extension and Sea Grant (Program Coordinator)
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Related Website: www.mainehealthybeaches.org

Under Clean Water Act (CWA) guidelines, the designated use of swimming beaches is for "Recreation in and on the Water." Beaches can have advisories or closures posted to warn of potential health risks; both methods us some form of risk analysis. The beaches listed in Tables 7-2 and 7-3 had advisories and/or closures for the number of days noted.

Beach advisories/closures are posted according to:

- Results obtained from bacteria water quality samples exceeding State and Federal standards.
- Conditions at monitoring site indicating the possible presence of disease-causing organisms.

These advisories/closures are recommendations to the public to avoid water contact activities at the beach until further analyses reveal safe conditions and/or conditions at monitoring site change.

For this 2009 Integrated Report, 2007 data show there were 171 advisory and 2 closure days at 29 beaches.

Table 7-2 2007 Beach Advisory and Closure Information

Town Name	Beach Name	Advisory Days	Closure Days	Total Days in 2007
Cape Elizabeth	Crescent Beach (Crescent Beach St. Park)	4		4
Cape Elizabeth	Kettle Cove (Crescent Beach St. Park)	4		4
Portland	East End		2	2
Scarborough	Higgins	2		2
Scarborough	Ferry Beach	1		1
Scarborough	Scarborough (Scarborough Beach St. Park)	1		1
South Portland	Willard Beach	2		2
Lincolnville	Lincolnville Beach	2		2
Camden	Laite Beach	4		41
Camden	Yacht Club	11		11
Rockland	Sandy Beach	14		14
Phippsburg	East (Popham Beach St. Park)	4		4
Phippsburg	Center (Popham Beach St. Park)	5		5
Georgetown	East (Reid St. Park)	3		3

Georgetown	Lagoon (Reid St. Park)	2		2
Georgetown	Mile (Reid St. Park)	2		2
Wells	Drakes Island	6		6
Wells	Wells Harbor	11		11
Wells	Laudholm (WNERR)	3		3
Saco	Kinney Shores	5		5
Saco	Ferry (Ferry Beach St. Park)	1		1
Biddeford	Middle	5		5
Kennebunk	Goochs Beach	18		18
Kennebunkport	Goose Rocks	39		39
Kennebunkport	Colony Beach	9		9
Ogunquit	Main	2		2
Ogunquit	Footbridge	2		2
Ogunquit	Riverside	2		2
Ogunquit	Little	1		1
York	Cape Neddick	6		6
TOTALS		**171**	**2**	**173**

The 2008 data show there were 170 advisory and 4 closure days at 22 beaches.

Table 7-3 2008 Beach Advisory and Closure Information

Town Name	Beach Name	Advisory Days	Closure Days	Total Days in 2008
Cape Elizabeth	Crescent Beach (Crescent Beach St. Park)	3		3
Cape Elizabeth	Kettle Cove (Crescent Beach St. Park)	4		4
Portland	East End	2	4	6
Scarborough	Ferry Beach	6		6
Scarborough	Pine Point	2		2
South Portland	Willard Beach	3		3
Lincolnville	Ducktrap River	30		30
Lincolnville	Lincolnville Beach	8		8
Camden	Laite Beach	24		24
Camden	Yacht Club	11		11
Wells	Wells Harbor	8		8
Wells	Laudholm (WNERR)	6		6
Saco	Bay View	7		7
Saco	Kinney Shores	7		7
Kennebunk	Goochs Beach	6		6
Kennebunk	Libby Cove	6		6
Kennebunkport	Goose Rocks	9		9
Kittery	Crescent Beach	9		9
Ogunquit	Riverside	2		2
Ogunquit	Little	7		7
York	Cape Neddick	6		6
York	Short Sands	4		4
TOTALS		**170**	**4**	**174**

SHELLFISH PROGRAM MONITORING & ASSESSMENTS

SHELLFISH HARVEST AREA CLOSURES

Contact: Amy Fitzpatrick, Director, DMR BRM, Public Health Division, Shellfish Sanitation Program

Tel: (207) 633-9554 email: Amy.Fitzpatrick@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dmr/rm/public_health/publichealth.html

The Department of Marine Resources (DMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. A goal of the Clean Water Act (CWA) is to have these areas meet their designated use of "Propagation and Harvest of Shellfish." Shellfish areas are closed by DMR if the area is found to have elevated levels of bacteria or if the area is determined as threatened by potential sewage pollution problems (proximity of wastewater outfalls or intense storm runoff events). Water samples are collected and tested for fecal coliform bacteria at least six (6) times annually from each of the more than 2,000 established sampling sites that are located along the entire Maine coast. The shoreline survey includes a visual inspection of the shoreline to determine the location and magnitude of potential sewage pollution and toxic contamination problems.

TOXIC ALGAE (RED TIDE)

Contact: Darcie Couture, Toxin Monitoring Director, DMR BRM, Public Health Division, Marine Biotoxin Monitoring Program

Tel: (207) 633-9570 email: Darcie.Couture@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dmr/rm/public_health/redtide.htm

"Red Tide" is used to refer to rapid increases in numbers of microscopic marine algae that contain potentially lethal toxins. The toxin is transferred to humans by the ingestion of shellfish that have filtered the organisms into their systems. The toxin affects humans by paralyzing the central nervous system and, in high doses, may cause death.

DMR's Biotoxin Monitoring Program monitors levels of PSP (Paralytic Shellfish Poisoning or "Red Tide") and other marine biotoxins in the shellfish and waters of Maine. Shellfish samples are collected statewide between April and October and evaluated at the Biotoxin laboratories in West Boothbay Harbor and Lamoine. When toxin is found approaching quarantine levels, closures of shellfish harvest areas are implemented. Maine has historically had high levels of PSP during the warmer periods of the year. While red tide is a water quality issue, it is not a direct cause and effect relationship with human-caused pollutants. Closures, therefore, are not reported as violations of water quality standards.

For information on closures, call DMR’s hot line 1-800-232-4733 or 207-633-9571or visit the web at

www.maine.gov/dmr/rm/public_health/closures/shellfishhotline.htm

Ocean Fish and Shellfish Consumption Advisories

Contact Andrew Smith, DHHS Maine CDC, Environmental and Occupational Health Program

Tel: (207) 287-5189 email: Andy.E.Smith@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dhhs/eohp/fish/

Waters do not attain their "Clean Water Act-designated use for Fishing," whenever government agencies issue fish and/or shellfish consumption advisories. These advisories are designed to let citizens know that there may be an increased risk to their health if they choose to consume certain species of fish or shellfish. Since 1992, human health consumption advisories have been in place to warn the public against the consumption of lobster tomalley due to high levels of toxic contaminants. No evidence of elevated levels of these contaminants was found in lobster meat. The advisory was expanded to include bluefish and striped bass in 1996, also due to detection of elevated levels of toxic contaminants in their flesh. The advisory for striped bass and blue fish was substantially revised in June 2009 based on recent sampling data from Maine and other Atlantic coastal states. The entire Maine coast (for waters naturally capable of supporting lobster propagation and harvest) is only in partial support of its designated use for fishing due to these consumption advisories. Toxic contamination found in lobster tomalley is presumed to originate in Maine waters, which leads to their listing in Category 5-D for non-attainment due to legacy pollutants. Toxic contaminants found in migratory or pelagic finfish are presumed to have been acquired largely outside of Maine waters where the fish spend most of their lives. Thus, advisories for marine finfish are not listed as causes of non-attainment.

Advisory Overview

Current information, with a last revision date of June 3, 2009, on ocean fish and shellfish advisories as adapted from the Maine CDC is as follows:

WARNING About Eating Saltwater Fish and Lobster Tomalley

Warning: Chemicals in some Maine saltwater fish and lobster tomalley may harm people who eat them. Women who are or may become pregnant and children should carefully follow the Safe Eating Guidelines.

It's hard to believe fish that looks, smells, and tastes fine may not be safe to eat. But the truth is that some saltwater fish have mercury, PCBs and Dioxins in them.

All these chemicals settle into the ocean from the air. PCBs and Dioxins also flow into the ocean through our rivers. These chemicals then build up in fish.

Small amounts of mercury can damage a brain starting to form or grow. That's why babies in the womb, nursing babies, and young children are at most risk. Mercury can also harm older children and adults, but it takes larger amounts.

PCBs and Dioxins can cause cancer and other health problems if too much builds up in your body. Since some saltwater fish contain several chemicals, we ask that all consumers of the following saltwater species follow the safe eating guidelines.

Specific Ocean Fish Consumption Advisories

Safe Eating Guidelines

Striped Bass and Bluefish: Pregnant and nursing women, women who may get pregnant, nursing mothers and children under 8 years of age should not eat any striped bass or bluefish. All other individuals should eat no more than 4 meals per year.

Shark, Swordfish, King Mackerel, and Tilefish: Pregnant and nursing women, women who may get pregnant and children under 8 years of age are advised to not eat any swordfish or shark. All other individuals should eat no more than 2 meals per month.

Canned Tuna: Pregnant and nursing women, women who may get pregnant and children under 8 years of age should eat no more than 1 can of "white" tuna or 2 cans of "light" tuna per week.

All other ocean fish and shellfish, including canned fish and shellfish: Pregnant and nursing women, women who may get pregnant and children under 8 years of age should eat no more than 2 meals per week.

Lobster Meat and Tomalley Consumption Advisories

Lobster Meat: Consumption advisories do not exist for lobster meat.

Lobster Tomalley: Recommended to completely avoid consumption of lobster tomalley. While there is no known safety considerations when it comes to eating lobster meat, consumers are advised to refrain from eating the tomalley. The tomalley is the soft, green substance found in the body cavity of the lobster that functions as the liver and pancreas. Test results have shown that the tomalley can accumulate contaminants found in the environment.

For more information, including warnings on freshwater fish call (866) 292-3474 or visit the related web site at: www.maine.gov/dhhs/eohp

Freshwater Fish Consumption Monitoring, Assessments and Advisories

Contact: Barry Mower, DEP BLWQ, Division of Environmental Assessment (DEA)

Tel: (207) 287-3901 email: Barry.F.Mower@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dep/dioxin/

In addition to marine fish and shellfish, DEP monitors freshwater fish in its Dioxin Monitoring Program and Surface Waters Ambient Toxics (SWAT) monitoring program for contaminants that may present a risk for human consumption. The results are forwarded to the MCDC who is responsible for recommending the warnings on eating fish based on the presence of chemicals (MSRA 22 ß 1696 I) . MCDC does so in the form of Fish Consumption Advisories, which can be seen with additional information at http://www.maine.gov/dhhs/eohp/fish/ . There is a statewide Fish Consumption

Advisory for all freshwaters because of mercury and additional advisories for specific waters because of other contaminants.

Mercury Statewide Fish Consumption Advisory

Based on monitoring of mercury concentrations in freshwater fish from all over Maine, the Maine Bureau of Health (now MCDC) issued a statewide advisory for all Maine lakes and ponds in 1994 and expanded it to include all freshwaters in 1997, and revised in 2000 as follows:

Pregnant and nursing women, women who may get pregnant, and children under age 8 SHOULD NOT EAT any freshwater fish from Maine's inland waters. Except, for brook trout and landlocked salmon, 1 meal per month is safe.

All other adults and children older than 8 CAN EAT 2 freshwater fish meals per month. For brook trout and landlocked salmon, the limit is 1 meal per week.

DIOXIN

Dioxin levels in fish from Maine rivers continue to decline, approaching background at some locations but still exceeding background at others.

An evaluation of the need for fish consumption advisories due to the presence of dioxin-like compounds in fish requires a comparison to a health benchmark. The ME-CDC uses a health benchmark that is expressed as a toxicity-weighted concentration of dioxin-like compounds in fish tissue, referred to as a “Fish Tissue Action Level” or FTAL. For the present report, the ME-CDC compares the most recent data on contaminant levels to its current FTALs for dioxin-like compounds of 1.5 parts per trillion (ppt) for protection of cancer-related effects and a 0.4 parts per trillion FTAL for protection of noncancer related effects. The FTAL of 1.5 ppt for cancer related effects has been used by ME-CDC since 1990. The FTAL of 0.4 ppt for noncancer effects is based on the same toxicity data relied upon since 1990, but has been adjusted downward to account for the substantial background exposure we all get from the presence of these chemicals in most dietary foods.

For the first time since 1987, there was no dioxin monitoring for this summer 2009. We expect to resume in 2010 perhaps monitoring in alternating years.

The ME-CDC has evaluated recent data that can be seen at

http://mainegov-images.informe.org/dep/blwq/docmonitoring/dioxin/report_2007.pdf

RIVER AND STREAM SPECIFIC FISH CONSUMPTION ADVISORIES

The dominant causes for the following fish consumption advisories are identified as dioxin/furans/coplanar PCBs, total PCBs, and total DDTs (DDD + DDE + DDT). ME-CDC is currently reviewing all the fish contaminant data since 2003 and expects any revisions to the fish consumption advisories to be issued in spring 2010.

Current advisories are listed on next page.

Department of Health and Human Services Guidelines about Eating Freshwater Fish

***Warning:* Mercury in Maine freshwater fish may harm the babies of pregnant and nursing mothers, and young children.**

SAFE EATING GUIDELINES

Pregnant and nursing women, women who may get pregnant, and children under age 8 SHOULD NOT EAT any freshwater fish from Maine's inland waters. Except, for brook trout and landlocked salmon, 1 meal per month is safe.

All other adults and children older than 8 CAN EAT 2 freshwater fish meals per month. For brook trout and landlocked salmon, the limit is 1 meal per week.
It's hard to believe that fish that looks, smells, and tastes fine may not be safe to eat. But the truth is that fish in Maine lakes, ponds, and rivers have mercury in them. Other states have this problem too. Mercury in the air settles into the waters. It then builds up in fish. For this reason, older fish have higher levels of mercury than younger fish. Fish (like pickerel and bass) that eat other fish have the highest mercury levels.

Small amounts of mercury can harm a brain starting to form or grow. That is why unborn and nursing babies and young children are most at risk. Too much mercury can affect behavior and learning. Mercury can harm older children and adults, but it takes larger amounts. It may cause numbness in hands and feet or changes in vision. The Safe Eating Guidelines identify limits to protect everyone.

Warning: Some Maine waters are polluted, requiring additional limits to eating fish.

Fish caught in some Maine waters have high levels of PCBs, Dioxins or DDT in them. These chemicals can cause cancer and other health effects. The Bureau of Health recommends additional fish consumption limits on the waters listed below. Remember to check the mercury guidelines. If the water you are fishing is listed below, check the mercury guideline above and follow the most limiting guidelines.

Androscoggin River Gilead to Merrymeeting Bay:-------------------------- 6-12 fish meals a year.
Dennys River Meddybemps Lake to Dead Stream:----------------------- 1-2 fish meals a month.
Green Pond, Chapman Pit, & Greenlaw Brook
(Limestone):---**Do not eat any fish from these waters**.
Little Madawaska River & tributaries
(Madawaska Dam to Grimes Mill Road):-----------------**Do not eat any fish from these waters**.
Kennebec River Augusta to the Chops:----------------**Do not eat any fish from these waters**.
Shawmut Dam in Fairfield to Augusta:--------- 5 trout meals a year, 1-2 bass meals a month.
Madison to Fairfield: --- 1-2 fish meals a month.
Meduxnekeag River: --- 2 fish meals a month.
North Branch Presque Isle River-- 2 fish meals a month.
Penobscot River below Lincoln:-- 1-2 fish meals a month
Prestile Stream:-- 1 fish meal a month.
Red Brook in Scarborough: -- 6 fish meals a year.
Salmon Falls River below Berwick: -- 6-12 fish meals a year.
Sebasticook River (East Branch, West Branch & Main Stem)
(Corinna/Hartland to Winslow):--2 fish meals a month.

GROUND WATER AND PUBLIC HEALTH CONCERNS

PUBLIC HEALTH AND ENVIRONMENTAL CONCERNS

Contaminants found in groundwater have numerous adverse human health and environmental impacts. Public health concerns arise because some of the contaminants are individually linked to numerous toxic effects ranging from allergic reactions and respiratory impairment to liver and kidney damage, and damage to the central nervous system. Additional public health concerns also arise because information is not available about the health impacts of many contaminants found in groundwater.

Due to uncertainties in the relationships between exposure to contaminants and impacts on human health, public health efforts are based on identifying the probabilities of impacts (i.e. risk assessment). Conducting a risk assessment for combinations of contaminants that are commonly found in groundwater is difficult because there are no generally accepted protocols for testing the effects of contaminant interactions. The primary route of exposure to contaminants is through ingestion of drinking water, although exposure is also possible through contact with skin and inhalation of vapors from groundwater sources (bathing, food preparation, industrial processes, etc.)

Because groundwater generally provides base flow to streams and rivers, environmental impacts include toxic effects on benthic invertebrates, fish, wildlife and aquatic vegetation. This also presents a public health concern if the surface waterbody is a source of food and recreation. In some areas of the State there are probably links between low-level, long-term groundwater quality degradation and the water quality of streams and brooks during low-flow conditions.

DRINKING WATER PROGRAMS AND GROUNDWATER CONTAMINANT ASSESSMENTS

WELLHEAD PROTECTION PROGRAM

Contact: David Braley, DHHS Maine CDC, Division of Environmental Health, Drinking Water Program

Tel: (207) 287-5338 email: David.Braley@SPAM-ZAPmaine.gov

Related Website:

http://www.state.me.us/dhhs/eng/water/download_documents/2010WHPapplication.pdf or http://www.state.me.us/dhhs/eng/water/

The State of Maine Drinking Water Program (DWP), located in the Department of Health and Human Services, administers the Wellhead Protection Program (WHPP). The WHPP continues to be a voluntary program for Maine's public water suppliers, with all reduced or waived monitoring tied to approved protection programs. To be eligible for reduced or waived monitoring, a system must have an approved local Wellhead Protection Plan (WHPP) and have completed a waiver application.

SOURCE WATER ASSESSMENT PROGRAM

Contact: Andrews L. Tolman, DHHS Maine CDC, Division of Environmental Health, Drinking Water Program

Tel: (207) 287-2070 email: Andrews.L.Tolman@SPAM-ZAPmaine.gov

Related Websites: www.medwp.com and

http://www.maine.gov/dhhs/eng/water/Templates/Sections/SourceWaterProtection/sourcewaterprotection.htm

Water supply protection is the first line of defense in protecting public health. Protecting a water supply source has long been recognized as the cornerstone of providing safe drinking water. The most effective source protection method is to keep the area contributing water to the supply open and undeveloped. The Maine Drinking Water Program's (DWP) recently completed five year assessment of source protection for public water supplies identified rapid residential and commercial development in source protection areas as the most significant threat to water quality and quantity, and few water suppliers are prepared to deal with these risks.

Public Water Systems (PWS) have a very limited suite of tools for source protection: they can purchase land, inspect existing activities, and ask local government to enact (and enforce) protective ordinances. Only one in five of Maine's community water systems have effective source protection plans in place after more than fifteen years of encouragement and incentives.

FINISHED WATERS

Contact: Andy Tolman, DHHS Maine CDC, Division of Environmental Health, Drinking Water Program

Tel: (207) 287-6191 email: andrews.l.tolman@SPAM-ZAPmaine.gov

Related Website: www.medwp.com

The Drinking Water Program (DWP) is the front line enforcement agent of the U.S. Environmental Protection Agency (EPA) for the rules and regulations set forth in the Safe Drinking Water Act (SDWA). The requirements of SDWA apply to the approximately 2,000 public drinking water systems in Maine. There are 70 water systems that use surface water as their primary source and these all have water treatment systems and watershed protection programs. Of the approximately 1,880 ground water systems, 876 have some form of treatment on-line (and this number is likely to continue to rise) while the remaining systems have no treatment and serve raw water. Water testing on finished water is the primary means for assessing public water system compliance while verifying the quality of water that is reaching consumers.

PRIVATE WELLS

Contact Andrew Smith, DHHS Maine CDC, Environmental and Occupational Health Program

Tel: (207) 287-5189 email: Andy.E.Smith@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dhhs/eohp/wells/

The State of Maine has one of the highest per capita uses of domestic household wells for drinking water in the U.S. Based on data from Maine's 2003 Behavioral Risk Factors Surveillance Survey (BRFSS), 52 percent of the state's population relies on private domestic wells for their drinking water. Despite the fact that the majority of Maine residents obtain their drinking water from private household wells, the State does not have an environmental health services program focused specifically on meeting the needs of private well owners.

Please refer to pages 162-167 of the 2006 Integrated Water Quality Monitoring and Assessment Report for additional information on Maine's Wellhead Protection and Source Water Protection Programs, and Finished Water and Private Well information. http://www.state.me.us/dep/blwq/docmonitoring/305b/index.htm

RADON

Contact: Bob Stilwell, DHHS Maine CDC, Division of Environmental Health, Radiation Control Program

Tel: (207) 287-5698 (or 800-232-0842 in Maine)

email: Bob.Stilwell@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dhhs/eng/rad/hp_radon.htm

Not all public health concerns that involve ground water are caused by pollution released from human activities. The presence of naturally occurring radioactive radon gas in ground water drawn from granite bedrock aquifers and overlying soils has long been recognized as a problem in Maine. Based on studies of miners and more recently on people living in homes with high radon concentrations, medical researchers have shown that high radon levels in air are associated with increased incidence of lung cancer. Radon in water supplies is a concern because radon is readily released into the air from water. Therefore the health concerns stems more from inhalation of the radon rather than drinking the water. A large number of Maine wells have radon concentrations that through normal household water use, release concentrations of radon into the air that are as high or higher than the concentrations associated with an increased incidence of lung cancer.

The average concentration of radon in public or private water supplies in Maine ranges from 5,000 to 10,000 picocuries/Liter (pci/L). The Maine State Toxicologist set a maximum exposure guideline (MEG) for radon in water of 4,000 pCi/l, effective January 1 2007. For private wells with radon in water concentrations between 4,000 pCi/l and 10,000 pCi/l, the Toxicologist recommends investigation of the total radon risk in the structure from water and soil gas (air), then making a decision to reduce radon based on the amount of risk the occupants are willing to accept and the resources available for radon risk reduction. For private wells with radon concentrations of 10,000 pCi/l or higher in water, the guidance recommends reducing the radon in water concentration regardless of the radon in air concentration. The new radon in water MEG is also being used by the Drinking Water Program when evaluating new community water supplies and new non-transient, non-community water supplies.

ARSENIC

Contacts: Robert Marvinney, State Geologist, DOC BGNA, Maine Geological Survey, Administrative Division

Tel: (207) 287-2801 email: Robert.Marvinney@SPAM-ZAPmaine.gov

or David Braley, DHHS, Maine CDC, Division of Environmental Health, Drinking Water Program

Tel: (207) 287-5338 email: David.Braley@SPAM-ZAPmaine.gov

Related Websites: http://www.maine.gov/dhhs/eohp/documents/ASBROCH3.pdf and http://www.maine.gov/dhhs/eohp/index.htm

Several types of cancer including skin and bladder cancer, along with other health problems have been linked to the occurrence of arsenic in drinking water. The current Maximum Contaminant Level (MCL) for arsenic is 50 ppb (parts per billion); however the EPA has recently proposed lowering the MCL to 10 ppb in drinking water. The Maine Bureau of Health has set a maximum exposure guideline (MEG) for arsenic in domestic well water at 0.01 milligrams of arsenic per liter of water (which is equal to 10 ppb). This is also the same amount that the World Health Organization currently recommends. A 1994 – 1995 study of about 600 randomly selected wells indicated that, statewide, about 1 to 2 percent have arsenic levels greater than 50 ppb. However, about 10 percent have arsenic levels above the MEG of 10 ppb.

Currently a source or sources for all arsenic detected in well water has not been determined. However, preliminary work by the MGS, University of Maine Department of Geological Sciences, DEP, and DHHS indicate that the problem is of statewide significance and that the arsenic concentration in ground water is most likely the result of both natural processes and human activity.

CHAPTER 8 SUMMARY OF IMPAIRED WATERS

Table 8-1a and 8-1b present specific *Causes* of impairment that have been removed from the list of Impaired Waters (the"303d List") for the specified river and stream segments. Table 8-1a presents new delistings for E. coli for 2010 and Table 8-1b provides a summary of new and previously delisted waters for other causes. Refer to the "Delisting" section on page 53 for an explanation of the delisting process. Segments may appear multiple times, if they have multiple causes that have been delisted. This list has been presented in this format in keeping with the manner in which the EPA Assessment Database (ADB) stores and reports this information.

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

Assessment Unit	AU Name	Location Description	Size	Cause	Reason for Removal	Delisting Comment
ME0101000105_103R01	Shields Branch of Big Black R	mainstem	8.16 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	12/3/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0101000121_117R	St. John River at Madawaska	HUC: 0101000121	0 MILES*	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0101000413_146R01	**Webster Brook****	**HUC: 0101000413**	**12.1 MILES**	**Escherichia coli**	**Applicable WQS attained; original basis for listing was incorrect**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**
ME0102000110_205R03	Millinocket Stream (Millinocket)	HUC: 0102000110	3.03 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0102000402_219R_02	Piscataquis River at Dover Foxcroft	HUC: 0102000402	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000403_215R_02	Sebec River at Milo	HUC: 0102000403	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000506_222R01	Costigan Str (Costigan)	HUC: 0102000506	0.78 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_226R01	Otter Stream, Milford	HUC: 0102000509	6.27 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_226R02	Boynton Brook	HUC: 0102000509	2.64 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_233R_02	Penobscot River at Orono	HUC: 0102000509	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_233R_03	Penobscot River at Old Town-Milford	HUC: 0102000509	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

ME0102000510_224R02	Kenduskeag Stream	HUC: 0102000510	2.96 MILES	Escherichia coli	Applicable WQS attained; original basis for listing was incorrect	Delisted with Statewide bacteria TMDL 9/28/09. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds
Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0102000513_234R	Penobscot River	at Bangor-Brewer including Kenduskeag Stream	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000306_320R02	Currier Brook	HUC: 0103000306	3.19 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000306_320R03	Whitten Brook (Skowhegan)	HUC: 0103000306	1.12 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000306_338R_02	Kennebec River at Skowhegan, CSO	Variable mileage CSO-affected segment	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000306_339R_03	Kennebec River, near Fairfield	Variable mileage CSO affected segment	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

ME0103000309_332R	Sebasticook River	main stem, below confluence of E and W Branches, (excluding the Halifax Impd)	30.83 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000312_333R02	Whitney Brook (Augusta)	HUC: 0103000312	2.68 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0103000312_339R_02	Kennebec River at Waterville, CSO	Variable mileage CSO-affected	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000312_340R_02	Kennebec River at Augusta, including Riggs Brook- CSO	HUC: 0103000312	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	Statewide bacteria TMDL approved 9/28/09
ME0103000312_340R_03	Kennebec River at Hallowell- CSO	HUC: 0103000312	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0103000312_340R_04	Kennebec River at Gardiner-Randolph	HUC: 0103000312	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000208_413R01	Jepson Brook (Lewiston)	HUC: 0104000208	2.43 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0104000208_413R03	Stetson Brook (Lewiston)	HUC: 0104000208	6.82 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000208_413R04	Logan Brook, Auburn	HUC: 0104000208	0.96 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000208_413R07	Gully Brook (Auburn)	HUC: 0104000208	1.91 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000209_417R_02	Little Androscoggin River at Mechanic Falls	HUC: 0104000209	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000210_418R02	No Name Brook (Lewiston)	HUC: 0104000210	10.02 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000210_419R02	Hart Brook (Lewiston) A.K.A Dill Brook and including Goff Bk	HUC: 0104000210	4.15 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000210_425R_02	Androscoggin River, Lewiston-Auburn	at Lewiston-Auburn, that area of mainstem affected by CSO's	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

ME0105000108_505R_02	St. Croix R., Calais CSO	Calais CSO	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL by EPA 9/28/09;
ME0105000203_508R02	Pottle Brook (Perry)	HUC: 0105000203	0.5 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0105000213_514R_01	Card Brook (Ellsworth)	HUC: 0105000213	1.2 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	TMDL approval
ME0105000220_522R01_01	Megunticook River (Camden)	HUC: 0105000220	3.56 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0105000220_522R02_01	Unnamed Brook (Camden) .	HUC: 0105000220	0.7 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0105000220_522R03	**Unnamed Brook (Rockport)**	**HUC: 0105000220**	**0.5 MILES**	**Escherichia coli**	**Applicable WQS attained; original basis for listing was incorrect**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**
ME0105000220_522R04	Unnamed Brook (Rockland)	HUC: 0105000220	0.5 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

Assessment Unit	AU Name	Location Description	Size	Cause	Reason for Removal	Delisting Comment
ME0105000305_528R01	Sheepscot River at Alna	HUC: 0105000305	4.01 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	12/3/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0105000305_528R03	Dyer River below Rt 215	HUC: 0105000305	9.35 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_607R03	Colley Wright Brook (Windham)	HUC: 0106000103	8.16 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0106000103_607R04	Piscataqua River (Falmouth)	HUC: 0106000103	12.53 MILES	Escherichia coli	Applicable WQS attained; original basis for listing was incorrect	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds
ME0106000103_607R06	Hobbs Brook (Cumberland)	HUC: 0106000103	1.54 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_607R07	Inkhorn Brook (Westbrook)	HUC: 0106000103	4.32 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

						bacteria TMDL
ME0106000103_607R09	Otter Brook (Windham)	HUC: 0106000103	2.16 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_607R11	Nason Brook (Gorham)	Trib to Presumpscot entering so. of Dundee Pd.	2.7 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_607R12	Pleasant River (Windham)	mainstem of Pleasant River from Thayer Brook to confluence with Presumpscot	8.8 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_609R_02	Presumpscot River at Westbrook	HUC: 0106000103	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
Assessment Unit	**AU Name**	**Location Description**	**Size**	**Cause**	**Reason for Removal**	**Delisting Comment**
ME0106000106_602R01	Frost Gully Brook	HUC: 0106000106	4.04 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	12/3/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000106_612R01_02	Bear Brook, Saco CSO	HUC: 0106000106	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	Category 4A Statewide bacteria TMDL approved 9/28/09

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL

ME0106000106_616R04	Bear Bk	HUC: 0106000106	0.5 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	12/3/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000204_618R01	**Saco R, Fryeburg**	**main stem, Swans Falls to Rt 5 (Fryeburg)**	**5 MILES**	**Escherichia coli**	**Applicable WQS attained; original basis for listing was incorrect**	**12/3/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**
ME0106000209_614R01	**Ossippee R**	**mainstem below Kezar Falls .**	**5 MILES**	**Escherichia coli**	**Applicable WQS attained; original basis for listing was incorrect**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**
ME0106000211_616R02	Tappan Bk	HUC: 0106000211	0.5 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000211_616R03	Sawyer Bk	HUC: 0106000211	0.5 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000211_616R05	Thatcher Bk (Biddeford)	HUC: 0106000211	5.67 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Table 8-1a River and stream segments impaired for Escherichia coli that have been delisted to Category 2 (now attaining) or to Category 4A for the 2010 assessment cycle due to US EPA approval of a Statewide Maine Bacteria TMDL						
ME0106000211_616R06	Swan Pond Brook at South Street (Biddeford)	HUC: 0106000211	1 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000211_619R01	Saco River at Biddeford-Saco	including Thatcher Bk	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000301_622R01	Kennebunk River	HUC: 0106000301	3.07 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000302_628R02	Mousam River at Sanford	HUC: 0106000302	0 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000305_630R01	Salmon Falls R	main stem, from Route 9 to tidewater	7.43 MILES	Escherichia coli	TMDL approved or established by EPA (4A)	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

*** "0 MILES" indicates number of miles affected is undetermined due to Combined Sewer Overflows**

**** Bold font indicates delisted to Category 2 rather than Category 4A.**

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
'02 '04	'06 '08 '10				ME0101000303_124R 01	Dickey Brook	Nutrient/Eutrophication Biological Indicators	TMDL approved by EPA Category 4A) 9/15/2006	Submitted with Daigle Pond/Cross Pond TMDL in September 2006. EPA approved TMDL 9/28/06
'02 '04	'06 '08 '10				ME0101000303_124R 01	Dickey Brook	Oxygen, Dissolved	TMDL approved by EPA Category 4A) 9/15/2006	Submitted with Daigle Pond/Cross Pond TMDL in September 2006. EPA approved TMDL 9/28/06
'02 '04	'06 '08 '10				ME0101000303_124R 02	Daigle Brook	Nutrient/Eutrophication Biological Indicators	TMDL approved by EPA Category 4A) 9/15/2006	Submitted with Daigle Pond/Cross Pond TMDL in September 2006. EPA approved TMDL 9/28/06
'02 '04	'06 '08' 10				ME0101000303_124R 02	Daigle Brook	Oxygen, Dissolved	TMDL approved by EPA Category 4A) 9/15/2006	Submitted with Daigle Pond/Cross Pond TMDL in September 2006. EPA approved TMDL 9/28/06
'02		'04		'06 '08 '10	ME0101000412_140R 01	No. Br. Presque Isle Stream between Mapleton and Presque Isle	Dissolved oxygen	State Determines water quality standard is being met (Category 2) 8/31/2006	Removal of Mapleton POTW complete. 2004 biomonitoring- showed attainment of Class A biocriteria and attains D.O. criteria at Station 11, 0.2 km downstream of Mapleton POTW
'02 '04			'06 '08 '10		ME0101000413_142R 01	Caribou Stream	Benthic-Macroinvertebrate Bioassessments (Streams)	Flaws in original listing (Category 3) 10/2006	Administrative error, conflicting data Biocriteria non-attainment is inconsistent; segment was 5A for nonattainment of biocriteria in 1994 only. Subsequent samples showed attainment; requires re-sampling
'04 '06 '08	**'10**				**ME0101000412_140R 02**	**Dudley Brook (Chapman)**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**TMDL approved or established by EPA (4A)**	**EPA approved TMDL 4/26/2010 (for Tot. Phos; Tot. Nitr. And Sediments)**
		'02 '04 '06 '08 '10			ME0101000413_145R 01	Little Madawaska River and tributaries	Benthic-Macroinvertebrate Bioassessments (Streams)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	Haz waste remediation project is complete (Superfund)--expected to attain standards

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	**4A**	**4B**	**3**	**2**	**ADB Assessment Unit #**	**Water Name**	**Cause**	**Delisting Reason / Date**	**Comments**
		'02 '04 '06 '08 '10			ME0101000413_145R 01	Little Madawaska River and tributaries	Polychlorinated biphenyls	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	Haz waste remediation project is complete (Superfund)--expected to attain standards by 2010. Needs re-sampling to confirm
		'02 '04 '06 '08 '10			ME0101000413_145R 02	Greenlaw Stream	Polychlorinated biphenyls	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 2002	Haz waste remediation project (Superfund)--expected to attain standards
'04 '06 '08				**'10**	**ME0101000413_146R 01**	**Webster Brook**	**E. coli**	**Applicable WQS attained; original basis for listing was incorrect**	**Monitoring for Statewide bacteria TMDL indicates this water attains bacteria standards**
'04 '06 '08	**'10**				**ME0101000501_149R 01**	**Prestile Stream above dam in Mars Hill**	**Nutrients, Aq. Life Use, DO**	**EPA approval of TMDL 5/10/2010**	**Eutrophic lake source (Christina L.) TMDL approved for lake and stream. Also listed 5D for legacy DDT sources**
		(4C) '02 '04		'06 '08 '10	ME0102000103_201R 02	West Branch of Penobscot R below Seboomook Lake	Benthic-Macroinvertebrate Bioassessments (Streams)	State Determines water quality standard is being met (Category 2)	UAA approved by EPA on April 5, 2005 (FERC# 2634, expiration date 11/31/2064). Meets applicable water quality standards.
'02 '04 '06				'08 '10	ME0102000403_215R 01	Sebec River at Milo above confluence with Piscataquis R	Benthic-Macroinvertebrate Bioassessments (Streams)	Applicable WQS attained due to restoration activities	Previously listed in 5-A for biocriteria non-attainment based on 1985 data. This segment has been delisted: Resampling in 2006, at Biomonitoring Station 827, below the Milo Dam, shows attainment of Class A biocriteria.

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
'04				'02 '06 '08 '10	ME0102000502_220R _01	Mattanawcook Stream (Lincoln)	E. coli	State Determines water quality standard is being met for this cause (Category 2)	CSO has been removed. Data from multiple sampling events collected by the Penobscot Indian Nation during summer 2004 for Mattanawcook Stream confirm attainment of numeric criteria for dissolved oxygen and bacteria. Segment is also Category 3 listed for sediment contamination; possible fish consumption impairment. Needs sampling to confirm
'04				'02 '06 '08 '10	ME0102000502_220R _01	Mattanawcook Stream (Lincoln)	Oxygen, dissolved	State Determines water quality standard is being met for this cause (Category 2)	CSO has been removed. Data from multiple sampling events collected by the Penobscot Indian Nation during summer 2004 for Mattanawcook Stream confirms attainment of numeric criteria for dissolved oxygen and bacteria. Segment is also Category 3 listed for sediment contamination; possible fish consumption impairment.
'02 '04				'06 '08 '10	ME0102000502_231R	Penobscot R, main stem, from Cambolasse Str to Piscataquis R	Benthic-Macroinvertebrate Bioassessments (Streams)	Flaws in original listing of this cause (Category 2) 12/6/2006	Administrative error, no data to support impaired biocriteria assessment. Erroneously listed for benthic macroinvertebrates prior to 2002 cycle; has attained applicable biocriteria in 1992, 1993, 1994 and 1995.
'02 '04		'06 '08 '10			ME0102000502_231R	Penobscot R, main stem, from Cambolasse Str to Piscataquis R	Dioxin (including 2,3,7,8-TCDD)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 8/1/2006	Dioxin controls in place and monitoring confirms improvement. Dioxin data from 2003 and 2005 showed no difference in fish above and below Lincoln.

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
		'10		**'02 '04 '06 '08**	**ME0102000109_205R 01**	**West Branch Penobscot R main stem, below confluence with Millinocket Str**	**Oxygen, dissolved**	**Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 1/17/08**	**Updated assessment of 2007 data determined impaired but 1/17/08 BEP Consent Agreement in place to control phosphorus**
		'10		**'02 '04 '06 '08**	**ME0102000109_205R 01**	**West Branch Penobscot R main stem, below confluence with Millinocket Str**	**Nutrient/Eutrophication Biological Indicators**	**Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 1/17/08**	**Updated assessment of 2007 data determined impaired but 1/17/08 BEP Consent Agreement in place to control phosphorus**
		'10		**'02 '04 '06 '08**	**ME0102000512_229R**	**Penobscot R main stem, above Mattawamkeag R.**	**Oxygen, dissolved**	**Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 1/17/08**	**Updated assessment of 2007 data determined impaired but 1/17/08 BEP Consent Agreement in place to control phosphorus**
		'10		**'02 '04 '06 '08**	**ME0102000512_229R**	**Penobscot R main stem, above Mattawamkeag R.**	**Nutrient/Eutrophication Biological Indicators**	**Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 1/17/08**	**Updated assessment of 2007 data determined impaired but 1/17/08 BEP Consent Agreement in place to control phosphorus**
'04		'06 '08 '10		'02	ME0102000503_221R 01	Cold Stream (Enfield) downstream of hatchery	Benthic-Macroinvertebrate Bioassessments (Streams)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 6/20/2006	Final hatchery permit issued 3/31/06 ; other pollution controls are in place, attainment expected by 2009;

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
'02 '04 '06	'08 '10				ME0102000510_224R 04	Birch Stream (Bangor)	Benthic-Macroinvertebrate Bioassessments (Streams)	TMDL approved by EPA 9/12/07	EPA approved TMDL 9/12/07 Biomonitoring August 2005 and 2006 both still non-attainment
'02 '04		'06 '08 '10			ME0103000304_313R 01	Mill Stream (Embden)	Benthic-Macroinvertebrate Bioassessments (Streams)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 6/20/2006	Hatchery permit issued 1/30/2006; exp. Date 1/30/2011; other pollution controls are in place, attainment expected by 2009;
'04		'06 '08 '10		'02	ME0103000305_315R _02	Unnamed Stream trib to Sandy R (Avon-Dunham Hatchery)	Benthic-Macroinvertebrate Bioassessments (Streams)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 6/20/2006	Hatchery permit issued 10/18/2005; expiration date 10/18/10; hatchery is now closed; other pollution controls are in place, attainment expected by 2008;
'04 '06 '08		**'10**			**ME0103000305_319R _02**	**Sandy R. main stem, segment below Farmington WWTP**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B)**	**New wastewater license, outfall moved, expected to attain all standards; Biomonitoring in 2007-attained Class B; algae monitoring in 2007- attained Class B**
		'02 '04 '06 '08 '10			ME0103000308_325R 01	East Branch Sebasticook River Corundel Pd to Sebasticook L (Corinna)	Benthic-Macroinvertebrate Bioassessments (Streams)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	Haz waste remediation project (Superfund). CSO removal. New wastewater permit, removal to land treatment in 2004. Segment attains aquatic life criteria (2003 data). Expected to attain by 2008.
		'02 '04 '06 '08 '10			ME0103000308_325R 01	East Branch Sebasticook River, Corundel Pd to Sebasticook L (Corinna)	Benzene	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	Haz waste remediation project (Superfund). CSO removal. New wastewater permit, removal to land treatment in 2004. Segment attains aquatic life criteria (2003 data). Expected to attain by 2008.

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
		'06 '08 '10			ME0103000308_331R 01	Martin Stream (Dixmont)	Ammonia (Un-ionized)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 7/13/2006	CAFO permit issued 8/15/06; other pollution controls in place, expected to attain stds
		'06 '08 '10			ME0103000308_331R 01	Martin Stream (Dixmont)	Benthic-Macroinvertebrate Bioassessments (Streams) 7/13/2006	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 7/13/2006	CAFO permit issued 8/15/06, other pollution controls in place, expected to attain stds
		(4C) '02 '04 '06 '08		'10	**ME0103000309_332R 01**	**Sebasticook River (Halifax impoundment)**	Benthic-Macroinvertebrate Bioassessments (Streams)	Applicable WQS attained due to restoration activities	**Biomonitoring following removal of Halifax Dam confirms attainment of biocriteria**
'02 '04	'06 '08 '10				ME0103000310_322R 01	Fish Brook (Fairfield)	Benthic-Macroinvertebrate Bioassessments (Streams)	EPA approval of TMDL (Category 4A) 8/30/2005	EPA approved TMDL 8/30/2005
'02 '04	'06 '08 '10				ME0103000310_322R 01	Fish Brook (Fairfield)	Oxygen, Dissolved	EPA approval of TMDL (Category 4A) 8/30/2005	EPA approved TMDL 8/30/2005
		'10			**ME0103000324_333R _02**	**Spring Brook (Augusta) from Gov Hill fish hatchery to Mt Vernon Rd, Augusta**	**Benthic-Macroinvertebrate Bioassessments (Streams); Phosphorus**	**Other point source or nonpoint source controls are expected to meet water quality standards**	**Active licensing and enforcement process under Consent agreement; upgraded settling basin, underway to address nutrient problems.**

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	**4A**	**4B**	**3**	**2**	**ADB Assessment Unit #**	**Water Name**	**Cause**	**Delisting Reason / Date**	**Comments**
'04	'06			'08 '10	ME0104000206_423R 01	Androscoggin R, main stem, Livermore impoundment	Benthic-Macroinvertebrate Bioassessments (Streams); Total Suspended Solids	Applicable WQS attained due to restoration activities	EPA approved TMDL 7/18/2005 (TMDL #11594) but there are ongoing licensing issues. Attained Class C biocriteria in 2003, and attained Class B biocriteria in 2004, 2005 and 2006. Benthic invertebrate and TSS causes delisted to 'WQS attainment'. Also 4b listed for dioxin 5d listed for legacy PCB contamination
		'02 '04 '06 '08 '10			ME0104000206_423R 01	Androscoggin R, main stem, Livermore impoundment	Dioxin (including 2,3,7,8-TCDD)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	EPA approved TMDL 7/18/2005 but there are ongoing licensing issues. Attained Class C biocriteria in 2003 and attained Class B biocriteria in 2004; Also 4B listed for dioxin; 5D listed for legacy PCB contamination.
		'02 '04 '06 '08 '10			ME0104000207_412R 02	House/Lively Brook	Nitrogen (Total)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	Waste (manure) removal (Agric NPS) by Consent Order and Site Permit-expected to attain standards; needs additional monitoring to confirm attainment.
'04			'06 '08 '10	'02	ME0104000208_413R 08	Bobbin Mill Brook (Lake Auburn Outlet, Auburn)	Benthic-Macroinvertebrate Bioassessments (Streams)	Flaws in original listing (Category 3) 3/9/05	Administrative error, conflicting data. Biocriteria non-attainment is inconsistent. Needs re-sampling to confirm non-attainment. 1998- non-attainment of biocriteria; biomonitoring in August 2003 showed attainment of biocriteria; Delist to Category 3--need to confirm that 1998 non-attainment was caused by natural conditions.
'04	'06 '08 '10				ME0104000208_424R _01	Androscoggin R, main stem, upstream of the Gulf Island Dam	BOD, Biochemical oxygen demand	EPA approval of TMDL (Category 4A) 7/18/2005	Draft revised WLA & TMDL target date Feb 2010 4a EPA approved TMDL (TSS, DO, Nutrients/BOD; phosphorus) 7/18/05 -ongoing

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	**4A**	**4B**	**3**	**2**	**ADB Assessment Unit #**	**Water Name**	**Cause**	**Delisting Reason / Date**	**Comments**
		'02 '04 '06 '08 '10			ME0104000208_424R_01	Androscoggin R, main stem, upstream of the Gulf Island Dam	Dioxin (including 2,3,7,8-TCDD)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 3/15/2004	licensing issues; 4b dioxin 5d Fish tissue sampling shows legacy PCB 2/5/08 Non-attainment of Primary Contact Recreation use due to algae blooms
'04	'06 '08 '10				ME0104000208_424R_01	Androscoggin R, main stem, upstream of the Gulf Island Dam	Oxygen, Dissolved	EPA approval of TMDL (Category 4A) 7/18/2005	
'04	'06 '08 '10				ME0104000208_424R_01	Androscoggin R, main stem, upstream of the Gulf Island Dam	Phosphorus	EPA approval of TMDL (Category 4A) 7/18/2005	
'04	'06 '08 '10				ME0104000208_424R_01	Androscoggin R, main stem, upstream of the Gulf Island Dam	Total suspended solids	EPA approval of TMDL (Category 4A) 7/18/2005	
'04	'06 '08 '10				ME0104000208_424R_01	Androscoggin R, main stem, upstream of the Gulf Island Dam	Algae blooms	EPA approval of TMDL (Category 4A) 7/18/2005	
		'02 '04 '06 '08 '10			ME0105000201_507R01	Dennys River	Polychlorinated biphenyls	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 9/5/2006	Haz waste remediation project (Superfund)--expected to attain standards by 2010; Biomon Sta 297 -2006 result= Class A, needs re-sampling to delist.
'02 '04	'06 '08 '10				ME0105000217_520R01	Carleton Stream (Blue Hill)	Benthic-Macroinvertebrate Bioassessments (Streams)	EPA approval of TMDL (Category 4A) 10/7/2004	EPA approved TMDL 10/7/2004

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
'02 '04	'06 '08 '10				ME0105000217_520R 01	Carleton Stream (Blue Hill)	Iron	EPA approval of TMDL (Category 4A) 10/7/2004	EPA approved TMDL 10/7/2004
'04 '06 '08				**'10**	**ME0105000220_522R 03**	**Unnamed Brook (Rockport)**	**E. coli**	**Applicable WQS attained; original basis for listing was incorrect**	**Monitoring for Statewide bacteria TMDL indicates this water attains bacteria standards**
'04 '06 '08				**'10**	**ME0105000305_528R 02**	**West Branch Sheepscot River**	**Oxygen, Dissolved**	**Applicable WQS attained; original basis for listing was incorrect**	**TMDL analysis of additional monitoring data demonstrates that segment is not impaired for dissolved oxygen.**
			'10	**'04 '06 '08**	**ME0105000305_528R 02**	**West Branch Sheepscot River**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**Insufficient information to determine if WQS attained**	**Category change from 2 to 3 due to inconsistent biocriteria attainment for benthic invertebrates and algae**
'02 '04		'06 '08 '10			ME0105000305_528R 08_02	Sheepscot River below Sheepscot L	Oxygen, Dissolved	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 6/20/2006	Listed for dissolved oxygen; hatchery permit issued 2/20/06, expiration date 2/20/11; facility upgrade complete; Expected to attain standards by 2010. Monitoring due in 2012
'02 '04		'06 '08 '10			ME0106000101_605R 01	Mile Brook (Casco)	Benthic-Macroinvertebrate Bioassessments (Streams)	Other point source or nonpoint source controls are expected to meet water quality standards (Category 4B) 6/20/2006	Hatchery permit issued 5/8/2006; exp. Date 5/8/2011; other pollution controls are in place, attainment expected by 2009;
'02 '04				'06 '08 '10	ME0106000102_603R 05	Royal River, segment below Collyer Bk	Drinking water-trichloroethylene	State Determines water quality standard is being met (Category 2) 8/31/2006	Per RCRA hazardous waste site manager: June 2006 surface water monitoring determined that the trichloroethylene standards and all other water quality criteria are being met in the Royal River at sites down-gradient of the contaminated site.
'04 '06 '08				**'10**	**ME0106000103_607R 04**	**Piscataqua River (Falmouth)**	**E. coli**	**Applicable WQS attained; original basis for listing was incorrect**	**Monitoring for Statewide bacteria TMDL indicates this water attains bacteria standards**

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
	'02 '04			'06 '08 '10	ME0106000103_609R _01	Presumpscot R, main stem, below Sacarappa Dam	BOD, Biochemical oxygen demand	State Determines water quality standard is being met (Category 2) 8/31/2006	Sources removed, pulping operation closed and Smelt Hill Dam has been breached. Bioassessment (2005) shows attainment of Class C dissolved oxygen and biocriteria (Class B biocriteria just above Smelt Hill dam site).
	'02 '04			'06 '08 '10	ME0106000103_609R _01	Presumpscot R, main stem, below Sacarappa Dam	Total Suspended Solids (TSS)	State Determines water quality standard is being met (Category 2) 8/31/2006	Sources removed, pulping operation closed and Smelt Hill Dam has been breached. Bioassessment (2005) shows attainment of Class C dissolved oxygen and biocriteria (Class B biocriteria just above Smelt Hill dam site).
'02 04 06 '08		**'10**			**ME0106000105_610R 03**	**Long Creek (South Portland)**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**Other enforcible controls are in place 6/9, 2010**	**Active stakeholder process and watershed restoration process; Long Creek has been moved to Category 4B due to Stormwater General Permit , MEPDES MEG190000. Wastewater Discharge license number W-9052-5Y-A-N November 6, 2009**
'02 '04 '06	'08 '10				ME0106000105_610R 05	Trout Brook (So. Portland)	Benthic-Macroinvertebrate Bioassessments (Streams)	EPA approval of TMDL (Category 4A) 10/25/2007	EPA approved TMDL 10/25/2007 (under bundled urban stream project;)
'02 '04 '06	'08 '10				ME0106000105_610R 05	Trout Brook (So. Portland)	Habitat Assessment (Streams)	EPA approval of TMDL (Category 4A) 10/25/2007	EPA approved TMDL 10/25/2007 (under bundled urban stream project;)
'02 '04 '06	'08 '10				ME0106000105_610R 09	Barberry Cr	Benthic-Macroinvertebrate Bioassessments (Streams)	EPA approval of TMDL (Category 4A) 6/21/2007	EPA approved TMDL 6/21/2007 (under bundled urban stream project.)

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
'02 '04 '06	'08 '10				ME0106000105_610R 09	Barberry Cr	Habitat Assessment (Streams)	EPA approval of TMDL (Category 4A) 6/21/2007	EPA approved TMDL 6/21/2007 (under bundled urban stream project.)
'04			'06 '08 '10	'02	ME0106000106_607R 12	Norton Brook (Falmouth)	Benthic-Macroinvertebrate Bioassessments (Streams)	Flaws in original listing of this cause (Category 3) 10/2006	Administrative error, conflicting data. More data required to support impaired assessment. Non-attainment of biocriteria in 2002 may be due to natural habitat effects; needs resampling
'02	'04 '06 '08 '10				ME0106000106_612R 01_01	Goosefare Brook	Cd, Cr, Cu, Fe, Pd, Ni, Zn	EPA approval of TMDL (Category 4A) 9/29/2003	EPA approved TMDL 9/29/2003
'04 '06 '08				**'10**	**ME0106000204_618R 01**	**Saco R., Fryeburg**	**E. coli**	**Applicable WQS attained; original basis for listing was incorrect**	**Monitoring for Statewide bacteria TMDL indicates this water attains bacteria standards**
'04 '06 '08				**'10**	**ME0106000209_614R 01**	**Ossippee R, mainstem below Kezar Falls**	**E. coli**	**Applicable WQS attained; original basis for listing was incorrect**	**Monitoring for Statewide bacteria TMDL indicates this water attains bacteria standards**
'06' 08		'10			ME0106000301_622R 02	Lord's Brook (Lyman)	Nutrient/Eutrophication Biological Indicators	TMDL Alternative	Court-ordered controls in place
'06' 08		'10			ME0106000301_622R 02	Lord's Brook (Lyman)	Oxygen, Dissolved	TMDL Alternative	Court-ordered controls in place
'06' 08		'10			ME0106000301_622R 02	Lord's Brook (Lyman)	BOD, Biochemical oxygen demand	TMDL Alternative	Court-ordered controls in place
	'02 '04 '06 '08 '10				ME0106000305_630R 01	Salmon Falls R, segment below Collyer Bk	Ammonia (Un-ionized)	EPA approval of TMDL (Category 4A) 11/1/1999	4-A EPA approved TMDL 11/22/99 for BOD, ammonia and phosphorus; 5B non-CSO, low priority bacteria listing; 5D fish tissue monitoring shows legacy PCBs and Dioxin

Table 8-1b Status of delisted Category 5 Rivers and Streams, including 2010 segments that have been delisted directly to Category 2 or Category 4B.

(Bold font indicates waters that have changed Category during this cycle)

Category by Report Year									
5	4A	4B	3	2	ADB Assessment Unit #	Water Name	Cause	Delisting Reason / Date	Comments
	'02 '04 '06 '08 '10				ME0106000305_630R 01	Salmon Falls R segment below Collyer Bk,	Nutrient/Eutrophica tion Biological Indicators	EPA approval of TMDL (Category 4A) 11/1/1999	4-A EPA approved TMDL 11/22/99 for BOD, ammonia and phosphorus; 5b non-CSO, low priority bacteria listing; 5D fish tissue monitoring shows legacy PCBs and Dioxin
	'02 '04 '06 '08 '10				ME0106000305_630R 01	Salmon Falls R, segment below Collyer Bk	Oxygen, Dissolved	EPA approval of TMDL (Category 4A) 11/1/1999	4-A EPA approved TMDL 11/22/99 for BOD, ammonia and phosphorus; 5b non-CSO, low priority bacteria listing; 5D fish tissue monitoring shows legacy PCBs and Dioxin

Table 8-2. Status of Category 5a / TMDL Lakes and Ponds 2000 through 2010. Bold text indicates changes for 2010 cycle.[1]

Lake	Town	MIDAS	Acres	HUC10	List Cat 00[2]	List Cat 02	List Cat 04	List Cat 06	List Cat 08	List Cat 10	Comments
CHRISTINA RESERVOIR	**FT FAIRFIELD**	**9525**	**400**	**0101000501**	**(5a)**	**5a**	**5a**	**5a**	**5a**	**4a**	**10: Stable, chronic blooming 'wetland'; TMDL March 2010**
LILLY P	ROCKPORT	83	29	0105000220	(5a)	5a	5a	4a	4a	4a	10: Stable; TMDL app. Dec. 2005
NARROWS P (UPPER)	WINTHROP	98	279	0103000311	(3)	5a	5a	2 *	2 *	2 *	10: Originally listed in 1998 but low priority for TMDL (approved 2005). Data collected since listing and over long-term record indicate stable trend
ELL (L) P	WELLS	119	32	0106000304	(5a)	3	2	2 *	2 *	2 *	10: Delist no longer supporting repeated nuisance blooms
ARNOLD BROOK L	PRESQUE ISLE	409	395	0101000412	(5a)	5a	5a	5a	4a	4a	10: Stable; TMDL Feb. 2007
DAIGLE P	NEW CANADA	1665	36	0101000303	(5a)	5a	5a	4a	4a	4a	10: Stable; TMDL Sept. 2006
CROSS L	T17 R05 WELS	1674	2515	0101000303	(5a)	5a	5a	4a	4a	4a	10: Stable; TMDL Sept. 2006
ECHO L	PRESQUE ISLE	1776	90	0101000412	(5a)	5a	5a	5a	4a	4a	10: Slow improv.; TMDL Feb. 2007
MADAWASKA L	T16 R04 WELS	1802	1526	0101000413	(5a)	4a	4a	2 *	2 *	2 *	10: Stable, occasional bloom; persistent improvement; TMDL 2000
MONSON P	FT FAIRFIELD	1820	160	0101000413	(5a)	5a	5a	5a	4a	4a	10: Stable; TMDL Nov. 2006
SEBASTICOOK L	NEWPORT	2264	4288	0103000308	(5a)	4a	4a	4a	4a	4a	10: Slow Improv.; TMDL 2001
HERMON P	HERMON	2286	461	0102000511	(5a)	5a	5a	5a	5a	5a	10: Stable; Paleo evidence[3] of historic productivity
HAMMOND P	HAMPDEN	2294	83	0102000511	(5a)	5a	5a	5a	5a	5a	10: Stable; High flushing rate; Paleo evidence[3] productive inflow
TOOTHAKER P	PHILLIPS	2336	30	0103000305	(3)	5a	5a	4a	4a	4a	10: Stable; TMDL Sept. 2004
HIGHLAND L	BRIDGTON	3454	1401	0106000101	(5a)	5a	5a	2*	2*	2*	10: TMDL Aug 2004; data indicates persistent stable trend
HIGHLAND (DUCK) L	**FALMOUTH**	**3734**	**634**	**0106000103**	**(5a)**	**5a**	**4a**	**4a**	**4a**	**2 ***	**10: TMDL 2003; Appears stable**
SABATTUS P	GREENE	3796	1962	0104000210	(5a)	5a	5a	4a	4a	4a	10: Stable perhaps Improving; TMDL August 2004

Table 8-2. Status of Category 5a / TMDL Lakes and Ponds 2000 through 2010. Bold text indicates changes for 2010 cycle.[1]

Lake	Town	MIDAS	Acres	HUC10	List Cat 00[2]	List Cat 02	List Cat 04	List Cat 06	List Cat 08	List Cat 10	Comments
WILSON P	WAYNE	3832	582	0103000311	(3)	3	2	5a	4a	4a	10: deteriorating trophic trend – all trophic param.; TMDL Aug. 2007
MOUSAM L	ACTON	3838	900	0106000302	(5a)	5a	4a	2*	2*	2 *	10: Attainment of monitored uses verified. Data collected since listing and over long-term record indicate stable trend.
UNITY P	UNITY	5172	2528	0103000309	(5a)	5a	5a	4a	4a	4a	10: Stable; TMDL Sept 2004
LOVEJOY P	ALBION	5176	324	0103000309	(5a)	5a	5a	4a	4a	4a	10: Stable; TMDL 2004
COBBOSSEECONTEE L	WINTHROP	5236	5543	0103000311	(5a)	4a	4a	2 *	2 *	2 *	10: persistent improvement
PLEASANT (MUD) P	GARDINER	5254	746	0103000311	(5a)	5a	4a	4a	4a	4a	10: Stable -blooms persist; TMDL complete 2004
LONG P	**BELGRADE**	**5272**	**2714**	**0103000310**	**(3)**	**3**	**3**	**5a**	**5a**	**4a**	**10: Deterior. Trophic & DO; Gloeotrichia blooms; trophic param. indicate shift; TMDL April 2008**
GREAT P	**BELGRADE**	**5274**	**8239**	**0103000310**	**(3)**	**3**	**3**	**3**	**3**	**5a**	**10: Deterior. Trophic & DO; Gloeotrichia blooms**
EAST P	SMITHFIELD	5349	1823	0103000310	(5a)	4a	4a	4a	4a	4a	10: blooms persist; deteriorating trophic trend continues; TMDL 2001
WEBBER P	VASSALBORO	5408	1201	0103000312	(5a)	5a	4a	4a	4a	4a	10: Stable; chronic blooms; TMDL 2003
THREEMILE P	CHINA	5416	1162	0103000312	(5a)	5a	4a	4a	4a	4a	10: Stable; chronic blooms; TMDL 2003
THREECORNERED P	**AUGUSTA**	**5424**	**182**	**0103000312**	**(5a)**	**5a**	**4a**	**3**	**3**	**2 ***	**10: TMDL 2003;Improving; no recent blooms**
CHINA L	CHINA	5448	3845	0103000309	(5a)	4a	4a	4a	4a	4a	10: Stable -blooms persist; TMDL 2001.
DUCKPUDDLE P	**NOBLEBORO**	**5702**	**293**	**0105000303**	**(5a)**	**5a**	**5a**	**3**	**3**	**2 ***	**10: Stable; TMDL Sept 2005, occasional bloom**
LONG L	BRIDGTON	5780	4867	0106000101	(5a)	5a	5a	2 *	2 *	2 *	10: TMDL May 2005; Data collected since listing and over long-term record indicate stable trend.
COBBOSSEECONTEE (LT)	WINTHROP	8065	75	0103000311	(5a)	5a	5a	4a	4a	4a	10: Stable perhaps Improving; occasional bloom; TMDL 2005
TRAFTON L	LIMESTONE	9779	85	0101000413	(5a)	5a	5a	5a	4a	4a	10: Stable; TMDL Oct. 2006
TOGUS P	AUGUSTA	9931	660	0103000312	(5a)	5a	5a	4a	4a	4a	10: Stable; TMDL Sept 2005

Table 8-2. Status of Category 5a / TMDL Lakes and Ponds 2000 through 2010. Bold text indicates changes for 2010 cycle.[1]

Lake	Town	MIDAS	Acres	HUC10	List Cat 00[2]	List Cat 02	List Cat 04	List Cat 06	List Cat 08	List Cat 10	Comments
SEWALL P	ARROWSIC	9943	46	0105000307	(3)	3	5a	4a	4a	4a	10: Stable; TMDL March 2006
ANNABESSACOOK L	MONMOUTH	9961	1420	0103000311	(5a)	5a	4a	4a	4a	4a	10: blooms persist; possible improvement; TMDL 2004

[1] Non TMDL listing changes are summarized in Appendix III, Category Listing Change Summary

[2] In 2000, current Listing Categories had not been established. Equivalent Listing Categories have been assigned for purposes of comparison.

[3] Appendix III includes report documenting evidence of historic productivity in Hermon and Hammond Ponds.

* Lakes currently listed in Category 2 do not appear individually in Appendix III but rather are included in the overall lake summary for the HUC.

Table 8-3 2008 Category 5/TMDL Estuarine/Marine Waters not on 2010 Category 5/TMDL List

See Appendix V, Category 4-A for waters delisted from the 2008 Category 5 list and moved to the 2010 Category 4 list due to US EPA approval of the Maine Statewide Bacteria TMDL.

Table 8-4 Specific causes of River and Stream impairment for which a Total Maximum Daily Load report (TMDL) must be (or has been) prepared and the schedule that has been established to accomplish it. This list has been presented in this format in keeping with the manner in which the EPA Assessment Database (ADB) stores and reports this information.

TMDL Development Status

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0101000105_103R01	Shields Branch of Big Black R	mainstem	River	8.16	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000412_140R02	Dudley Brook (Chapman)	HUC: 0101000412	River	6.41	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2010	High	TMDL under contract- final expected 2010		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000412_140R03_02	N Br Presque Isle Stream	HUC: 0101000412	River	14.68	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

DDT	2012	Low	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000412_140R04	Hanson Brook- formerly "Unnamed Stream (P.I. airport)"	Tributary to Presque Isle Stream, draining the airport	River	2.5	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2012	High	new listing, not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000412_143R01	Everett Brook (Ft. Fairfield)	HUC: 0101000413	River	3.53	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	High	TMDL report under contract		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000501_149R	Minor tributaries to Prestile Stream above dam in Mars Hill	HUC: 0101000501	River	77.2	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
DDT	2020	Low	5-d listed for legacy pollutant- DDT		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000501_149R01	Prestile Stream above dam in Mars Hill	including L. Christina	River	15.78	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments DDT Nutrient/Eutrophication Biological Indicators Oxygen, Dissolved Periphyton (Aufwuchs) Indicator Bioassessments	2013 2020 2013 2013 2013	Medium Low Medium Medium Medium	TMDL report under contract 5-d listed for legacy pollutant - DDT TMDL report under contract TMDL report under contract Report under contract		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0101000501_150R	Prestile Str and tributaries entering below dam in Mars	HUC: 0101000501	River	95.55	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
DDT	N/A	Low	5-d legacy pollutant		

TMDL Development Status

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0101000504_152R01_01	Meduxnekeag River	below confluence with S Branch	River	11	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
DDT	2020	Low	Legacy pollution		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000402_219R01	Piscataquis R	main stem, below Dover Foxcroft	River	13.44	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2011	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000404_216R01_01	W. Br. Pleasant R (KIW Twp)	HUC: 0102000404	River	1	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Iron	2012	Low	legacy pollutant- iron		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000404_216R01_02	Blood Bk (KIW Twp)	HUC: 0102000404	River	1	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
Iron	2012	Low	legacy pollutant- iron		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000502_230R	Penobscot R- (Mattawamkeag to Cambolassee)	main stem, from Mattawamkeag R to Cambolassee Str	River	14.05	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Nutrient/Eutrophication Biological Indicators Oxygen, Dissolved	2011 2011	High High	Requires more monitoring data; flows too high in 2009 Requires more monitoring data; flows too high in 2009		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000502_231R	Penobscot R	main stem, from Cambolasse Str to Piscataquis R	River	19.08	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	legacy pollutant- 5d		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000506_222R01	Costigan Str (Costigan)	HUC: 0102000506	River	0.78	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
Oxygen, Dissolved	2012	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000506_232R	Penobscot R	main stem, from Piscataquis R. to Orson Is.	River	36.49	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Nutrient/Eutrophication Biological Indicators	2011	High	New listing		
Oxygen, Dissolved	2011	High	New listing		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000509_233R_01	Penobscot R	main stem, from Orson Is to Veazie Dam	River	14.51	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Nutrient/Eutrophication Biological Indicators	2011	High	New listing		
Oxygen, Dissolved	2011	High	New listing		
Polychlorinated biphenyls	2020	Low	Category 5d for legacy PCB contamination		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**

TMDL Development Status

ME0102000510_224R01	Burnham Brook (Garland)	HUC: 0102000510	River	3.73	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	Low	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000510_224R02	Kenduskeag Stream	HUC: 0102000510	River River	1.5 2.96	Miles Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Nutrient/Eutrophication Biological Indicators Periphyton (Aufwuchs) Indicator Bioassessments	N/A N/A	Low Low	N/A N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000510_224R03	French Stream (Exeter)	HUC: 0102000510	River	12.79	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Periphyton (Aufwuchs) Indicator Bioassessments	2012 2012	Medium Medium	N/A N/A		

TMDL Development Status

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0102000510_224R05	Capehart (Pushaw) Brook (Bangor)	HUC: 0102000510	River	0.46	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Habitat Assessment (Streams)	N/A	High	; Will be included in Statewide % Impervious Cover TMDL		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0102000510_224R06	Arctic Brook (near Valley Ave Bangor)	HUC: 0102000510	River	0.18	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	N/A N/A	High High	Draft TMDL is complete; needs Public Review Draft TMDL is complete; needs Public Review Will be included in Statewide % Impervious Cover TMDL		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0102000511_225R01_02	Shaw Brook (Bangor, Hampden)	HUC: 0102000511	River	3.91	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	N/A N/A	High High	Public review draft TMDL Public review draft TMDL Will be included in Statewide % Impervious Cover TMDL

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0102000511_225R02	Sucker Brook (Hampden) (formerly 'Unnamed St.-Hampden')	Tributary to Penobscot R. entering from the west, in Hampden	River River	2.5 3.03	Miles Miles

Cause	Scheduled Date	Priority	Project Status
Benthic-Macroinvertebrate Bioassessments Oxygen, Dissolved	2012 2012	N/A N/A	Will be included in Statewide % Impervious Cover TMDL

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0102000513_226R03	Penjajawoc Stream (Bangor) Meadow Bk (Bangor)	HUC: 0102000509	River	6.76	Miles

Cause	Scheduled Date	Priority	Project Status
Benthic-Macroinvertebrate Bioassessments	N/A N/A	Low Low	Will be included in Statewide % Impervious Cover TMDL Watershed planning process underway; Public review draft TMDL complete;

TMDL Development Status

Habitat Assessment (Streams) Oxygen, Dissolved	N/A	Low	Watershed planning process underway; Public review draft TMDL complete; Watershed planning process underway; Public review draft TMDL complete;		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0102000513_234R02	Penobscot	main stem, Veazie Dam to Reed Bk	River	10.1	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Nutrient/Eutrophication Biological Indicators Dissolved oxygen Polychlorinated biphenyls	2011 2011 2020	High High Low	New listing New listing 5d-legacy PCBs		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000306_314R02	Cold Stream (Skowhegan)	HUC: 0103000306	River	5.73	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	N/A	Medium	Monitoring in 2006; TMDL not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000306_320R03	Whitten Brook (Skowhegan)	HUC: 0103000306	River	1.12	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2010 2010	High High	TMDL ready for final review TMDL ready for final review		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000306_320R04	Mill Stream (Norridgewock)	HUC: 0103000306	River	8.17	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	N/A	Low	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000306_338R_04	Kennebec R,	main stem, from Carrabassett R to Fairfield- Skowhegan boundary	River	22.76	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	Not started- legacy PCB problem		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000306_339R_02	Kennebec R,	main stem, from	River	14.65	Miles

TMDL Development Status

		Fairfield-Skowhegan boundary to Sebasticook R			
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB problem		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000307_330R	W Branch of Sebasticook R	main stem, below Rt. 23 bridge in Hartland	River	12.5	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	N/A N/A	Medium Medium	TMDL not started not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000308_325R02	Brackett Brook (Palmyra)	HUC: 0103000308	River	2.74	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000308_325R03	Mulligan	HUC: 0103000308	River	4.03	Miles

TMDL Development Status

	Stream (St. Albans)				
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Medium	TMDL monitoring in 2006		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000308_331R	E Branch of Sebasticook R	main stem, below Sebasticook Lake	River	10.25	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Dioxin (including 2,3,7,8-TCDD) Oxygen, Dissolved Phosphorus (Total) Polychlorinated biphenyls	N/A N/A N/A N/A	Low Low Low Low	legacy pollutant Eutrophic lake source with lake TMDL complete; Lake TMDL approved 2001 5d listed, legacy pollutant		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000308_332R	Sebasticook R	main stem, from E and W Branches to Burnham (bridge); including Burnham impoundment	River	8.62	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Dioxin (including 2,3,7,8-	2011	Low	low prioirty		

TMDL Development Status

TCDD) Polychlorinated biphenyls	2050	Low	legacy PCB contamination		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000309_327R01	Mill Stream (Albion)	HUC: 0103000309	River	2.17	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000309_332R	Sebasticook River	main stem, below confluence of E and W Branches, (excluding the Halifax Impd)	River	30.83	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Dioxin (including 2,3,7,8-TCDD) Oxygen, Dissolved Polychlorinated biphenyls	N/A 2011 N/A 2011	N/A Low N/A Low	N/A Legacy upstream sources m(W.Br. Sebasticook); TMDL not started N/A legacy upstream sources (W. Br. Sebasticook)		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000309_332R01	Sebasticook	HUC: 0103000309	River	2	Miles

TMDL Development Status

	River (Halifax impoundment)				
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Dioxin (including 2,3,7,8-TCDD)	N/A	Low	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000310_5274L	GREAT P	LAKE_ID: 5274 HUC: 0103000310	Freshwater Lake	8239	Acres
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Phosphorus (Total) Secchi disk transparency	2012 2012	High High	N/A N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000311_334R03	Jock Stream (Wales)	HUC: 0103000311	River	9.43	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Nutrient/Eutrophication Biological Indicators Oxygen, Dissolved	N/A N/A	Medium Medium	not started not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**

TMDL Development Status

ME0103000311_334R04	Mill Stream (Winthrop)	HUC: 0103000311	River	0.63	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Cause Unknown	2011 2011	Medium Medium	TMDL monitoring in 2005; biomonitoring in 2004; needs followup monitoring TMDL monitoring in 2005; biomonitoring in 2004; needs follow-up monitoring		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0103000311_334R05	Cobbossee Stream (Gardiner)	HUC: 0103000311	River	1.46	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Periphyton (Aufwuchs) Indicator Bioassessments	2014 2014	Medium Medium	N/A N/A		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0103000312_333R01_02	Bond Brook mainstem	From confluence of Spring and Tanning Brook to tidal influence	River	5	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Periphyton (Aufwuchs) Indicator Bioassessments	2013	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_333R02	Whitney Brook (Augusta)	HUC: 0103000312	River	2.68	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Nutrient/Eutrophication Biological Indicators	N/A N/A	Medium Medium	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_333R03	Kennedy Brook (Augusta)	HUC: 0103000312	River	2	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2012	Medium	Added to Ch 500 Urban Impaired list; Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_333R04	Unnamed tributary to Bond Brook	(Augusta) entering below I-95	River	1.34	Miles
Cause	**Scheduled**	**Priority**	**Project Status**		

TMDL Development Status

	Date				
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2011 2011	High High	TMDL and Stream Team monitoring in 2005 TMDL and Stream Team monitoring in 2005 Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_335R03	Meadow Brook (Farmingdale)	HUC: 0103000312	River	2	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2012	Low	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_339R_01	Kennebec R,	main stem, from Sebasticook R to Augusta (Curran Bridge)	River	17.7	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB contamination		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_340R_01	Kennebec R,	main stem, from Augusta (Curran	River	30.53	Miles

TMDL Development Status

		bridge) to Merrymeeting Bay (Chops)			
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB contamination		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0103000312_427R	Merrymeeting Bay	including tidal portions of tributaries from the Androscoggin R to The Chops	River	3.44	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB contamination		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000201_421R	Androscoggin R	main stem, from Maine-NH border to Wild R	River	2.35	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	5d PCB legacy pollutant		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**

TMDL Development Status

ME0104000202_421R	Androscoggin R	main stem, above Rumford Point	River	31.04	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- 5d- legacy PCB contamination		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0104000204_421R	Androscoggin R	main stem, from Rumford Pt to Virginia Bridge	River	10.97	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCBs- Category 5d		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0104000204_422R	Androscoggin R	main stem, from Virginia bridge to Webb R	River	6.8	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB contamination; Category 5-d		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0104000205_410R01_02	Whitney Brook (Canton) .	HUC: 0104000205	River	1.82	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
Benthic-Macroinvertebrate Bioassessments	2012	Medium	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000205_422R	Androscoggin R	main stem, Webb R to Riley dam	River	15.7	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB contamination; Category 5d		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000206_423R	Androscoggin R	main stem, from Riley Dam to Nezinscot R	River	21.7	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started- legacy PCB contamination- Category 5d		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000206_423R01	Androscoggin R	main stem, Livermore impoundment	River	1	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Polychlorinated biphenyls	2020	Low	5d- legacy pcbs		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000208_413R01	Jepson Brook (Lewiston)	HUC: 0104000208	River	2.43	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams) Oxygen, Dissolved	2012 2012 2012	N/A Medium Medium	May require Use Attainability Analysis May require Use Attainability Analysis May require Use Attainability Analysis Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000208_413R03	Stetson Brook (Lewiston)	HUC: 0104000208	River	6.82	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	High	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000208_413R04	Logan Brook, Auburn	HUC: 0104000208	River	0.96	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Habitat Assessment (Streams) Oxygen, Dissolved	2010 2010	High High	Will be included in Statewide % Impervious Cover TMDL City review of TMDL complete; revise/resubmit to EPA City review of TMDL complete; revise/resubmit to EPA		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000208_413R07	Gully Brook (Auburn)	HUC: 0104000208	River	1.91	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	Medium	not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000208_424R	Androscoggin R,	main stem, from confluence of Nezinscot R to confluence with Little Androscoggin R, except Gulf Island Pond	River River	7.25 15.45	Miles Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started; legacy PCBs- 5d listed		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000208_424R_01	Androscoggin R, GIP	main stem, upstream of the Gulf Island Dam Note: this	River River	8.19 15.45	Miles Miles

TMDL Development Status

		segment was listed as 0104000208_424R_02 in the draft 2006 303d list; segment number has been changed to 424R_01			
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Chlorophyll-a Polychlorinated biphenyls	2010 N/A	Medium Low	Listed due to algae blooms impairing swimming use N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_413R02	Penley Brook (Auburn)	HUC: 0104000208	River	1.57	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_418R01	Sabattus River between Sabattus and Androscoggin R	HUC: 0104000210	River	11.41	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Benthic-Macroinvertebrate Bioassessments Nutrient/Eutrophication Biological Indicators Oxygen, Dissolved	2010 2010 2010	High High High	updated modeling report completed in 2006 Updated, revised modeling report completed 2006 Updated, revised modeling report completed 2006		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_418R02	No Name Brook (Lewiston)	HUC: 0104000210	River	10.02	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_419R01	Unnamed Brook (Biomon Sta. 347-Lisbon Falls at Rt 196)	HUC: 0104000210	River	1.36	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Habitat Assessment (Streams)	2010	High	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_419R02	Hart Brook (Lewiston)	HUC: 0104000210	River River	3.62 4.15	Miles Miles

TMDL Development Status

	A.K.A Dill Brook and including Goff Bk				
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams) Oxygen, Dissolved	2010 2010 2010	High High High	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_419R03	Unnamed Stream (Lewiston Municipal Landfill)	Biomon Sta 857 affected by Lewiston Municipal Landfill near Plourde Pky	River	0.8	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2011	Medium	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_420R01	Unnamed tributary (Brunswick 2)	Biomon Sta 641 (near River Rd. Brunswick) 43.91538/69.98089	River	1.85	Miles

TMDL Development Status

	to Androscoggin R				
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2011 2011	Medium Medium	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_420R02	Unnamed tributary (Brunswick 3) to Androscoggin R	Biomon Sta 642 (near Water St. Brunswick) 43.92167/69.95586	River	0.56	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2011 2011	Medium Medium	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_420R03	Unnamed tributary	Biomon Sta 643 (near Jordan Ave.,	River	1.73	Miles

TMDL Development Status

	(Brunswick 4) to Androscoggin R	Brunswick) 43.91077/69.94130			
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2011 2011	Medium Medium	Will be included in Statewide % Impervious Cover TMDL		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0104000210_420R04	Unnamed tributary (Topsham 2) to Androscoggin R	Bio Sta 633 (Topsham-Dwnstrm of Rt. 24 crossing) 43.92470/69.95027	River	1.77	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Habitat Assessment (Streams)	2011	Medium	Will be included in Statewide % Impervious Cover TMDL		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0104000210_420R05	Unnamed trib (Topsham 4) to Androscoggin	BioSta 634; Drains Topsham Fair Mall	River	1.4	Miles
Cause	**Scheduled**	**Priority**	**Project Status**		

TMDL Development Status

	Date				
Benthic-Macroinvertebrate Bioassessments	2011	Medium	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_425R_01	Androscoggin R,	main stem, from L Androscoggin R to Brunswick Dam	River	22.15	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started, legacy PCB contamination- 5d listed		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0104000210_426R	Androscoggin R	main stem, from Brunswick Dam to Brunswick-Bath boundary	River	8.49	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Polychlorinated biphenyls	2020	Low	not started, legacy PCB contamination; 5d listed		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000209_512R_02	McCoy Brook (Deblois)	HUC: 0105000209	River River	1 1.33	Miles Miles
Cause	**Scheduled**	**Priority**	**Project Status**		

TMDL Development Status

	Date		
Benthic-Macroinvertebrate Bioassessments pH	2012 2012	Medium Low	N/A legacy effect from abandoned peat mining- low pH

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0105000209_512R_03	Great Falls Branch, Schoodic Stream (Deblois)	HUC: 0105000209	River	1.33	Miles

Cause	Scheduled Date	Priority	Project Status
Benthic-Macroinvertebrate Bioassessments	2012	Medium	N/A

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0105000213_514R_01	Card Brook (Ellsworth)	HUC: 0105000213	River	1.2	Miles

Cause	Scheduled Date	Priority	Project Status
Benthic-Macroinvertebrate Bioassessments Oxygen, Dissolved	2012 2012	Medium N/A	Will be included in Statewide % Impervious Cover TMDL Some monitoring data collected Some monitoring data collected

Assessment Unit	AU Name	Location Description	Water Type	Size	Units

TMDL Development Status

ME0105000218_521R01	Warren Brook (Belfast)	HUC: 0105000218	River	6.04	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000305_528R03	W.Br. Sheepscot		River	2.29	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
E. coli	2012	Medium	Include in 2012 Statewide bacteria TMDL update		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000305_528R03	Dyer River below Rt 215	HUC: 0105000305	River	9.35	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	High	TMDL monitoring complete; apply new TMDL model		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000305_528R04	Trout Brook (Alna)	HUC: 0105000305	River	3.43	Miles
Cause	**Scheduled**	**Priority**	**Project Status**		

TMDL Development Status

	Date		
Oxygen, Dissolved	N/A	Low	TMDL monitoring in 2005 and 2007

Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000305_528R05	Meadow Bk (Whitefield)	HUC: 0105000305	River	5.94	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	Dissolved oxygen monitoring in 2005; TMDL monitoring in 2007		

Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000305_528R06	Carlton Bk (Whitefield)	HUC: 0105000305	River	3.94	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	Dissolved oxygen monitoring in 2005; TMDL monitoring in 2007		

Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0105000305_528R07	Choate Bk (Windsor)	HUC: 0105000305	River	1.33	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	Dissolved oxygen monitoring in 2005; TMDL monitoring in 2007		

TMDL Development Status

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0105000305_528R08_01	Chamberlain Bk (Whitefield) .	HUC: 0105000305	River	1.76	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	Dissolved oxygen monitoring in 2005; TMDL monitoring in 2007		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0106000102_603R02	Chandler River including East Branch	HUC: 0106000102	River	27.19	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	N/A	N/A		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0106000102_603R06	Cole Brook (Gray)	HUC: 0106000102	River	2.49	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2012	Low	N/A		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units

TMDL Development Status

ME0106000103_607R01	Black Brook (Windham)	HUC: 0106000103	River	6.07	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Escherichia coli Oxygen, Dissolved	2011 N/A	N/A Low	Under bundled bacteria TMDL approach; TMDL monitoring in 2007; Should be included in next round of Statewide TMDL bacteria listings TMDL monitoring in 2007;		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R03	Colley Wright Brook (Windham)	HUC: 0106000103	River	8.16	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	TMDL monitoring in 2007; Under bundled bacteria TMDL approach		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R06	Hobbs Brook (Cumberland)	HUC: 0106000103	River	1.54	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	TMDL monitoring 2007; Under bundled bacteria TMDL approach		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R07	Inkhorn Brook	HUC: 0106000103	River	4.32	Miles

TMDL Development Status

	(Westbrook)				
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	TMDL monitoring in 2007; Under bundled bacteria TMDL approach		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R08	Mosher Brook (Gorham)	HUC: 0106000103	River	2.03	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	TMDL monitoring in 2007; Under bundled bacteria TMDL approach		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R09	Otter Brook (Windham)	HUC: 0106000103	River	2.16	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	N/A	Low	TMDL monitoring in 2007; Under bundled bacteria TMDL approach		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R10	Thayer Brook	HUC: 0106000103	River	3.82	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Oxygen, Dissolved	N/A	Medium	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000103_607R12	Pleasant River (Windham)	mainstem of Pleasant River from Thayer Brook to confluence with Presumpscot	River	8.8	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2010	Medium	not started, new 303d listing		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000104_611R02	Phillips Brook (Scarborough)	HUC: 0106000104	River	2.77	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Habitat Assessment (Streams)	N/A	Medium	Will be included in Statewide % Impervious Cover TMDL TMDL monitoring in 2006		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_607R11_01	Nasons Brook (Portland) south of Rt 25, trib to Fore River	HUC: 0106000105	River	2	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Benthic-Macroinvertebrate Bioassessments	N/A	Medium	Will be included in Statewide % Impervious Cover TMDL TMDL monitoring in 2006; TMDL internal draft		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_609R01	Dole Brook (formerly known as 'Unnamed Stream-Portland 3')	Tributary to Presumpscot R. entering east of Rt. 302 in Portland	River	1.6	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2012	Medium	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_610R01	Capisic Brook	HUC: 0106000105	River	3.02	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2010 2010	High High	Draft sent to EPA 7/29/05 under bundled Urban Stream project; revise and resubmit. %IC candidate Draft sent to EPA 7/29/05 under bundled Urban Stream project; revise and resubmit. %IC candidate		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_610R02	Clark Brook (Westbrook)	HUC: 0106000105	River	1.23	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
Oxygen, Dissolved	N/A	Medium	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_610R04	Stroudwater River (South Portland, Westbrook)	HUC: 0106000105	River	15.71	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Oxygen, Dissolved	2012	N/A	N/A		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_610R06	Kimball Brook	HUC: 0106000105	River	1.55	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	2012 2012	Medium Medium	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_610R07	Red Brook (Scarborough, S Portland)	HUC: 0106000105	River	7.15	Miles

TMDL Development Status

Cause	Scheduled Date	Priority	Project Status		
Habitat Assessment (Streams) Polychlorinated biphenyls	N/A 2012	Low Low	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000105_610R08	Fall Bk (Portland)	HUC: 0106000105	River	2.54	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Habitat Assessment (Streams)	N/A	Low	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000106_602R01	Frost Gully Brook	HUC: 0106000106	River	4.04	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	N/A 2010	High High	Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000106_602R02	Mare Brook	HUC: 0106000106	River	4.9	Miles

TMDL Development Status

	(Brunswick)				
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Habitat Assessment (Streams)	N/A	High	Will be included in Statewide % Impervious Cover TMDL		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0106000106_602R03	Concord Gully (Freeport)	HUC: 0106000106	River	2.47	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Escherichia coli Habitat Assessment (Streams) Oxygen, Dissolved	N/A N/A N/A 2010	High Low High High	Will be included in Statewide % Impervious Cover TMDL Should be included in next round of Statewide bacteria TMDL		

Assessment Unit	AU Name	Location Description	Water Type	Size	Units
ME0106000210_615R01	Little Ossippee R	segment from Lake Arrowhead (Ledgemere) Dam to Saco River .	River	12.49	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate	N/A	Low	not started		

TMDL Development Status

Bioassessments Oxygen, Dissolved	N/A	Low	not started		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000210_615R02	Brown Brook (Limerick)	HUC: 0106000210	River	2.44	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments Habitat Assessment (Streams)	N/A N/A	High High	TMDL monitoring in 2006 TMDL monitoring in 2006		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000211_616R	Wales Pond Brook (Hollis)	HUC: 0106000211	River	2.66	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	2012	High	not started; license modifications underway; needs re-sampling		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000211_616R05	Thacher Bk (Biddeford)	HUC: 0106000211	River	5.67	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

Benthic-Macroinvertebrate Bioassessments	N/A	Medium	New listing; Will be included in Statewide % Impervious Cover TMDL		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000303_624R01	Stevens Brook (Wells, Ogunquit)	HUC: 0106000303	River	2.87	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	N/A	Medium	TMDL data collected in 2006		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000304_625R01	Adams Brook (Berwick)	HUC: 0106000304	River	2.97	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		
Benthic-Macroinvertebrate Bioassessments	N/A	Medium	TMDL data collected in 2006		
Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000304_625R03	West Brook (N. Berwick)	HUC: 0106000304	River	3.22	Miles
Cause	**Scheduled Date**	**Priority**	**Project Status**		

TMDL Development Status

1,1-Dichloroethane 1,2-Dichloroethane Oxygen, Dissolved	2012 2012 2012	N/A N/A N/A	not started not started not started

Assessment Unit	**AU Name**	**Location Description**	**Water Type**	**Size**	**Units**
ME0106000305_630R01	Salmon Falls R	main stem, from Route 9 to tidewater	River	7.43	Miles

Cause	**Scheduled Date**	**Priority**	**Project Status**
Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2008 2020	N/A Low	4-b expected to attain not started; legacy PCBs

Table 8-5 Lake TMDL Current Project Update

Lake	Lake ID	Pollutants	Project Status	Priority *	TMDL Submittal Target**
Great Pond	5274	Total phosphorus	Just listed	1	2012
Hermon Pond	2286	Total phosphorus	Delisting may occur over next cycle	n/a	n/a
Hammond Pond	2294	Total phosphorus	Delisting may occur over next cycle	n/a	n/a

Table 8-6 Estuarine/Marine Current TMDL Project Update

Waterbody ID	Assessment Unit ID & Pollutant	Project Status	TMDL Submittal Target
Mousam River Estuary	811-9, PS	Modeling Report Complete	On hold

Table 8-7 Estuarine and Marine Waters delisted to another Category

Waterbody ID	AU Name	Location Description	Size	Cause	Reason for Removal	Delisting Comment
722-25B DMR Area 35-B	**Penobscot River Estuary,**	**Winterport, Reeds Bk to Marsh River**	250 acres	Fish consumption	Presence of lobster not	Initially included in coastwide 5D shellfish consumption impairment due to PCB contamination of lobster tomalley. Determination was not specific to this location. 1992 survey indicates this AU may not naturally support

						harvestable lobster. Additional information needed to confirm attainment.

Table 8-7 Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.
(Note: "0" in Previous Category indicates a newly established Assessment Unit)

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.							
ADB Assessment Unit #	**Water Name**	**Location Description**	**Water Type**	**Size**	**Current Category**	**Previous AU ID**	**Previous Category**
RIVERS							
ME0103000312_333R01_02	Bond Brook mainstem	From confluence of Spring and Tanning Brook to tidal influence	RIVER	5 MILES	5	ME0103000312_333R01_02	0
ME0103000311_334R05	Cobbossee Stream (Gardiner)	HUC: 0103000311	RIVER	1.46 MILES	5	ME0103000311_334R05	4A
ME0103000312_333R02	Whitney Brook (Augusta)	HUC: 0103000312	RIVER	2.68 MILES	5 (benthic invertebrates)	ME0103000312_333R02	2
ME0103000312_333R03	Kennedy Brook (Augusta)	HUC: 0103000312	RIVER	2 MILES	5	ME0103000312_333R03	3
ME0101000504_152R01_01	Meduxnekeag River	below confluence with S Branch	RIVER	11 MILES	5	ME0101000504_152R01_01	4A
ME0105000305_528R02	West Branch Sheepscot River	HUC: 0105000305	RIVER	2.29 MILES	5 (E. coli only)	ME0105000305_528R02	2

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ADB Assessment Unit #	Water Name	Location Description	Water Type	Size	Current Category	Previous AU ID	Previous Category
ME0102000506_232R	Penobscot R,	mainstem from Piscataquis R. to Orson Is.	RIVER	36.49 MILES	5	ME0102000506_232R	2
ME0102000509_233R_01	Penobscot R,	mainstem Orson Is to Veazie Dam	RIVER	14.51 MILES	5	ME0102000509_233R_01	2
ME0102000513_234R02	Penobscot River	Veazie Dam to Reed Brook (tidewater)	RIVER	10.1 MILES	5	ME0102000513_234R02	2
ME0104000210_419R03	Unnamed Stream (Lewiston Municipal Landfill)	Biomon Sta 857 affected by Lewiston Municipal Landfill near Plourde Pky	RIVER	0.8 MILES	5	ME0104000210_419R03	0
ME0104000210_420R05	Unnamed trib (Topsham 4) to Androscoggin	BioSta 634; Drains Topsham Fair Mall	RIVER	1.4 MILES	5	ME0104000210_420R05	0
ME0104000210_425R_02	Androscoggin River, Lewiston-Auburn	at Lewiston-Auburn, that area of mainstem affected by	RIVER	0 MILES	4A	ME0104000210_425R_02	5

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.							
		CSO's					
ME0106000106_616R04	Bear Bk	HUC: 0106000106	RIVER	0.5 MILES	4A	ME0106000106_616R04	5
ME0106000106_612R01_02	Bear Brook, Saco CSO	HUC: 0106000106	RIVER	0 MILES	4A	ME0106000106_612R01_02	5
ME0102000509_226R02	Boynton Brook	HUC: 0102000509	RIVER	2.64 MILES	4A	ME0102000509_226R02	5
ME0103000306_320R02	Currier Brook	HUC: 0103000306	RIVER	3.19 MILES	4A	ME0103000306_320R02	5
ME0103000312_340R_02	Kennebec River at Augusta, including Riggs Brook- CSO	HUC: 0103000312	RIVER	0 MILES	4A	ME0103000312_340R_02	5
ME0103000312_340R_04	Kennebec River at Gardiner-Randolph	HUC: 0103000312	RIVER	0 MILES	4A	ME0103000312_340R_04	5
ME0103000312_340R_03	Kennebec River at Hallowell- CSO	HUC: 0103000312	RIVER	0 MILES	4A	ME0103000312_340R_03	5
ME0103000306_338R_02	Kennebec River at Skowhegan, CSO	Variable mileage CSO-affected segment	RIVER	0 MILES	4A	ME0103000306_338R_02	5
ME0103000312_339R_02	Kennebec River at Waterville, CSO	Variable mileage CSO-affected	RIVER	0 MILES	4A	ME0103000312_339R_02	5

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.							
ADB Assessment Unit #	**Water Name**	**Location Description**	**Water Type**	**Size**	**Current Category**	**Previous AU ID**	**Previous Category**
ME0103000306_339R_03	Kennebec River, near Fairfield	Variable mileage CSO affected segment	RIVER	0 MILES	4A	ME0103000306_339R_03	5
ME0106000301_622R01	Kennebunk River	HUC: 0106000301	RIVER	3.07 MILES	4A	ME0106000301_622R01	5
ME0104000209_417R_02	Little Androscoggin River at Mechanic Falls	HUC: 0104000209	RIVER	0 MILES	4A	ME0104000209_417R_02	5
ME0105000220_522R01_01	Megunticook River (Camden)	HUC: 0105000220	RIVER	3.56 MILES	4A	ME0105000220_522R01_01	5
ME0102000110_205R03	Millinocket Stream (Millinocket)	HUC: 0102000110	RIVER	3.03 MILES	4A	ME0102000110_205R03	5
ME0106000302_628R02	Mousam River at Sanford	HUC: 0106000302	RIVER	0 MILES	4A	ME0106000302_628R02	5
ME0106000103_607R11	Nason Brook (Gorham)	Trib to Presumpscot entering so. of Dundee Pd.	RIVER	2.7 MILES	4A	ME0106000103_607R11	5
ME0102000509_226R01	Otter Stream, Milford	HUC: 0102000509	RIVER	6.27 MILES	4A	ME0102000509_226R01	5
ME0102000513_234R	Penobscot River	at Bangor-Brewer including Kenduskeag Stream	RIVER	0 MILES	4A	ME0102000513_234R	5
ME0102000509_233R_03	Penobscot River at Old Town-Milford	HUC: 0102000509	RIVER	0 MILES	4A	ME0102000509_233R_03	5

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ADB Assessment Unit #	Water Name	Location Description	Water Type	Size	Current Category	Previous AU ID	Previous Category
ME0102000509_233R_02	Penobscot River at Orono	HUC: 0102000509	RIVER	0 MILES	4A	ME0102000509_233R_02	5
ME0102000402_219R_02	Piscataquis River at Dover Foxcroft	HUC: 0102000402	RIVER	0 MILES	4A	ME0102000402_219R_02	5
ME0105000203_508R02	Pottle Brook (Perry)	HUC: 0105000203	RIVER	0.5 MILES	4A	ME0105000203_508R02	5
ME0106000103_609R_02	Presumpscot River at Westbrook	HUC: 0106000103	RIVER	0 MILES	4A	ME0106000103_609R_02	5
ME0106000211_619R01	Saco River at Biddeford-Saco	including Thatcher Bk	RIVER	0 MILES	4A	ME0106000211_619R01	5
ME0106000211_616R03	Sawyer Bk	HUC: 0106000211	RIVER	0.5 MILES	4A	ME0106000211_616R03	5
ME0102000403_215R_02	Sebec River at Milo	HUC: 0102000403	RIVER	0 MILES	4A	ME0102000403_215R_02	5
ME0105000305_528R01	Sheepscot River at Alna	HUC: 0105000305	RIVER	4.01 MILES	4A	ME0105000305_528R01	5
ME0105000108_505R_02	St. Croix R., Calais CSO	Calais CSO	RIVER	0 MILES	4A	ME0105000108_505R_02	5
ME0101000121_117R	St. John River at Madawaska	HUC: 0101000121	RIVER	0 MILES	4A	ME0101000121_117R	5
ME0106000211_616R06	Swan Pond Brook at South Street (Biddeford)	HUC: 0106000211	RIVER	1 MILES	4A	ME0106000211_616R06	5
ME0106000211_616R02	Tappan Bk	HUC: 0106000211	RIVER	0.5 MILES	4A	ME0106000211_616R02	5

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ADB Assessment Unit #	Water Name	Location Description	Water Type	Size	Current Category	Previous AU ID	Previous Category
ME0105000220_522R02_01	Unnamed Brook (Camden) .	HUC: 0105000220	RIVER	0.7 MILES	4A	ME0105000220_522R02_01	5
ME0105000220_522R04	Unnamed Brook (Rockland)	HUC: 0105000220	RIVER	0.5 MILES	4A	ME0105000220_522R04	5
ME0102000109_205R01	West Branch Penobscot R main stem	below confluence with Millinocket Str	RIVER	4.25 MILES	4B	ME0102000109_205R01	2
ME0102000512_229R	Penobscot R main stem	above confluence of Mattawamkeag R	RIVER	13.03 MILES	4B	ME0102000512_229R	2
ME0103000305_319R_02	Sandy R,	main stem, segment below Farmington WWTP	RIVER	3.24 MILES	4B	ME0103000305_319R_02	5
ME0103000324_333R_02	Spring Brook (Augusta)	From Gov Hill fish hatchery to Mt Vernon Rd, Augusta	RIVER	0.75 MILES	4B	ME0103000324_333R_02	0
ME0106000105_610R03	Long Creek (South Portland)		RIVER	4.12	4B	ME0106000105_610R03	5A
ME0104000210_425R_01_01	Androscoggin R, main stem	Pejepscot Dam to Brunswick Dam)	RIVER	4.5 MILES	4C	ME0104000210_425R_01	2 and 5D

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ADB Assessment Unit #	Water Name	Location Description	Water Type	Size	Current Category	Previous AU ID	Previous Category
ME0104000208_413R08	Bobbin Mill Brook (Lake Auburn Outlet, Auburn)	HUC: 0104000208	RIVER	3.45 MILES	3	ME0104000208_413R08	2
ME0102000502_220R_01	Mattanawcook Stream (Lincoln)	Valley Ave Boat Launch; Outlet to Mattanawcook Stream. PIN site LE1	RIVER	1.2 MILES	3	ME0102000502_220R_01	2
ME0101000504_152R01_02	Meduxnekeag R. mainstem below Meduxnekeag L.	mainstem between Meduxnekeag L. and So. Br. Meduxnekeag R.	RIVER	9.5 MILES	3	ME0101000504_152R01_02	5
ME0104000207_412R01	Nezinscot River at Buckfield	HUC: 0104000207	RIVER	4 MILES	3	ME0104000207_412R01	2
ME0103000324_333R_01	Riggs Brook (Augusta)	Augusta, including portions of tribs affected by watershed development	RIVER	1.3 MILES	3	ME0103000324_333R_01	0
ME0106000103_607R13	Tannery Brook (Gorham)	Tributary to Little River in Gorham	RIVER	2 MILES	3	ME0106000103_607R13	2
ME0103000309_332R01	Sebasticook River	(Halifax Impd)	RIVER	2 MILES	2 (Biocriteria)	ME0103000309_332R01	5

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ME0106000209_614R01	Ossippee R	mainstem below Kezar Falls .	RIVER	5 MILES	2	ME0106000209_614R01	5
ME0106000103_607R04	Piscataqua River (Falmouth)	HUC: 0106000103	RIVER	12.53 MILES	2	ME0106000103_607R04	5
ME0106000103_609R_01	Presumpscot R,	main stem, below Sacarappa Dam	RIVER	6.9 MILES	2	ME0106000103_609R_01	1
ME0106000102_603R05	Royal River	segment below Collyer Bk	RIVER	2.15 MILES	2	ME0106000102_603R05	1
ME0106000204_618R01	Saco R, Fryeburg	main stem, Swans Falls to Rt 5 (Fryeburg)	RIVER	5 MILES	2	ME0106000204_618R01	5
ME0105000220_522R03	Unnamed Brook (Rockport)	HUC: 0105000220	RIVER	0.5 MILES	2	ME0105000220_522R03	5
ME0101000413_146R01	Webster Brook	HUC: 0101000413	RIVER	12.1 MILES	2	ME0101000413_146R01	5
ME0105000305_528R02	West Branch Sheepscot River	HUC: 0105000305	RIVER	2.29 MILES	2 (dissolved oxygen only)	ME0105000305_528R02	5

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ADB Assessment Unit #	Water Name	Location Description	Water Type	Size	Current Category	Previous AU ID	Previous Category
LAKES							
ME0103000310_5274L	GREAT P	LAKE_ID: 5274 HUC: 0103000310	FRESHWATER LAKE	8239 ACRES	5	ME0103000310_5274L	3

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.

ADB Assessment Unit #	Water Name	Location Description	Water Type	Size	Current Category	Previous AU ID	Previous Category
ME0101000501_9525L	CHRISTINA RESERVOIR	LAKE_ID: 9525 HUC: 0101000501	FRESHWATER LAKE	400 ACRES	4A	ME0101000501_9525L	5
ME0103000310_5272L	LONG P	LAKE_ID: 5272 HUC: 0103000310	FRESHWATER LAKE	2714 ACRES	4A	ME0103000310_5272L	5
ME0105000212_4444L	ABRAMS P	LAKE_ID: 4444 HUC: 0105000212	FRESHWATER LAKE	423 ACRES	2	ME0105000212_4444L	3
ME0104000206_3836L	ANDROSCOGGIN L	LAKE_ID: 3836 HUC: 0104000206	FRESHWATER LAKE	3980 ACRES	2	ME0104000206_3836L	3
ME0103000311_5236L	COBBOSSEECONTEE L	LAKE_ID: 5236 HUC: 0103000311	FRESHWATER LAKE	5543 ACRES	2	ME0103000311_5236L	0
ME0105000303_5702L	DUCKPUDDLE P	LAKE_ID: 5702 HUC: 0105000303	FRESHWATER LAKE	293 ACRES	2	ME0105000303_5702L	3
ME0101000413_1808L	FISCHER L	LAKE_ID: 1808 HUC: 0101000413	FRESHWATER LAKE	10 ACRES	2	ME0101000413_1808L	3
ME0103000310_5280L	MESSALONSKEE L	LAKE_ID: 5280 HUC: 0103000310	FRESHWATER LAKE	3510 ACRES	2	ME0103000310_5280L	3
ME0106000101_3414L	PAPOOSE P	LAKE_ID: 3414 HUC: 0106000101	FRESHWATER LAKE	64 ACRES	2	ME0106000101_3414L	3
ME0103000310_5352L	SALMON L (ELLIS P)	HUC: 0103000310	FRESHWATER LAKE	666 ACRES	2	ME0103000310_5352L	3

Summary of overall category changes, 2008 to 2010, for rivers, streams and lakes.							
ME0103000312_5424L	THREECORNERED P	LAKE_ID: 5424 HUC: 0103000312	FRESHWATER LAKE	182 ACRES	2	ME0103000312_5424L	3

CHAPTER 9 ACCESSING AND MANAGING DATA USED IN MAKING DECISIONS ON STATUS OF WATERS

MAINE DEP QUALITY MANAGEMENT SYSTEM

Contact: Malcolm Burson, DEP Quality Assurance Manager, Office of Policy Services

Tel: (207) 287-7755 email: Malcolm.C.Burson@SPAM-ZAPmaine.gov

Related Website: www.maine.gov/dep/qms.htm

- Please refer to the 2006 Integrated Report for complete information and details on this subject.

Data used in making decisions on the status of Maine waters are collected, analyzed, and evaluated according to the standards contained in the Department's QMP or Quality Management Plan (Revision 2, as approved by EPA-New England, June, 2003). The Plan documents DEP's Quality Management System (QMS) which applies to all program areas and activities in the Maine DEP. The QMS uses a rigorous internal second-party audit approach to managing for quality, in addition to program-level QA/QC activities. The latter are documented in Standard Operating Procedures (SOPs) developed and implemented for each program area. SOPs are included in all Quality Assurance Project/Program Plans (QAPPs) applicable to environmental data gathering and analysis.

ENVIRONMENTAL AND GEOGRAPHIC ANALYSIS DATABASE (EGAD)

Contact: Chris Halsted, EGAD Programmer/Analyst, MDEP GIS Unit
Tel: (207) 287-8754 email: Christian.H.Halsted@SPAM-ZAPmaine.gov

Groundwater Contact: Mark Holden, MDEP BLWQ, Division of Environmental Assessment (DEA) Tel: (207) 287-7779 email: Mark.K.Holden@SPAM-ZAPmaine.gov

Related Websites: www.maine.gov/dep/rwm/egad/ and http://www.maine.gov/dep/gis/datamaps/index.htm (for access to MDEP data via Google Earth projects on the internet)

The Maine Environmental and Geographic Analysis Database (EGAD) stores site and water quality information in a relational database using Oracle technology and spatial locations using Environmental Systems Research Institute (ESRI) Spatial Database Engine (SDE) software. The database includes data from groundwater and surface water samples as well as sediment and biological samples and other pertinent information. To date (February 2010), data from the following MDEP programs involved in monitoring activities has been incorporated: Environmental Geology, Biological Monitoring, SWAT (Surface Water Ambient Toxics; freshwater and marine), Dioxin Monitoring, Rivers-Stream TMDL, Rivers-Modeling, Rivers-Salmon, and Healthy Beaches; data from the Lakes Assessment program has been partly incorporated. There are a total of 18,841 sampling sites in the database and a total of 5.1 million samples each of which has one to many results records; ~1.8 million of these samples are used in water quality assessments in general. Approximately 750 groundwater sites and 100 surface water sites are added to the database every year.

Data collected by MDEP staff or submitted by contractors or laboratories are loaded to EGAD using a standard EDD (Electronic Data Deliverable) which offers automated quality control. The EGAD system allows complete integration of all data via spatial relationships. Database functionalities exist to assess trends in water quality information, satisfy requests for data, assist in answering inquiries, provide automated analysis, and enable customized reporting and map-making. The database allows rapid access to information which is critical for emergency response for hazardous materials spills. MDEP staff can also geo-locate, browse and access all EGAD data together with related site and monitoring information on the Internet via several Google Earth projects. The ability to access a large variety of data quickly, easily and in a number of different formats allows staff to identify resources that require protection, such as lakes, streams, or municipal or private wells, and to target monitoring efforts.

Water quality assessment results are stored in Maine's version of the EPA Assessment Database (ADB) and a link to a prototype ArcMap project shows geo-referenced assessment units and the water quality geodatabase. MDEP envisions that all raw water quality data in support of the Integrated Report will ultimately be stored in EGAD. The GIS-facilitated link to ADB assessments will ultimately allow for waterbody assessments via a fully geo-referenced Maine ADB*.*

Since 2008, EGAD has been exporting Maine water quality data to the national EPA database (STORET) via WQX, the Water Quality Exchange system; to date only data from SWAT and River-Stream TMDL programs have been transferred to WQX *(export of Healthy Beaches data to WQX is also imminent)*. Like MDEP staff, the public can also access Maine surface and groundwater data as well as related site and monitoring information data via Google Earth.

WATER QUALITY GIS AND THE NATIONAL HYDROGRAPHY DATA (NHD)

Contacts: Vicki Schmidt, BLWQ GIS Unit
Tel: (207) 485-1482   email: Vicki.I.schmidt@SPAM-ZAPmaine.gov;
Doug Suitor, BLWQ GIS Unit
Tel: 207-441-6616   email: douglas.suitor@SPAM-ZAPmaine.gov

The MDEP Bureau of Land & Water Quality is highly active in designing, creating, and maintaining hydrologic and terrestrial spatial features for use in water quality decision making programs for the State of Maine. Our primary objective over the last year (2009) has been to assist in establishing The National Hydrography Data (NHD) as Maine's core hydrographic dataset. We have a dedicated staff person who has attained national NHD Stewardship certification and whose performance measures include incorporating all our water quality information into NHD format.

The NHD base data, as well as all supporting spatial data sets regarding water quality, are housed at the Maine Office of GIS for efficient on-line access through the MEGIS Internet Data Catalog (http://megis.maine.gov/catalog). The MEGIS Internet Data Catalog is provided at no cost and is supported by Maine's Legislative initiative (L.D. 2116 "An Act to Establish the Maine Library of Geographic Information (Chapter 649). The initiative established data custodians within Departments to organize, catalog, and provide access to public geographic information to all levels of government and to the public. The MDEP and BL&WQ are highly supportive and involved with this process for disseminating all spatial components of water quality information and analysis activities.

An additional goal that is becoming well established is the creation of on-line tutorials for our staff as well as outside users of NHD. These programs will ensure easy access and retrieval of water quality information for DEP users as well as all State and national users of Maine based GIS water quality information.

LISTINGS ON INDIVIDUAL WATERS

See Appendices II through V (separate document) for listing information on specific waters. Appendices include assessments for rivers/streams, lakes, wetlands and estuarine waters.

State of Maine

Department of
Environmental Protection

2010 Integrated Water Quality
Monitoring and Assessment Report

Appendices:

Acronyms, HUC Maps, Definitions
And
Integrated Lists of Surface Waters

Table of Contents

Appendix I: Acronyms Found in the Body of the 2010 305(b) Report Along with the Meaning or Definition

No.	Term	Meaning or Definition
1	303(d) List	List of a state's Impaired Waters
2	305(b) Report	The 305(b) report is a complete assessment of all water quality management sub-segments in the state for which uses and standards are available. (a.k.a. The Integrated Report)
3	A/B	Above/Below (Fish Test for Dioxin)
4	ADB	EPA Database (short for Assessment DataBase)
5	ALPS	Aquifer Lakes Pilot Survey
6	AMCL	Alternate Maximum Contaminant Level
7	AMD	Acid Mine Drainage
8	ANC	Acid Neutralizing Capacity
9	AST	Above Ground Storage tank
10	AU	Animal Unit: 1 AU is equal to 1,000 lbs. of live animal body weight.
11	BMP	Best Management Practice
12	Board	Board of Environmental Protection
13	BOD	Biological or Biochemical Oxygen Demand
14	BPJ	Best Professional Judgment
15	CAFO	Concentrated Animal Feeding Operation
16	CBEP	Casco Bay Estuary Partnership
17	CDBG	Community Development Block Grant
18	CHL a	Chlorophyll a
19	CNMP	Certified Nutrient Management Planners
20	COD	Chemical Oxygen Demand
21	CSO	Combined Sewer Overflow
22	CWA	Clean Water Act
23	DAFRR	Maine Department of Agriculture, Food and Rural Resources - former name of the MDOA
24	DEP - BAQ	Department of Environmental Protection - Bureau of Air Quality
25	DEP - BLWQ	Department of Environmental Protection - Bureau of Land and Water Quality
26	DEP - BLWQ - DEA	DEP - Bureau of Land and Water Quality - Division of Environmental Assessment

No.	Term	Meaning or Definition
27	DEP - BLWQ - DECTA	DEP - Bureau of Land and Water Quality - Division of Engineering, Compliance and Technical Assistance
28	DEP - BLWQ - DLRR	DEP - Bureau of Land and Water Quality - Division of Land Resource Regulation
29	DEP - BLWQ - DPS	DEP - Bureau of Land and Water Quality - Division of Program Services
30	DEP - BLWQ - DWM	DEP - Bureau of Land and Water Quality - Division of Watershed Management
31	DEP - BLWQ - DWRR	DEP - Bureau of Land and Water Quality - Division of Water Resource Regulation
32	DEP - BLWQ - DWRR - UICP	DEP - BLWQ - Division of Water Resource Regulation - Underground Injection Control Program
33	DEP - BRWM	Department of Environmental Protection - Bureau of Remediation and Waste Management
34	DEP - BRWM - DOHWFR	DEP - Bureau of Remediation and Waste Management - Division of Oil and Hazardous Waste Facilities Regulation
35	DEP - BRWM - DOR	DEP - Bureau of Remediation and Waste Management - Division of Remediation
36	DEP - BRWM - DOR - USP	DEP - BRWM - Division of Remediation - Uncontrolled Hazardous Substance Sites Program
37	DEP - BRWM - DPS	DEP - Bureau of Remediation and Waste Management - Division of Program Services
38	DEP - BRWM - DSWM	DEP - Bureau of Remediation and Waste Management - Division of Solid Waste Management
39	DEP - BRWM - DTS	DEP - Bureau of Remediation and Waste Management - Division of Technical Services
40	DEP, MDEP, MeDEP, "The Department"	State of Maine - Department of Environmental Protection
41	DHS - BOH	Department of Human Services - Bureau of Health
42	DHS - BOH - DHE	DHS - Bureau of Health - Division of Health Engineering
43	DHS - BOH - DHE - DWP	DHS - Bureau of Health - Division of Health Engineering - Drinking Water Program
44	DHS - BOH - DHE - DWP - WHPP	DHS - BOH - DHE - Drinking Water Program - Wellhead Protection Program
45	DHS - BOH - DHE - RCP	DHS - Bureau of Health - Division of Health Engineering - Radiation Control Program
46	DHS - BOH - HETL	DHS - Bureau of Health - Public Health and Environmental Testing Laboratory
47	DHS, MDHS	Department of Human Services
48	DIFW - BRM	Maine Department of Inland Fisheries and Wildlife - Bureau of Resource Management
49	DIFW, IF&W, MDIFW	Maine Department of Inland Fisheries and Wildlife
50	DMR	Discharge Monitoring Report
51	DMR - BRM	Department of Marine Resources - Bureau of Resource Management
52	DMR - BRM - PHD	DMR - Bureau of Resource Management - Public Health Division
53	DMR, MDMR	Department of Marine Resources
54	DOA - OANRR	Maine Department of Agriculture - Office of Agricultural, Natural and Rural Resources
55	DOA - OANRR - BPC	DOA - Office of Agricultural, Natural and Rural Resources - Board of Pesticide Control

No.	Term	Meaning or Definition
56	DOA - OANRR - NMP	DOA - Office of Agricultural, Natural and Rural Resources - Nutrient Management Program
57	DOA, MDOA	Maine Department of Agriculture
58	DOC	Department of Conservation
59	DOC	Dissolved Organic Carbon
60	DOC - BGNA	Department of Conservation - Bureau of Geology and Natural Areas
61	DOC - BGNA - MGS	DOC - Bureau of Geology and Natural Areas - Maine Geologic Survey
62	DOC - BGNA - MNAP	DOC - Bureau of Geology and Natural Areas - Maine Natural Areas Program
63	DOC - LURC	Department of Conservation - Land Use Regulation Commission
64	DOE, U.S. DOE, USDOE	Department of Energy
65	EDD	Electronic Data Deliverable
66	EGAD	Environmental Groundwater Analysis Database
67	ELS	Eastern Lake Survey
68	EMAP	Environmental Monitoring and Assessment Program
69	EPA, USEPA, U.S. EPA	United States Environmental Protection Agency
70	EPA-NE, EPA-New England	Region 1 of the EPA (Covers CT, MA, ME, NH, RI & VT)
71	FFY	Federal Fiscal Year
72	GIS	Geographic Information Systems - computerized mapping systems
73	GPA	Great Pond Class A
74	GPS	Global Positioning System
75	GTCC	Greater Than Class C (radioactive waste)
76	HDPE	High-Density Poly Ethylene
77	HELM	High Elevation Lakes Monitoring
78	HLW	High Level (radioactive) Waste
79	HRS	Hazard Ranking System
80	HUC	Hydrologic Unit Code
81	ICAG	Interim Cover and Grading (procedure for landfills)
82	ISFSI	Independent Spent (nuclear power plant) Fuel Storage Installation
83	JETCC	Joint Environmental Training Coordinating Committee
84	LLW	Low Level (radioactive) Waste

No.	Term	Meaning or Definition
85	LQG	Large Quantity Generators
86	LUST	Leaking Underground Storage Tank
87	MCGL	Maximum Contaminant Goal Level
88	MCL	Maximum Contaminant Level
89	MDL	Maximum Daily Load
90	MDOT	Maine Department of Transportation
91	MEG	Maximum Exposure Guideline
92	MeGIS, OGIS	Maine Office of Geographic Information Systems (GIS)
93	MEPDES	Maine Pollutant Discharge Elimination System
94	mg/L	Milligrams Per Liter
95	MHBP	Maine Healthy Beaches Program
96	MRWA	Maine Rural Waters Association
97	MS4	Municipal Separate Storm Sewer Systems
98	MSW	Municipal Solid Waste
99	MWPP	Maine Water Pollution Prevention Program
100	NAD	EPA Database (short for National Assessment Database)
101	NCR	Noncompliance Review Meetings (can be monthly or quarterly - QNCR)
102	NEMO	Non-point Education for Municipal Officials Program
103	NGO	Non-governmental Organization
104	NMP	Nutrient Management Plan
105	NORM	Naturally Occurring Radioactive Materials
106	NPDES	National Pollutant Discharge Elimination System
107	NPL	National Priorities List (a.k.a. Superfund Sites)
108	NPS	Nonpoint Source (of Pollution)
109	NRC, U.S. NRC, USNRC	Nuclear Regulatory Commission
110	NRPA	Natural Resources Protection Act
111	OBD	Overboard Discharge -
112	ODGP	Overboard Discharge Grant Program
113	OIA	Office of Innovation and Assistance

No.	Term	Meaning or Definition
114	OME	Operations Management Evaluations
115	P2 Program	Pollution Prevention Program
116	PBT	Persistent Bioaccumulative and Toxic Pollutants
117	PCB	Polychlorinated Biphenyls
118	pci/L	Picocuries Per Liter
119	PCS	Permit Compliance System
120	pg/g	Picograms per Gram
121	POTW	Publicly Owned Treatment Works - e.g. a municipal wastewater treatment plant
122	Ppb	Parts Per Billion
123	Ppm	Parts Per Million
124	Ppq	Parts Per Quadrillion
125	P-WL	Wetland Protection Sub-District
126	QA/QC	Quality Assurance / Quality Control
127	QAPP	Quality Assurance Project/Program Plan
128	QMP	Quality Management Plan
129	QMS	Quality Management System
130	QMSC	Quality Management Steering Committee
131	RAP	Remedial Action Plan
132	RCRA	Resource Conservation and Recovery Act
133	REMAP	Regional Environmental Monitoring and Assessment Program
134	RFP	Request For Proposal
135	RLTM	Regional Long Term Monitoring
136	SBTAP	Small Business Technical Assistance Program
137	SCGP	Small Community Grant Program
138	SDT	Secchi Disk Transparency
139	SDWA	Safe Drinking Water Act
140	SHWT	Seasonal High Water Table
141	SOP	Standard Operating Procedures
142	SPCC	Spill Prevention Control and Countermeasures

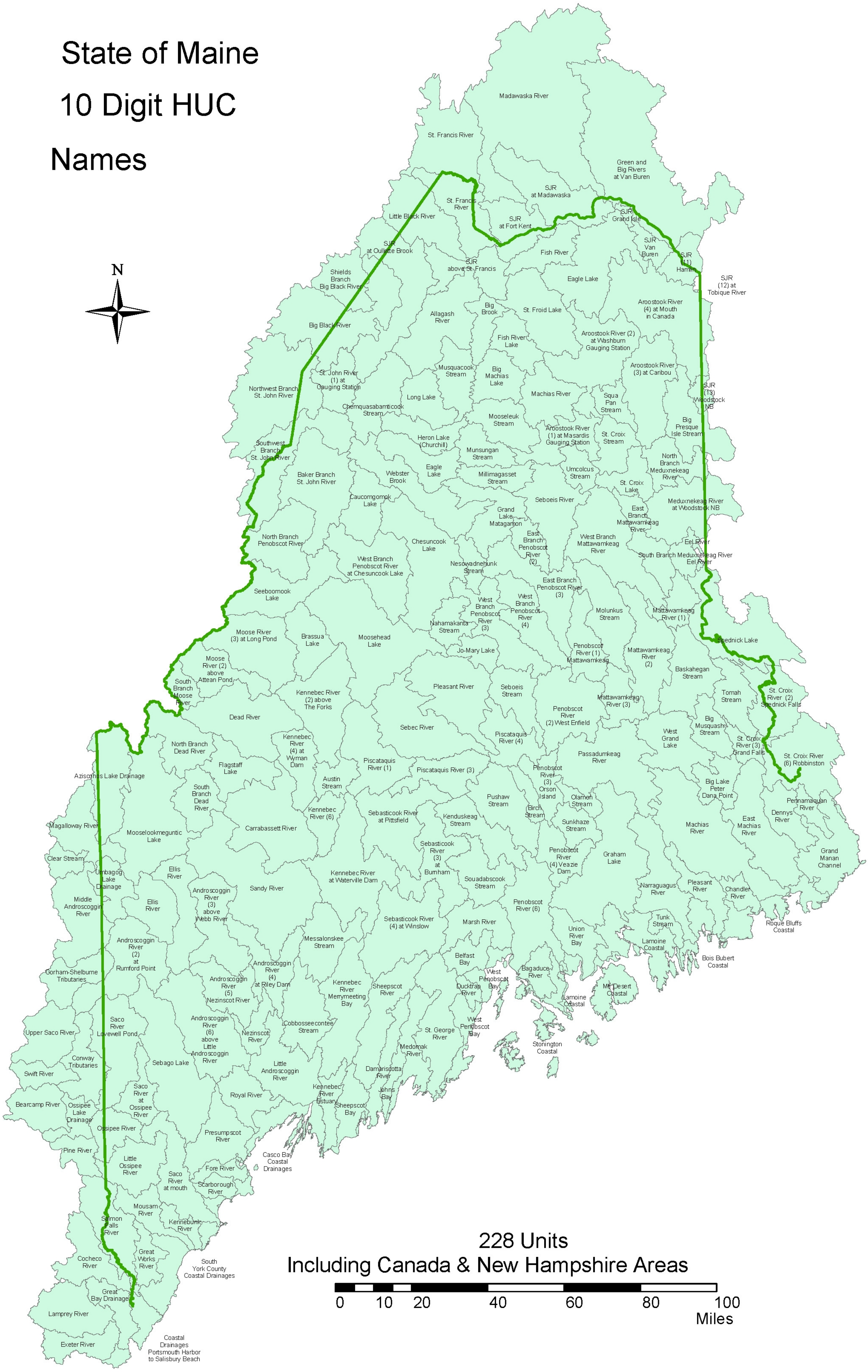
No.	Term	Meaning or Definition
143	SPO, MSPO	Maine State Planning Office
144	SPU	Standard Platinum Units
145	SQG	Small Quantity Generators
146	SRF	State Revolving Fund
147	State Fiscal Year	July 1st to June 30th
148	STORET	EPA Database (short for STOrage and RETrieval)
149	SWAP	Surface Water Assessment Program
150	TDS	Total Dissolved Solids
151	THWRP	Toxics and Hazardous Waste Reduction Program
152	TMDL	Total Maximum Daily Load
153	TPH	Total Petroleum Hydrocarbons
154	TSI	Trophic State Indices
155	UIC	Underground Injection Conduit
156	USDA	United State Department of Agriculture
157	USGS	United States Geological Survey
158	UST	Underground Storage Tank
159	VLMP	Volunteer Lake Monitoring Program
160	WET	Whole Effluent Toxicity

HUC Maps for Appendices II through V

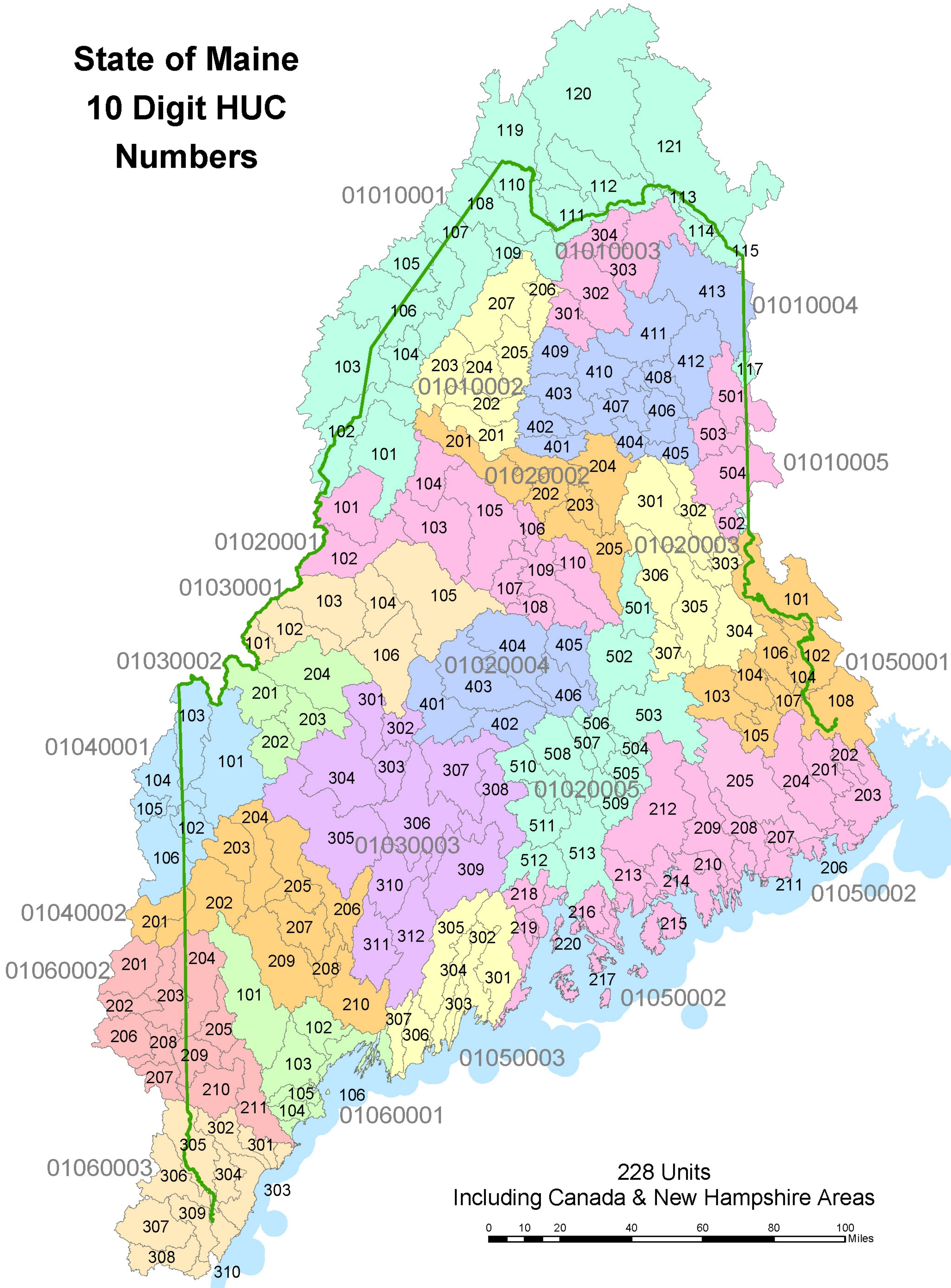
State of Maine

10 Digit HUC

Names



State of Maine 10 Digit HUC Numbers



Definitions for terms common in Appendices II through V

ADB Assessment Unit ID: (Rivers and Streams Only) Combination of the Assessment Unit (HUC – Hydrologic Unit Code) and Segment ID (used in previous Integrated Reports) to create a unique identification code for each water segment in the ADB.

Assessment Unit (HUC): 10-digit HUC number – Note: HUCs can be thought of as very large watersheds, but they have not yet been assigned to marine waters.

Waterbody or Lake ID: Segment numbers within an assessment unit (these are the same numbers used by the Waterbody System in previous 305b reports). For lakes, this is a unique ID number for each lake that is also known as a MIDAS code.

DMR Area: A numeric code assigned to generalized areas of marine waters by the State Department of Marine Resources (DMR).

Segment or Lake Name / Segment Description: Common name for a river or stream segment, a lake or portions of marine waters (respectively).

Location: Additional description of the location of a river, stream or marine water segment.

Segment Size / Lake Area / Segment Acres: In miles for rivers and streams, in acres for lakes or marine waters (also in square miles for marine waters).

Segment Class: The assigned classification from M.R.S.A. Title 38 Section 467,468,469. Assessment is made according to the standards of the assigned class.

Monitored Date / Last Year Sampled: The last year data was collected from an assessment unit or segment. When data is older than five years, it is listed as an evaluated segment.

Scheduled Monitoring Date: Estimate of when a segment/lake is likely to be sampled again.

Impaired Use: Uses from M.R.S.A. Title 38 Section 465, 465-A, 465-B that are found to not be fully supported

Cause(s): Criteria that have not been attained or known pollutants that cause impairment. Final determination of all causes may require completion of the TMDL or other analyses.

Reason for DMR Closure: The reason as to why the DMR has closed an area to shellfishing.

Sources: A list of probable sources of impairment to a water body or segment. Final determination of sources may require completion of a TMDL or other problem analysis.

TMDL Schedule: Projected date for TMDL (Total Maximum Daily Load) completion. A "2006" indicates the TMDL's completion is expected within this reporting cycle. Other entries indicate when those TMDL's completion may be expected (or other management actions will be taken to bring a segment into attainment). These schedules may be revised in future report listings.

TMDL (Target) Date: Projected / scheduled date that a TMDL Report will be completed.

TMDL Number: (If known) A number assigned by the EPA to identify and track TMDLs

TMDL Approval: The year that the EPA approved a TMDL for a water segment or lake.

Expect to Attain Date: Future date when the quality of a waterbody or segment is expected to attain its designated uses and will no longer be considered impaired.

Comments / Notes: A general field to display relevant comments or notes.

APPENDIX II: RIVERS AND STREAMS

Category 1: Rivers and Streams Fully Attaining All Designated Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000101_101R	Baker Branch St. John R and its tributaries		210.92	Class AA	Nature Conservancy reserve
ME0101000102_101R	SW Branch St. John R and its tributaries		142.9	Class AA	Nature Conservancy reserve
ME0101000104_106R	Minor tributaries St. John R entering above Nine Mile Bridge		74.36	Class A	
ME0101000104_114R	St. John R	main stem, above Nine Mile Bridge	17.4	Class AA	
ME0101000106_103R	Big Black R and its tributaries		159.14	Class AA	
ME0101000107_104R	Chimenticook Str and its tributaries	those riverine waters	25.35	Class A	
ME0101000107_105R	Pocwock Str and its tributaries	those riverine waters lying	37.8	Class A	
ME0101000107_106R	Minor tributaries St. John R entering above Ouellette Bk		77.41	Class A	
ME0101000107_114R	St. John R	main stem, above Ouellette Bk	47.2	Class AA	
ME0101000108_107R	Little Black R and its tributaries		111.07	Class A	
ME0101000109_106R	Minor tributaries St. John R entering above Little Black R		63.22	Class A	
ME0101000201_119R	Eagle Lake	Allagash R tributaries	98.83	Class AA	Allagash Wilderness Waterway
ME0101000202_119R	Heron (Churchill) Lake	Allagash R tributaries	97.52	Class AA	Allagash Wilderness Waterway
ME0101000203_119R	Chemquasabamticook Stream and tributaries		159.18	Class AA	Allagash Wilderness Waterway
ME0101000204_119R	Long Lake	Allagash R tributaries	155.17	Class AA	Allagash Wilderness Waterway

Category 1: Rivers and Streams Fully Attaining All Designated Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000204_120R	Allagash R	main stem	7.41	Class AA	Allagash Wilderness Waterway
ME0101000205_119R	Musquacook Stream and tributaries		171.46	Class AA	Allagash Wilderness Waterway
ME0101000206_119R	Big Brook and tributaries		118.62	Class AA	Allagash Wilderness Waterway
ME0101000207_119R	Allagash R tributaries		272.88	Class AA	Allagash Wilderness Waterway
ME0101000207_120R	Allagash R	main stem	45.41	Class AA	Allagash Wilderness Waterway
ME0101000301_121R	Fish R	main stem, and its tributaries above outlet of Fish River Lake	144.98	Class AA	
ME0101000401_130R	Millimagasset Stream and tributaries		97.63	Class AA	
ME0101000402_130R	Munsungan Stream and tributaries		103.28	Class AA	
ME0101000403_130R	Mooseleuk Stream and tributaries		159.07	Class AA	
ME0101000404_130R	Umcolcus Stream and tributaries		77.28	Class AA	
ME0101000405_131R	St. Croix Stream	tributaries to St. Croix L	127.97	Class AA	
ME0101000406_131R	St. Croix Str and its tributaries		124.68	Class AA	
ME0101000407_130R	Aroostook R	main stem, and tributaries above St Croix Str	141.83	Class AA	
ME0101000409_133R	Machias R and tributaries above Big Machias L		175.53	Class AA	
ME0101000411_136R01	Gardner Brook and tributaries	Entering Aroostook R. from the north, upstream of Washburn	10	Class B	
ME0102000101_201R	North Branch of Penobscot R and its tributaries		176.66	Class A	
ME0102000106_202R	Nesowadnehunk Stream and tributaries		56.94	Class AA	Baxter State Park

Category 1: Rivers and Streams Fully Attaining All Designated Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0102000107_202R	Namakanta Stream and tributaries		97.36	Class AA	Nature Conservancy Reserve, State Ecological Reserve
ME0102000109_202R	Tributaries of West Branch Penobscot R above Ferguson L		207.95	Class AA	Baxter State Park
ME0102000201_206R	Webster Bk and tributaries of East Branch Penobscot R	above Grand Matagamon	188.67	Class AA	Baxter State Park
ME0102000202_206R	Tributaries of East Branch Penobscot R at Grand Matagamon		167.03	Class AA	Baxter State Park
ME0103000101_301R	South Branch Moose R and its tributaries		48.72	Class AA	
ME0103000102_301R	Moose R and its tributaries above Attean Pd		139.43	Class AA	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000103_102R	NW Branch St. John R and its tributaries		54.04	Class AA	
ME0101000105_103R	Shields Branch of Big Black R	Tributaries	7.88	Class AA	
ME0101000109_109R	Minor tributaries St. John R entering above St. Francis R		90.89	Class A	
ME0101000109_114R	St. John R	main stem, above confluence St. Francis R	26.59	Class AA	
ME0101000110_108R	St. Francis R and its tributaries		134.93	Class A	
ME0101000111_109R	Minor tributaries St. John R entering above Fort Kent		44	Class A	
ME0101000111_114R	St. John R	main stem, above Fort Kent	1.4	Class AA	
ME0101000111_115R	St. John R	main stem, above Fort Kent	17.49	Class A	
ME0101000112_110R	Minor tributaries St. John R entering above Madawaska		40.67	Class B	
ME0101000112_115R	St. John R	main stem, above Madawaska	0.63	Class A	
ME0101000113_111R	Minor tributaries St. John R entering above Grand Isle		14.58	Class B	
ME0101000114_112R	Violette Str and its tributaries (riverine waters only)		72.02	Class B	
ME0101000115_113R	Minor tributaries St. John R entering below Violette Bk		47.34	Class B	
ME0101000115_118R	St. John R	main stem, below Van Buren	10.02	Class C	
ME0101000116_113R	Minor tributaries St. John R entering below Grand Falls		5.79	Class B	
ME0101000116_116R	St. John R	main stem, above Madawaska	21.84	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000116_117R	St. John R	main stem, from Madawaska to La Grande Isle	15.51	Class C	
ME0101000117_150R	Riviere de Chute and its tributaries		24.67	Class B	
ME0101000118_153R	Minor tributaries of the Eel River		21.21	Class B	
ME0101000121_111R	Minor tributaries St. John R	entering Madawaska and Van Buren	15.21	Class B	
ME0101000121_118R	St. John R	main stem, from La Grande Isle to Van Buren	10.23	Class C	
ME0101000302_121R	Fish R	main stem, and its tributaries above outlet of Porta	106.81	Class AA	
ME0101000302_122R	Fish R	main stem, and tributaries above the outlet of St. Froid lake	214.23	Class AA	
ME0101000303_123R	Tributaries of Fish R entering above the outlet of Mud Lake		87.36	Class B	
ME0101000303_124R	Tributaries of Fish R above the outlet Cross L		24.5	Class B	
ME0101000303_125R	Tributaries of Fish R above the outlet Square L		83.5	Class B	
ME0101000303_126R	Fish R	main stem, and tributaries above outlet of Eagle L	104.4	Class A	
ME0101000304_127R	Wallagrass Str and tributaries		76.71	Class B	
ME0101000304_128R	Tributaries of Fish R entering below outlet of Eagle Lake		61.45	Class B	
ME0101000304_129R	Fish R	main stem, below outlet of Eagle Lake	12.59	Class A	
ME0101000304_147R	Aroostook River	main stem, between St. Croix and Masardis Gauge	1.8	Class A	
ME0101000408_132R	Squapan Stream and tributaries		83.16	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000408_136R	Minor tributaries of Aroostook R entering between confluence		25.54	Class A	
ME0101000410_133R	Machias R and its tributaries		182.92	Class AA	
ME0101000411_134R	Little Machias R and its tributaries		66.96	Class A	
ME0101000411_135R	Beaver Brk and its tributaries		104.55	Class B	
ME0101000411_136R	Minor tributaries of Aroostook R above Washburn Gauge		92.29	Class A	
ME0101000411_137R	Salmon Brk and its tributaries		52.37	Class B	
ME0101000411_147R	Aroostook River	main stem, above Washburn Gauge	29.39	Class A	
ME0101000412_138R	Minor tributaries Aroostook R	entering from south above Presque Isle	11.96	Class B	
ME0101000412_139R	Presque Isle Str	main stem above confluence of Alder Brk	108.56	Class A	
ME0101000412_140R	Presque Isle Str	main stem below confluence of Alder Brk	48.17	Class B	
ME0101000412_140R01	No. Br.Presque Isle Stream	between Mapleton and Presque Isle	11.49	Class B	Previously 5-A listed. Removal of Mapleton POTW complete. 2004 biomonitoring- showed attainment of Class A biocriteria at Station 11 (0.2 km downstream of Mapleton POTW)
ME0101000412_141R	Minor tributaries Aroostook R	entering north and west above Caribou	39.57	Class B	
ME0101000412_143R	Minor tributaries Aroostook R	entering from south below Presque Isle Str	9.91	Class B	
ME0101000412_148R	Aroostook River	main stem, above Caribou	24.17	Class B	
ME0101000413_142R	Caribou Str and its tributaries		33.18	Class B	
ME0101000413_144R	Minor tributaries Aroostook R	entering from north below Caribou	35	Class B	
ME0101000413_145R	Little Madawaska R and tributaries		247.46	Class A	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000413_146R	Limestone Str and its tributaries		40.45	Class B	
ME0101000413_146R01	**Webster Brook**		**12.1**	**Class B**	**4A Included in multi-stream bacteria TMDL; approved 9/28/09 Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**
ME0101000413_148R	Aroostook River	main stem, above Caribou	17.61	Class B	
ME0101000502_153R	S Branch of Meduxnekeag R and its tributaries		61.33	Class B	
ME0101000503_151R	N Branch of Meduxnekeag R and its tributaries		153.88	Class A	
ME0101000504_152R	Meduxnekeag R	main stem, and tributaries	243.63	Class B	
ME0102000102_201R	West Branch of Penobscot R	and its tributaries above Seboomook L outlet	194.24	Class A	
ME0102000103_201R01	West Branch of Penobscot R and its tributaries at Chesuncook		233.11	Class A	
ME0102000103_201R02	West Branch of Penobscot R	below Seboomook Lake	1	Class A	Delisted from 4C Flow modified for hydropower. New hydro water quality certification in place, 2006
ME0102000104_201R	West Branch Penobscot R tributaries above Caucomgomoc L		115.89	Class A	
ME0102000105_201R	West Branch of Penobscot R	and its tributaries above Chesuncook outlet	300.36	Class A	
ME0102000108_202R	Jo-Mary Lake tributaries		61.49	Class AA	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0102000109_203R	West Branch Penobscot R	main stem, from Ripogenus dam to Ferguson L	18.49	Class A	
ME0102000110_202R	Tributaries of West Branch Penobscot R	entering below Ferguson L	247.22	Class AA	
ME0102000110_205R01	Backwater of Dolby Impoundment		0.5	Class C	Delisted in 2004; Previously 4-C listed. New impoundment oxygen measurement in attainment.
ME0102000203_206R	Tributaries of East Branch Penobscot R above Seboeis R		62.57	Class AA	
ME0102000203_207R	East Branch Penobscot R	main stem above Seboeis R	22.89	Class AA	
ME0102000204_206R	Seboeis River and tributaries		228.46	Class AA	
ME0102000205_206R	Tributaries of East Branch Penobscot R below Seboeis R		264.48	Class AA	
ME0102000205_207R	East Branch Penobscot R	main stem above Seboeis R	24.97	Class AA	
ME0102000301_208R	West Branch of Mattawamkeag R and its tributaries		337.93	Class A	
ME0102000302_209R	East Branch of Mattawamkeag R and its tributaries		160.72	Class A	
ME0102000303_212R	Minor tributaries of Mattawamkeag R	below confluence of E and W Branch	82.9	Class A	
ME0102000303_213R	Mattawamkeag R,	main stem, below confluence with E and W Branch	15.46	Class A	
ME0102000304_210R	Baskahegan Str and its tributaries		202.99	Class A	
ME0102000305_212R	Minor tributaries of Mattawamkeag R	below confluence with Baskahegan Str	218.31	Class A	
ME0102000305_213R	Mattawamkeag R	main stem, below confluence with Baskahegan Str	21.9	Class A	
ME0102000306_211R	Molunkus Str and its tributaries		238.97	Class A	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0102000307_212R	Minor tributaries of Mattawamkeag R below Kingman		117.37	Class A	
ME0102000307_213R	Mattawamkeag R	main stem, below confluence with E and W Branch	12.79	Class AA	
ME0102000401_214R	Piscataquis R	main stem and tributaries, above the Rt. 6 bridge in Guilford	312.14	Class AA	
ME0102000402_218R	Minor tributaries of Piscataquis R	above confluence with Sebec R	203.6	Class A	
ME0102000403_215R	Sebec R and its tributaries		350.6	Class A	**AU# has been changed: formerly ME0102000403_215R_01**
ME0102000403_215R01	Sebec R	at Milo above confluence with Piscataquis R	2.3	Class A	Previously listed in 5-A for biocriteria non-attainment based on 1985 data. Resampling in 2006, at Biomon. Sta. 827, below the Milo Dam, shows attainment of Class A biocriteria.
ME0102000404_216R	Pleasant R and its tributaries		361.07	Class AA	
ME0102000405_217R	Sebois Str and its tributaries		159.76	Class A	
ME0102000406_218R	Minor tributaries of Piscataquis R	entering below confluence with Sebec R	154.74	Class A	
ME0102000406_219R	Piscataquis R	main stem, above confluence with Sebec R	23.29	Class B	
ME0102000501_220R	Minor tributaries Penobscot R	above confluence of Mattawamkeag R	144.51	Class A	
ME0102000502_220R_02	Minor tributaries Penobscot R	Piscataquis R	241.86	Class A	
ME0102000503_221R	Passadumkeag R and its tributaries		382.42	Class AA	
ME0102000504_222R	Olamon Stream and its tributaries		53.34	Class A	
ME0102000505_226R	Sunkhaze Stream and its tributaries		88.7	Class AA	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0102000506_222R	Minor tributaries of Penobscot R	between Piscataquis R and Orson Is	91.11	Class A	
ME0102000507_226R	Birch stream and its tributaries		63.38	Class B	
ME0102000508_223R	Pushaw Str and its tributaries		277.17	Class B	
ME0102000509_226R	Minor tributaries of Penobscot R	between Orson Is and Veazie Dam	127.81	Class B	
ME0102000510_224R	Kenduskeag Str and its tributaries		199.83	Class B	
ME0102000511_225R	Souadabscook Str and tributaries		156	Class AA	
ME0102000512_228R	Marsh River and its tributaries (nontidal portions)		199.77	Class B	
ME0102000513_226R	Minor tributaries Penobscot R	between Veazie Dam and Reed Bk (non-tidal portions)	62.12	Class B	
ME0102000513_227R	Minor tributaries entering from the east to Penobscot R	between Reed Bk and south end of Verona Is	185.21	Class B	
ME0102000513_227R01	Mill Stream (Orrington)		2	Class B	
ME0102000513_228R	Minor tributaries entering from the west to Penobscot R	between Reed Bk and south end of Verona Is	26.57	Class B	
ME0103000103_301R	Moose R and its tributaries above Rt 201 Jackman		88.74	Class AA	
ME0103000103_302R	Moose R and its tributaries at Long Pond		113.6	Class A	
ME0103000104_302R	Moose River and tributaries at Brassua L		134.37	Class A	
ME0103000105_303R	Moosehead Lake and minor tributaries of Moosehead Lake		401.92	Class A	
ME0103000106_304R	Minor tributaries of Kennebec R entering above Dead R		268.45	Class AA	
ME0103000106_306R	Kennebec R	main stem, above confluence of Dead R	19.16	Class AA	
ME0103000201_307R	North Branch of Dead R and its tributaries		131.98	Class A	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0103000203_309R	Flagstaff Lake and minor tributaries of Flagstaff Lake		96.52	Class A	
ME0103000204_310R	Tributaries of Dead R entering below Flagstaff Lake		204.87	Class A	
ME0103000204_311R_01	Dead R, main stem		21.47	Class AA	A 1 mile segment (ME0 103000204_311R_02) is listed in Category 4c, flow modified for hydropower
ME0103000301_312R	Minor tributaries Kennebec R	between Dead River and Wyman Dam	80.26	Class A	
ME0103000302_312R	Austin Stream and tributaries		75.68	Class A	
ME0103000303_312R	Minor tributaries Kennebec R	between Wyman dam and Carrabassett R	69.04	Class A	
ME0103000304_313R	Carrabassett R and its tributaries		279.53	Class AA	
ME0103000305_315R_01	Sandy R	and tributaries above Rt 145 Strong	138.67	Class AA	
ME0103000305_316R	Sandy River and tributaries	between Rt. 145 and Rt. 2 Farmington	190.66	Class A	
ME0103000305_317R	Wilson Str and its tributaries above Wilson Pond		64.8	Class A	
ME0103000305_318R	Wilson Str	main stem, below Wilson Pond	15.99	Class C	
ME0103000305_319R_01	Sandy R,	main stem, below Rt. 2 bridge in Farmington	29.69	Class B	
ME0103000305_320R	Minor tributaries Kennebec R	between Carrabassett R and Sebasticook R	193.79	Class B	
ME0103000305_322R	Tributaries Messalonskee Str entering below Messalonskee L		21.23	Class B	
ME0103000305_323R	Messalonskee Str	main stem .	10.27	Class C	
ME0103000306_314R	Wesserunsett Str and its tributaries		109.85	Class B	
ME0103000307_324R	W Branch of Sebasticook R	and its tributaries except for main stem below Rt 23 (Hartland)	350.13	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0103000307_329R	Higgins Brook, tributary to Great Moose L. & Sebasticook		97.99	Class A	
ME0103000308_325R	E Branch of Sebasticook R	and its tributaries except for main stem below Corundel Pd	190.86	Class B	Attaining some uses, Haz waste remediation project complete. 2003 biocriteria in attainment of Class C.
ME0103000309_326R	Twentyfive Mile Str and its tributaries		136.96	Class B	
ME0103000309_327R	Fifteen Mile Str and its tributaries		70.97	Class B	
ME0103000309_328R	China Lake Outlet and its tributaries		41.04	Class B	
ME0103000309_329R	Minor tributaries of Sebasticook R entering below Burnham		111.48	Class B	
ME0103000309_329R01	Minor tributaries of Sebasticook R	from E and W Branches to Burnham (bridge)	32.21	Class B	
ME0103000310_321R	Tributaries Messalonskee Str entering above Messalonskee L		167.07	Class B	
ME0103000311_334R	Cobbosseecontee Str and its tributaries		185.45	Class B	
ME0103000311_335R	Minor tributaries Kennebec R	Cobbossee Str to Merrymeeting Bay (Chops)	144.38	Class B	
ME0103000312_333R	Minor tributaries Kennebec R	between Sebasticook R and Cobbossee Str	132.5	Class B	
ME0103000312_333R01	Bond Brook (Augusta)		10	Class B	
ME0103000312_335R02	Togus Stream (Chelsea)		2.01	Class B	
ME0103000312_336R	Kennebec R	main stem, from Dead R to Wyman Dam	24.86	Class A	
ME0103000312_337R	Kennebec R	main stem, from Wyman Dam to Carrabassett R	23.14	Class A	
ME0104000101_402R	Mooseleukmeguntic - Cupsuptic R and its tributaries		38.33	Class AA	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0104000101_403R	Mooseleukmeguntic -Kennebago R and its tributaries		82.69	Class AA	
ME0104000102_404R	Umbagog - Rapid R and its tributaries		141.6	Class AA	
ME0104000102_405R	Umbagog	Tributaries of Umbagog Lake and segments of minor tributaries entering Androscoggin R in NH	43.95	Class A	
ME0104000103_401R	Azicohos - Magalloway R	and its tributaries upstream of the Maine-NH border	137.8	Class A	
ME0104000104_401R	Magalloway - Sturtevant Str and its tributaries		13.75	Class A	
ME0104000106_405R	Minor tributaries entering Androscoggin R in NH		8.83	Class A	
ME0104000201_406R	Minor tributaries of Androscoggin R	entering upstream of the Wild R	11.24	Class A	
ME0104000202_406R	Minor tributaries of Androscoggin R	entering above Rumford Point	129.85	Class AA	
ME0104000203_407R	Ellis R and its tributaries		119.67	Class A	
ME0104000204_408R	Swift R and its tributaries		66.07	Class A	
ME0104000204_410R	Androscoggin R	Minor tributaries of entering between Rumford Pt and Webb R	35.51	Class B	
ME0104000205_409R	Webb R and its tributaries		102.33	Class A	
ME0104000205_410R	Minor tributaries of Androscoggin R	entering between Rumford Pt and Webb R	46	Class B	
ME0104000206_410R	Minor tributaries of Androscoggin R	between Riley Dam and Nezinscot R	34.13	Class B	
ME0104000206_411R	Dead R and its tributaries above Androscoggin L		43.47	Class B	
ME0104000206_411R01	Dead R	Androscoggin L to Androscoggin R	8	Class B	
ME0104000207_412R	Nezinscot R and its tributaries		107.91	Class A	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0104000208_413R	Minor tributaries of Androscoggin R	between Nezinscot R and L Androscoggin R	17.32	Class B	
ME0104000209_414R	Little Androscoggin R	and tributaries above Rt. 26 bridge in Paris	141.16	Class A	
ME0104000209_415R	Bog Brk and other tributaries of Little Androscoggin R	below Rt 26 bridge	78.25	Class A	
ME0104000209_416R	Little Androscoggin R	main stem, from Rt. 26 bridge in Paris to Rt 121 in Oxford	12.65	Class C	
ME0104000209_417R_01	Little Androscoggin R,	main stem, below Rt. 121 bridge in Oxford	24.49	Class C	
ME0104000210_418R	Sabattus R and its tributaries		22.45	Class B	
ME0104000210_419R	Minor tributaries of Androscoggin R	between L Androscoggin R and Brunswick Dam	89.77	Class B	
ME0104000210_420R	Minor tributaries of Merrymeeting Bay		94.31	Class B	
ME0105000101_501R	Tributaries of St. Croix R	entering above outlet of Spednik L	111.07	Class A	
ME0105000102_502R	St. Croix R	main stem, from outlet of Spednik Lake to Spednik Falls	110.55	Class A	
ME0105000103_502R	Grand Lake Stream and tributaries		230.47	Class A	Hatchery permit issued August 2006 to protect water quality;
ME0105000104_502R	Musquash Stream and tributaries		123.19	Class A	
ME0105000105_502R	Big Lake at Peter Dana Point		134.7	Class A	
ME0105000106_502R	Tomah Stream and tributaries		166.98	Class AA	
ME0105000107_502R	St. Croix River and tributaries above Grand Falls		60.35	Class A	
ME0105000108_503R	Minor tributaries of St. Croix R	between Grand Falls and tidewater	59.28	Class B	
ME0105000108_504R	Minor tributaries of St. Croix River Estuary	entering tidewater in Calais and Robbinston	38.1	Class B	
ME0105000108_505R	St. Croix R	main stem, from Grand Falls to tidewater	22.17	Class A	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0105000201_507R	Dennys R and its tributaries		125.39	Class AA	
ME0105000202_508R	Pennamaquan River and tributaries		63.24	Class B	
ME0105000203_508R	Minor drainage entering tidewater in Washington County	between Robbinston and Sandy Point (Cutler)	180.8	Class B	
ME0105000204_509R	E Machias R and its tributaries		288.08	Class AA	
ME0105000204_509R01	Chase Mill Stream (East Machias)		1.52	Class B	
ME0105000205_510R	Machias R and its tributaries		489.5	Class AA	
ME0105000206_508R	Roque Bluffs Coastal	Minor drainages entering tidewater between Sandy Pt (Cutler) and E Machias R	51.68	Class B	
ME0105000207_513R	Chandler R and its tributaries		57.11	Class B	
ME0105000207_513R01	Minor drainages entering tidewater in Addison and Harrington		39.85	Class A	
ME0105000208_511R	Pleasant R and its tributaries		109.2	Class AA	
ME0105000208_511R01	Bog Stream (T18MD)		1.02	Class B	
ME0105000209_512R_01	Narraguagus R and its tributaries .		323.8	Class AA	
ME0105000209_513R	Minor drainages entering tidewater in Machias Bay		30.39	Class B	
ME0105000209_513R01	Roque Bluff Coastal	Minor drainages entering tidewater between E Machias R and Pleasant R	90.14	Class B	
ME0105000210_513R	Tunk Stream and tributaries		54.42	Class A	
ME0105000211_513R	Bois Bubert Coastal	and Tunk Str	76.96	Class B	
ME0105000212_515R	W Branch of Union R and its tributaries		210.3	Class B	
ME0105000212_516R	E Branch of Union R and its tributaries		159.2	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0105000212_517R	Minor tributaries of Graham Lake		203.69	Class B	Reeds Brook- Green Lake NFH: final hatchery permit issued 2/6/04; exp date 2/6/09
ME0105000212_518R	Tributaries of Union R entering below outlet of Graham Lake		64.14	Class B	
ME0105000212_520R	Minor drainages entering Penobscot Bay	in Hancock County between Verona Is and Castine	7.51	Class B	
ME0105000213_514R_02	Union River Bay		18.62	Class AA	
ME0105000214_514R	Min. drainages entering tidewater between Tunk S./Haynes Pt.	(Trenton)	228.71	Class A	
ME0105000215_514R	Mt Desert Coastal	tributaries entering from Mt Desert and adjacent islands	115.98	Class AA	
ME0105000216_520R	Bagaduce River and its tributaries		125.06	Class B	
ME0105000216_520R01	Stonington Coastal	Minor drainages entering tidewater in Hancock County	209.66	Class B	
ME0105000217_514R	Stonington Coastal	Minor drainages entering tidewater in Hancock County west of Union River	39.64	Class AA	
ME0105000218_521R	Minor drainages entering tidewater in Waldo County		93.17	Class B	
ME0105000219_521R	Ducktrap River and its tributaries		51.55	Class AA	
ME0105000220_521R	West Penobscot Bay Coastal	Minor drainages entering tidewater in Waldo County south of Verona Is	84.39	Class B	
ME0105000220_522R01_02	Minor drainages entering tidewater in Knox County		116.06	Class B	
ME0105000220_522R02_02	West Penobscot Bay Coastal -	Minor drainages entering tidewater from Waldo Cty line to Marshall Pt (St George R)	86.02	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0105000220_522R03	**Unnamed Brook (Rockport)**		**0.5**	**Class B**	**4A Included in multi-stream bacteria TMDL; approved by EPA 9/28/09. TMDL monitoring data showed no excursions- delisted to Category 2 in 2010**
ME0105000301_523R	St. George R and its tributaries		216.79	Class AA	
ME0105000301_524R01	Min drainages entering tidewater portion of St George R		79.67	Class B	
ME0105000301_524R02	Minor drainages to Muscongus Bay	including Meduncook River to Pemaquid Point .	13.26	Class B	
ME0105000302_524R01	Unnamed Brook (N. Cushing)		0.5	Class B	
ME0105000302_525R	Medomak River and its tributaries	including Meduncook River to Pemaquid Point .	86.91	Class A	
ME0105000302_526R	Minor drainages to Muscongus Bay	including Meduncook River to Pemaquid Point .	97.78	Class B	
ME0105000303_526R	Minor drainages entering tidewater into Johns Bay		46.92	Class B	
ME0105000303_526R01	Minor drainages entering tidewater of Damariscotta River		40.26	Class B	
ME0105000304_527R	Damariscotta Lake outlet	including its tributaries entering above tidewater	30.82	Class B	
ME0105000304_527R01	Damariscotta River below lake outlet		0.2	Class B	
ME0105000305_528R	Sheepscot R and its tributaries		186.3	Class AA	Palermo Fish Hatchery- final hatchery permit issued 2/20/06; exp date 2/20/11

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0105000305_528R02	**West Branch Sheepscot River**		**2.29**	**Class AA**	**12/17/09: analysis of additional TMDL monitoring data demonstrates that segment is no longer impaired for dissolved oxygen. DO delisted to Category 2. 12/7/09 macroinvertebrate and algal biocriteria results inconsistent between Class A and Class B for both assemblages from year to year. New Category 3 for ALU.**
ME0105000305_529R01	Minor drainages entering tidewater of Damariscotta River		7.07	Class B	
ME0105000305_529R02	Minor drainages entering tidewater of Sheepscot River		82.55	Class B	
ME0105000306_529R	Minor drainages entering tidewater of Sheepscot Bay		93.8	Class B	
ME0105000306_530R	Minor drainages entering tidewater of Sheepscot Bay		50.48	Class B	
ME0105000307_530R	Min. drainages entering tidewater of Kennebec Estuary	below the Chops	133.36	Class B	
ME0106000101_605R	Crooked R and its tributaries		173.58	Class AA	
ME0106000101_606R	Sebago Lake and its tributaries		256.73	Class A	
ME0106000102_603R	Royal R and its tributaries		131.86	Class A	
ME0106000102_603R03	Eddy Brook (New Gloucester)		3.68	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0106000102_603R04	Hatchery Brook (Gray)		0.87	Class B	Final hatchery permit issued 6/6/06; exp date 6/6/11
ME0106000102_603R05	Royal River	segment below Collyer Bk	2.15	Class B	2006 delisted segment; RCRA hazardous waste site; water quality criteria are met down-gradient of the contaminated site.
ME0106000102_604R	Min. drainages entering tidewater	between Royal River and Presumpscot River	9.8	Class B	
ME0106000103_607R	Tributaries of Presumpscot R	entering below outlet of Sebago L	267.59	Class B	
ME0106000103_607R04	**Piscataqua River (Falmouth)**		**12.53**	**Class B**	**9/28/09 approval of statewide bacteria TMDL Delisted to Category 2 in 2010 due to TMDL monitoring data showing attainment of bacteria stds**
ME0106000103_608R	Presumpscot R	main stem, above Dundee Dam	4.2	Class A	
ME0106000103_609R_01	Presumpscot R,	main stem, below Sacarappa Dam	6.9	Class C	2006 delisted segment; closure of pulp mill and breach of Smelt Hill Dam. Attainment of dissolved oxygen and biocriteria
ME0106000103_611R	Min. drainages entering tidewater	in Cumberland County between Fore River and Scarborough R	36.49	Class B	
ME0106000103_612R	Min. drainages entering tidewater	in York County east of Saco River	10.19	Class B	
ME0106000106_601R	Min. drainages entering tidewater in Sagadhoc County	west of Small Point	26.74	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0106000106_602R	Min. drainages entering tidewater	between Cumberland-Sagadahoc line and Royal River	94.47	Class B	
ME0106000203_613R	Minor tributaries of Saco R entering above Swans Falls		1.48	Class A	
ME0106000203_618R	Saco R,	main stem, between the Maine-New Hampshire border and Swans Falls	5.42	Class AA	
ME0106000204_613R	Minor tributaries of Saco R	between Swans Falls and Rt 160 in Brownfield	209.74	Class A	
ME0106000204_618R	Saco R,	main stem, between Swans Falls and Rt 160 in Brownfield	27.53	Class AA	
ME0106000204_618R01	**Saco R, Fryeburg**	**main stem, Swans Falls to Rt 5 (Fryeburg)**	**5.0**	**Class AA**	**12/3/09 approval of statewide bacteria TMDL. All TMDL bacteria monitoirng values were low- Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**
ME0106000205_613R	Minor tributaries of Saco R	between Rt 160 in Brownfield and Ossippee River	116.42	Class A	
ME0106000205_618R	Saco R,	main stem, between Rt 160 in Brownfield and Ossippee River	14.95	Class AA	
ME0106000209_614R	Ossippee R and its tributaries		105.38	Class B	
ME0106000209_614R01	**Ossippee R**	**mainstem below Kezar Falls**	**5.0**	**Class B**	**9/28/09 approval of statewide bacteria TMDL. Delisted to Category 2 due to TMDL monitoring data showing attainment of bacteria stds**

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0106000210_615R	Little Ossippee R and its tributaries		266.16	Class B	
ME0106000210_616R	Minor tributaries of Saco R	between Little Ossippee River and tidewater	214.67	Class B	
ME0106000211_613R	Minor tributaries of Saco R	between the Ossippee River and Little Ossippee River	75.58	Class B	
ME0106000211_616R01	Deep Brook (Saco)		2.5	Class B	
ME0106000211_617R	Min. tributaries of Saco River Estuary	entering tidewater between head of tide and Camp Ellis	12	Class B	
ME0106000211_618R	Saco R	main stem, between the Maine-New Hampshire border and Swans Falls	14.71	Class AA	
ME0106000211_619R	Saco R	main stem, between the Little Ossippee River and tidewater	24.1	Class AA	
ME0106000211_619R02	Saco River (Dayton)		0.2	Class A	
ME0106000211_619R03	Saco River (West Buxton)		0.2	Class A	
ME0106000211_619R04	Saco River (Bar Mills)		0.2	Class A	
ME0106000301_622R	Kennebunk R and its tributaries		88.8	Class B	
ME0106000302_623R	Mousam R	main stem, above Rt. 224 bridge in Sanford and all tributaries to the entire main stem	164.91	Class B	
ME0106000302_624R	Min. drainages entering tidewater	between Mousam River and the Ogunquit-York boundary	98.83	Class B	
ME0106000303_621R	Min. drainages entering tidewater	between Saco River and Kennebunk River	37.41	Class B	
ME0106000304_625R02	Great Works R,	main stem, above Rt. 9 bridge in N Berwick and all tributaries	137.32	Class B	
ME0106000304_626R	Min. drainages entering tidewater	between Ogunquit-York boundary and Piscataqua Estuary	99.62	Class B	

Category 2: Rivers and Streams Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0106000305_627R	Minor tributaries of Salmon Falls River		155.81	Class B	
ME0106000305_629R	Great Works R	main stem, below Rt. 9 bridge in N Berwick	15.23	Class B	
ME0106000305_630R03	Salmon Falls R,	main stem, from Great East Lake to tidewater	22.2	Class B	
ME0106000310_626R	Min. drainages entering	tidewater of the Piscataqua Estuary	36.22	Class B	
ME0106000310_626R01	Smelt Brook (York)		3.18	Class B	

Bold text indicates waters that were removed from the 2008 impaired waters list

Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0101000412_143R02	Merrit Brook	entering Aroostook R. from south, downstream of Presque Isle	1	Class B	Potential sources for impairment, inconclusive data.	2009
ME0101000413_142R01	Caribou Stream (Caribou)		2.73	Class B	Previously 5A; Biocriteria attainment is inconsistent but 2004 sample showed Class A biocriteria attainment	2009
ME0101000504_152R01_02	**Meduxnekeag R. mainstem below Meduxnekeag L.**	**mainstem between Meduxnekeag L. and So. Br. Meduxnekeag R**	**9.5**	**Class B**	**2007 and 2008 data submitted by Houlton Band of Maliseet Indians documents environmental indicators of nutrient problems including diurnal DO swings, increased algal coverage, and low DO.**	**2014**
ME0102000502_220R_01	Mattanawcook Stream	tributary to Penobscot R. in Lincoln	1.2	Class C	Dissolved oxygen and bacteria delisted to Category 2 in 2006. New data shows sediment contamination; fish consumption use may be impaired. Insufficient data	2008
ME0102000511_225R01_01	Souadabscook Stream	main stem below Hammond Pd	5.5	Class AA	Eutrophic lake source, (Hermon Pd TMDL required). Data inconclusive for river segment	2011
ME0102000512_228R01	Unnamed Brook (Frankfort)		1	Class B	Potential sources for impairment, inconclusive data.	2011
ME0103000305_316R01	Barker Stream (Farmington)		8.22	Class B	Errors or inconsistencies in the original data. Limited new data indicates attainment.	2012
ME0103000305_316R03	Tannery Brook (Farmington)		1.5	Class B	Potential sources for impairment unknown, inconclusive data.	2012

Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0103000305_317R01	Meadow Brook (Wilton)		3.39	Class B	Potential sources for impairment unknown, inconclusive data.	2012
ME0103000306_314R01	Wesserunsett Stream at Athens		2.67	Class B	Errors or inconsistencies in the data.	2012
ME0103000306_320R01	Carrabassett Stream (Canaan, Skowhegan)		19.88	Class B	Errors or inconsistencies in the data.	2012
ME0103000306_339R_01	Kennebec R,	Shawmut Dam	5.5	Class C	Insufficient data.	2012
ME0103000309_328R01	China Lake Outlet (Vassalboro)		4.27	Class B	2002 Aquatic Life assessment in attainment. NPS controls. Improved lake condition. Facility compliance review recommended.	2012
ME0103000309_329R02	Twelvemile Brook (Clinton)		3	Class B	Errors or inconsistencies in the data.	2012
ME0103000309_329R03	Unnamed stream (Benton)		2	Class B	Potential sources for impairment unknown, inconclusive data.	2012
ME0103000309_329R04	Farnham Brook (Pittsfield)		3	Class B	Potential sources for impairment unknown, inconclusive data.	2012
ME0103000311_334R01	Mud Mills Stream (Monmouth)		10.5	Class B	Errors or inconsistencies in the data.	2012
ME0103000311_334R02	Potters Brook (Litchfield)		4.23	Class B	Errors or inconsistencies in the data.	2012
ME0103000312_333R01_01	Tanning Brook	Manchester, tributary to Bond Brook	5	Class B	Class B stream; Biomonitoring Station 744 showed attainment of Class C in 2004; needs resampling	2012
ME0103000312_335R01	Kimball Brook (Pittston)		3.38	Class B	Errors or inconsistencies in the data.	2012

Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0103000312_420R01	Abagadasset River (Richmond, Bowdoinham)		13.33	Class B	Errors or inconsistencies in the data.	2012
ME0103000324_333R_01	**Riggs Brook (Augusta)**	**Augusta, including portions of tribs affected by watershed development**	**1.3**	**Class B**	**2007-Biomonitoring attains Class C (invertebrates and algae). Elevated phosphorus Resampling needed to confirm whether impairment exists**	**2012**
ME0104000101_403R_01	Rangeley River	From Rangeley Lake Dam to Mooselookmeguntic Lake in Oquossoc	1.3	Class A	Rangeley River- Cooke Oquossoc Hatchery- final hatchery permit issued 12/30/05; exp date 12/30/10; Lake outlet effect confounds interpretation of effect of salmon hatchery	2013
ME0104000202_406R01	Sunday River (Newry, Bethel)		5	Class A	Potential sources for impairment, inconclusive data.	2013
ME0104000205_410R01_01	Spears Stream (Peru).		9.75	Class B	Potential sources for impairment unknown, inconclusive data.	2013
ME0104000206_410R02	Sevenmile Stream	Tributary to Androscoggin entering from the north in Jay	3	Class B	Data from 1995 indicates possible dissolved oxygen and nutrient problem. Needs re-sampling to confirm impairment.	2012
ME0104000207_412R01	Nezinscot River at Buckfield		4	Class B	Potential sources for impairment, recent data provides conflicting status	2013
ME0104000207_412R03	Nezinscot River at Turner		2	Class B	Potential sources for impairment, inconclusive data.	2012
ME0104000208_413R08	Bobbin Mill Brook	(Lake Auburn Outlet, Auburn)	3.45	Class B	Conflicting data. Needs re-sampling to confirm that 1998 non-attainment was caused by natural conditions.	2012

Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0104000209_414R02	Penneseeewassee Lake Outlet		1.24	Class B	New information inconclusive.	2012
ME0104000209_415R01	Davis Brook (Poland)		1	Class B	Errors or inconsistencies in the data.	2012
ME0105000108_503R01	Unnamed stream (Calais)		1	Class B	Potential sources for impairment unknown, inconclusive data.	2011
ME0105000108_505R01	Woodland Impoundment		5.5	Class C	Insufficient data. Long term river study in 2006.	2012
ME0105000213_519R	Union R	Main stem (Ellsworth)	2.94	Class B	Sampled in 2007; new model under construction; new treatment plant is planned.	2010
`ME0105000305_528R02	**West Branch Sheepscot River**		**2.29**	**Class AA**	**Formerly referred to as "West Branch Sheepscot River below Halls Corner"** **12/17/09: analysis of additional monitoring data demonstrates that segment is no longer impaired for dissolved oxygen. Delisted to Category 2.** **12/7/09 macroinvertebrate and algal biocriteria results inconsistent between Class A and Class B for both assemblages from year to year. Category 3 for ALU**	**2012**
ME0106000103_607R05	East Branch Piscataqua River	Mainstem entering Piscataqua just upstream of confluence with Presumpscot River in Falmouth	5.5	Class B		2010

Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0106000103_607R13	Tannery Brook (Gorham)	Tributary to Little River in Gorham	2	Class B	Potential sources of impairment; Variable or conflicting information; Category 3 listed from Rt 114 to confluence with Little river	2010
ME0106000104_611R	Tributaries of the Scarborough River and Scarborough Marsh		99.99	Class B	Potential sources for impairment, insufficient data.	2010
ME0106000105_610R	Stroudwater River and minor drainages of the Fore River		50.45	Class B	Potential sources for impairment, insufficient data.	2010
ME0106000106_607R12	Norton Brook	Falmouth	1.34	Class B	Administrative error, conflicting data. More data required to support impaired assessment. Non-attainment of biocriteria in 2002 may be due to natural habitat effects; needs resampling	2010
ME0106000304_625R04	Goodall Brook (Sanford)	upstream of Berwick Rd	2.5	Class B	Newly listed this cycle; Biomonitoring station 747- non-attainment of biocriteria in 2004. Needs re-sampling to confirm.	2010

Category 4-A: Rivers and Streams with Impaired Use, TMDL Completed

Waters Impaired by Atmospheric Deposition of Mercury:

All freshwaters formerly listed in Category 5-C are moved to Category 4A (TMDL Completed) due to US EPA approval of a Regional Mercury TMDL.

5-C waters moved to 4A: Impairment caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources.

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0101000121 117R*	**St. John River at Madawaska**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class C**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0101000303_124R01	Dickey Brook		Nutrient/Eutrophication Biological Indicators	19.5	Class B	30683	
ME0101000303 124R01	Dickey Brook		Oxygen, Dissolved	19.5	Class B	30683	
ME0101000303 124R02	Daigle Brook		Nutrient/Eutrophication Biological Indicators	7.99	Class B	30681	
ME0101000303_124R02	Daigle Brook		Oxygen, Dissolved	7.99	Class B	30681	

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0101000412_140R02	**Dudley Brook (Chapman)**	**Chapman**	**Total phosphorus Total Nitrogen Sedimentation**	**6.41**	**Class A**	**38548, 38549, 38550**	**Aq. Life Use impairments-EPA approved TMDL 4/26/2010**
ME0101000412_140R03_01	Presque Isle Stream at Presque Isle		Ammonia (Un-ionized)	1	Class B	2529	
ME0101000412_140R03_01	Presque Isle Stream at Presque Isle		BOD, Biochemical oxygen demand	1	Class B	2529	
ME0101000412_140R03_01	Presque Isle Stream at Presque Isle		Phosphorus (Total)	1	Class B	2529	
ME0101000501_149R01	**Prestile Stream above dam in Mars Hill**		**Benthic-Macroinvertebrate Bioassessments (Streams)**	**15.78**	**Class A**	**2013**	**5/10/10 EPA approved TMDL (with Christina Reservoir) for benthic macroinvertebrates, nutrient eutrophication/biological indicators and dissolved oxygen.**
ME0101000501_149R01	**Prestile Stream above dam in Mars Hill**		**Nutrient/Eutrophication Biological Indicators**	**15.78**	**Class A**	**2013**	
ME0101000501_149R01	**Prestile Stream above dam in Mars Hill**		**Oxygen, Dissolved**	**15.78**	**Class A**	**2013**	
ME0101000504_152R01_01	Meduxnekeag River	Below confluence with S Branch	Phosphorus (Total)	11	Class B	2471	

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0102000110_205R03	Millinocket Stream (Millinocket)		Escherichia coli	3.03	Class C	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000402_219R_02	Piscataquis River at Dover Foxcroft	Variable mileage, CSO affected	Escherichia coli	0 *	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000403_215R_02	Sebec River at Milo	Variable mileage, CSO affected	Escherichia coli	0 *	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_226R01	Otter Stream		Escherichia coli	6.27	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_226R02	Boynton Brook		Escherichia coli	2.64	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0102000509_233R_02	Penobscot River at Orono	Variable mileage, CSO affected	Escherichia coli	0 *	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0102000509_233R_03	**Penobscot River at Old Town-Milford**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0102000510_224R04	Birch Stream	Bangor	Benthic-Macroinvertebrate Bioassessments (Streams)	0.5	Class B	33160	
ME0102000513_234R	**Penobscot River**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000306_320R02	**Currier Brook**		**Escherichia coli**	**3.19**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000306_338R_03	**Kennebec River at Skowhegan**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000306_339R03	**Kennebec River at Fairfield**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class C**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0103000310_322R01	Fish Brook (Fairfield)		Benthic-Macroinvertebrate Bioassessments (Streams)	6.34	Class B	12077	
ME0103000310_322R01	Fish Brook (Fairfield)		Oxygen, Dissolved	6.34	Class B	12077	
ME0103000311_334R05	Cobbossee Stream (Gardiner)		Phosphorus (Total)	1.46	Class B	9998	
ME0103000312_339R_02	**Kennebec River at Waterville (CSO)**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000312_340R_02	**Kennebec River at Augusta, including Riggs Brook**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000312_340R_03	**Kennebec River at Hallowell**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000312_340R_04	**Kennebec River at Gardiner-Randolph**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0104000208_424R_01	Androscoggin R,	main stem, upstream of the Gulf Island Dam	Algae blooms	8.19	Class C	11594	
ME0104000208_424R_01	Androscoggin R,	main stem, upstream of the Gulf Island Dam	BOD, Biochemical oxygen demand	8.19	Class C	11594	
ME0104000208_424R_01	Androscoggin R,	main stem, upstream of the Gulf Island Dam	Oxygen, Dissolved	8.19	Class C	11594	
ME0104000208_424R_01	Androscoggin R,	main stem, upstream of the Gulf Island Dam	Phosphorus	8.19	Class C	11594	
ME0104000208_424R_01	Androscoggin R,	main stem, upstream of the Gulf Island Dam	Total Suspended Solids	8.19	Class C	11594	
ME0104000209_417R_02	**Little Androscoggin River at Mechanic Falls**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class C**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0104000210_425R_02	**Androscoggin River**	**Lewiston-Auburn, Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class C**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0105000108_505R_02	**St. Croix R, (Calais)**	**Variable mileage, CSO affected**	**Escherichia coli**	**0***		**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0105000203_508R02	**Pottle Brook (Perry)**		**Escherichia coli**	**0.5**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0105000217_520R01	Carleton Stream (Blue Hill)		Benthic-Macroinvertebrate Bioassessments (Streams)	1.23	Class C	10917	
ME0105000217_520R01	Carleton Stream (Blue Hill)		Iron	1.23	Class C	10917	
ME0105000220_522R01_01	**Megunticook River (Camden)**		**Escherichia coli**	**3.56**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0105000220_522R02_01	**Unnamed Brook (Camden)**		**Escherichia coli**	**0.7**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0105000220_522R04	Unnamed Brook (Rockland)		Escherichia coli	0.5	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0105000305_528R01	Sheepscot River at Alna		Escherichia coli	4.01	Class AA	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_607R08	Mosher Brook (Gorham)		Escherichia coli	2.03	Class B	37777	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_607R11	Nason Brook (Gorham)		Escherichia coli	2.7	Class B	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000103_609R_02	Presumpscot River at Westbrook	Variable mileage, CSO affected	Escherichia coli	0 *	Class C	37772-37783	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000105_610R05	Trout Brook	So. Portland	Benthic-Macroinvertebrate Bioassessments (Streams)	2.93	Class C	33816	
ME0106000105_610R05	Trout Brook	So. Portland	Habitat Assessment (Streams)	2.93	Class C	33817	

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0106000105_610R09	Barberry Cr		Benthic-Macroinvertebrate Bioassessments (Streams)	3.03	Class C	32399	
ME0106000105_610R09	Barberry Cr		Habitat Assessment (Streams)	3.03	Class C		
ME0106000106_612R01_01	Goosefare Brook		Cadmium	6.14	Class B	9765	
ME0106000106_612R01_01	Goosefare Brook		Chromium (total)	6.14	Class B	9765	
ME0106000106_612R01_01	Goosefare Brook		Copper	6.14	Class B	9765	
ME0106000106_612R01_01	Goosefare Brook		Iron	6.14	Class B	9765	
ME0106000106_612R01_01	Goosefare Brook		Lead	6.14	Class B	9765	
ME0106000106_612R01_01	Goosefare Brook		Nickel	6.14	Class B	9765	
ME0106000106_612R01_01	Goosefare Brook		Zinc	6.14	Class B	9765	
ME0106000106_612R01_02	**Bear Brook, Saco**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000106_616R04	**Bear Bk**		**Escherichia coli**	**0.5**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0106000211_616R02	**Tappan Bk**		**Escherichia coli**	**0.5**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000211_616R03	**Sawyer Bk**		**Escherichia coli**	**0.5**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000211_616R06	**Swan Pond Brook at South Street (Biddeford)**		**Escherichia coli**	**1**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000211_619R01	**Saco River at Biddeford-Saco**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000301_622R01	**Kennebunk River**		**Escherichia coli**	**3.07**	**Class B**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Aluminum	20.48	Class B	2530	

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Ammonia (Un-ionized)	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Arsenic	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	BOD, Biochemical oxygen demand	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Copper	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Lead	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Phosphorus (Total)	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Selenium	20.48	Class B	2530	

Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL NUMBER	COMMENTS
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Silver	20.48	Class B	2530	
ME0106000302_628R01	Mousam R,	main stem, below Rt. 224 bridge in Sanford	Zinc	20.48	Class B	2530	
ME0106000302_628R02	**Mousam River at Sanford**	**Variable mileage, CSO affected**	**Escherichia coli**	**0 ***	**Class C**	**37772-37783**	**9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0106000305_630R01	Salmon Falls R		Ammonia (Un-ionized)	7.43	Class B	1029	
ME0106000305_630R01	Salmon Falls R		Nutrient/Eutrophication Biological Indicators	7.43	Class B	1029	
ME0106000305_630R01	Salmon Falls R		Oxygen, Dissolved	7.43	Class B	1029	

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0101000413_145R01	Little Madawaska River	Benthic-Macroinvertebrate Bioassessments (Streams)	20.5	Class B	Haz waste remediation project is complete (Superfund)—expected to attain standards	2015
ME0101000413_145R01	Little Madawaska River	Polychlorinated biphenyls	20.5	Class B	Haz waste remediation project is complete (Superfund)—expected to attain standards	2020
ME0101000413_145R02	Greenlaw Stream	Polychlorinated biphenyls	17.12	Class B	Haz waste remediation project (Superfund)--expected to attain standards	2008
ME0102000109_205R01	**West Branch Penobscot R main stem, below confluence with Millinocket Str**	**Nutrient/Eutrophication Biological Indicators**	**4.25**	**Class C**	**Consent agreement signed by BEP 1/17/08 to reduce phosphorous loading from upstream mills. Monitoring in 2011;**	**2014**
ME0102000109_205R01	**West Branch Penobscot R main stem, below confluence with Millinocket Str**	**Dissolved oxygen**	**4.25**	**Class C**	**Consent agreement signed by BEP 1/17/08 to reduce phosphorous loading from upstream mills. Monitoring in 2011;**	**2014**
ME0102000503_221R01	Cold Stream (Enfield) downstream of hatchery	Benthic-Macroinvertebrate Bioassessments (Streams)	1.63	Class A	Final hatchery permit issued 3/31/06	2011
ME0102000502_231R	Penobscot R. main stem, from Cambolasse Str to Piscataquis R	Dioxin (including 2,3,7,8-TCDD)	19.08	Class B	Also 5A listed for DO and nutrients	2020

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0102000506_232R	Penobscot R mainstem, Piscataquis to Orson Is.	Dioxin (including 2,3,7,8-TCDD)	36.49	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0102000509_233R_01	Penobscot R, mainstem Orson Is to Veazie Dam	Dioxin (including 2,3,7,8-TCDD)	14.51	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0102000512_229R	**Penobscot R main stem, above confluence of Mattawamkeag R**	**Nutrient/Eutrophication Biological Indicators**	**13.03**	**Class C**	**Consent agreement signed by BEP 1/17/08 to reduce phosphorous loading from upstream mills; Monitoring in 2011**	**2014**
ME0102000512_229R	**Penobscot R main stem, above confluence of Mattawamkeag R**	**Dissolved oxygen**	**13.03**	**Class C**	**Consent agreement signed by BEP 1/17/08 to reduce phosphorous loading from upstream mills; Monitoring 2011**	**2014**

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0102000513_234R02	Penobscot mainstem, Veazie Dam to Reed Bk	Dioxin (including 2,3,7,8-TCDD)	10.1	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0103000304_313R01	Mill Stream (Embden)	Benthic-Macroinvertebrate Bioassessments (Streams)	2.57	Class B	Hatchery permit issued 1/30/2006; exp. date 1/30/2011	2011
ME0103000305_315R_02	Unnamed Stream trib to Sandy R (Avon-Dunham)	Benthic-Macroinvertebrate Bioassessments (Streams)	2.63	Class B	Hatchery permit issued 10/18/2005; hatchery is closed	2010
ME0103000306_338R_04	Kennebec R,	Dioxin (including 2,3,7,8-TCDD)	22.76	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0103000306_339R_02	Kennebec R,	Dioxin (including 2,3,7,8-TCDD)	14.65	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0103000308_325R01	East Branch Sebasticook River Corundel Pd to Sebasticook L	Benzene	4.51	Class C	Haz waste remediation project (Superfund). CSO removal. New wastewater permit, removal to land treatment in 2004. Segment attains aquatic life criteria (2003 data). Expected to attain in 2010.	2010
ME0103000308_325R01	East Branch Sebasticook River Corundel Pd to Sebasticook L	Benthic-Macroinvertebrate Bioassessments (Streams)	4.51	Class C	Haz waste remediation project (Superfund). CSO removal. New wastewater permit, removal to land treatment in 2004. Segment attains aquatic life criteria (2003 data). Expected to attain in 2010.	2010
ME0103000308_331R01	Martin Stream (Dixmont)	Ammonia (Un-ionized)	0.5	Class A	CAFO permit in place, operations currently suspended; expected to attain stds. Segment length is from fields draining manure storage piles to downstream of Rt 7	2010
ME0103000308_331R01	Martin Stream (Dixmont)	Benthic-Macroinvertebrate Bioassessments (Streams)	0.5	Class A	CAFO permit in place, operations currently suspended, expected to attain stds. Segment length is from fields draining manure storage piles to downstream of Rt 7	2010
ME0103000312_339R_01	Kennebec R,	Dioxin (including 2,3,7,8-TCDD)	17.7	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0103000312_340R_01	Kennebec R,	Dioxin (including 2,3,7,8-TCDD)	30.53	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0103000312_427R	Merrymeeting Bay	Dioxin (including 2,3,7,8-TCDD)	3.44	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000201_421R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	2.35	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0104000202_421R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	31.04	Class B	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000204_421R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	10.97	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000204_422R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	6.8	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0104000205_422R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	15.7	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000206_423R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	21.7	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000206_423R01	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	1	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2008
ME0104000207_412R02	House/Lively Brook	Nitrogen (Total)	3.53	Class B	Waste (manure) removal (Agric NPS) by Consent Order and Site Permit-expected to attain standards; needs addtional monitoring to confirm attainment.	2008

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0104000208_424R	Androscoggin R,	Dioxin (including 2,3,7,8-TCDD)	15.45	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000210_425R_01	Androscoggin R,	Dioxin (including 2,3,7,8-TCDD)	22.15	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0104000210_426R	Androscoggin R	Dioxin (including 2,3,7,8-TCDD)	8.49	Class C	Dioxin license limits in 38 MRSA Section 420. New Dioxin sources removed, expected to attain standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.	2020
ME0105000201_507R01	Dennys River	Polychlorinated biphenyls	4.5	Class AA	Haz waste remediation project (Superfund)--expected to attain standards by 2010	2010
ME0105000305_528R08_02	Sheepscot River below Sheepscot L	Oxygen, Dissolved	5.67	Class B	Listed for dissolved oxygen; hatchery permit issued 2/20/06; Expected to attain standards.	2010

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0106000101_605R01	Mile Brook (Casco)	Benthic-Macroinvertebrate Bioassessments (Streams)	2.28	Class B	Hatchery permit issued 5/8/2006; exp. date 5/8/2011	2009
ME0106000105_610R03	**Long Creek (South Portland)**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**4.12**	**Class C**	**Stormwater General Permit , MEPDES MEG190000. Wastewater Discharge license number W-9052-5Y-A-N November 6, 2009**	**2020**
ME0106000105_610R03	**Long Creek (South Portland)**	**Habitat Assessment (Streams)**	**4.12**	**Class C**		
ME0106000301_622R02	**Lord's Brook (Lyman)**	**BOD, Biochemical oxygen demand;**	**2.35**	**Class B**	**August 2007 Consent Decree signed agreeing to make water quality improvements; May 2008 Contempt of Court Order February 2009 District Court ordered cease and desist acceptance of new solid waste (appealed) Moved to Category 4B- court-ordered controls in place**	**2012**
ME0106000301_622R02	**Lord's Brook (Lyman)**	**Oxygen, Dissolved,**	**2.35**	**Class B**	**August 2007 Consent Decree signed agreeing to make water quality improvements; May 2008 Contempt of Court Order February 2009 District Court ordered cease and desist acceptance of new solid waste (appealed) Moved to Category 4B- court-ordered controls in place**	**2012**

Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0106000301_622R02	**Lord's Brook (Lyman)**	**Nutrient/Eutrophication Biological Indicators**	**2.35**	**Class B**	**August 2007 Consent Decree signed agreeing to make water quality improvements; May 2008 Contempt of Court Order February 2009 District Court ordered cease and desist acceptance of new solid waste (appealed) Moved to Category 4B- court-ordered controls in place**	**2012**

Bold text indicates waters that were moved into Category 4-B during this reporting cycle

Category 4-C: Rivers and Streams with Impairment not Caused by a Pollutant

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0102000109_205R02	West Branch Penobscot R	Other flow regime alterations	4.24	Class C	Flow diversion - modified for hydropower.
ME0102000513_227R02	Silver Lake Outlet	Other flow regime alterations	1.28	Class B	Water withdrawal.
ME0103000204_311R_02	Dead R, main stem	Other flow regime alterations	1	Class AA	Flow modified for hydropower. New hydro certification pending.
ME0103000306_338R_01	Kennebec R,	Other flow regime alterations	5	Class B	Impounded water (Norridgwock)
ME0104000210_425R_01_01	**Androscoggin R, (main stem, from Pejepscot Dam to Brunswick Dam)**	**Fish Passage Barrier**	**4.5**	**Class C**	**Inadequate fish passage in Brunswick prohibits migration of American Shad. Segment is also listed in Category 5D**
ME0106000103_608R01	Presumpscot River	Other flow regime alterations	16.14	Class A	Impoundments. Draft water quality certificate.
ME0106000203_613R01	Wards Brook (Fryeburg)	Other flow regime alterations	1.5	Class C	Impounded water
ME0106000302_628R01_01	Mousam River below Old Falls Dam	Other flow regime alterations	1	Class C	Low oxygen from bottom release

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0101000105_103R01	Shields Branch of Big Black R	mainstem	Oxygen, Dissolved	8.16	Class AA	2012	
ME0101000412_140R04	Hanson Brook (formerly "Unnamed Stream P.I. airport")	Tributary to Presque Isle Stream, draining the airport	Benthic-Macroinvertebrate Bioassessments (Streams)	2.5	Class B	2012	
ME0101000412_143R01	Everett Brook (Ft. Fairfield)		Oxygen, Dissolved	3.53	Class B	H	TMDL report under contract
ME0102000402_219R01	Piscataquis R	main stem, below Dover Foxcroft	Oxygen, Dissolved	13.44	Class B	2011	Dover Foxcroft to about 4 miles upstram of confluence with Sebec River is listed for dissolved oxygen
ME0102000502_230R	Penobscot R	main stem, from Mattawamkeag R to Cambolassee Str	Nutrient/Eutrophication Biological Indicators	14.05	Class B	H	High priority modeling; low flow monitoring data collected in 2010; flows too high in 2009
ME0102000502_230R	Penobscot R	main stem, from Mattawamkeag R to Cambolassee Str	Oxygen, Dissolved	14.05	Class B	H	
ME0102000502_231R	Penobscot R	main stem, from Cambolasse Str to Piscataquis R	Oxygen, Dissolved	19.08	Class B	2011	High priority modeling; low flow monitoring data collected in 2010; flows too high in 2009 .
ME0102000502_231R	Penobscot R	main stem, from Cambolasse Str to Piscataquis R	Nutrient/Eutrophication Biological Indicators	19.08	Class B	2011	
ME0102000506_222R01	Costigan Str (Costigan)		Oxygen, Dissolved	0.78	Class B	2012	
ME0102000506_232R	**Penobscot R**	**main stem, from Piscataquis to Orson Is**	**Nutrient/Eutrophication Biological Indicators**	**36.49**	**Class B**	**H**	**High priority WQ modeling; low flow monitoring data collected in 2010, flows too high in 2009**
ME0102000506_232R	**Penobscot R**	**main stem, from Piscataquis to Orson Is**	**Oxygen, Dissolved**	**36.49**	**Class B**	**H**	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0102000509_233R01	**Penobscot R**	**main stem, from Orson Is to Veazie Dam**	**Nutrient/Eutrophication Biological Indicators**	**14.51**	**Class B**	**H**	**High priority WQ modeling; low flow monitoring data collected in 2010, flows too high in 2009**
ME0102000509_233R01	**Penobscot R**	**main stem, from Orson Is to Veazie Dam**	**Oxygen, Dissolved**	**14.51**	**Class B**	**H**	
ME0102000510_224R01	Burnham Brook (Garland)		Oxygen, Dissolved	3.73	Class B	2012	
ME0102000510_224R03	French Stream (Exeter)		Benthic-Macroinvertebrate Bioassessments (Streams)	12.79	Class B	2012	
ME0102000510_224R05	Capehart Brook (AKA Unnamed (Pushaw) Stream (Bangor)		Habitat Assessment (Streams)	0.46	Class B	H	Statewide %IC candidate. Stream name changed from :Unnamed (Pushaw) Bk to Capehart (Pushaw) Brook (Bangor) at the request of City of Bangor, July 2007. Bangor refers to the stream as "Capehart Brook".
ME0102000510_224R06	Arctic Brook (near Valley Ave Bangor)		Benthic-Macroinvertebrate Bioassessments (Streams)	0.18	Class B	H	Statewide %IC candidate; Draft TMDL is complete; needs Public Review
ME0102000510_224R06	Arctic Brook (near Valley Ave Bangor)		Habitat Assessment (Streams)	0.18	Class B	H	
ME0102000511_225R01_02	Shaw Brook (Bangor, Hampden)		Benthic-Macroinvertebrate Bioassessments (Streams)	3.91	Class B	H	
ME0102000511_225R01_02	Shaw Brook (Bangor, Hampden)		Habitat Assessment (Streams)	3.91	Class B	H	
ME0102000511_225R02	Sucker Brook (Hampden) (formerly 'Unnamed St.-Hampden')	Tributary to Penobscot R. entering from the west, in Hampden	Oxygen, Dissolved	2.5	Class B	2012	Formerly identified and 303d listed as 'Unnamed Stream (Hampden)'
ME0102000511_225R02	Sucker Brook (Hampden) (formerly 'Unnamed St.-Hampden')	Tributary to Penobscot R. entering from the west, in Hampden	Benthic-Macroinvertebrate Bioassessments (Streams)	2.5	Class B	2012	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0102000513_226R03	Penjajawoc Stream (Bangor) Meadow Bk (Bangor)		Benthic-Macroinvertebrate Bioassessments (Streams)	6.76	Class B	L	Watershed planning process underway; 2008 NA for invertebrate biocriteria ; Sta 315- algae model non-attainment in 2006;
ME0102000513_226R03	Penjajawoc Stream (Bangor) Meadow Bk (Bangor)		Habitat Assessment (Streams)	6.76	Class B	L	
ME0102000513_226R03	Penjajawoc Stream (Bangor) Meadow Bk (Bangor)		Oxygen, Dissolved	6.76	Class B	L	
ME0102000513_234R02	**Penobscot R**	**main stem, from Veazie Dam to Reeds Bk**	**Nutrient/Eutrophication Biological Indicators**	**10.1**	**Class B**	**H**	**High priority WQ modeling; low flow monitoring data collected in 2010, flows too high in 2009**
ME0102000513_234R02	**Penobscot R**	**main stem, from Veazie Dam to Reeds Bk**	**Oxygen, Dissolved**	**10.1**	**Class B**	**H**	
ME0103000305_319R_02	Sandy R, main stem,	segment below Farmington WWTP	Benthic-Macroinvertebrate Bioassessments (Streams)	3.24	Class B	M	New wastewater license, outfall moved, requires additional monitoring to set pertmit limits-high flows in 2006, 2008, 2009, 2010 Biomonitoring in 2007-attained Class B; algae monitoring in 2007- attained Class B
ME0103000306_314R02	Cold Stream (Skowhegan)		Benthic-Macroinvertebrate Bioassessments (Streams)	5.73	Class B	M	Monitoring in 2006;
ME0103000306_320R03	Whitten Brook (Skowhegan)		Benthic-Macroinvertebrate Bioassessments (Streams)	1.12	Class B	2010	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL 2007 biomonitoring- NA Target TMDL due date for aquatic life, habitat and DO early 2010
ME0103000306_320R03	Whitten Brook (Skowhegan)		Habitat Assessment (Streams)	1.12	Class B	2010	
ME0103000306_320R04	Mill Stream (Norridgewock)		Benthic-Macroinvertebrate Bioassessments (Streams)	8.17	Class B	L	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0103000307_330R	W Branch of Sebasticook R		Polychlorinated biphenyls	12.5	Class C	M	Likely municipal and industrial sources of PCBs and dioxin
ME0103000307_330R	W Branch of Sebasticook R		Dioxin (including 2,3,7,8-TCDD)	12.5	Class C	M	
ME0103000308_325R02	Brackett Brook (Palmyra)		Oxygen, Dissolved	2.74	Class B	2012	
ME0103000308_325R03	Mulligan Stream (St. Albans)		Oxygen, Dissolved	4.03	Class B	M	TMDL monitoring in 2006
ME0103000308_331R	E Branch of Sebasticook R	Below Sebasticook L.	Oxygen, Dissolved	10.25	Class C	Low	Upstream Lake TMDL and superfund project are complete; Dioxin and PCBs--Category 5D also 5A- Primary recreation impairment from phosphorus- algae blooms from upstream lake source prohibit swimming
ME0103000309_327R01	Mill Stream (Albion)		Oxygen, Dissolved	2.17	Class B	M	
ME0103000309_332R	Sebasticook River	main stem, below confluence of E and W branches	Nutrient/Eutrophication Biological Indicators	30.83	Class C	2011	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL CSO in Winslow with LTCP (under KSTD's LTCP); Permit date 2009. 5A dioxin from legacy upstream (W.Br. Sebasticook) sources Category 5D for PCBs
ME0103000309_332R	Sebasticook River	main stem, below confluence with E and W branches	Oxygen, Dissolved;	30.83	Class C	2011	
ME0103000309_332R	Sebasticook River	main stem, below confluence with E and W branches	dioxin	30.83	Class C	L	Also listed 5D for legacy PCB contamination
ME0103000309_332R01	Sebasticook River	Halifax Impoundment	dioxin	2.00	Class C	L	Fish tissue contamination from dioxins from upstream sources. Delisted to Category 2 for biocriteria due to documented attainment
ME0103000311_334R03	Jock Stream (Wales)		Oxygen, Dissolved	9.43	Class B	M	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0103000311_334R03	Jock Stream (Wales)		Nutrient/Eutrophication Biological Indicators	9.43	Class B	M	
ME0103000311_334R04	Mill Stream (Winthrop)		Benthic-Macroinvertebrate Bioassessments (Streams)	0.63	Class B	M	Stream TMDL monitoring 2005; Biomon. sample 2004- NA
ME0103000311_334R04	Mill Stream (Winthrop)		Impairment Unknown	0.63	Class B	M	BRWM Remediation completed (underground storage tank-#6 fuel oil) Needs follow-up TMDL monitoring in 2010 to update impairment status; Removed from Urban Impaired Streams list - impairment not deemed to be caused by urban stormwater issues.
ME0103000311_334R05	**Cobbossee Stream (Gardiner)**		**Benthic-Macroinvertebrate Bioassessments (Streams); Periphyton Indicator Bioassessments;**	**7.00**	**Class B**	**2014**	**New 5A listing for Aquatic Life Use: Benthic macroinvertebrate non-attainment and algae Class C in 2007 Phorphorus Cause-4A, included as part of Pleasant Pond TMDL**
ME0103000312_333R02	**Whitney Brook (Augusta)**		**Benthic-Macroinvertebrate Bioassessments (Streams);**	**2.68**	**Class B**	**M**	**2010 New ALU Impairment listing-2007 biomonitoring data show non-attainment for benthic macroinvertebrates and algae- Sta 601. Added to Urban Impaired Stream list. 9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL**
ME0103000312_333R03	**Kennedy Brook (Augusta)**		**Benthic-Macroinvertebrate Bioassessments (Streams)**	**2**	**Class B**	**2012**	**Previously Category 3 due to biocriteria issues in 2004; Stormwater diversion. 2007 biomonitoring attains Class C for macroinvertebrates and non-attainment in provisional algae model.Added to Ch 500 Urban Impaired list; Potential candidate for statewide % Impervious Cover TMDL**
ME0103000312_333R04	Unnamed tributary to Bond Brook	(Augusta) entering below I-95	Habitat Assessment (Streams)	1.34	Class B	2011	2007 biomonitoring showed continued benthic invertebrate non-attainment

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0103000312_333R04	Unnamed tributary to Bond Brook	(Augusta) entering below I-95	Benthic-Macroinvertebrate Bioassessments (Streams)	1.34	Class B	2011	2002 algae NA
ME0103000312_335R03	Meadow Brook (Farmingdale)		Benthic-Macroinvertebrate Bioassessments (Streams)	2	Class B	2012	
ME0103000324_333R_02	**Spring Brook (Augusta**	**From Gov Hill fish hatchery to Mt Vernon Rd, Augusta**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**0.75**	**Class B**	M	**Nutrient problems-active licensing and enforcement process under Consent agreement; upgraded settling basin underway.**
ME0103000324_333R_02	**Spring Brook (Augusta**	**From Gov Hill fish hatchery to Mt Vernon Rd, Augusta**	**Phosphorus (Total)**	**0.75**	**Class B**	M	**Nutrient problems-active licensing and enforcement process under Consent agreement; upgraded settling basin underway.**
ME0104000205_410R01_02	Whitney Brook (Canton)		Benthic-Macroinvertebrate Bioassessments (Streams)	1.82	Class B	2012	
ME0104000208_413R01	Jepson Brook (Lewiston)		Oxygen, Dissolved	2.43	Class B	L	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL. Upstream section is 80% channelized . May require Use Attainability Analysis..
ME0104000208_413R01	Jepson Brook (Lewiston)		Habitat Assessment (Streams)	2.43	Class B	L	
ME0104000208_413R01	Jepson Brook (Lewiston)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.43	Class B	L	
ME0104000208_413R03	Stetson Brook (Lewiston)		Oxygen, Dissolved	6.82	Class B	H	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000208_413R04	Logan Brook, Auburn		Habitat Assessment (Streams)	0.96	Class B	2010	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL Watershed plan complete; target TMDL due date for other impairments early 2010
ME0104000208_413R04	Logan Brook, Auburn		Oxygen, Dissolved	0.96	Class B	2010	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0104000208_413R07	Gully Brook (Lewiston)		Oxygen, Dissolved	1.91	Class B	M	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000210_413R02	Penley Brook (Auburn)		Oxygen, Dissolved	1.57	Class B	L	
ME0104000210_418R01	Sabattus River between Sabattus and Androscoggin R		Benthic-Macroinvertebrate Bioassessments (Streams)	11.41	Class C	2009	Lake TMDL is completed. Updated, revised river modeling report completed June 2006, for dissolved oxygen and nutrient issues - showed marginal attainment (per David Miller, 8/2006). 2008 biomonitoring shows continued NA and high Total P at Sta.170, below Upper Dam, Lisbon
ME0104000210_418R01	Sabattus River between Sabattus and Androscoggin R		Nutrient/Eutrophication Biological Indicators	11.41	Class C	2010	
ME0104000210_418R01	Sabattus River between Sabattus and Androscoggin R		Oxygen, Dissolved	11.41	Class C	2010	
ME0104000210_418R02	No Name Brook (Lewiston)		Oxygen, Dissolved	10.02	Class C	M	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0104000210_419R01	Unnamed Brook (Biomon Sta. 347- Lisbon Falls at Rt 196)		Habitat Assessment (Streams)	1.36	Class B	L	Class C biocriteria, 1998 biomonitoring data, Sta. 347
ME0104000210_419R02	Hart Brook (Lewiston) A.K.A Dill Brook and including Goff Bk		Habitat Assessment (Streams)	4.15	Class B	2010	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL Biomonitorng Sta 341-2007 invertebrates- NA; 2003 algae-NA; 2004 algae-Class C TMDL originally submitted under the name "Dill Brook"; watershed plan complete 12/09 City review of TMDL complete; revise/resubmit to
ME0104000210_419R02	Hart Brook (Lewiston) A.K.A Dill Brook and including Goff Bk		Oxygen, Dissolved	4.15	Class B	2010	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0104000210_419R02	Hart Brook (Lewiston) A.K.A Dill Brook and including Goff Bk		Benthic-Macroinvertebrate Bioassessments (Streams)	4.15	Class B	2010	EPA early 2010 %IC candidate
ME0104000210_419R03	**Unnamed Stream (Lewiston Municipal Landfill)**	**Biomon Sta 857 affected by Lewiston Municipal Landfill near Plourde Pky**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**0.8**	**Class B**	**2011**	**2010 new listing-Biomon Sta 857 showed non-attainment in 2008 below Lewiston Municipal landfill; upstream Sta 856 is on watch list.**
ME0104000210_420R01	Unnamed tributary to Androscoggin R	(near River Rd. Brunswick) 43.91538/69.98089	Habitat Assessment (Streams)	1.85	Class B	M	
ME0104000210_420R02	Unnamed tributary to Androscoggin R	(near Water St. Brunswick) 43.92167/69.95586	Habitat Assessment (Streams)	0.56	Class B	M	
ME0104000210_420R03	Unnamed tributary to Androscoggin R	(near Jordan Ave., Brunswick) 43.91077/69.94130	Habitat Assessment (Streams)	1.73	Class B	M	
ME0104000210_420R04	Unnamed tributary to Androscoggin R	(near Rt. 196, Topsham) 43.92470/69.95027	Habitat Assessment (Streams)	1.77	Class B	M	
ME0104000210_420R05	**Unnamed trib (Topsham 4) to Androscoggin**	**Drains Topsham Fair Mall; Biomon Sta 634;**	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**1.4**	**Class B**	**2011**	**New listing in 2010; Class B stream- 2008 Invertebrate biomon- NA Added to Urban Impaired Stream list**
ME0105000209_512R_03	Great Falls Branch, Schoodic Stream (Deblois)		Benthic-Macroinvertebrate Bioassessments (Streams)	1.33	Class A	M	Formerly listed as segment 512R_02 - Great Falls Branch, Schoodic Stream
ME0105000213_514R_01	Card Brook (Ellsworth)		Oxygen, Dissolved	1.2	Class B	M	2006 Biocriteria Non-attainment; probable Urban Stream Syndrome downstream of Rt 3 in

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0105000213_514R_01	Card Brook (Ellsworth)		Benthic-Macroinvertebrate Bioassessments (Streams)	1.2	Class B	M	Elsworth; also listed for dissolved oxygen-9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0105000218_521R01	Warren Brook (Belfast)		Oxygen, Dissolved	6.04	Class B	L	
ME0105000305_528R02	**West Branch Sheepscot River**		**E. coli**	**2.29**	**Class AA**	**M**	**Erroneously dropped from 2006 Report. To be included in next update of the Statewide Bacteria TMDL; has been delisted for dissolved oxygen**
ME0105000305_528R03	Dyer River below Rt 215		Oxygen, Dissolved	9.35	Class B	H	Draft TMDL complete; apply new model; 9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0105000305_528R04	Trout Brook (Alna)		Oxygen, Dissolved	3.43	Class B	L	TMDL monitoring in 2005 and 2007
ME0105000305_528R05	Meadow Bk (Whitefield)		Oxygen, Dissolved	5.94	Class B	L	TMDL monitoring in 2005 and 2007
ME0105000305_528R06	Carlton Bk (Whitefield)		Oxygen, Dissolved	3.94	Class B	L	TMDL monitoring in 2005 and 2007
ME0105000305_528R07	Choate Bk (Windsor)		Oxygen, Dissolved	1.33	Class B	L	TMDL monitoring in 2005 and 2007
ME0105000305_528R08_01	Chamberlain Bk (Whitefield) .		Oxygen, Dissolved	1.76	Class B	L	TMDL monitoring in 2005 and 2007
ME0106000102_603R02	Chandler River including East Branch		Oxygen, Dissolved	27.19	Class B	L	
ME0106000102_603R06	Cole Brook (Gray)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.49	Class B	M	
ME0106000103_607R01	Black Brook (Windham)		Oxygen, Dissolved	6.07	Class B	L	TMDL monitoring in 2007

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0106000103_607R03	Colley Wright Brook (Windham)		Oxygen, Dissolved	8.16	Class B	L	
ME0106000103_607R06	Hobbs Brook (Cumberland)		Oxygen, Dissolved	1.54	Class B	L	
ME0106000103_607R07	Inkhorn Brook (Westbrook)		Oxygen, Dissolved	4.32	Class B	L	
ME0106000103_607R08	Mosher Brook (Gorham)		Oxygen, Dissolved	2.03	Class B	L	
ME0106000103_607R09	Otter Brook (Windham)		Oxygen, Dissolved	2.16	Class B	L	
ME0106000103_607R10	Thayer Brook		Oxygen, Dissolved	3.82	Class B	M	
ME0106000103_607R12	Pleasant River (Windham)	mainstem of Pleasant River from Thayer Brook to confluence with Presumpscot	Oxygen, Dissolved	8.8	Class B	M	Listed in 2006- excursions of Class B DO at several sampling locations. 9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL
ME0106000104_611R02	Phillips Brook (Scarborough)		Habitat Assessment (Streams)	2.77	Class C	M	TMDL monitoring in 2006
ME0106000105_607R11_01	Nasons Brook (Portland) south of Rt 25, trib to Fore River		Benthic-Macroinvertebrate Bioassessments (Streams)	2	Class C	M	TMDL monitoring in 2006; TMDL internal draft 2 mile listed section is in Portland; upstream unlisted section is in Westbrook
ME0106000105_609R01	Dole Brook (formerly known as 'Unnamed Stream-Portland 3')	Tributary to Presumpscot R. entering east of Rt. 302 in Portland	Benthic-Macroinvertebrate Bioassessments (Streams)	1.6	Class B	M	Dole Brook (formerly Unnamed Str. Portland 3) now added to Urban Impaired Stream list 2007 biomonitoring showed continued non-attainment (also NA in 2004) invertebrate Sta 751
ME0106000105_610R01	Capisic Brook		Benthic-Macroinvertebrate Bioassessments (Streams)	3.02	Class C	2010	Target TMDL due date 2010 %IC candidate
ME0106000105_610R01	Capisic Brook		Habitat Assessment (Streams)	3.02	Class C	2010	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0106000105_610R02	Clark Brook (Westbrook)		Oxygen, Dissolved	1.23	Class C	M	
ME0106000105_610R04	Stroudwater River (South Portland, Westbrook)		Oxygen, Dissolved	15.71	Class B	2012	
ME0106000105_610R06	Kimball Brook		Habitat Assessment (Streams)	1.55	Class C	2012	Biomon Station 795; Biomonitoring results- non-attainment of Class C Additonal TMDL Program monitoring in 2005 and 2006
ME0106000105_610R06	Kimball Brook		Benthic-Macroinvertebrate Bioassessments (Streams)	1.55	Class C	2012	
ME0106000105_610R07	Red Brook (Scarborough, S Portland)		Habitat Assessment (Streams)	7.15	Class C	2012	2007 invertebrate biomonitoring Class B
ME0106000105_610R07	Red Brook (Scarborough, S Portland)		Polychlorinated biphenyls	7.15	Class C	L	
ME0106000105_610R08	Fall Bk (Portland)		Habitat Assessment (Streams)	2.54	Class C	L	
ME0106000106_602R01	Frost Gully Brook		Benthic-Macroinvertebrate Bioassessments (Streams)	4.04	Class A	H	12/3/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL High priority for TMDL; %IC candidate. TMDL monitoring indicates not impaired for DO- delisted for DO in 2006
ME0106000106_602R01	Frost Gully Brook		Habitat Assessment (Streams)	4.04	Class A	H	
ME0106000106_602R02	Mare Brook (Brunswick)		Habitat Assessment (Streams)	4.9	Class B	H	
ME0106000106_602R03	Concord Gully (Freeport)		Habitat Assessment (Streams)	2.47	Class B	H	Public review comments on draft TMDL required changes to model Aquatic life listing erroneously dropped in 2006- listing restored for 2010 cycle %IC candidate
ME0106000106_602R03	Concord Gully (Freeport)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.47	Class B	H	

Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	SEGMENT NAME	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0106000210_615R01	Little Ossippee R	segment from Lake Arrowhead Dam to Saco River	Oxygen, Dissolved	12.49	Class B	L	Class B stream, Biomonitoring Station 446 attained Class C
ME0106000210_615R01	Little Ossippee R	segment from Lake Arrowhead Dam to Saco River	Benthic-Macroinvertebrate Bioassessments (Streams)	12.49	Class B	L	
ME0106000210_615R02	Brown Brook (Limerick)		Habitat Assessment (Streams)	2.44	Class B	H	Biomon Station 445; Class B stream only attains Class C
ME0106000210_615R02	Brown Brook (Limerick)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.44	Class B	H	
ME0106000211_616R	Wales Pond Brook (Hollis)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.66	Class B	M	AAG ruled that Wales Pond should be considered as a Class B stream, (rather than GPA). Hatchery permit issued 3/29/2007-3/29/2012 (Shy Beaver); discharges directly to the "pond"; Hatchery was temporarily closed (June 2007) but now back in operation (2010) Listed 5A due to ongoing issues in receiving water. 2005 Biocriteria Sta 475 result= Non-attainment. Follow-up monitoring scheduled for 2010.
ME0106000211_616R05	Thacher Bk (Biddeford)		Benthic-Macroinvertebrate Bioassessments (Streams)	5.67	Class B	M	9/28/09 Recreational use impairments now Category 4A due to approval of statewide bacteria TMDL Non attainment for biocriteria; added to Urban impaired stream list
ME0106000303_624R01	Stevens Brook (Wells, Ogunquit)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.87	Class B	M	TMDL data collected 2006; Follow-up biomonitoring scheduled for 2010
ME0106000304_625R01	Adams Brook (Berwick)		Benthic-Macroinvertebrate Bioassessments (Streams)	2.97	Class B	M	TMDL data collected 2006
ME0106000304_625R03	West Brook (N. Berwick)		Oxygen, Dissolved	3.22	Class B	2012	AWQC drinking water impairment from industrial NPS/hazardous waste; dichloroethane

Bold text indicates waters that were moved into Category 5A during this reporting cycle

Category 5-B: Rivers and Streams Impaired for Bacteria Only, TMDL Required

All freshwaters formerly listed in Category 5-B are moved to Category 4-A (TMDL Completed) due to US EPA approval of a Statewide Bacteria TMDL.

In September of 2009 EPA approved a Statewide Maine Bacteria Total Maximum Daily Load that resulted in the removal of 34 bacteria-impaired segments from Category 5-B-1 and 5-B-2 to Category 4-A. The TMDL addresses bacteria impairments caused by Escherichia coli in freshwaters.

Category 5-D: Rivers and Streams Impaired by Legacy Pollutants

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000412_140R03_02	N Br Presque Isle Stream	DDT	14.68	Class B	legacy DDT contamination
ME0101000501_149R	Minor tributaries to Prestile Stream above dam in Mars Hill	DDT	77.2	Class B	legacy DDT contamination
ME0101000501_149R01	Prestile Stream above dam in Mars Hill	DDT	15.78	Class A	5D- legacy DDT sources; TMDL approved in 2010 for other causes- delisted to Category 4A
ME0101000501_150R	Prestile Str and tributaries entering below dam in Mars Hill	DDT	95.55	Class B	legacy DDT contamination
ME0101000504_152R01_02	Meduxnekeag River	DDT	11	Class B	legacy DDT contamination
ME0102000404_216R01_01	W. Br. Pleasant R (KIW Twp)	Iron	1	Class AA	legacy iron mine contamination
ME0102000404_216R01_02	Blood Bk (KIW Twp)	Iron	1	Class A	legacy iron mine contamination

Category 5-D: Rivers and Streams Impaired by Legacy Pollutants

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0102000502_231R	Penobscot R (main stem, from Cambolasse Str to Piscataquis R)	Polychlorinated biphenyls	19.08	Class B	New licenses issued or underway for mills. WQ monitoring in 2007 and modeling report in 2008 to ascertain appropriate loads. PCBs are listed 5d- legacy pollutant. Dioxin listed 4b- controls in place, expected to attain standards
ME0102000509_233R_01	Penobscot R (main stem, from Orson Is to Veazie Dam)	Polychlorinated biphenyls	14.51	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0102000513_234R02	Penobscot (main stem, Veazie Dam to Reed Bk)	Polychlorinated biphenyls	10.1	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0103000306_338R_04	Kennebec R, (main stem, from Carrabassett R to Fairfield- Skowhegan boundary)	Polychlorinated biphenyls	22.76	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0103000306_339R_02	Kennebec R, (main stem, from Fairfield-Skowhegan boundary to Sebasticook R)	Polychlorinated biphenyls	14.65	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0103000308_331R	E Branch of Sebasticook R, Below Sebasticook L.	Dioxin (including 2,3,7,8-TCDD)	10.25	Class C	Upstream Lake TMDL and superfund project are complete; Dioxin, PCB--Category 5D Dissolved oxygen -5A
ME0103000308_331R	E Branch of Sebasticook R Below Sebasticook L.	Polychlorinated biphenyls	10.25	Class C	Upstream Lake TMDL and superfund project are complete; Dioxin, PCB--Category 5D Dissolved oxygen -5A
ME0103000308_332R	Sebasticook River (Burnham Impdmnt)	Polychlorinated biphenyls	30.83	Class C	Includes impounded water. New hydro certification received in 2006- attains applicable uses, except for Fish Consumption (dioxin 5a and PCBs- 5d) .

Category 5-D: Rivers and Streams Impaired by Legacy Pollutants

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0103000308_332R	Sebasticook River (Burnham Impdmnt)	Dioxin (including 2,3,7,8-TCDD)	30.83	Class C	Includes impounded water. New hydro certification received in 2006- attains applicable uses, except for Fish Consumption (dioxin 5a and PCBs- 5d) .
ME0103000309_332R	Sebasticook River main stem, below confluence with E and W branches	PCBs	30.83	Class C	Also listed 5A for dioxin contamination
ME0103000312_339R_01	Kennebec R, (main stem, from Sebasticook R to Augusta (Curran Bridge)	Polychlorinated biphenyls	17.7	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0103000312_340R_01	Kennebec R, (main stem, from Augusta (Curran bridge) to Merrymeeting Bay (Chops))	Polychlorinated biphenyls	30.53	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0103000312_427R	Merrymeeting Bay	Polychlorinated biphenyls	3.44	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000201_421R	Androscoggin R (main stem, from Maine-NH border to Wild R)	Polychlorinated biphenyls	2.35	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000202_421R	Androscoggin R (main stem, above Rumford Point)	Polychlorinated biphenyls	31.04	Class B	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs

Category 5-D: Rivers and Streams Impaired by Legacy Pollutants

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0104000204_421R	Androscoggin R (main stem, from Rumford Pt to Virginia Bridge)	Polychlorinated biphenyls	10.97	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000204_422R	Androscoggin R (main stem, from Virginia bridge to Webb R)	Polychlorinated biphenyls	6.8	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000205_422R	Androscoggin R (main stem, Webb R to Riley dam)	Polychlorinated biphenyls	15.7	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000206_423R	Androscoggin R (main stem, from Riley Dam to Nezinscot R)	Polychlorinated biphenyls	21.7	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000206_423R01	Androscoggin R (main stem, Livermore impoundment)	Polychlorinated biphenyls	1	Class C	Attained Class C biocriteria in 2003, and attained Class B biocriteria in 2004, 2005 and 2006. Benthic invertebrate and TSS causes delisted. EPA approved TMDL 7/18/2005 (TMDL #11594) Also 4b listed for dioxin 5d listed for legacy PCB contamination
ME0104000208_424R_01	Androscoggin R, (Gulf Island Pond)	Polychlorinated biphenyls	15.45	Class C	Draft revised WLA & TMDL target date Feb 2010 4a EPA approved TMDL (TSS, DO, Nutrients/BOD; phosphorus) 7/18/05 -ongoing licensing issues; 4b dioxin 5d Fish tissue sampling shows legacy PCB 2/5/08 Non-attainment of Primary Contact Recreation use due to algae blooms

Category 5-D: Rivers and Streams Impaired by Legacy Pollutants

ADB ASSESSMENT UNIT ID	SEGMENT NAME	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0104000210_425R_01	Androscoggin R, (main stem, from L Androscoggin R to Brunswick Dam)	Polychlorinated biphenyls	22.15	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0104000210_426R	Androscoggin R (main stem, from Brunswick Dam to Brunswick-Bath boundary)	Polychlorinated biphenyls	8.49	Class C	4-b Dioxin license limits in 38 MRSA Section 420. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit), (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference. Fish tissue monitoring has revealed legacy PCBs
ME0105000209_512R_02	McCoy Brook (Deblois)	Benthic-Macroinvertebrate Bioassessments (Streams)	1	Class B	Legacy peat mining effects
ME0105000209_512R_02	McCoy Brook (Deblois)	pH	1	Class B	Legacy peat mining effects
ME0106000305_630R01	Salmon Falls R	Dioxin (including 2,3,7,8-TCDD)	7.43	Class B	Fish tissue monitoring shows legacy PCBs and dioxin.
ME0106000305_630R01	Salmon Falls R	Polychlorinated biphenyls	7.43	Class B	Fish tissue monitoring shows legacy PCBs and dioxin.

APPENDIX III: LAKES

Category 1: Lake Waters Fully Attaining All Designated Uses

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 1 (Acres)	# of Lakes within the HUC listed in Category 1	Other listing categories having lakes within this HUC
ME	0101000101	*	Baker Branch St. John River	355.24	3383	89	
ME	0101000102	*	Southwest Branch St. John River	354.42	191	30	
ME	0101000103	*	Northwest Branch St. John River	504.67	333	5	
ME	0101000104	*	St. John River (1) at Gauging Station	127.53	211	25	
ME	0101000105	*	Shields Branch Big Black River	162.98	2	1	
ME	0101000106	*	Big Black River	466.4	1178	14	
ME	0101000107	*	St. John River at Oullette Brook	384.74	2866	10	
ME	0101000108	*	Little Black River	261.73	38	4	2
ME	0101000109	*	St. John River above St. Francis	176.48	298	17	2
ME	0101000110	*	St. Francis River	228.41	3289	9	2
ME	0101000114	*	St. John River at Van Buren	64.98	8	1	2
ME	0101000201	*	Eagle Lake	169.18	11806	30	
ME	0101000202	*	Heron Lake (Churchill)	129	5875	21	
ME	0101000203	*	Chemquasabamticook Stream	214.54	3293	9	
ME	0101000204	*	Long Lake	143.4	2436	10	
ME	0101000205	*	Musquacook Stream	155.53	3889	20	
ME	0101000206	*	Big Brook	100.88	708	11	
ME	0101000207	*	Allagash River	320.93	2134	15	2
ME	0101000301	*	Fish River Lake	128.98	3601	15	
ME	0101000302	*	St. Froid Lake	273.95	1238	43	2
ME	0101000303	*	Eagle Lake	353.06	1067	9	2,4a
ME	0101000304	*	Fish River	133.44	107	4	2
ME	0101000401	*	Millimagasset Stream	108.59	5215	35	
ME	0101000402	*	Munsungan Stream	120.15	2668	37	
ME	0101000403	*	Mooseleuk Stream	168.76	1600	24	
ME	0101000404	*	Umcolcus Stream	82.6	1244	10	2

Category 1: Lake Waters Fully Attaining All Designated Uses

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 1 (Acres)	# of Lakes within the HUC listed in Category 1	Other listing categories having lakes within this HUC
ME	0101000405	*	St. Croix Lake	112.34	162	25	2
ME	0101000406	*	St. Croix Stream	126.48	273	17	
ME	0101000407	*	Aroostook River (1) at Masardis Gauging Station	175.93	43	6	2
ME	0101000409	*	Big Machias Lake	146.85	1542	14	
ME	0101000410	*	Machias River	182.46	395	10	
ME	0101000411	*	Aroostook R (2) at Washburn Gauging Station	348.8	110	8	2
ME	0101000412	*	Aroostook River (3) at Caribou	289.41	41	2	2,4a
ME	0101000413	*	Aroostook River (4) at Mouth in Canada	499.04	92	2	2,4a
ME	0101000501	*	Big Presque Isle Stream	232.18	5	2	2,4a
ME	0101000502	*	South Branch Meduxnekeag River	64.55	4	1	2
ME	0101000503	*	North Branch Meduxnekeag River	147.7	186	12	2
ME	0102000101	*	North Branch Penobscot River	255.48	3529	59	
ME	0102000102	*	Seeboomook Lake	266.8	4999	102	2
ME	0102000103	*	WEST Branch Penobscot R at Chesuncook Lk	314.76	5473	59	2
ME	0102000104	*	Caucomgomok Lake	178.46	10211	59	
ME	0102000105	*	Chesuncook Lake	404.77	34926	73	
ME	0102000106	*	Nesowadnehunk Stream	66.56	1936	32	
ME	0102000107	*	Nahamakanta Stream	103.18	4679	76	
ME	0102000108	*	Jo-Mary Lake	83.5	6949	40	
ME	0102000109	*	West Branch Penobscot River (3)	245.71	25876	105	2
ME	0102000110	*	West Branch Penobscot River (4)	211.31	12365	66	2
ME	0102000201	*	Webster Brook	289.69	21919	48	2
ME	0102000202	*	Grand Lake Matagamon	200.84	6042	51	
ME	0102000203	*	East Branch Penobscot River (2)	89.69	913	43	
ME	0102000204	*	Seboeis River	268.31	6638	76	2
ME	0102000205	*	East Branch Penobscot River (3)	269.47	1439	81	2
ME	0102000301	*	West Branch Mattawamkeag River	368.52	129	9	2
ME	0102000302	*	East Branch Mattawamkeag River	165.95	45	1	2
ME	0102000304	*	Baskahegan Stream	233.6	824	4	2
ME	0102000305	*	Mattawamkeag River (2)	276.47	1358	5	2

Category 1: Lake Waters Fully Attaining All Designated Uses

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 1 (Acres)	# of Lakes within the HUC listed in Category 1	Other listing categories having lakes within this HUC
ME	0102000306	*	Molunkus Stream	233.59	766	8	2
ME	0102000401	*	Piscataquis River (1)	264.05	282	16	2
ME	0102000403	*	Sebec River	351.1	1372	37	2
ME	0102000404	*	Pleasant River	339.32	4354	81	2
ME	0102000405	*	Seboeis Stream	161.16	3812	24	2
ME	0102000501	*	Penobscot River (1) at Mattawamkeag	161.07	941	6	2
ME	0102000502	*	Penobscot River (2) at West Enfield	298.2	1115	5	2
ME	0102000503	*	Passadumkeag River	398.81	10851	27	2
ME	0102000504	*	Olamon Stream	53.88	9	1	2
ME	0102000505	*	Sunkhaze Stream	94.65	68	13	2
ME	0102000508	*	Pushaw Stream	238.53	1014	2	2
ME	0103000101	*	South Branch Moose River	68.34	171	14	
ME	0103000102	*	Moose River (2) above Attean Pond	180.94	2207	56	2
ME	0103000103	*	Moose River (3) at Long Pond	307.3	1643	35	2
ME	0103000104	*	Brassua Lake	157.53	473	27	4c
ME	0103000105	*	Moosehead Lake	549	4116	92	2
ME	0103000106	*	Kennebec River (2) above The Forks	323.12	6404	120	2
ME	0103000201	*	North Branch Dead River	200.89	2348	50	2
ME	0103000202	*	South Branch Dead River	147.96	73	4	2
ME	0103000203	*	Flagstaff Lake	173.02	825	18	2,4c
ME	0103000204	*	Dead River	357.53	5691	190	2
ME	0103000301	*	Kennebec River (4) at Wyman Dam	158.85	2344	22	2
ME	0103000302	*	Austin Stream	89.87	297	11	2
ME	0103000303	*	Kennebec River (6)	110.29	87	9	2
ME	0103000304	*	Carrabassett River	396.83	398	19	2
ME	0103000305	*	Sandy River	592.92	86	6	2,4c
ME	0103000312	*	Kennebec River at Merrymeeting Bay	314.46	3	1	2,4a
ME	0104000101	*	Mooselookmeguntic Lake	473.72	3283	36	2
ME	0104000102	*	Umbagog Lake Drainage	122.05	759	7	2
ME	0104000103	*	Aziscohos Lake Drainage	245.91	1606	33	4c

Category 1: Lake Waters Fully Attaining All Designated Uses

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 1 (Acres)	# of Lakes within the HUC listed in Category 1	Other listing categories having lakes within this HUC
ME	0104000202	*	Androscoggin River (2) at Rumford Point	308.23	27	3	2
ME	0104000203	*	Ellis River	164.26	29	2	2
ME	0104000204	*	Ellis River	202.35	89	13	2
ME	0104000205	*	Androscoggin River (3) above Webb River	245.05	22	3	2
ME	0104000209	*	Androscoggin R (6) above Little Androscoggin	353.1	6	1	2
ME	0105000101	*	Spednick Lake	411.52	291	1	2
ME	0105000102	*	St. Croix River (2) at Spednick Falls	216.84	778	6	
ME	0105000103	*	West Grand Lake	224.54	4426	10	2
ME	0105000104	*	Big Musquash Stream	114.17	412	3	2
ME	0105000105	*	Big Lake at Peter Dana Point	121.07	1417	15	2
ME	0105000106	*	Tomah Stream	153.03	233	8	2
ME	0105000201	*	Dennys River	130.64	190	2	2
ME	0105000203	*	Grand Manan Channel	246.09	370	8	2
ME	0105000204	*	East Machias River	311.96	1357	11	2
ME	0105000205	*	Machias River	498.35	11912	90	2
ME	0105000208	*	Pleasant River	130.39	243	13	2
ME	0105000209	*	Narraguagus River	245.16	826	47	2
ME	0105000210	*	Tunk Stream	48.41	1076	15	2
ME	0105000212	*	Graham Lake	495.07	1908	20	2,4c
ME	0105000214	*	Lamoine Coastal	256.14	180	11	2
ME	0106000101	*	Sebago Lake	441.76	306	13	2
ME	0106000103	*	Presumpscot River	205.44	15	4	2
ME	0106000105	*	Fore River	54.46	1	1	2
ME	0106000305	*	Salmon Falls River	242.91	150	1	2
			Totals within Category 1:		**295,443**	**2,857**	

* Lakes within this HUC can be found under other listing categories (see right column)

Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses - Insufficient Information for Other Uses (HUCs with lakes added are in bold)

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 2 (Acres)	# of Lakes within the HUC listed in Category 2	Other listing categories having lakes within this HUC
ME	0101000108	*	Little Black River	261.73	3	1	1
ME	0101000109	*	St. John River above St. Francis	176.48	41	4	1
ME	0101000110	*	St. Francis River	228.41	330	2	1
ME	0101000111	*	St. John River at Fort Kent	184.38	266	7	
ME	0101000112	*	St. John River at Madawaska	310.29	3	1	
ME	0101000113	*	St. John River at Grand Isle	16.18	16	1	
ME	0101000114	*	St. John River at Van Buren	64.98	4	3	1
ME	0101000115	*	St. John River (11) at Hamlin	102.19	41	7	
ME	0101000116	*	St. John River (12) at Tobique River	0.41	19	1	
ME	0101000117	*	St. John River (13) at Woodstock NB	40.37	28	6	
ME	0101000121	*	Green and Big Rivers at Van Buren	948.13	11	6	
ME	0101000207	*	Allagash River	320.93	1	1	1
ME	0101000302	*	St. Froid Lake	273.95	4874	2	1
ME	0101000303	*	Eagle Lake	353.06	20281	15	1,4a
ME	0101000304	*	Fish River	133.44	792	18	1
ME	0101000404	*	Umcolcus Stream	82.6	2	2	1
ME	0101000405	*	St. Croix Lake	112.34	416	1	1
ME	0101000407	*	Aroostook R (1) at Masardis Gauging Station	175.93	338	21	1
ME	0101000408	*	Squa Pan Stream	81.21	17	1	4c
ME	0101000411	*	Aroostook R (2) at Washburn Gauging Station	348.8	340	4	1
ME	0101000412	*	Aroostook River (3) at Caribou	289.41	352	15	1,4a
ME	**0101000413**	*	**Aroostook River (4) at Mouth in Canada**	**499.04**	**1948**	**34**	**1,4a**
ME	0101000501	*	Big Presque Isle Stream	232.18	214	24	1,4a
ME	0101000502	*	South Branch Meduxnekeag River	64.55	290	7	1
ME	0101000503	*	North Branch Meduxnekeag River	147.7	138	10	1
ME	0101000504	*	Meduxnekeag River at Woodstock NB	300.02	1868	45	
ME	0102000102	*	Seeboomook Lake	266.8	6460	3	1
ME	0102000103	*	WEST Branch Penobscot R at Chesuncook Lk	314.76	22	1	1

Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses - Insufficient Information for Other Uses (HUCs with lakes added are in bold)

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 2 (Acres)	# of Lakes within the HUC listed in Category 2	Other listing categories having lakes within this HUC
ME	0102000109	*	West Branch Penobscot River (3)	245.71	8	2	1
ME	0102000110	*	West Branch Penobscot River (4)	211.31	554	5	1
ME	0102000201	*	Webster Brook	289.69	58	1	1
ME	0102000204	*	Seboeis River	268.31	1242	10	1
ME	0102000205	*	East Branch Penobscot River (3)	269.47	7	1	1
ME	0102000301	*	West Branch Mattawamkeag River	368.52	5218	43	1
ME	0102000302	*	East Branch Mattawamkeag River	165.95	2732	16	1
ME	0102000303	*	Mattawamkeag River (1)	102.28	70	1	
ME	0102000304	*	Baskahegan Stream	233.6	10280	6	1
ME	0102000305	*	Mattawamkeag River (2)	276.47	443	12	1
ME	0102000306	*	Molunkus Stream	233.59	1591	13	1
ME	0102000307	*	Mattawamkeag River (3)	127.82	804	14	
ME	0102000401	*	Piscataquis River (1)	264.05	3406	46	1
ME	0102000402	*	Piscataquis River (3)	178.58	1253	19	
ME	0102000403	*	Sebec River	351.1	14497	64	1
ME	0102000404	*	Pleasant River	339.32	14	4	1
ME	0102000405	*	Seboeis Stream	161.16	4445	14	1
ME	0102000406	*	Piscataquis River (4)	164.69	7515	32	
ME	0102000501	*	Penobscot River (1) at Mattawamkeag	161.07	928	8	1
ME	0102000502	*	Penobscot River (2) at West Enfield	298.2	5581	17	1
ME	0102000503	*	Passadumkeag River	398.81	8073	20	1
ME	0102000504	*	Olamon Stream	53.88	318	3	1
ME	0102000505	*	Sunkhaze Stream	94.65	4	1	1
ME	0102000506	*	Penobscot River (3) at Orson Island	112.65	6	4	
ME	0102000507	*	Birch Stream	54.55	103	3	
ME	0102000508	*	Pushaw Stream	238.53	6058	16	1
ME	0102000509	*	Penobscot River (4) at Veazie Dam	140.5	2253	25	
ME	0102000510	*	Kenduskeag Stream	191.28	174	5	

Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses - Insufficient Information for Other Uses (HUCs with lakes added are in bold)

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 2 (Acres)	# of Lakes within the HUC listed in Category 2	Other listing categories having lakes within this HUC
ME	0102000511	*	Souadabscook Stream	177.79	645	12	5a
ME	0102000512	*	Marsh River	168.72	438	20	
ME	0102000513	*	Penobscot River (6)	290.37	6098	25	
ME	0103000102	*	Moose River (2) above Attean Pond	180.94	19	1	1
ME	0103000103	*	Moose River (3) at Long Pond	307.3	9581	24	1
ME	0103000105	*	Moosehead Lake	549	79454	12	1
ME	0103000106	*	Kennebec River (2) above The Forks	323.12	3051	17	1
ME	0103000201	*	North Branch Dead River	200.89	48	5	1
ME	0103000202	*	South Branch Dead River	147.96	657	10	1
ME	0103000203	*	Flagstaff Lake	173.02	83	6	1,4c
ME	0103000204	*	Dead River	357.53	385	23	1
ME	0103000301	*	Kennebec River (4) at Wyman Dam	158.85	4700	21	1
ME	0103000302	*	Austin Stream	89.87	882	11	1
ME	0103000303	*	Kennebec River (6)	110.29	337	16	1
ME	0103000304	*	Carrabassett River	396.83	3615	42	1
ME	0103000305	*	Sandy River	592.92	3741	88	1,4a
ME	0103000306	*	Kennebec River at Waterville Dam	410.5	3280	43	
ME	0103000307	*	Sebasticook River at Pittsfield	316.21	7012	28	
ME	0103000308	*	Sebasticook River (3) at Burnham	266.25	2936	14	4a
ME	0103000309	*	Sebasticook River (4) at Winslow	365.58	1898	47	4a
ME	**0103000310**	*	**Messalonskee Stream**	**207.64**	**8249**	**50**	**4a,5a**
ME	0103000311	*	Cobbosseecontee Stream	216.27	10579	47	3,4a
ME	**0103000312**	*	**Kennebec River at Merrymeeting Bay**	**314.46**	**1751**	**34**	**1,4a**
ME	0104000101	*	Mooselookmeguntic Lake	473.72	32243	45	1
ME	0104000102	*	Umbagog Lake Drainage	122.05	8353	4	1
ME	0104000104	*	Magalloway River	195.1	650	9	
ME	0104000106	*	Middle Androscoggin River	268.68	24	1	
ME	0104000201	*	Gorham-Shelburne Tributaries	154.72	7	1	

Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses - Insufficient Information for Other Uses (HUCs with lakes added are in bold)

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 2 (Acres)	# of Lakes within the HUC listed in Category 2	Other listing categories having lakes within this HUC
ME	0104000202	*	Androscoggin River (2) at Rumford Point	308.23	713	5	1
ME	0104000203	*	Ellis River	164.26	1258	6	1
ME	0104000204	*	Ellis River	202.35	108	11	1
ME	0104000205	*	Androscoggin River (3) above Webb River	245.05	3461	11	1
ME	**0104000206**	*****	**Androscoggin River (4) at Riley Dam**	**203.85**	**9886**	**53**	
ME	0104000207	*	Androscoggin River (5) at Nezinscot River	178.75	1743	29	
ME	0104000208	*	Nezinscot River	83.22	3591	16	
ME	0104000209	*	Androscoggin R (6) above Little Androscoggin	353.1	10255	58	1
ME	0104000210	*	Little Androscoggin River	262.87	614	28	4a
ME	0105000101	*	Spednick Lake	411.52	35904	10	1
ME	0105000103	*	West Grand Lake	224.54	31174	22	1
ME	0105000104	*	Big Musquash Stream	114.17	3218	10	1
ME	0105000105	*	Big Lake at Peter Dana Point	121.07	10334	4	1
ME	0105000106	*	Tomah Stream	153.03	239	7	1
ME	0105000107	*	St. Croix River (3) at Grand Falls	70.2	7627	4	
ME	0105000108	*	St. Croix River (6) at Robbinston	323.71	2792	20	
ME	0105000201	*	Dennys River	130.64	10294	5	1
ME	0105000202	*	Pennamaquan River	54.4	2025	10	
ME	0105000203	*	Grand Manan Channel	246.09	3332	12	1
ME	0105000204	*	East Machias River	311.96	15289	26	1
ME	0105000205	*	Machias River	498.35	1948	14	1
ME	0105000206	*	Roque Bluffs Coastal	83.23	167	4	
ME	0105000208	*	Pleasant River	130.39	1201	15	1
ME	0105000209	*	Narraguagus River	245.16	2382	17	1
ME	0105000210	*	Tunk Stream	48.41	2466	6	1
ME	0105000211	*	Bois Bubert Coastal	75.62	53	6	
ME	**0105000212**	*****	**Graham Lake**	**495.07**	**18596**	**93**	**1,4c**
ME	0105000213	*	Union River Bay	126.78	4117	12	

Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses - Insufficient Information for Other Uses (HUCs with lakes added are in bold)

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 2 (Acres)	# of Lakes within the HUC listed in Category 2	Other listing categories having lakes within this HUC
ME	0105000214	*	Lamoine Coastal	256.14	3300	51	1
ME	0105000215	*	Mt. Desert Coastal	108.01	2626	44	
ME	0105000216	*	Bagaduce River	81.92	1250	12	
ME	0105000217	*	Stonington Coastal	140	1030	55	
ME	0105000218	*	Belfast Bay	91.6	2254	25	
ME	0105000219	*	Ducktrap River	33.17	993	16	
ME	0105000220	*	West Penobscot Bay Coastal	162.7	1989	31	4a
ME	0105000301	*	St. George River	278.44	8010	100	
ME	0105000302	*	Medomak River	152.87	1554	38	
ME	**0105000303**	*	**Johns Bay**	**46.94**	**2766**	**15**	
ME	0105000304	*	Damariscotta River	115.51	4604	21	
ME	0105000305	*	Sheepscot River	250.89	4366	55	
ME	0105000306	*	Sheepscot Bay	113.16	514	36	
ME	0105000307	*	Kennebec River Estuary	89.51	723	16	4a
ME	**0106000101**	*	**Sebago Lake**	**441.76**	**45688**	**76**	**1**
ME	0106000102	*	Royal River	140.93	769	12	
ME	**0106000103**	*	**Presumpscot River**	**205.44**	**3261**	**30**	**1**
ME	0106000104	*	Scarborough River	53.72	10	3	
ME	0106000105	*	Fore River	54.46	45	11	1
ME	0106000106	*	Casco Bay Coastal Drainages	170.01	368	32	
ME	0106000204	*	Saco River-Lovewell Pond	566.22	7340	58	
ME	0106000205	*	Saco River at Ossipee River	114.23	4180	49	
ME	0106000209	*	Ossipee River	122.89	2052	31	
ME	0106000210	*	Little Ossipee River	185.21	4287	73	
ME	0106000211	*	Saco River at mouth	220.24	1513	41	
ME	0106000301	*	Kennebunk River	59.18	319	9	
ME	0106000302	*	Mousam River	116.97	3232	39	
ME	0106000303	*	South York County Coastal Drainages	155.09	594	37	

Category 2: Lake Waters Within Hydrologic Unit Attaining Some Designated Uses - Insufficient Information for Other Uses (HUCs with lakes added are in bold)

HUC			HUC Name	Total HUC Area (Sq. Miles)	Lake Area within the HUC listed in Category 2 (Acres)	# of Lakes within the HUC listed in Category 2	Other listing categories having lakes within this HUC
ME	0106000304	*	Great Works River	86.67	519	22	
ME	0106000305	*	Salmon Falls River	242.91	3766	20	1
ME	0106000310	*	Coastal Drainages-Portsmouth Harb.to Salisbury	65.19	39	8	
			Totals within Category 2:		**606,236****	**2,890****	

* Lakes within this HUC can be found under other listing categories (see right column)
**Totals do not include 6 lakes (22 Acres) occurring on islands and not currently assigned to a HUC

Category 3: Lake Waters with Insufficient Data or Information to Determine if Designated Uses are Attained

HUC			Lake Name	Lake ID	Lake Area (Acres)	Date of Last Visit; Year of Likely Next Visit		Comments	Other listing categories having lakes within this HUC	2008 Listing Category
ME	0103000311	*	COCHNEWAGON P	3814	410	2008	2009	10: trophic deterioration; alum treatment ~25 y.a.; waiting on results from paleo study to determine natural conditions	2,4a	3
Total acreage for 1 lake within Categoy 3:					**410**					

* Lakes within this HUC can be found under other listing categories (see column second in from right)

Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury

All freshwaters are listed in Category 4A (TMDL Completed) due to US EPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources.

Category 4-A: Lake Waters with Impaired Use other than mercury, TMDL Completed

HUC			Lake Name	Lake ID	Lake Area (Acres)	Date of Last Visit; Year of Likely Next Visit		TMDL Year approved by EPA (Impaired use & notes)	Other listing categories having lakes within this HUC	2008 Listing Cat.
ME	0101000303	*	CROSS L	1674	2515	2008	2011	2006 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0101000303	*	DAIGLE P	1665	36	2006	2011	2006 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0101000412	*	ARNOLD BROOK L	409	395	2005	2011	2007 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0101000412	*	ECHO L	1776	90	2005	2011	2007 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0101000413	*	MONSON P	1820	160	2005	2011	2006 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0101000413	*	TRAFTON L	9779	85	2005	2011	2006 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0101000501	*	CHRISTINA RESERVOIR	9525	400	2004	2011	2010 (Prim. Cont, stable, chronic bloomer)	1, 2	5a
ME	0103000305	*	TOOTHAKER P	2336	30	2008	2009	2004 (Prim.Contact, stable, blooms persist)	1,2	4a
ME	0103000308	*	SEBASTICOOK L	2264	4288	2008	2009	2001 (Prim.Contact, slow improve., blooms persist)	2	4a
ME	0103000309	*	CHINA L	5448	3845	2008	2009	2001 (Prim.Contact, stable, blooms persist)	2,4a	4a
ME	0103000309	*	LOVEJOY P	5176	324	2008	2009	2004 (Prim.Contact, stable, blooms persist)	2,4a	4a
ME	0103000309	*	UNITY P	5172	2528	2008	2009	2004 (Prim.Contact, stable, blooms persist)	2,4a	4a
ME	0103000310	*	EAST P	5349	1823	2008	2009	2001 (Prim.Contact, blooms persist; deteri trophic trd)	2,5a	4a
ME	0103000310	*	LONG P	5272	2714	2008	2009	2008 (Aq. Life – trophic trend)	2,5a	5a
ME	0103000311	*	ANNABESSACOOK L	9961	1420	2008	2009	2004 (Prim.Contact; blooms persist; poss. Improve.)	2,3,4a	4a
ME	0103000311	*	COBBOSSEECONTEE (LT)	8065	75	2008	2009	2005 (Prim.Contact, stable, occas.bloom)	2,3,4a	4a
ME	0103000311	*	PLEASANT (MUD) P	5254	746	2008	2009	2004 (Prim.Contact, stable, blooms persist)	2,3,4a	4a
ME	0103000311	*	WILSON P	3832	582	2008	2009	2007 (Trophic trend)	2,3,4a	4a
ME	0103000312	*	THREEMILE P	5416	1162	2008	2009	2003 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0103000312	*	TOGUS P	9931	660	2008	2009	2005 (Prim.Contact, stable, occas.bloom)	1,2,4a	4a
ME	0103000312	*	WEBBER P	5408	1201	2008	2009	2003 (Prim.Contact, stable, blooms persist)	1,2,4a	4a
ME	0104000210	*	SABATTUS P	3796	1962	2008	2009	2004 (Prim.Contact, stable perhaps improving	2	4a
ME	0105000220	*	LILLY P	83	29	2008	2011	2005 (Prim.Contact, stable)	2	4a
ME	0105000307	*	SEWALL P	9943	46	2008	2011	2006 (Prim.Contact, stable)	2	4a
Total acreage for 24 lakes with Category 4A:					27,116					

* Lakes within this HUC can be found under other listing categories (see column second in from right)

Category 4-C: Lake Waters with Impairment not Caused by a Pollutant

HUC			Lake Name	Lake ID	Lake Area (Acres)	Date of Last Visit; Year of Likely Next Visit		Comment (Impaired use)	Other listing categories having lakes within this HUC	2008 Listing Category
ME	0101000408	*	SQUAPAN L	1654	5120	2001	2007	Non-att.d/t non-poll. (Aquatic Life: draw down)	2	4c
ME	0103000104	*	BRASSUA L	4120	8979	1996	2007	Non-att.d/t non-poll. (Aquatic Life: draw down)	1	4c
ME	0103000203	*	FLAGSTAFF L	38	20300			Non-att.d/t non-poll. (Aquatic Life: draw down)	1,2	4c
ME	0104000103	*	AZISCOHOS L	3290	6700	2004	2009	Non-att.d/t non-poll. (Aquatic Life: draw down)	1	4c
ME	0105000212	*	GRAHAM L	4350	7865	2004	2009	Non-att.d/t non-poll. (Aquatic Life: draw down)	1,2,3	4c
Total acreage for 5 lakes within Category 4C:					**48,964**					

* Lakes within this HUC can be found under other listing categories (see column second in from right)

Category 5-A: Lake Waters Needing TMDLs

HUC			Lake Name	Lake ID	Lake Area (Acres)	Date of Last Visit; Year of Likely Next Visit	Impaired Use	TMDL (Target Dates)	Priority	Other listing categories having lakes within this HUC	2008 Listing Category
ME	0103000511	*	HERMON P	2286	461	2008 2012	Aquatic Life; Primary Contact	n/a	n/a	2, 5a	5a
ME	0103000511	*	HAMMOND P	2294	83	2008 2012	Aquatic Life; Primary Contact	n/a	n/a	2, 5a	5a
ME	0103000310	*	GREAT P	5274	8239	2008 2009	Aquatic Life: trophic trend, lowDO, Gloeotrichia blooms	2012	1	2, 4a	3
Total acreage for 3 lakes in Category 5a:					**8,883**						

- Lakes within this HUC can be found under other listing categories (see column second in from right)

Category Listing Change Summary: 2008 to 2010 (12 Lakes)

HUC	Lake Name	Lake ID	Acres	2008 ListCat	2010 ListCat*	Notes
0101000413	FISCHER L	1808	10	3	2	10: Stable, occasional bloom
0101000501	CHRISTINA RESERVOIR	9525	400	5a	4a	10: TMDL completed 2010
0103000310	GREAT P	5274	8239	3	5a	10: Deterior. Trend
0103000310	LONG P	5272	2714	5a	4a	10: TMDL completed 2008
0103000310	MESSALONSKEE L	5280	3510	3	2	10: Stable
0103000310	SALMON L (ELLIS P)	5352	666	3	2	10: Stable, occasional bloom
0103000312	THREECORNERED P	5424	182	3	2	10: Stable, occasional bloom
0104000206	ANDROSCOGGIN L	3836	3980	3	2	10: Stable, occasional bloom
0105000212	ABRAMS P	4444	423	3	2	10: Stable, occasional bloom
0105000303	DUCKPUDDLE P	5702	293	3	2	10: Stable, occasional bloom
0106000101	PAPOOSE P	3414	64	3	2	10: Stable, occasional bloom
0106000103	HIGHLAND (DUCK) L	3734	634	4a	2	10: Stable
Total acreage for 12 lakes moved to a new Listing Category in 2010			21,115			

* Lakes currently listed in Categories 1 or 2 do not appear individually in their respective Appendix III tables but rather are included in the overall lake summary for the HUC.

APPENDIX IV MAINE WETLANDS ASSESSMENT

Category 1: Wetland Habitat Fully Attaining All Designated Uses

NO WETLAND SEGMENTS ARE CURRENTLY LISTED IN CATEGORY 1.

(Note: ADB Assessment Unit ID prefix for wetlands corresponds to the associated river/stream or lake assessment units)

Category 2: Wetland Habitat Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0101000201_119R_W125	Pillsbury Deadwater		Undetermined Size	Class A	
ME0101000403_1990_W120	Mooseleuk Lake		Undetermined Size	Class GPA	cat 1 on river/stream (r/s) and lakes tables
ME0101000410_1784_W114	Salmon Brook Lake		Undetermined Size	Class GPA	
ME0101000502_153R_W122	South Branch Meduxnekeag River		Undetermined Size	Class B	
ME0101000504_1034_W118	Green Pond	MEDUXNEKEAG RIVER	Undetermined Size	Class GPA	
ME0101000504_1736_W117	Drews Lake		Undetermined Size	Class GPA	
ME0102000305_3092_W123	Mud Pond		Undetermined Size	Class GPA	Mattawamkeag Rliver Wildlife Management Area
ME0102000401_214R_W126	West Shirley Bog		Undetermined Size	Class A	
ME0102000503_221R_W149	Passadumkeag River		Undetermined Size	Class A	cat 1 on lakes tables
ME0103000203_309R_W169	Stratton Brook Pond		Undetermined Size	Class A	
ME0103000204_5110_W170	Baker Pond		Undetermined Size	Class GPA	
ME0103000205_310R_W073	Dead River Tributary		Undetermined Size	Class A	
ME0103000205_310R_W166	Black Brook		Undetermined Size	Class A	
ME0103000306_18_W069	Stump Pond		Undetermined Size	Class GPA	Wildlife Management Area
ME0103000307_4_W167	Gilman Pond		Undetermined Size	Class GPA	
ME0103000308_74_W068	Fahi Pond		Undetermined Size	Class GPA	
ME0103000311_317R_W064	Little Norridgewock Stream		Undetermined Size	Class B	Chesterville Wildlife Management Area
ME0103000311_317R_W063	Mosher Pond		Undetermined Size	Class B	
ME0103000314_314R_W164	West Branch Cold Stream		Undetermined Size	Class B	
ME0103000315_320R_W067	Cannan Bog		Undetermined Size	Class B	
ME0103000317_324R_W066	Madawaska Bog		Undetermined Size	Class B	Wildlife Management Area

Category 2: Wetland Habitat Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0103000319_2276_W147	Plymouth Pond		Undetermined Size	Class GPA	
ME0103000320_326R_W071	Carlton Stream		Undetermined Size	Class B	
ME0103000320_41_W070	Carlton Bog		Undetermined Size	Class GPA	
ME0103000321_329R_W077	Pattee Pond Brook		Undetermined Size	Class B	
ME0103000322_5280_W-76	Messalonskee Lake		Undetermined Size	Class GPA	
ME0103000323_334R_W158	Horseshoe Pond		Undetermined Size	Class B	
ME0103000323_5302_W157	Jamie's Pond		Undetermined Size	Class GPA	
ME0103000324_335R_W061	Brann Brook		Undetermined Size	Class B	Garcelon Wildlife Management Area
ME0104000203_407R_W096	Meadow Brook		Undetermined Size	Class A	
ME0104000206_411R_W095	Hopkins Stream		Undetermined Size	Class B	
ME0104000206_5656_W197	Cranberry Pond		Undetermined Size	Class GPA	
ME0104000207_3476_W190	Washburn Pond		Undetermined Size	Class GPA	
ME0104000207_3600_W191	Little Labrador Pond		Undetermined Size	Class GPA	
ME0104000207_412R_W109	Bunganock Brook		Undetermined Size	Class B	
ME0104000207_412R_W187	Brettun's Pond South		Undetermined Size	Class B	
ME0104000209_3760_W185	Lower Range Pond		Undetermined Size	Class GPA	
ME0104000209_9693_W195	Bird Pond		Undetermined Size	Class GPA	
ME0104000210_418R_W100	Curtis Bog		Undetermined Size	Class B	
ME0104000210_418R_W101	No Name Brook		Undetermined Size	Class B	
ME0104000210_420R_W091	Tributary To Cathance River		Undetermined Size	Class B	
ME0104000210_5258_W092	Ceasar Pond		Undetermined Size	Class GPA	
ME0105000104_502R_W150	Big Musquash Stream		Undetermined Size	Class A	Cat 1 on lakes tables
ME0105000201_1386_W156	Great Works Pond		Undetermined Size	Class GPA	Wildlife Management Area
ME0105000221_4880_W135	Cross Pond		Undetermined Size	Class GPA	
ME0105000221_521R_W137	Hurd's Pond Inlet		Undetermined Size	Class B	
ME0105000301_4918_W163	Trues Pond		Undetermined Size	Class GPA	
ME0105000302_525R_W083	Pettengill Stream		Undetermined Size	Class A	

Category 2: Wetland Habitat Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0105000302_5692_W159	Medomak Pond		Undetermined Size	Class GPA	
ME0105000303_526R_W168	Pemaquid River		Undetermined Size	Class B	
ME0105000304_5382_W161	Clary Lake		Undetermined Size	Class GPA	
ME0105000304_7911_W162	Dead Water Slough		Undetermined Size	Class GPA	
ME0106000101_3230_W130	Black Pond		Undetermined Size	Class GPA	
ME0106000101_3370_W032	Holt Pond		Undetermined Size	Class GPA	
ME0106000101_3458_W021	Otter Pond		Undetermined Size	Class GPA	
ME0106000101_5786_W007	Unnamed Tributary To Sebago Lake	North of Smith Mill Road	Undetermined Size	Class GPA	
ME0106000101_605R_W008	Songo Pond Inlet	Wetland site W-134	Undetermined Size	Class AA	
ME0106000101_605R_W019	Duck Pond Brook		Undetermined Size	Class A	
ME0106000101_606R_W022	Tributary To Holt Pond		Undetermined Size	Class A	
ME0106000103_607R12_W004	Gray Meadow	PLEASANT RIVER	Undetermined Size	Class B	
ME0106000103_607R13_W005	Gray Meadow	WIGGINS BROOK	Undetermined Size	Class B	
ME0106000103_607R13_W030	Gray Meadow	HEAD OF WIGGINS BROOK	Undetermined Size	Class B	
ME0106000204_613R_W056	Brownfield Bog		Undetermined Size	Class A	
ME0106000205_613R_W048	Unnamed Pond	HIRAM NATURE STUDY AREA	Undetermined Size	Class A	
ME0106000209_3190_W045	Spruce Pond		Undetermined Size	Class GPA	
ME0106000210_615R_W040	Black Brook		Undetermined Size	Class B	
ME0106000210_615R_W046	Head Of Pendexter Brook		Undetermined Size	Class B	
ME0106000210_615R_W047	Unnamed Tributary To Rock Haven Lake	Upstream of Lewis Hill Road in Newfield	Undetermined Size	Class B	
ME0106000210_615R_W058	Swetts Meadow		Undetermined Size	Class B	
ME0106000211_613R_W038	Kelly Brook		Undetermined Size	Class B	
ME0106000211_613R_W039	Quaker Brook		Undetermined Size	Class B	
ME0106000211_613R_W059	Tucker Brook		Undetermined Size	Class B	
ME0106000211_616R_W042	Bartlett Brook		Undetermined Size	Class B	

Category 2: Wetland Habitat Attaining Some Designated Uses - Insufficient Information for Other Uses

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS
ME0106000302_623R_W044	**Unnamed Tributary To Bunganut Pond**	**Upstream (West) of Roux Road Extension in Lyman**	**Undetermined Size**	**Class B**	
ME0106000302_623R_W051	**Unnamed Tributary To Mousam Lake**	**Downstream (west) of Simon Ricker Road in Shapleigh**	**Undetermined Size**	**Class B**	

(Note: ADB Assessment Unit ID prefix corresponds to the associated river/stream or lake assessment units)

Category 3: Wetland Habitat With Insufficient Data Or Information To Determine If Designated Uses Are Attained (One Or More Uses May Be Impaired)

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0103000324_333R_W062	Headwater Tributary To Riggs Brook	Downstream of Hatch Hill Landfill in Augusta	Undetermined Size	Class B	Riggs Brook listed in River and Stream Table 3	2012
ME0102000510_226R_W106	Penjajawoc Marsh		Undetermined Size	Class B		2011
ME0106000105_609R01_W026	DOLE BROOK (Formerly Known As 'Unnamed Stream- Portland 3')	Tributary to Presumpscot R. entering east of Rt. 302 in Portland	Undetermined Size	Class B	Dole Brook listed in River and Stream Table 5A for stream macroinvertebrates	2010
ME0106000302_623R_W054	Unnamed Tributary To Mousam River	Downstream (West) of Rushton Street in Sanford	Undetermined Size	Class B		2010
ME0104000210_3796_W099	Sabattus Pond		Undetermined Size	Class GPA	Sabattus Pond listed in Lakes 4A Table, TMDL completed 2004	2013
ME0103000318_5481_W088	St Albans Game Management Pond		Undetermined Size	Class GPA	St Albans Wildlife Management Area	2012
ME0104000210_418R02_W102	No Name Brook (Lewiston)		Undetermined Size	Class B	No Name Brook listed in River and Stream 5A Table for Dissolved Oxygen	2013

Category 3: Wetland Habitat With Insufficient Data Or Information To Determine If Designated Uses Are Attained (One Or More Uses May Be Impaired)

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	SCHEDULED MONITORING DATE
ME0101000501_9525_W115	Christina Reservoir		Undetermined Size	Class GPA	resampled in 2009, but results not yet available. Lake TMDL completed in 2010.	2014
ME0106000104_610R_W027	Head Of Long Creek	Upstream (east) of Cummings Road in South Portland	Undetermined Size	Class C	Also listed in River and Stream Category 4B.. Permitting under Residual Designation Authority qualifies this segment for listing in 4-B	2015
ME0104000208_413R03_W183	Stetson Brook (Lewiston)		Undetermined Size	Class B	Stetson Brook listed in River and Stream 5A Table for Dissolved Oxygen	2013

(Note: ADB Assessment Unit ID prefix corresponds to the associated river/stream or lake assessment units)

Category 4-B: Wetland Habitat Impaired By Pollutants - Pollution Control Requirements Reasonably Expected To Result In Attainment

ADB ASSESSMENT UNIT ID	Segment Name	CAUSE	SEGMENT SIZE	SEGMENT CLASS	COMMENTS	EXPECT TO ATTAIN DATE
ME0103000308_325R01_W080	East Branch Sebasticook River Corundel Pd To Sebasticook L	Benthic-Macroinvertebrate Bioassessments (Wetlands)	Undetermined Size	Class C	Also listed in River and Stream 4B Table	2010
ME0106000301_622R_W176	Lord's Brook Pond	Benthic-Macroinvertebrate Bioassessments (Wetlands)	Undetermined Size	Class B	Also listed in River and Stream 4B Table	2012

(Note: ADB Assessment Unit ID prefix corresponds to the associated river/stream or lake assessment units)

Category 5-A: Wetland Habitat Impaired By Pollutants Other Than Those Listed In 5-B Through 5-D (TMDL Required)

ADB ASSESSMENT UNIT ID	Segment Name	LOCATION	CAUSE	SEGMENT SIZE	SEGMENT CLASS	TMDL PRIORITY	COMMENTS
ME0106000105_610R01_W023	Capisic Pond		Benthic-Macroinvertebrate Bioassessments (Wetlands)	Undetermined Size	Class C	2010	Also listed in River and Stream 5A Table
ME0106000211_616R05_W043	Thacher Brook	Upstream (south) of Rte. 111 in Biddeford	Benthic-Macroinvertebrate Bioassessments (Wetlands)	Undetermined Size	Class B	M	Also listed in River and Stream 5A Table
ME0106000105_607R11_01_W127	Nason's Brook	Biomonitoring Wetland Stations W-127 (off Pinetree Industrial Parkway) and W-172 (off Saunder's Way)	Benthic-Macroinvertebrate Bioassessments (Wetlands)	Undetermined Size	Class C	M	Also listed in River and Stream 5A Table
ME0104000210_418R01_W188	SABATTUS RIVER Between Sabattus And Androscoggin R	between Sabattus Pond and Rte 126 in Sabattus	Benthic-Macroinvertebrate Bioassessments (Wetlands)	Undetermined Size	Class C	2010	Also listed in River and Stream 5A Table

Appendix V: Estuarine and Marine Waters

Category 1: Estuarine and Marine Waters Fully Attaining All Designated Uses

No waters are listed in Category 1 in 2010

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
826		*	Fort Foster, Kittery to Bald Head York		SB/SA			0.00	
824		*	Bald Head, York to Kennebunk R. Estuary (east bank), Kennebunkport		SB			0.00	
824-1	4B		Ogunquit & Moody Beaches	1,108.30	SB	Current	2 STP outfalls	1.7317188	
821		*	Kennebunk R. Estuary (east bank), Kennebunkport to Biddeford Pool, Biddeford		SB			0.00	
821-3	8-B		Timber Point to Fortunes Rocks, Biddeford	279.2	SB	Current	OBDs (Over Board Discharges)	0.4362500	
811		*	Biddeford Pool, Biddeford to Dyer Point (Two Lights), Cape Elizabeth		SB			0.00	
811-3	12		Prouts Neck, Scarborough	1004.8	SB	Current	STP outfall	1.5700000	
804		*	Dyer Point (Two Lights), Cape Elizabeth to Parker Point (west bank of Royal R.), Yarmouth		SB/SA			0.00	
802		*	Parker Point (west Bank of Royal R.), Yarmouth to south end of Butler Cove (Merrymeeting Bay), Bath		SB/SA			0.00	
802-1	14-D		Great Chebeague Island, Cumberland	22.1	SB	Current	OBD	0.0345313	
802-3	16-C		Cousins & Littlejohn Islands, Yarmouth	59.5	SB	Current	STP outfall; OBDs	0.0929688	
802-4	17		Harraseeket River, Freeport	530.8	SB	Current	STP outfall	0.8293750	
802-10	18-C		Mere Point Neck-Birch Island, Brunswick	15.3	SB	Current	Improper septic systems	0.0239063	
802-12	18-E		Cundy's Harbor and Dingley Island, Harpswell	235.2	SB	Current	OBDs	0.3675000	
802-14	18-H		Harpswell Sound, Harpswell	55	SB	Current	OBDs	0.0859375	

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
802-15	18-I		Harpswell Fuel Depot, Harpswell	102.3	SB	Current	Closed originally because of presumed fuel contamination; 2002 mussel results show no contamination; Testing clams and sediments in the SWAT program	0.1598438	
802-16	18-M		Lookout Point & Wilson Cove, Harpswell	9.9	SB	Current	Horse manure runoff, but elevated fecal counts not reported	0.0154688	
802-17	18-R		East Harpswell and Long Island, Harpswell	15.4	SB	Current	Improper septic systems	0.0240625	
								0.00	
802-21	18AA		Little Yarmouth Island	8.4	SB	Current	Improper septic systems	0.0131250	
	18-P		Bombazine Is. And Foster Pt.	29.8	SB	Current	OBDs	0.0465625	
802-22	19		Wood Island - Malaga Island, Phippsburg	350.3	SB	Current/ incomplete survey	Improper septic systems	0.5473438	Moved from Category 5 (incorrect placement in 2004?)
802-23	19-A		Birch Point, West Bath - Bear Island, Phippsburg	107	SB	Current	OBDs; Improper septic systems	0.1671875	
802-22	19B		N. Cape Small Hbr.	7	SB	Current	Septic system problems	0.0109375	
802-24	19-C		Dam Cove - Birch Point, West Bath	291.6	SB	Current	OBDs	0.4556250	
710		*	South end of Butler Cove (Meerymeeting Bay), Bath to east point of Sagadahoc Bay, Georgetown		SB			0.00	
730		*	East point of Sagadahoc Bay, Georgetown to Ocean Point, Boothbay		SB/SA			0.00	
730-2	20-E		N.Robinhood Cove, So. Robinhood Cove, & Knubble Bay, Georgetown/Westport	674	SB	Current	OBDs, marina	1.0531250	Moved from Category 3
730-3	21		Indian Point, Georgetown, to Fowle Pt., Westport	2425.3	SB	Current	OBDs, incomplete survey	3.7895313	

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
730-4	22		Sheepscot River	1431.7	SB	Current	OBDs	2.2370313	
730-5	22-B		Hodgdon Island, Boothbay	249.2	SB	Current	OBD	0.3893750	Knickercane Cove - Merrow Island, Boothbay
730-5	22-C		Cameron Point. Southport	206.98	SB	Current	OBD, gray water discharges	0.3234063	Back River, Boothbay
730-7	22-F		Ovens Mouth - Sherman Creek, Boothbay – Edgecomb	162.3	SB	Current	OBD	0.2535938	Moved from Category 5, elevated fecals in 2004
730-8	22-G		Upper Sheepscot River	299.2	SB	Current	Restricted: possible NPS	0.4675000	No prohibited areas - 7/2/1997
730-9	23		Boothbay Harbor - Damariscove Island	7337.9	SB/SA	Mainland is current	OBDs; Boats	11.4654688	
730-11	23-B		Southwestern Southport Island	392.5	SB	Current	OBDs	0.6132813	
729-1	24		Damariscotta River - Boothbay	692.6	SB	Current	OBDs; Boats	1.0821875	
729		*	Ocean Point, Boothbay to Pemaquid Point, Bristol		SB			0.00	
729-3	25-A		South Bristol	550.4	SB	Current	OBDs; Boats	0.8600000	
729-4	25-B		Pemaquid River, Bristol	324.6	SB	Current	OBDs; Boats	0.5071875	
726-1	25-C		New Harbor, Bristol	161.8	SB	Current	OBDs; Boats	0.2528125	
729-5	25-E		Inner Heron Island	11	SB	no station	No station; Septic system problems	0.0171875	
729-6	25-F		Pemaquid Neck, Bristol	580.1	SB	Current	OBDs	0.9064063	
726-2	25-D		Long Cove Point to Muscongus Harbor, Bristol	556.1	SB	Current	OBDs	0.8689063	
726-4	25-G		Soldiers Cove, Bristol	18.7	SB	Current	OBDs, improper septics	0.0292188	
726-5	25-H		Keene Narrows, Medomak - Bremen	70.4	SB	Current	Marina; Septic system problems	0.1100000	
726-6	25-I		Muscongus Harbor, Bristol-Bremen	11.7	SB	Current	OBD; Boats, Septic system problems	0.0182813	
726-7	25-J		Eastern Farmers Island, South Bristol	13.4	SB	Current	OBD	0.0209375	
726-8	25-N		High Island to McFarlands Cove, South Bristol	172.7	SB	Current	Improper septic systems	0.2698438	OBD in 2004

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
726		*	Pemaquid Point, Bristol to middle north side of Back River Cove, Waldoboro		SB			0.00	
724		*	Middle north side of Back River Cove, Waldoboro to Marshall Point, St. George		SB			0.00	
724-3	26-B		Friendship Harbor	508.5	SB	Current	OBDs	0.7945313	
724-5	26-H		Broad Cove, Cushing	25.5	SB	Current	Restricted: wildlife	0.0398438	
724-6	26-K		Upper Meduncook Rive - Crotch Island, Cushing	27	SB	Current	Septic system problems - Crotch Island	0.0421875	
724-7	26-M		Pleasant Point Gut - Davis Cove, Cushing	24.9	SB	Current	Septic system problems	0.0389063	
724-9	26-0		Friendship Long Island & Vicinity, Friendship	167.6	SB	Current but more samples needed	Septic system problems	0.2618750	Moved from Category 3
724-10	27		St. George River	1,046.40	SB	Current	STP; seasonal closure	1.6350000	Moved from Category 5, elevated fecals in 2004
	27-C		Upper Bay, St. George	469.28	SB	Current	Conditional on STP	0.7332500	
724-12	28-A		Port Clyde and the St. George Islands, St. George and Cushing	390.4	SB	Current	OBDs; Septic system problems	0.6100000	
722		*	Marshall Point, St. George to Naskeag Point, Brooklin		SB/SA			0.00	
722-3	28-B		Spruce Head Island - Thorndike Point	403.7	SB	Current	Incomplete DMR sanitary survey; OBDs; Boats	0.6307813	
722-4	28-C		Rackliff Island, St. George	65.3	SB	2 stations dropped in 2002	OBDs	0.1020313	
722-5	28-E		Ash Point-Birch Point, Owl's Head	60.2	SB	Current	Incomplete DMR sanitary survey; OBDs	0.0940625	

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
722-9	29-A		Owl's Head	726.8	SB	Current	OBDs	1.1356250	
722-12	30-A		Southwestern Vinalhaven	2242.9	SB		Incomplete DMR sanitary survey; OBDs; Septic system problems	3.5045313	
	30-B		The Basin, Vinalhaven	34.7	SB	Current	Questionable plumbing	0.0542188	New
722-15	30-I		North Haven Island	3,984.80	SB	Current	OBDs; Boats	6.2262500	
722-18	30-L		Bartlett and Crabtree	51.5	SB	Current	Septic system problems	0.0804688	Ames Creek, North Haven
722-20	30-N		Indian Point - Burnt Island, North Haven	40.9	SB	Current	OBDs; Septic system problems	0.0639063	
722-26	36		Penobscot & Bagaduce Rivers, in Castine-Penobscot	1,632.00	SB/SA	Current	OBDs	2.5500000	lower acres--divided into 36, 36A, B & C
722-26	36-C		Harborside, Brooksville	207.00	SB	Current	OBDs	0.3234375	new, also lists heavy metals
722-27	36-F		Islesboro	1771.3	SB	Current	OBD; Boats; Septic system problems	2.7676563	
722-28	37		Condon Point, Brooksville, to "Herricks" Village Brooksville	547	SB	Current	OBDs	0.8546875	
722-29	37-A		Deer Isle	61	SB	Current	OBDs	0.0953125	
722-30	37-B		Blastow Cove, Deer Isle	7	SB	Current	OBDs	0.0109375	
722-31	37-C		Heart Island, Deer Isle	9	SB	Current	OBDs	0.0140625	
722-32	37-E		Eggemoggin, Little Deer Isle	43	SB	Current	OBDs	0.0671875	
722-35	38-A		Inner Harbor, Stonington-Deer Isle	0.5	SB	Current	OBDs (and STP)	0.0007813	
722-36	38-B		Burnt Cove, Stonington	75	SB	Current	OBD, formerly high fecal counts, on OBD removal list	0.1171875	
722-37	38-C		Fifield Point to Moose Island	51	SB	Current	OBDs	0.0796875	
707		*	Naskeag Point, Brooklin to Bass Harbor Head, Tremont		SB/SA			0.00	
707-1	39		Blue Hill Harbor	308	SB	Current	OBDs	0.4812500	
707-2	39-C		McHerd Cove - Webber Cove, East Blue Hill	42	SB	Current	OBDs	0.0656250	

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
707-3	39-D		High Head-Sand Point, South Blue Hill	38	SB	Current	OBDs	0.0593750	
707-1A	39-J		Hub Island and Peters Cove, Blue Hill Harbor, Blue Hill	62	SB	Current	STP	0.0968750	New
707-5	40		Union River Bay, Surry & Trenton	6,778.00	SB	Current	STP	10.5906250	
707-5A	40-A		Union River, Patten Bay & Heath Brook, Ellsworth, Surry & Trenton	1,828.00	SB	Current	OBDs, WWTP	2.8562500	was DMR area 40
707-6	42		Bass Harbor & Eastern Duck Cove, Tremont	702	SB	Current	OBDs (placed in incorrect category 2004)	1.0968750	
707-7	42-A		Lunt Harbor, Frenchboro	10	SB	Current	OBDs	0.0156250	
707-8	42-B		Burnt Coat Harbor, Swans Island	64	SB	Current	OBDs	0.1000000	
707-9	42-D		Red Point, Swans Island	178	SB	Current	OBDs	0.2781250	
714		*	Bass Harbor Head, Tremont to Schoodic Point, Winter Harbor		SB/SA			0.00	
714-1	43		Southwest Harbor	569	SB	Current	OBDs	0.8890625	
714-2	44		Northeast Harbor and Bracy Cove	1,259.00	SB/SA	Current	OBDs and STP	1.9671875	was Southern Mt. Desert Island & the Cranberry Isles was 8711 acres now in DMR areas 45, 45A, 45B
714-3	44A		Broad Cove and Somes Harbor, Mount Desert	125	SB/SA	Current	OBDs; Seasonal marina	0.1953125	
	45		Sutton Island	120	SB	Current	OBDs	0.1875000	was part of DMR area 44
	45A		Great Cranberry Island	81	SB	Current	OBDs	0.1265625	was part of DMR area 44
	45B		Little Cranberry Island	196	SB	Current	OBDs	0.3062500	was part of DMR area 44
714-4	46		Seal Harbor	288	SB	Current	OBDs and STP	0.4500000	
714-6	47		Bar Harbor	1,941.00	SB	Current	OBDs	3.0328125	
714-6	47		Bar Harbor depuration area (Bar Island bar)	46	SB	Current	CSOs; Seasonal marina	0.0718750	

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
714-8	49		Salisbury Cove, Bar Harbor	208	SB	Current	OBDs	0.3250000	
714-12	50		Sorrento	49	SB	Current	OBDs; Seasonal marina	0.0765625	
714-17	51		Winter Harbor	139	SB	Current	OBDs	0.2171875	
714-18	51-A		Arey Cove, Winter Harbor	84	SB	Current	OBDs	0.1312500	
714-19	51-B		Grindstone Neck, Winter Harbor	292	SB	Current	OBDs	0.4562500	
714-20		*	Northwest End Flanders Bay, Sullivan-Sorrento		SB		DMR Area 50-D; 9/19/2001 Repealed -open; Was on TMDL list in 1998	0.00	
706		*	Schoodic Point, Winter Harbor to Petit Manan Point, Steuben		SB			0.00	
706-1	52		Prospect Harbor and Shark Cove, Gouldsboro	288	SB	Current	OBDs	0.4500000	was Corea Hbr, was 443 acres
706-2	52-A		Corea Harbor and Sand Cove, Gouldsboro	110	SB	Current	OBDs	0.1718750	Sand Cove added, was 42 acres
706-4	52-C		Bunkers Harbor, Gouldsboro	207	SB	Current	OBDs	0.3234375	
706-5	52-D		Southwestern Petit Manan Point, Steuben	106	SB	Current	OBDs	0.1656250	
706-9			Wonsqueak Harbor, Gouldsboro	10	SB	Current	OBDs	0.0156250	
705		*	Petit Manan Point, Steuben to Ray Point, Milbridge		SB/SA			0.00	
704		*	Ray Point, Milbridge to south end of Cape Split, Addison		SB			0.00	
704-1	53-A		Pleasant River and Dyer Cove, Addison	489	SB	Current	OBDs	0.7640625	
704-4	53-H		Cape Split, Addison	84	SB	Current	OBDs	0.1312500	
703		*	South end of Cape Split, Addison to Kelley Point, Jonesport		SB/SA			0.00	
703-1	53-H		Cape Split, Addison	acres in waterbody 704-4	SB	Current	OBDs		

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area		Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments
713		*	Kelley Point, Jonesport to Point of Maine, Machiasport		SB			0.00	
709		*	Point of Maine, Machiasport to Thorton Point, Cutler		SB			0.00	
709-1	55-E		Machias - East. Machias Rivers	729	SB	Current	OBDs (and STP)	1.1390625	was DMR area 55
709-2A	55		Randall Flats and Sanborn Cove, Machiasport	710	SB	Current	STP (Conditional restricted)	1.1093750	
709-2	55-B		Howard Cove - Starboard Cove, Bucks Harbor	118	SB	Current	OBDs	0.1843750	
709-3	55-C		Northeastern Holmes Bay, Whiting - Cutler	144	SB	Current	OBDs	0.2250000	
709-4	55-H		Bucks Harbor, Machiasport	47	SB	Current	OBDs	0.0734375	
708		*	Thorton Point, Cutler to Todd Head, Eastport		SB/SA/SC			0.00	
708-2	55-D		Great Head, Cutler & Bog Brook Cove, Trescott	167	SB	Current	OBDs	0.2609375	
708-5	57		Eastport	653	SC	Current	OBDs (STP or 2 – boundary dependent)	1.0203125	
701		*	Cobscook Bay		SB/SA			0.00	
701-5	57		Eastport	acres in waterbody 701-5	SC	Current	OBDs (STP or 2 – boundary dependent)		
701-6	57-A		Pleasant Point, Perry and Kendall Head, Eastport	872	SB	Current	OBDs (STP or 2 – boundary dependent)	1.3625000	
701-9	58-C		North Lubec	70	SB	Current	OBDs	0.1093750	
702		*	Todd Head, Eastport to Whitlocks Mill, Calais		SB/SC			0.00	
702-1	57		Eastport	653	SC	Current	OBDs (STP or 2 – boundary dependent)	1.0203125	

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses

Waterbody ID	DMR Area	Segment Description	Segment Acres	Segment Class	Last Year Sampled	Reason for DMR Closure	Segment Size (Square Miles)	Comments

*segments of this waterbody can be found in other listing categories

Category 3: Estuarine and Marine Waters with Insufficient Data or Information to Determine if Designated Uses are Attained

Waterbody ID	DMR Area	Segment Description	Segment Acres	Segment Class	Last Year Sampled	Projected Sample Date	Segment Size (Square Miles)	Comments
824-2	4-A	Perkins Cove	13.2	SB	No station		0.0206250	Many boats – no data
802-26		Quahog Bay, inside of the south end of Pole Island	589.61	SB	2005	2006	0.9212656	Possible Dissolved Oxygen Non-attainment; 309.4 acres in 5-B-1
722-10	29-B	Matinicus Island - Ragged Island	2,203.20	SB	no survey or samples	Far off the Maine coast - logistical problems	3.4425000	Never
722-25B	**35-B**	**Penobscot River Estuary, Winterport, Reeds Bk to Marsh River**	**250.00**	**SC**	1992	2011	0.4	Initially included in coastwide 5D shellfish consumption impairment due to lobster tomalley contamination. Determination was not specific to this location. 1992 survey suggests occurence of harvestable lobster unlikely here. Additional information needed to confirm attainment.
702-3	60	Little River, Perry	29	SB	7/25/1988		0.0453125	No information
812-1	**1**	**Piscataqua R. Estuary, Kittery, Eliot, So. Berwick**	**1144.2**	**SB/SC**	**2010 NH survey information**	**2010**	**1.79**	**Eelgrass loss documented in NH waters; assessment of potential ME Aquatic Life impairment incomplete.**
		Total =	2,835.0			Total =	6.619702	

Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed

(A TMDL is complete, but there is insufficient new data to determine if attainment has been achieved.
Note: Bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shell fish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (i.e., waters of high enough salinity for propagation of shellfish.)

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)

Waterbody ID	DMR Area	Segment Description	Segment Size Acres	Segment Class	Last Year Sampled	TMDL Approved	Segment Size (Square Miles)	Cause
812		Piscataqua R. Estuary, Eliot, So. Berwick	Acres included in Category 5-B-1	SB	1994	1999	(unknown mi)	Dissolved Oxygen
811-9		**Mousam R. Estuary (DMR Area 6)**	**192**	**SB**	**1995 -current for bacteria**	**2009**	**0.30**	**Elevated fecals**
811-8		**Saco R. Estuary**	**576**	**SC**	**1998**	**2009**	**0.90**	**Elevated fecals**
804-7		**Fore R. Estuary**	**768**	**SC**	**2001**	**2009**	**1.20**	**Elevated fecals**
802-25		**Royal R. Estuary**	**173.5**	**SB**	**2005**	**2009**	**0.27**	**Elevated fecals**
812-1	**1**	**Piscataqua R. Estuary, Kittery, Eliot, So. Berwick**	**1144.2**	**SB/SC**	**Current**	**2009**	**1.7878125**	**Elevated fecals only**
826-1	**1B**	**Jaffrey Point, N. H. to Brave Boat Harbor, York**	**1,211.90**	**SB**	**Current**	**2009**	**1.8935938**	**Elevated fecals only**
826-2	**2**	**York River**	**276.1**	**SB**	**Current**	**2009**	**0.4314063**	**Elevated fecals only**
826-2	**2A**	**York Harbor**	**41.2**	**SB**	**Current**	**2009**	**0.064375**	**Elevated fecals only**
826-3	**2B**	**Lobster Cove**	**57.4**	**SB**	**Current**	**2009**	**0.0896875**	**Elevated fecals only**
826-3	**3**	**Cape Neddick**	**1425.7**	**SB**	**Current**	**2009**	**2.2276563**	**Elevated fecals only**
824-1	**4**	**Ogunquit River**	**32.7**	**SB**	**Current**	**2009**	**0.0510938**	**Elevated fecals only**
824-3	**5**	**Webhannet River**	**604.7**	**SB**	**Current**	**2009**	**0.9448438**	**Elevated fecals only**
824-3	**5A**	**Little River**	**133.1**	**SB**	**Current**	**2009**	**0.2079688**	**Elevated fecals only**
824-4	**7**	**Kennebunk River**	**498.3**	**SB**	**Current**	**2009**	**0.7785938**	**Elevated fecals only**

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
821-1	8	Cape Porpoise	126.6	SB	Current	2009	0.1978125	Elevated fecals only
821-2	8-A	Cape Porpoise Harbor	130.7	SB	Current	2009	0.2042188	Elevated fecals only
821-2A	8-AA	Goosefare Bay	7.8	SB	Current	2009	0.0121875	Elevated fecals only
811-1	9	Saco River	1245.4	SB/SC	Current	2009	1.9459375	Elevated fecals only
	10	Saco Bay	3404.4	SB	Current	2009	5.319375	Elevated fecals only
811-2	11	Scarborough River	201.7	SB/SA	Current	2009	0.3151563	Elevated fecals only
811-4	13	Spurwink River	45.1	SB/SA	Current	2009	0.0704688	Elevated fecals only
804-1	14	Portland - Falmouth Area	12827.6	SB/SC	2/19/2002	2009	20.043125	Elevated fecals only
804-2	14-A	Falmouth – Cumberland	11.5	SB	Current	2009	0.0179688	Elevated fecals only
804-3	14-C	Long Island - Cliff Island, Portland	617.2	SB	Current - Long Is; 10/12/00 – others	2009	0.964375	Elevated fecals only
802-25	16	Royal & Cousins R. Estuaries	108.8	SB	Current	2009	0.17	Elevated fecals only
802-5	17-B	Maquoit Bay, Brunswick and Freeport	300.9	SB	Current	2009	0.4701563	Elevated fecals only
	17-E	Basin, Ash and Stover Coves, Harpswell	280.1	SB	Current	2009	0.4376563	Elevated fecals only
	17-F	Orrs and Bailey Island, Harpswell	200.4	SB	Current	2009	0.313125	Elevated fecals only
	17-G	Harpswell Sound, Harpswell	547.1	SB	Current	2009	0.8548438	Elevated fecals only
802-7	18	Potts Harbor	675.3	SB	Current	2009	1.0551563	Elevated fecals only
802-8	18-A	Gurnet Strait, Harpswell	154.5	SB	Current	2009	0.2414063	Elevated fecals only
802-9	18-BB	New Meadows River, Brunswick, West Bath, Harpswell	12.6	SB	Current	2009	0.0196875	Elevated fecals only

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
	18-B	New Meadows Lake, Brunswick, West Bath	22.5	SB	Current	2009	0.0351563	Elevated fecals only
802-10	18-J	Middle Bay	76.9	SB	Current	2009	0.1201563	Elevated fecals only
	18-CC	Merepoint, Brunsick	14.5	SB	Current	2009	0.0226563	Elevated fecals only
802-11	18-D	Eastern Bailey - Orr's Island, Western Quahog Bay,	1,256.60	SB	Current	2009	1.9634375	Elevated fecals only
802-12	18-F	Card Cove and Orrs Cove, Harpswell	52.1	SB	Current	2009	0.0814063	Elevated fecals only
	18-G	Northern Quahog Bay	257.3	SB	Current	2009	0.4020313	Elevated fecals only
802-19	18-X	Little Hen Island and Big Hen Island, Harpswell	70.7	SB	Current	2009	0.1104688	Elevated fecals only
802-9	19-F	Long Cove, West Bath	7.7	SB	Current	2009	0.0120313	Elevated fecals only
710-1	20	Upper Kennebec River and Tributaries	17,293.80	SB	Current	2009	27.0215625	Elevated fecals only
	20-G	Middle Kennebec River	1,145.50	SB	Current	2009	1.7898438	Elevated fecals only
710-2	20-H	Lower Kennebec, Phippsburg/Georgetown	1865.4	SB	Current	2009	2.9146875	Elevated fecals only
730-1	20-B	Back River, Wiscasset and Westport	139.4	SB	Current	2009	0.2178125	Elevated fecals only
730-6	22-E	Western Barters Island, Boothbay	225.9	SB	Current	2009	0.3529688	Elevated fecals only
730-10	23-A	Ebencook Harbor, Southport	1226.9	SB	Current	2009	1.9170313	Elevated fecals only
729-2	24-A	Lower Salt Bay	42.6	SB	Current	2009	0.0665625	Elevated fecals only
729-2	25	Damariscotta River, Newcastle – Damariscotta	694.5	SB	Current	2009	1.0851563	Elevated fecals only
726-10	26	Medomak River, Waldoboro and Friendship	155.6	SB	Current	2009	0.243125	Elevated fecals only
724-2	26-A	Monhegan Island	521.6	SB	Never	2009	0.815	Elevated fecals only

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
724-4	26-D	Wiley Cove, Cushing	61.2	SB	Current	2009	0.095625	Elevated fecals only
	26-E	Dutch Neck and Back River	35.1	SB	Current	2009	0.0548438	Elevated fecals only
724-8	26-N	Maple Juice Cove, Cushing	124	SB	Current	2009	0.19375	Elevated fecals only
724-11	27-B	Deep Cove - Otis Cove, St. George	318.2	SB	Current	2009	0.4971875	Elevated fecals only
722-1	27-A	Eastern Wheeler Bay, St. George	35.1	SB	Current	2009	0.0548438	Elevated fecals only
	27-E	Upper St. George and Mill River	317.6	SB	Current	2009	0.49625	Elevated fecals only
722-2	28	Tenants Harbor to Mosquito Head, St. George	621.4	SB	Current	2009	0.9709375	Elevated fecals only
722-6	28-H	Marshall Point - Mosquito Head, St. George	193.8	SB	Current	2009	0.3028125	Elevated fecals only
722-7	28-I	Weskeag River, So. Thomaston and Owls Head	41.9	SB	Current	2009	0.0654688	Elevated fecals only
722-8	29	Rockland	2,459.90	SB/SC	Current	2009	3.8435938	Elevated fecals only
722-11	30	Rockport	2,036.30	SB	Current	2009	3.1817188	Elevated fecals only
722-13	30-D	Vinalhaven	1,255.20	SB	Current	2009	1.96125	Elevated fecals only
722-14	30-H	Kent Cove, North Haven	180.8	SB	Current	2009	0.2825	Elevated fecals only
722-16	30-J	Vinal Cove - Starboard Rock, Vinalhaven	90.4	SB	Current	2009	0.14125	Elevated fecals only
722-17	30-K	Southern Harbor, North Haven	36.4	SB	Current	2009	0.056875	Elevated fecals only
722-19	30-M	Roberts Harbor, Vinalhaven	175.4	SB	Current	2009	0.2740625	Elevated fecals only
722-21	31-A	Rockport Harbor to Ducktrap Harbor, Lincolnville	2,139.60	SB	Current	2009	3.343125	Elevated fecals only
722-22	31-B	Great Spruce Head - Kelleys Cove, Northport	1,237.30	SB	Current	2009	1.9332813	Elevated fecals only

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
722-23	32	Belfast Bay	4,172	SB	Current	2009	6.51875	Elevated fecals only
722-24	33	Searsport - Stockton Springs	2789	SB/SC	Current	2009	4.3578125	Elevated fecals only
	34	Stockton Springs	460.6	SB/SC	Current	2009	0.7196875	Elevated fecals only
722-25A	35-A	Penobscot River Estuary	9,743.00	SB/SC	Current	2009	19.5	Elevated fecals only
722-25B	35-B	Penobscot River Estuary, Winterport, Reeds Bk to Marsh River	250.00	SC	Current	2009	0.4	Elevated fecals only
722-26A	36-A	Northern Bay, Penobscot	786.3	SB	Current	2009	1.2285938	Elevated fecals only
722-26B	36-B	Upper Baggaduce River	7	SA	Current	2009	0.0109375	Elevated fecals only
722-29A	37-D	Long Cove, Deer isle	22	SB	Current	2009	0.034375	Elevated fecals only
722-34	38	Stonington Harbor & NW Crocket Cove, Deer Isle & Stonington	222	SB	Current	2009	0.346875	Elevated fecals only
722-38	39-A	Center Harbor – Brooklin	32	SB	Current	2009	0.05	Elevated fecals only
722-38	39-B	Eastern Flye Point, Brooklin	11	SB	Current	2009	0.0171875	Elevated fecals only
722-39	39-F	Benjamin River, Sedgwick	23	SB	Current	2009	0.0359375	Elevated fecals only
707-4	39-E	Salt Pond, Sedgwick – Brooklin	80	SB	Current	2009	0.125	Elevated fecals only
	39-H	Northwest Herrick Bay, Brooklin	38	SB	Current	2009	0.059375	Elevated fecals only
	39-G	Northern Morgan Bay	114	SB	Current	2009	0.178125	Elevated fecals only
	39-I	Bragdon Brook, Blue Hill	25	SB	Current	2009	0.0390625	Elevated fecals only
707-10	42-E	Mackerel Cove, Swans Island	4	SB	Current	2009	0.00625	Elevated fecals only
707-5	48-A	Goose Cove, Trenton	121	SB	Current	2009	0.1890625	Elevated fecals only

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
707-11	48-B	Pretty Marsh Harbor, Mount Desert	180	SB	Current	2009	0.28125	Elevated fecals only
	48-C	Northwest Cove, Bar Harbor	87	SB	Current	2009	0.1359375	Elevated fecals only
714-9	49-A	Jellison Cove, Hancock	9	SB	Current	2009	0.0140625	Elevated fecals only
714-10	49-B	Carrying Place, Hancock	25	SB	Current	2009	0.0390625	Elevated fecals only
714-11	49-C	Kilkenny Cove, Hancock	43	SB	Current	2009	0.0671875	Elevated fecals only
	49-D	Eagle Point, Sullivan	7	SB	Current	2009	0.0109375	Elevated fecals only
714-13	50-A	US Rt. 1 Bridge, West Sullivan and Long Cove, Sullivan	30	SB	Current	2009	0.046875	Elevated fecals only
714-14	50-B	Springer Brook, Mill Brook and West Brook, W. Franklin	93	SB	Current	2009	0.1453125	Elevated fecals only
714-15	50-C	Johnny's Brook and Card Mill Stream, Franklin	2	SB	Current	2009	0.003125	Elevated fecals only
	50-D	Evergreen Point, Sullivan	34	SB	Current	2009	0.053125	Elevated fecals only
714-16	50-E	Egypt Bay, Hancock and Franklin	106	SB	Current	2009	0.165625	Elevated fecals only
	51-C	Bunker Cove, South Gouldsboro	12	SB	Current	2009	0.01875	Elevated fecals only
706-3	52-B	Mill Pond Stream, Gouldsboro	8	SB	Current	2009	0.0125	Elevated fecals only
706-6	52-E	Dyer Harbor - Pinkham Bay, Steuben	73	SB	Current	2009	0.1140625	Elevated fecals only
706-7	52-F	Birch Harbor, Gouldsboro	19	SB	Current	2009	0.0296875	Elevated fecals only
	52-G	Joy Bay, Gouldsboro and Steuben	1024	SB	Current	2009	1.6	Elevated fecals only
706-8	52-J	Dyer Harbor, Steuben	162	SB	Current	2009	0.253125	Elevated fecals only
705-3	52-K	Mitchell Point, Milbridge	32	SB	Current	2009	0.05	Elevated fecals only

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
705-1	53	Narraguagus River, Milbridge	821	SB	Current	2009	1.2828125	Elevated fecals only
704-2	53-D	Curtis Creek, Flat Bay, Harrington	31	SB	Current	2009	0.0484375	Elevated fecals only
704-3	53-E	Upper Harrington River	483	SB	Current	2009	0.7546875	Elevated fecals only
705-3	53-G	Smith Cove, Narraguagus Bay, Milbridge	3	SB	Current	2009	0.0046875	Elevated fecals only
703-2	54	Jonesport and West Jonesport	459	SB	Current	2009	0.7171875	Elevated fecals only
703-3	54-A	North End of Beals Island	95	SB	Current	2009	0.1484375	Elevated fecals only
703-4	54-B	Indian River, Addison – Jonesport	68	SB	Current	2009	0.10625	Elevated fecals only
703-5	54-K	Southeastern Alley Bay & Pig Island Gut, Beals	24	SB	Current	2009	0.0375	Elevated fecals only
703-6	54-M	Lamesen Brook in West River, Addison	52	SB	Current	2009	0.08125	Elevated fecals only
713-1	54-D	East & West Branches, Little Kennebec Bay, Machias and Machiasport	68	SB	Current	2009	0.10625	Elevated fecals only
713-2	54-G	White Creek, Masons Bay, Jonesport – Jonesboro	47	SB	Current	2009	0.0734375	Elevated fecals only
713-3	54-H	Chandler River, Jonesboro	119	SB	Current	2009	0.1859375	Elevated fecals only
709-5	55-I	Indian Head, Machiasport	17	SB	Current	2009	0.0265625	Elevated fecals only
708-1	55-A	Little River - Cutler Harbor	37	SB	Current	2009	0.0578125	Elevated fecals only
708-3	55-G	Money Cove, Cutler	32	SB	Current	2009	0.05	Elevated fecals only
708-4	56-C	Haycock Harbor, Trescott	16	SA/SB	Current	2009	0.025	Elevated fecals only
708-6	58	Lubec and South Lubec	70	SB	Current	2009	0.109375	Elevated fecals only
701-1	56	Denny's River and Northwest Denny's Bay, Edmunds – Pembroke	88	SA/SB	Current	2009	0.1375	Elevated fecals only

Formerly Categories 4-A (Piscataqua), 5A and 5-B-1 (TMDL now completed for listed causes)								
Waterbody ID	**DMR Area**	**Segment Description**	**Segment Size Acres**	**Segment Class**	**Last Year Sampled**	**TMDL Approved**	**Segment Size (Square Miles)**	**Cause**
701-2	56-A	Pennamaquan Bay, Pembroke	80	SB	Current	2009	0.125	Elevated fecals only
708-4	56-B	East Stream, Trescott	15	SA/SB	Current	2009	0.0234375	Elevated fecals only
	56-D	Crane Mill Brook, Edmunds	94	SA	Current	2009	0.146875	Elevated fecals only
	56-H	Ox Cove, Pembroke	653	SA	Current	2009	1.0203125	Elevated fecals only
701-7	57-B	Deep Cove, Eastport	154	SC	Current	2009	0.240625	Elevated fecals only
	59	Hal Moon Cove, Eastport	46	SB	Current	2009	0.071875	Elevated fecals only
701-8	58	Lubec and South Lubec	487	SB	Current	2009	0.7609375	Elevated fecals only
701-10	58-F	The Haul-Up, South Bay, West Lubec	40	SB	Current	2009	0.0625	Elevated fecals only
702-4	62	St. Croix River – Passamaquoddy Bay	7,933.00	SB/SC	Current	2009	12.3953125	Elevated fecals only
		Total	98380			Total	153.72	

Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed.

Note: Bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shell fish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (i.e., waters of high enough salinity for propagation of shellfish.)

Formerly Category 5-B-2 (Bacteria from Combined Sewer Overflows)

Waterbody ID	Location	Permitted Facility Name	Goal (separation or partial)	Enforcement Control (permit or consent decree, date)	TMDL Approval	Segment Size (Square Miles)	Cause
709-6	Machias	Machias WWTF	Separation	Permit 2009	0.00	0	Sewer separation projects complete. (formerly Category 5-B-2)
710-03	Bath	Bath WPCF	Partial w/ generic bypass	Permit 2012	2009	0	CSO-affected (formerly Category 5-B-2)
714-21	Bar Harbor	Bar Harbor, Town of	Separation	Permit 2015	0.00		Master Plan submitted Dec. 2006; (formerly Category 5-B-2)
722-40	Rockland	Rockland WWTF	Partial w/ generic bypass	Permit 2011	2009	0	CSO-affected (formerly Category 5-B-2)
722-41	Belfast	Belfast WWTF	Separation	Permit 2011	2009	0	CSO-affected (formerly Category 5-B-2)
722-42	Bucksport	Bucksport WWTP	Separation w/ generic bypass	Permit 2012	2009	0	CSO-affected (formerly Category 5-B-2)
722-43	Winterport	Winterport Sewerage District	Separation	Permit 2016	2009	0	CSO-affected (formerly Category 5-B-2)
722-44	Hamden	Hamden, Town of	Partial w/ storage	Permit 2015	2009	0	CSO-affected (formerly Category 5-B-2)
804-5	Portland	Portland Water District - Portland WWTF	Partial w/ generic bypass	2018	2009	0	CSO-affected (formerly Category 5-B-2)
804-6	South Portland	South Portland WPCF	Partial w/ generic bypass	2012	2009	0	CSO-affected (formerly Category 5-B-2)
804-7	Cape Elizabeth	Portland Water District	Separation		2009	0	CSO-affected (formerly Category 5-B-2)
811-6	Biddeford	Biddeford WWTF	Separation	Permit & A.O. 2013	2009	0	CSO-affected (formerly Category 5-B-2)
811-7	Saco	Saco WWTP	Partial w/ generic bypass	Permit and C.D. 2011	2009	0	CSO-affected (formerly Category 5-B-2)

Category 4-B-1: Estuarine and Marine Waters Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment

Waterbody ID	Segment Description	Segment Size Acres	Segment Class	Last Year Sampled	Impaired Use	Cause	Source	Segment Size (Square Miles)	Comments
824-5	Ogunquit R.	Acres included in Category 5-B-1	SB	1995	Marine Life Use Support	Dissolved Oxygen	Municipal point source	0.00	Outfall moved out of estuary
811-8	Goosefare Brook	Acres included in Category 5-B-1	SC	1994	Marine Life Use Support	Dissolved Oxygen	Municipal point source	0.00	Outfall moved out of estuary; TMDL on freshwater brook
726-11	Medomak R. Estuary	Acres included in Category 5-B-1	SB	2003	Marine Life Use Support	Dissolved Oxygen	Listed previously for Marine Life Use Support for Dissolved Oxygen caused by Municipal Point Source. Discharge has been removed (spray irrigation).	0.00	No data available yet on attainment.
724-13	St. George R. Estuary (DMR Area 27)	Acres included in Category 5-B-1	SB	1999	Marine Life Use Support; Bacteria (Included in Category 5-B-1)	Dissolved Oxygen	Listed previously for Marine Life Use Support for Dissolved Oxygen caused by Municipal Point Source. New discharge license has been issued; Nonpoint source.	0.00	New license issued based on modeling; No data available yet on attainment
722-45	Penobscot R. Estuary	Acres included in Category 5-B-1	SC		Fish Consumption	Toxics: Dioxin, PCBs, Bacteria	Industrial point sources, CSOs	0.00	Dioxin legislation passed; hazardous waste clean-up

Category 4-C: Estuarine and Marine Waters with Impairment not Caused by a Pollutant

Waterbody ID	Segment Description	Segment Size Acres	Segment Class	Last Year Sampled	Impaired Use	Cause	Source	Segment Size (Square Miles)	Comments
802-27	New Meadows R. Estuary, including the "Lake" upstream of Howard Point	Acres included in Category 5-B-1	SB	2002	Marine Life Use Support	Dissolved Oxygen	Partial Impoundment	undetermined	

Category 5-A: Estuarine and Marine Waters Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)

Waterbody ID	Segment Description	Segment Acres	Segment Class	Last Year Sampled	Impaired Use	Cause	Source	TMDL Date	Segment Size (Square Miles)	Comments
811-9	Mousam R. Estuary (DMR Area 6)	192	SB	1995 - current for bacteria	Marine Life Use Support	Dissolved Oxygen; Nonpointsource	Municipal point source, Nonpoint source, Sediment Oxygen Demand	2008	0.30	Includes 54.7 acre DMR closure; also listed in Category 4A for elevated fecals
811-8	Saco R. Estuary	576	SC	1998	Marine Life Use Support	Toxicity, Copper,	Municipal point source, CSOs	2008	0.90	also listed in Category 4A for elevated fecals
804-7	Fore R. Estuary	768	SC	2001	Marine Life Use Support	Aquatic life, Toxics,	Municipal point source, CSOs, Stormwater, Hazardous waste sites, Nonpoint (spills of all sizes)	2012	1.20	also listed in Category 4A for elevated fecals
802-25	Royal R. Estuary	173.5	SB	2005	Marine Life Use Support	DO, NPS	Municipal point source, Stormwater, Nonpoint Source	2010	0.27	also listed in Category 4A for elevated fecals Pending wasteload allocation study.
	Total =	1709.5						Total =	2.67	

Category 5-B: Estuarine and Marine Waters Impaired for Bacteria Only, TMDL Required

Note: Bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shell fish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (i.e., waters of high enough salinity for propagation of shellfish.)

Category 5-B-2: Estuarine and Marine Waters Impaired by Bacteria from Combined Sewer Overflows

All estuarine and marine waters formerly listed in Category 5-B and 5-B-2 are moved to Category 4A (TMDL Completed) due to US EPA approval of a Statewide Bacteria TMDL. Note: Bacteria may impair either recreational uses (swimming) or shellfish consumption uses, or both. Shell fish consumption impairments only apply to waters naturally capable of supporting the shellfish-harvesting use (i.e., waters of high enough salinity for propagation of shellfish.)

In September of 2009 EPA approved a Statewide Maine Bacteria Total Maximum Daily Load that resulted in the removal of 126 bacteria-impaired segments from Category 5-B-1 and 11 segments from 5-B-2 to Category 4-A. The TMDL addresses bacteria impairments caused by enterococcus bacteria.

Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants

All estuarine and marine waters capable of supporting American lobster are listed in Category 5-D, partially supporting fishing ("shellfish" consumption) due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley.