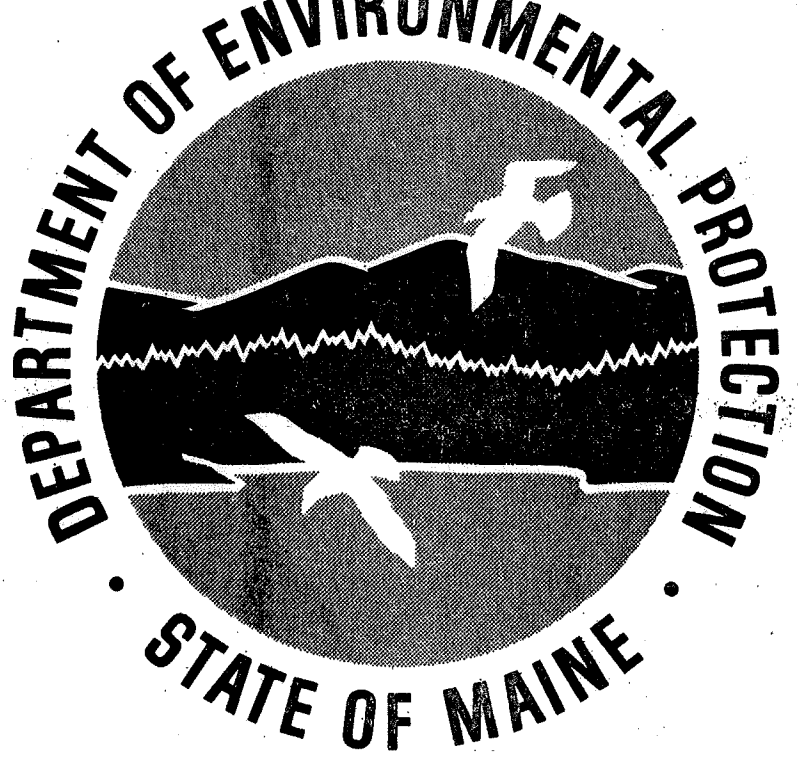
Maine Coastal Basin Water Quality Management Plan



Department of Environmental Protection
Bureau of Water Quality Control
Division of Water Quality Evaluation And Planning

June, 1976

STATE OF MAINE

Department of Environmental Protection

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June 28, 1976

Mr. John A.S. McGlennon
Regional Administrator
Environmental Protection Agency
J.F.K. Federal Building
Boston, Mass. 02203

Dear Mr. McGlennon:

Enclosed is the Maine Coastal Basin Water Quality Management Plan prepared pursuant to Section 303 (e) of the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) and Title 40 of the Code of Federal Regulations, Parts 130 and 131 (40 CFR 130, 131).

Generally, the quality of the waters in the Maine Coastal Basin appears to be good. Presently, over one-half of the major waste dischargers have wastewater treatment facilities in operation or under construction. Certain towns have had shellfishing areas reopened due to the operation of wastewater treatment facilities.

Several copies of this plan were available for public perusal at the offices of the Eastern Mid-Coast, Hancock County, Washington County, and Southern Mid-Coast Regional Planning Commissions. Copies were also mailed to all persons expressing an interest in the water quality of the Basin. A pulic pre sentation was made by the DEP at the June meeting of the Hancock County Regional Planning Commission. All comments were considered for incorporation into the final report.

Sincerely,

William R. Adams, Jr.
Commissioner

WRA:RJ:jig
Enc.

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I. Summary, Conclusions, and Recommendations

A. Summary

The Maine coast may well be the most valuable State resource. One reason is the abundance of high quality water. The overall quality of the waters in the Maine Coastal Basin appears to be good. Degradation is noted however, in waters that have received continuous major waste discharges from municipalities and industries for years such as Rockland Harbor, and the tidewaters of Eastport. Water quality problems are also encountered due to the large number of individual discharges from permanent and seasonal homes. Presently, over one-half of the major waste dischargers have waste abatement facilities funded, under construction, or operating. A few towns such as Thomaston and Waldoboro have had shellfishing areas reopened due to the operation of their wastewater treatment facilities.

The quality of certain waters in the Maine Coastal Basin is largely unknown due to the unavailability of data. A sampling program is proposed which emphasizes critical and fragile areas, as well as areas where the quality is in doubt.

Lake water quality is also believed to be good. There are no Water Quality Segments (WQS) or Lake Stress Quality (LSQ) impoundments in the Basin. Thirteen (13) lakes in the Basin are being intensively sampled during the three (3) year U.S. Geological Survey-DEP Cooperative Limnological Survey.

Minor discharges, although possibly insignificant if taken individually, are of concern because of the great numbers. Estimates of the numbers of unregistered "straight pipes" along the coast vary substantially. A DEP sponsored study is presently locating discharges to shellfishing areas and other remote areas to allow the DEP to adjust treatment facility construction to reflect the greatest water quality and economic benefits.

B. Conclusions

1. There is an overwhelming lack of reliable data for the waters of the Maine Coastal Basin.

2. Over one-half of the major waste dischargers in the Maine Coastal Basin have abatement facilities funded, under construction, or operating.

3. Shellfishing areas have been reopened due to the operation of municipal wastewater treatment facilities.

4. Alternative means of disposal for individual discharges have the potential to open additional shellfishing areas that are presently under administrative closure.

5. There is a substantial number of unregistered discharges in the Maine Coastal Basin.

6. Recent information indicates that significant water quality degradation is linked to small "feeder streams" in addition to direct discharges.

7. Lake problems in the Maine Coastal Basin appear to be minimal.

C. Recommendations

1. Conduct the sampling program proposed in Section V. B. to obtain representative water quality data.

2. Explore the possibility of upgrading the classification of waters where wastewater treatment facilities have been constructed.

3. Continue to investigate the feasibility of reopening shellfishing areas where wastewater treatment facilities both municipal and industrial have gone into operation.

4. Continue the DEP sponsored coastal sanitary survey to include the entire coast.

5. Examine the possibility of establishing a program to lend technical and/or financial assistance to homeowners for the treatment or disposal of individual waste discharges.

II. Introduction

The Maine Coastal Basin is unique and varied. Although considerably less densely populated than the Southern Maine and Presumpscot River - Cumberland County Coastal Basins, significant pressures are exerted from certain industries and a population that is almost doubled by the influx of tourists and seasonal residents.

As would be expected, much of the area economy has historically been linked to the sea. This led to the development and growth of numerous communities with small fish processing and packaging plants built around protective harbors. More recently however, a decline in the fishing catch and an economic recession that has dealt particularly harshly with this marginal industry coupled with high unemployment has contributed to a high emigration rate from these communities, especially those in Washington County.

Presently, a major concern is centered on the large number of untreated discharges from private homes located along the coast. An on-going study funded by the DEP is locating these "straight pipes", particularly those discharging to shellfishing areas. Other concerns have been nuclear power plant and oil refinery proposals, of which one of the latter was recently approved by the Board of Environmental Protection (BEP).

A. Purpose

The Maine Coastal Basin Water Quality Management Plan was prepared pursuant to Section 303 (e) of the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) and regulations published in the Federal Register, 40 CFR Parts 130 and 131. The intent of Section 303 (e) is to have each State establish a continuing planning process on a river basin framework that is consistent with the goals of PL 92-500. The purpose of the plan is to present the existing water quality and to identify the programs that must be implemented for the water quality of the Maine Coastal Basin to conform with State and Federal goals.

Maine law (Title 38 Maine Revised Statutes Annotated) presently requires all waste sources to have adequate treatment by October 1, 1976. The Federal Act (PL 92-500) requires best practicable control technology of all waste sources, which is defined as secondary treatment for publicly owned facilities, by July 1, 1977. PL 92-500 also states that it is a national goal for waters to be of "swimmable-fishable" quality by July 1, 1983. This would correspond to at least B-2 quality according to Maine Water Quality Standards of Classification (Title 38, MRSA, Section 363).

B. Basin Description

The Maine Coastal Basin extends from the international boundary in the St. Croix River Estuary to the Kennebec River Estuary south of Augusta, plus the Cathance River Drainage. The Basin is bounded on the north by the Presumpscot, Androscoggin, Kennebec, Penobscot, and St. Croix River Basins and on the south and east by the Atlantic Ocean (Figure 1). The drainage area of the Basin is approximately 4,550 square miles, including the offshore islands.

The principal rivers in the Maine Coastal Basin are listed in Table 1. The waters of the Basin are regulated by numerous dams (Table 2). Regulated flow, along with the large number of lakes and ponds of which there are thirty-one (31) with surface areas over 1,000 acres (Table 3), extensive marshes and swamps, and the relatively flat topography are factors which combine to level out the extreme flows so that flood damage is reduced.

Historically, studies considering the Maine Coastal Basin have separated it into two sections; the Central and Eastern Coastal Basins, the Central Coastal Basin being bounded by the Kennebec and Penobscot River Basins and the Eastern Coastal being bounded by the Penobscot and St. Croix River Basins. The largest river in the Central Basin is the Sheepscot River with a drainage area of 228 square miles. The major rivers in the Eastern Coastal Basin are the Union and Machias River Basins with drainage areas of 496 and 450 square miles, respectively.

Figure 1

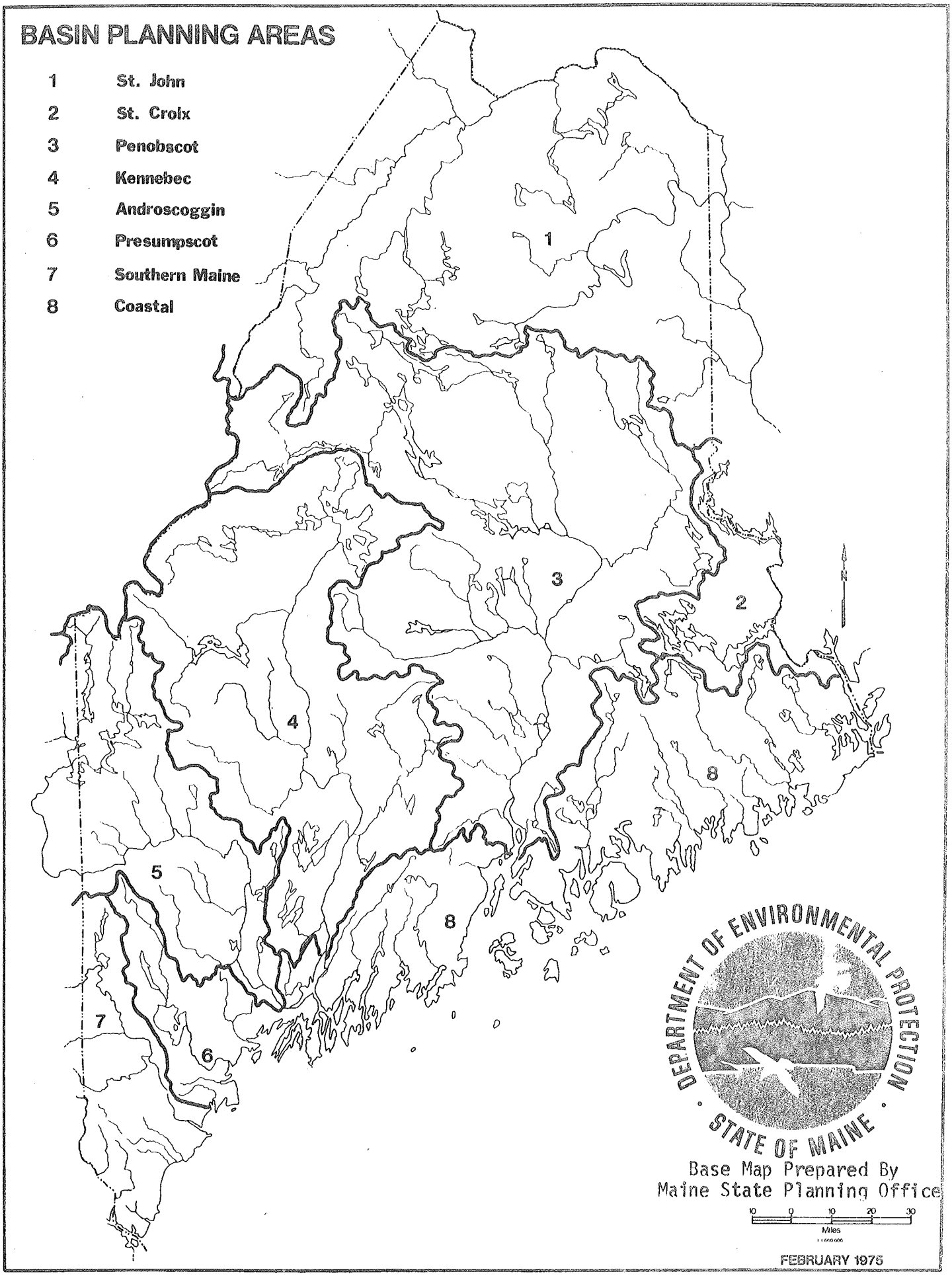

BASIN PLANNING AREAS
1 St. John
2 St. Croix
3 Penobscot
4 Kennebec
5 Androscoggin
6 Presumpscot
7 Southern Maine
8 Coastal
1
2
3
4
5
6
7
8
8
8
N
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF MAINE
Base Map Prepared By
Maine State Planning Office
10 0 10 20 30
Miles
FEBRUARY 1975

Table 1

Major Rivers in the Maine Coastal Basin*

River	Drainage Area (Square Miles)	MIDAS Stream Number
Cathance River	39	089
Chandler River	42	364
Damariscotta River	57	123
Dennys River	94	408
Duck Trap River	35	188
Machias River	450	373
Medomak River	74	139
Narraguagus River	214	338
Orange River	48	404
Passagassawakeag River	43	196
Pemaquam River	42	413
Pemaquid River	36	130
Pleasant River	85	345
St. George River	225	153
Sheepscot River	228	107
Tunk Stream	40	331
Union River	496	261

*Fourth Annual Report 1913, Maine State Water Storage Commission.

Table 2

Maine Coastal Basin Dams*

Sub-Basin	Number of Dams	MIDAS Stream Number
Dennys River	6	408
East Machias River	7	373003
Machias River	16	373
Narraguagus River	5	338
Pleasant River	4	345
Tunk Stream	8	331
Union River	2	261
Branch Lake Stream	2	261002
Tannery Brook	2	261013
Green Lake Outlet	5	261011
Beech Hill Pond Outlet	7	261012
Webb Brook	4	261015
East Branch Union River	9	261017
West Branch Union River	5	26101706
Damariscotta River	4	123
Medomak River	11	139
Passagassawakeag River	7	196
St. George River	6	153
Oyster River	1	153004
Crawford Lake Outlet	9	153008
Quantabacook Pond Outlet	2	153016
Kingdom Bog Outlet	1	15302001
Sheepscot River	3	107
Unnamed Tributary	1	107
Marsh River	5	107002

Table 2 continued

Sub-Basin	Number of Dams	MIDAS Stream Number
Dyer River	2	107003
Unnamed Tributary	2	107004
Clary Lake Stream	2	107013
Travel Brook	1	107015
Lovejoy Stream	2	107016
Colby Brook	1	10701801
Beech Pond Outlet	1	107019
West Branch Sheepscot River	1	107014
Other Dams	103	

*MIDAS File 543W, 1975, Maine State Planning Office

Table 3

Major Lakes in the Maine Coastal Basin*

Lake	Surface Area (Acres)	Location	Lake MIDAS Number
Alligator Lake	1,159	T34MD	4498
Beech Hill Pond	1,351	Otis	4352
Boyden Lake	1,747	Perry	1404
Branch Lake	2,703	Ellsworth	4328
Cathance Lake	2,905	No. 14 Plantation	9661
Crawford Lake	1,677	Crawford	1302
Damariscotta Lake	4,625	Jefferson	5400
Donnell Pond	1,120	T9SD	4412
Gardner Lake	3,886	East Machias	1358
Graham Lake	7,865	Mariaville	4350
Green Lake	2,111	Dedham	4294
Hadley Lake	1,776	East Machias	1352
Lead Mountain Pond (Upper)	1,021	T28MD	4482
Machias Lake (Fifth)	1,069	T36MDBPP	1144
Machias Lake (Fourth)	1,539	T42MDBPP	1148
Machias Lake (Third)	2,778	T42MDBPP	1124
Meddybemps Lake	6,765	Meddybemps	0177
Megunticook Lake	1,305	Camden	4852
Molasses Pond	1,252	Eastbrook	4448
Mopang Lake	1,487	Devereaux T29MDBPP	1172
Pemaquid Pond	1,515	Nobleboro	5704
Pennamaquan Lake	1,209	Charlotte	1402
Rocky Lake	1,555	T18EDBPP	1348
St. George Lake	1,095	Liberty	9971
Second & Loon Lake	1,650	Marion Township	1374

Table 3 Continued

Lake	Surface Area (Acres)	Location	Lake MIDAS Number
Sheepscot Pond	1,193	Palermo	4896
Spectacle Pond	1,754	Osborn Plantation	4450
Sunken & Rocky Lake	1,126	Whiting	1368
Swan Lake	1,370	Swanville	5492
Toddy Pond	1,987	Surry	4340
Tunk Lake	2,010	T10SD	4434

*MIDAS File 906Z, 1974, Maine State Planning Office

The United States Geological Survey (U.S.G.S.) maintains six (6) stream flow gages in the Basin. These are listed in Table 4.

The Maine Coastal Basin had a 1970 population of 127,847 which comprised 12.8 percent of the total State population. The peak seasonal population of the Basin has been estimated at 240,731 by the Maine State Planning Office. This represents a seasonal increase almost equivalent to the resident population. Table 5 lists the major population centers. These constitute almost fifty (50) percent of the Basin population. Although the total population for these communities showed only a minor net loss between 1960 and 1970, several registered dramatic losses. The communities showing the greatest losses such as Lubec and Eastport, appeared to be those with a narrow economic base dependent upon the ocean.

Projections prepared by the Public Affairs Research Center at Bowdoin College indicate that through 1980 the population for the Eastern Coastal Sub-basin will decrease slightly while population in the Central Coastal Sub-basin will increase moderately. These projections however, were prepared prior to recent economic trends.

Estimates available from the U.S. Bureau of Census using 1973 data indicate that, on the average, the major population centers listed in Table 5 increased by approximately 6.6 percent. The major difference between the SPO estimates and the census data is that the SPO figures show none of the major percentage decreases for individual municipalities that were noted during the 1960-1970 decade.

Table 4

U.S. Geological Survey Stream Flow Gaging Stations

in the Maine Coastal Basin*

Station	Drainage Area (Square Miles)	Flows (cfs)			Period of Records
		Average	Maximum (Date)	Minimum (Date)	
Sheepscot River					
North Whitefield	148	244	6,420 12-18-73	5 10-24-41	10-38 to Present
Dennys River					
Dennysville	92.4	190	3,930 4-29-73	8.4 10-1-57	10-55 to Present
Machias River					
Whitneyville	457	933	14,800 5-29-61	3.5 10-12-39	9-29 to Present
Narraguagus River					
Cherryfield	232	491	10,400 5-28-61	20 9-23-65	2-48 to Present
Union River, West Branch					
Amherst	148	265	4,140 4-13-40	2.6 7-28-65	7-29 to Present
Garland Brook					
Mariaville	9.8	21.5	1,230 12-27-69	0.24 9-25-65	8-64 to Present

*Water Resources Data for Maine, 1974. U.S. Department of the Interior, Geological Survey

Table 5

Population Summary of the Major Population Centers

in the Maine Coastal Basin*

Community	1970 Population	1960 Population	% Change	Peak Seasonal Population	1973 SPO Estimates	% Change 70 Census to 73 Estimates
Bar Harbor	3,716	3,807	-2.4	11,334	3818	2.7
Belfast	5,957	6,140	-3.0	7,656	6207	4.2
Blue Hill	1,367	1,270	7.6	2,027	1493	9.2
Boothbay	1,814	1,617	12.2	5,090	1930	6.4
Boothbay Harbor	2,320	2,252	3.0	6,783	2278	-1.8
Camden	4,115	3,988	3.2	7,577	4341	5.5
Castine	1,080	824	31.1	1,633	1215	12.5
Damariscotta	1,264	1,093	15.6	3,539	1445	14.3
Deer Isle	1,211	1,129	7.3	2,633	1314	8.5
East Machias	1,057	1,198	-11.8	1,740	1160	9.7
Eastport	1,989	2,537	-21.6	2,686	2103	5.7
Ellsworth	4,603	4,444	3.6	7,747	5227	13.6
Jonesport	1,326	1,563	-15.2	1,735	1379	4.0
Lubec	1,949	2,684	-27.4	2,704	2029	4.1
Machias	2,441	2,614	-6.6	2,891	2690	10.2
Milbridge	1,154	1,101	4.8	1,942	1238	7.3
Mount Desert	1,659	1,663	-0.2	6,960	1803	8.7
Rockland	8,505	8,769	-3.0	9,835	8390	-1.4
Rockport	2,067	1,893	9.2	3,523	2367	14.5
Searsport	1,951	1,838	6.1	3,062	2042	4.7
Thomaston	2,646	2,780	-4.8	3,007	2841	7.4
Union	1,109	1,196	0.4	1,779	1444	21.4
Vinalhaven	1,135	1,273	-10.8	2,405	1266	11.5
Waldoboro	3,146	2,882	9.2	4,116	3409	8.4
Winter Harbor	1,028	756	36.0	1,595	1207	17.4
Wiscasset	2,244	1,800	24.7	2,989	2468	10.0
	62,933	63,112		108,988	67104	

*Data from 1970 U.S. Census and Maine State Planning Office, Public Affairs Research Center of Bowdoin College

III. Water Quality

A. Segment Classification

Under Section 303 (e) of the Federal Water Pollution Control Act Amendments of 1972 and regulations published in the Federal Register, 40 CFR Parts 130.2 and 131.11 all segments of each Basin must be classified as a Water Quality Segment (WQS) or an Effluent Limited Segment (ELS) as defined in 40 CFR Part 130.2.

A WQS is described as:

> "Any segment where it is known that water quality does not meet applicable water quality standards and/or is not expected to meet applicable water quality standards even after the application of the effluent limitation required by Sections 301 (b) (1) (B) and 301 (b) (2) (A) of the Act".

An ELS is described as:

> "Any segment where it is known that water quality is meeting and will continue to meet applicable water quality standards or where there is adequate demonstration that water quality will meet applicable water quality standards after the application of the effluent limitations required by Sections 301 (b) (1) (B) and 301 (b) (2) (A) of the Act".

Applicable water quality standards are those published in Title 38 MRSA, Section 363-364, 368-371 such as A, B-1, B-2, C, D, etc. This classification system is described in Appendices I and II and shown in Figures 2A and 2B. Waste load allocations must be calculated for sources discharging into a WQS as required by Section 303 (d) (1) (C) of the Act.

The effluent limitations required by the above mentioned sections of the Act are best practicable control technology for other than publicly owned wastewater treatment facilities and secondary treatment for publicly owned facilities.

In addition to the segment classifications WQS and ELS, the Maine Department of Environmental Protection (DEP) has established another designation, Lake Stress Quality (LSQ). This category was created because lakes and ponds often have problems not encountered in rivers and streams. LSQ refers to an impoundment

Sec. 363. Standards of classification of fresh waters. The Board shall have 4 standards for the classification of fresh surface waters.

1971, c. 618.

Class **A** shall be the highest classification and shall be of such quality that it can be used for recreational purposes, including bathing, and for public water supplies after disinfection. The dissolved oxygen content of such waters shall not be less than 75% saturation or as naturally occurs, and shall not more than 100 coliform bacteria per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which would impart color, turbidity, taste or odor other than that which naturally occurs in said waters, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of these waters or contain chemical constituents which would be harmful or offensive to humans or which would be harmful to animal or aquatic life. No radioactive matter or substance shall be permitted in these waters other than that occurring from natural phenomena.

There shall be no discharge of sewage or other wastes into water of this classification unless specifically licensed by the commission upon finding that no degradation will result to the quality of such waters and no deposits of such matter fall on the banks of such waters in such a manner that transfer of the material into the waters is likely. Such waters may be used for log driving if such use will not lower its classification.

1971, c. 461, § 2.

Class B, the 2nd highest classification, shall be divided into 2 designated areas as B-1 and B-2.

B-1 Waters of this class shall be considered the higher quality of the Class B group and shall be acceptable for recreational purposes, including water contact recreation, for which are potable water supply after adequate treatment and for a fish and wildlife habitat. The dissolved oxygen of such waters shall be not less than 75% of saturation, and not less than 5 parts per million at any time. The fecal coliform bacteria count is not to exceed 200 per 100 milliliters. The fecal coliform bacteria shall not exceed 40 per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating soil to such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which impairs color, turbidity, taste or odor which would impair the usages ascribed to this classification nor shall such matter or substance alter the temperature or hydrogen-ion concentration of these waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animals or aquatic life or which adversely affect any other water use in this class. No radioactive matter or substance shall be discharged to these waters which will result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

Class **C** waters, the 3rd highest classification, shall be of such quality as to be satisfactory for recreational boating and fishing, for a fish and wildlife habitat and for other uses except potable water supplies and water contact recreation, unless such waters are adequately treated.

The dissolved oxygen content of such waters shall not be less than 5 parts per million, except in those cases where the board finds that the natural dissolved oxygen of any such body of water falls below 5 parts per million, in which case the board may authorize by rule or regulation, in no event shall the dissolved oxygen content of such waters be less than 4 parts per million. The total coliform bacteria is not to exceed 1,000 per 100 milliliters. The fecal coliform bacteria is not to exceed 1,000 per 100 milliliters.

1973, c. 423, § 6.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which impairs color, turbidity, taste, or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion content of the waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affect any other water use in this class. No radioactive matter or substance shall be discharged to these waters which will result in radio-nuclide concentrations above the standards as established by the United States Public Health Service as being acceptable for drinking water. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion content of the waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affect any other water use in this class. No radioactive material or substance shall be discharged to these waters which will result in radio-nuclide concentrations above the standards as established by the United States Public Health Service as being acceptable for drinking water.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification. Treated wastes discharging to these waters shall not create a public nuisance as defined in Title 17, Section 2404, by the creation of odor producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1967, c. 476, § 4; 1969, c. 431, §§ 1-2; 1971, c. 618.

Sec. 365. Tidal or Marine Waters. The Board shall have 6 standards for classification of tidal waters.

1971, c. 470, § 2; 1971, c. 618.

Marine waters shall include the waters of the Atlantic Ocean, its bays, inlets, etc., to mean high tide within 3 nautical miles from the coast line and all other tidal waters within the State generally subject to the rise and fall of the tides. In estuaries or coastal streams subject to the rise and fall of the tides, tidal or marine water classifications shall apply unless otherwise specified by statute.

Class **SA** shall be suitable for all clean water usages, including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 70 per 100 milliliters nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters.

The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof, and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters which are assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.7 to 8.5 range. There shall be no disposal of matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish to the area.

Class **SB** shall be suitable for all clean water usages including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish, and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters.

The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof, and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters which are assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.7 to 8.5 range. There shall be no disposal of matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish to the area.

Class **SB-1** shall be suitable for all clean water usages including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish, and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof, and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of the receiving waters to fall outside of the 6.7 to 8.5 range. There shall be no disposal of matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish if indigenous to this area.

Class **SC** the 4th highest classification, shall be of such quality as to be satisfactory for recreational boating, fishing and other similar uses except primary water contact. Such waters may be used for the prevention of indigenous shellfish to be harvested for depuration purposes, for a fish and wildlife habitat and for industrial cooling and process uses. The dissolved oxygen content of such waters shall not be less than 5 parts per million at any time. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 700 per 100 milliliters, nor shall more than 10% of the samples exceed 2,400 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 150 per 100 milliliters, nor shall more than 10% of the sampler exceed 500 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median number of coliform bacteria in a series of samples representative of the waters shall not exceed 1,500 per 100 milliliters nor shall more than 10% of the samples exceed 5,000 coliform bacteria per 100 milliliters.

In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 300 per 100 milliliters, nor shall more than 10% of the samples exceed 1,000 fecal coliform bacteria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial waste or other wastes, and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic materials, such that the treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or toxic material, such that the treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic materials, such that these treated wastes will not lower the standards or alter the usages of this classification. Treated wastes discharging to these waters shall not create a public nuisance as defined in Title 17, Section 2402, by the creation of odor producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1969, c. 431, § 3; 1970, c. 681, § 2; 1971, c. 618.

Class **SD** waters shall be assigned only where a higher water classification cannot be attained after utilizing the best practicable treatment or control of sewage or other wastes. Waters of this class may be used for power generation, navigation and industrial process waters other adequate to commit.

Dissolved oxygen of these waters shall not be less than 2.0 parts per million. The numbers of coliform bacteria allowed in these waters shall be only those amounts which will not, in the determination of the Commission, indicate a condition harmful to the public health or impair any usages ascribed to this classification.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which impairs color, turbidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of the waters to impair the usages of this classification. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification. Treated wastes discharged to these waters shall not create a public nuisance as defined in Title 17, Section 2802, by the creation of odor-producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1967, c. 476, § 5; 1969, c. 431, § 3; 1970, c. 681, § 2; 1971, c. 618.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CENTRAL COASTAL BASINS

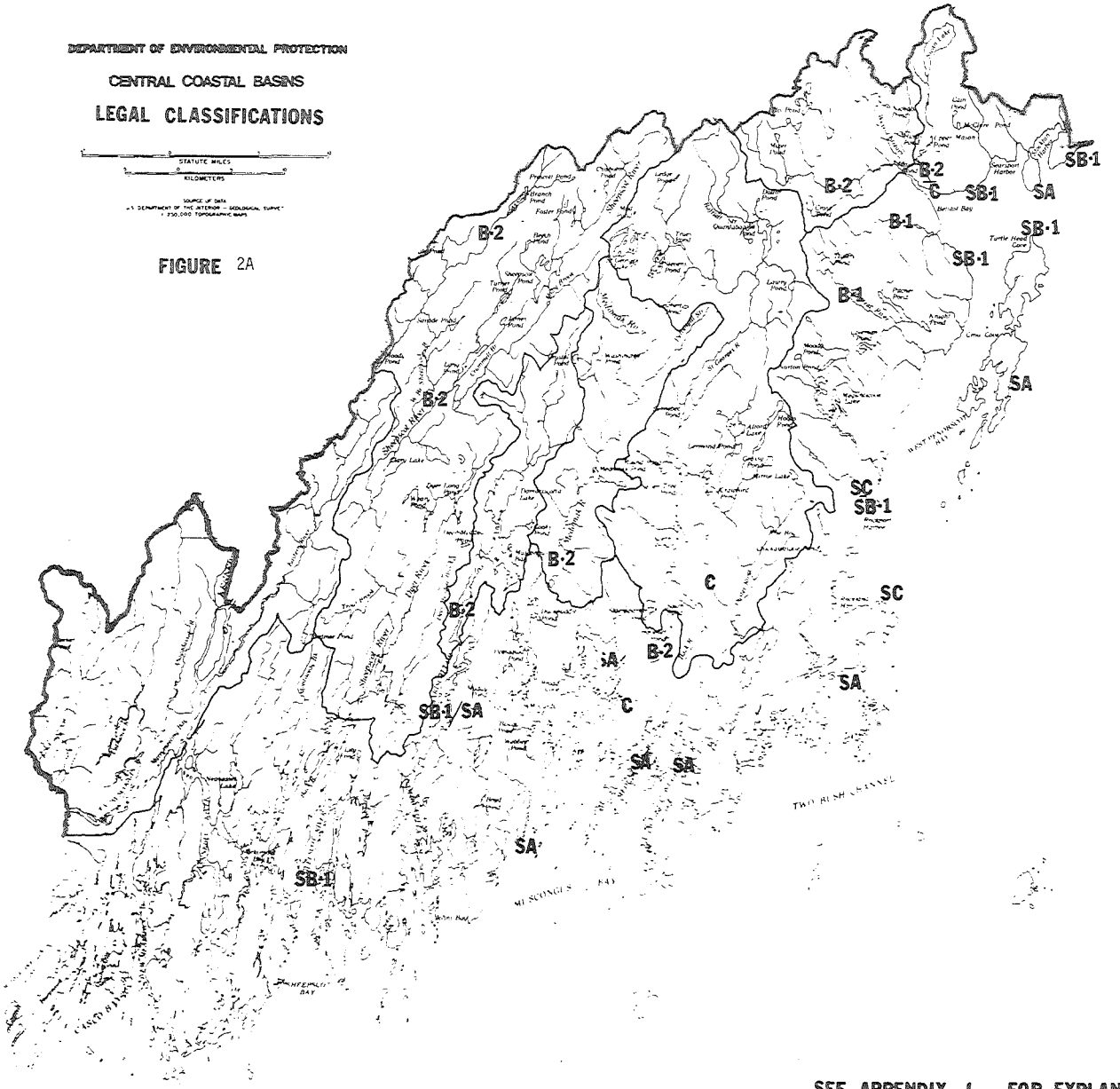
LEGAL CLASSIFICATIONS

STATUTE MILES

KILOMETERS

SOURCE OF DATA
U.S. DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY
1:250,000 TOPOGRAPHIC MAPS

FIGURE 2A



SEE APPENDIX I FOR EXPLANATIONS

Sec. 363. Standards of classification of fresh waters. The Board shall have 4 standards for the classification of fresh surface waters.

1971, c. 618

Class A shall be the highest classification and shall be of such quality that it can be used for recreational purposes, including bathing, and for public water supplies after disinfection. The dissolved oxygen content of such waters shall not be less than 75% saturation or as naturally occurs, and contain not more than 100 coliform bacteria per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which would impart color, turbidity, taste or odor other than that which naturally occurs in said waters, nor shall such matter or substances alter the temperature or hydrogen-ion concentration of these waters or contain chemical constituents which would be harmful or offensive to humans or which would be harmful to animal or aquatic life. No radioactive matter or substance shall be permitted in these waters other than that occurring from natural phenomena.

There shall be no discharge of sewage or other wastes into water of this classification unless specifically licensed by the commission upon finding that no degradation will result to the quality of such waters, and no deposits of such material on the banks of such waters in such a manner that transfer of the material into the waters is likely. Such waters may be used for log driving if such use will not lower its classification.

1971 c. 461, § 2.

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Class B, the 2nd highest classification, shall be divided into 2 designated classes as B-1 and B-2.

B-1 Waters of this class shall be considered the higher quality of the Class B group and shall be acceptable for recreational purposes, including water contact recreation, for use as potable water supply after adequate treatment and for a fish and wildlife habitat. The dissolved oxygen of such waters shall be not less than 75% of saturation, and not less than 5 parts per million at any time. The total coliform bacteria count is not to exceed 300 per 100 milliliters. The fecal coliform bacteria shall not exceed 60 per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification nor shall such matter or substance alter the temperature or hydrogen-ion concentration of these waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animals or aquatic life or which adversely affect any other water use in the class. No radioactive matter or substance shall be discharged to these waters which will raise the radio-nuclide concentrations above the standards as established by the United States Public Health Service as being acceptable for drinking water. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

B-2 Waters of this class shall be acceptable for recreational purposes including water contact recreation, for industrial and potable water supplies after adequate treatment, and for a fish and wildlife habitat. The dissolved oxygen of such waters shall not be less than 60% of saturation, and not less than 5 parts per million at any time. The total coliform bacteria is not to exceed 1,000 per 100 milliliters. The fecal coliform bacteria is not to exceed 200 per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease and scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of the waters so substance alter the temperature or hydrogen-ion concentration of the waters so as to render such waters harmful to fish or other aquatic life. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life, or which adversely affect any other water use in this class. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. No radioactive matter or substance shall be discharged to these waters which will raise the radio-nuclide concentrations above the standards as established by the United States Public Health Service as being acceptable for drinking water. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

Class C waters, the 3rd highest classification, shall be of such quality as to be satisfactory for recreational boating and fishing, for a fish and wildlife habitat and for other uses except potable water supplies and water contact recreation, unless such waters are adequately treated.

The dissolved oxygen content of such waters shall not be less than 5 parts per million, except in those cases where the board finds that the natural dissolved oxygen of any such body of water falls below 5 parts per million, in which case the board may grant deviance to this requirement. In no event shall the dissolved oxygen content of such waters be less than 4 parts per million. The total coliform bacteria is not to exceed 5,000 per 100 milliliters. The fecal coliform bacteria is not to exceed 1,000 per 100 milliliters.

1973, c. 423, § 5.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste, or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion content of the waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affect any other water use in this class. No radioactive material or substance shall be discharged to these waters which will raise the radio-nuclide concentration above the standards as established by the United States Public Health Service as being acceptable for drinking water.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

CLASS D waters shall be assigned only where a higher water classification cannot be attained after utilizing the best practicable treatment or control of sewage or other wastes. Waters of this class may be used for power generation, navigation and industrial process waters after adequate treatment.

Dissolved oxygen of these waters shall not be less than 2.0 parts per million. The numbers of coliform bacteria allowed in these waters shall be only those amounts which will not, in the determination of the Commission, indicate a condition harmful to the public health or impair any usages ascribed to this classification.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of the waters to impair the usages of this classification. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification. Treated wastes discharging to these waters shall not create a public nuisance as defined in Title 17, Section 2802, by the creation of odor producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1967, c. 475, § 4; 1969, c. 431, §§ 1-2; 1971, c. 618.

Sec. 364. Tidal or Marine Waters. The Board shall have 5 standards for classification of tidal waters.

1971, c. 470, § 2; 1971, c. 618.

Marine waters shall include the waters of the Atlantic Ocean, its bays, inlets, etc., to mean high tide within 3 nautical miles from the coast line and all other tidal waters within the State generally subject to the rise and fall of the tides. In estuaries or coastal streams subject to the rise and fall of the tides, tidal or marine water classifications shall apply unless otherwise specified by statute.

CLASS SA shall be suitable for all clean water usages, including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters.
The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other waste or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof; and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters assigned to this class. There shall be no discharge which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.7 to 8.5 range.

There shall be no disposal of any matter or substances that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters would be harmful to humans, animals or aquatic life and their shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish if indigenous to the area.

CLASS SB-1 shall be suitable for all clean water usages including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish, and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 15 per 100 milliliters nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of coliform bacteria in a series of samples representative of the waters shall not exceed 240 per 100 milliliters, nor shall more than 10% of the samples exceed 800 coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 50 per 100 milliliters, nor shall more than 10% of the samples exceed 150 fecal coliform bacteria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combination with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof; and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters which are assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside the 6.7 to 8.5 range. There shall be no disposal of matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material or which interferes with the propagation of fish or shellfish if indigenous to the area.

CLASS SB-2 shall be suitable for recreational usages, including water contact, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish, for a fish and wildlife habitat, and suitable for industrial cooling and process uses. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of coliform bacteria in a series of samples representative of the waters shall not exceed 500 per 100 milliliters, nor shall more than 10% of the samples exceed 1,000 coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 100 per 100 milliliters nor shall more than 10% of the samples exceed 200 fecal coliform bacteria per 100 milliliters. There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those having received treatment for the adequate removal of waste constituents including but not limited to solids color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combination with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof, and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of the receiving waters to fall outside of the 6.7 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish if indigenous to this area.

CLASS SC, the 4th highest classification, shall be of such quality as to be satisfactory for recreational boating, fishing and other similar uses except primary water contact. Such waters may be used for the propagation of indigenous shellfish to be harvested for depuration purposes, for a fish and wildlife habitat, and for industrial cooling and process uses. The dissolved oxygen content of such waters shall not be less than 5 parts per million at any time. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 700 per 100 milliliters nor shall more than 10% of the samples exceed 2,300 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 150 per 100 milliliters, nor shall more than 10% of the samples exceed 500 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median number of coliform bacteria in a series of samples representative of the waters shall not exceed 1,000 per 100 milliliters nor shall more than 10% of the samples exceed 5,000 coliform bacteria per 100 milliliters.

In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 300 per 100 milliliters, nor shall more than 10% of the samples exceed 1,000 fecal coliform bacteria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial waste or other wastes, and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic materials, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, or odor thereof or impair the waters for any other discharge ascribed to waters of this classification. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of the receiving waters to fall outside the 6.7 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animals or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

CLASS SD waters shall be assigned only where a higher water classification cannot be attained after utilizing the best practicable treatment or control of sewage or other wastes. Waters of this class may be used for power generation, navigation, industrial process waters or cooling waters, and for migration of fish. Dissolved oxygen of these waters shall not be less than 3.0 parts per million at any time. The numbers of coliform bacteria allowed in these waters shall be only those amounts which will not, in the determination of the Board, indicate a condition harmful to the public health or impair any usages ascribed to this classification.

1971, c. 618

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of the waters so as to impair the usages of this classification. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification. Treated wastes discharged to these waters shall not create a public nuisance as defined in Title 17, Section 2802, by the creation of odor-producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1967, c. 475, § 5; 1969, c. 431, § 3; 1970, c. 581, § 2; 1971, c. 618.

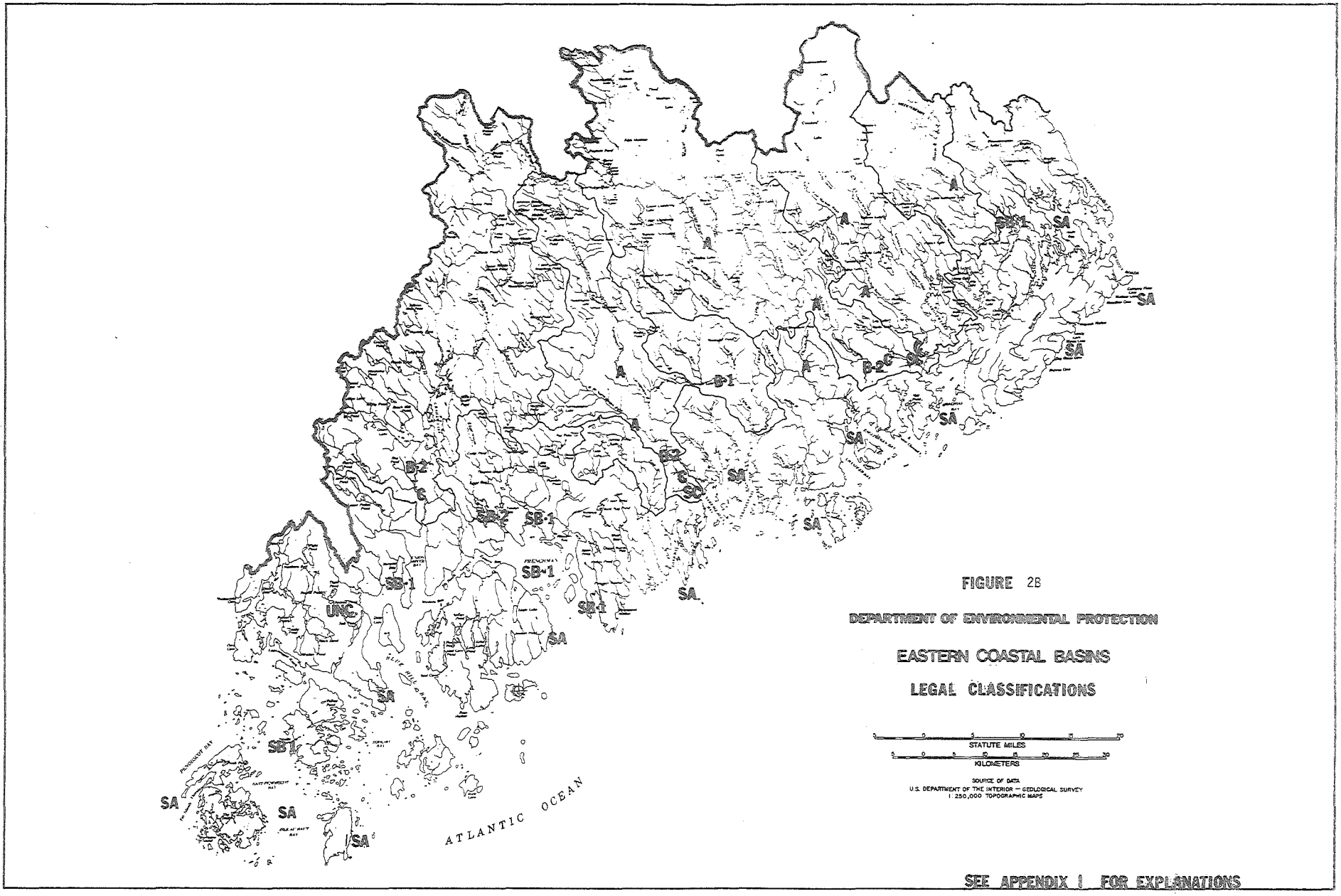


FIGURE 2B

DEPARTMENT OF ENVIRONMENTAL PROTECTION

EASTERN COASTAL BASINS

LEGAL CLASSIFICATIONS

STATUTE MILES

KILOMETERS

SOURCE OF DATA
U.S. DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY
1:250,000 TOPOGRAPHIC MAPS

SEE APPENDIX I FOR EXPLANATIONS

that may not presently be in violation of its assigned standard of classification, but is in such a trophic state that some or all normal uses associated with its classification are impaired.

The waters of the Maine Coastal Basin are all classified as Effluent Limited.

In addition, the DEP has classified Maine segments into four (4) broad categories. These are:

Class I. All Water Quality (WQS) segments as defined by EPA in 40 CFR Part 130 and as described by the DEP Continuing Planning Process (CPP) pursuant to Section 303 (e) of PL 92-500.

Class II. Other severely degraded waters caused by large quantities of untreated municipal and/or industrial wastes causing a nuisance, health hazard, economic losses or other problems. Also, all Lake Stress Quality waters (LSQ) are Class II, as defined by the DEP in the CPP. These are culturally stressed impoundments which have been so classified due to their trophic state.

Class III. Moderate water quality problems including localized problems. These conditions can usually be corrected with the application of conventional treatment means such as solids removal, BOD removals, and chlorination.

Class IV. High quality waters which require preservation with little or no sources of water quality degradation. All lakes and ponds which are not designated as either LSQ or WQS are Class IV segments.

The waters of the Maine Coastal Basin that have been classified according to this system are shown below:

Eastern Coastal Sub-basin

1. III - Machias River below Machias
2. III - East Machias River below East Machias
3. III - Narraguagus River below Cherryfield
4. III - Eastport tidewaters

5. III - Carleton Stream

6. III - Pleasant River

7. III - Craig Brook

8. III - Union River

9. III - Wilson Stream

10. Others, mostly III or IV

Central Coastal Sub-basin

1. III - Passagassawakeag River

2. III - Goose River

3. IV - Damariscotta River

4. III - St. George River

5. II - Medomak River

6. Others, mostly III or IV

The classification system is shown in Figures 3A and 3B.

As additional information regarding the Maine Coastal Basin becomes available the DEP will update the classification system to include the segments that have to date been omitted.

B. Existing Water Quality

The mid to eastern coastal region is among the most scenic in the State. The economy of this rugged coastal area has always been dependent on the sea, either for its resources or its attraction. Fishing, packing and processing, boat building, and recreation have long been the bases of the area economy. High quality water is a necessity if the region is to retain its identity.

Current water quality data for the Maine Coastal Basin is almost non-existent. The overall water quality however, appears to be good with several notable exceptions. These are mainly restricted to the towns surrounding harbors which have

Class **I**. All Water Quality Class (WQ) segments as defined by EPA in 40 CFR Part 130 and as described in the DEP Continuing Planning Process (CPP) pursuant Section 303 (e) of PL 92-500.

Class **II**. Other severely degraded waters caused by large quantities of untreated municipal and/or industrial wastes causing a nuisance, health hazard, economic losses, or other problems. Also, all Lake Stress Quality waters are Class II, as defined by DEP in the CPP. (These are culturally stressed impoundments which have been so classified due to their trophic state).

Class **III**. Moderate water quality problems including localized problems. These conditions can usually be corrected with the application of conventional treatment means such as solids removal, BOD removals, and chlorination.

Class **IV**. High quality waters which requires preservation with little or no sources of water quality degradation. All lakes and ponds which are not designated as either LSQ or WQ are Class IV segments.

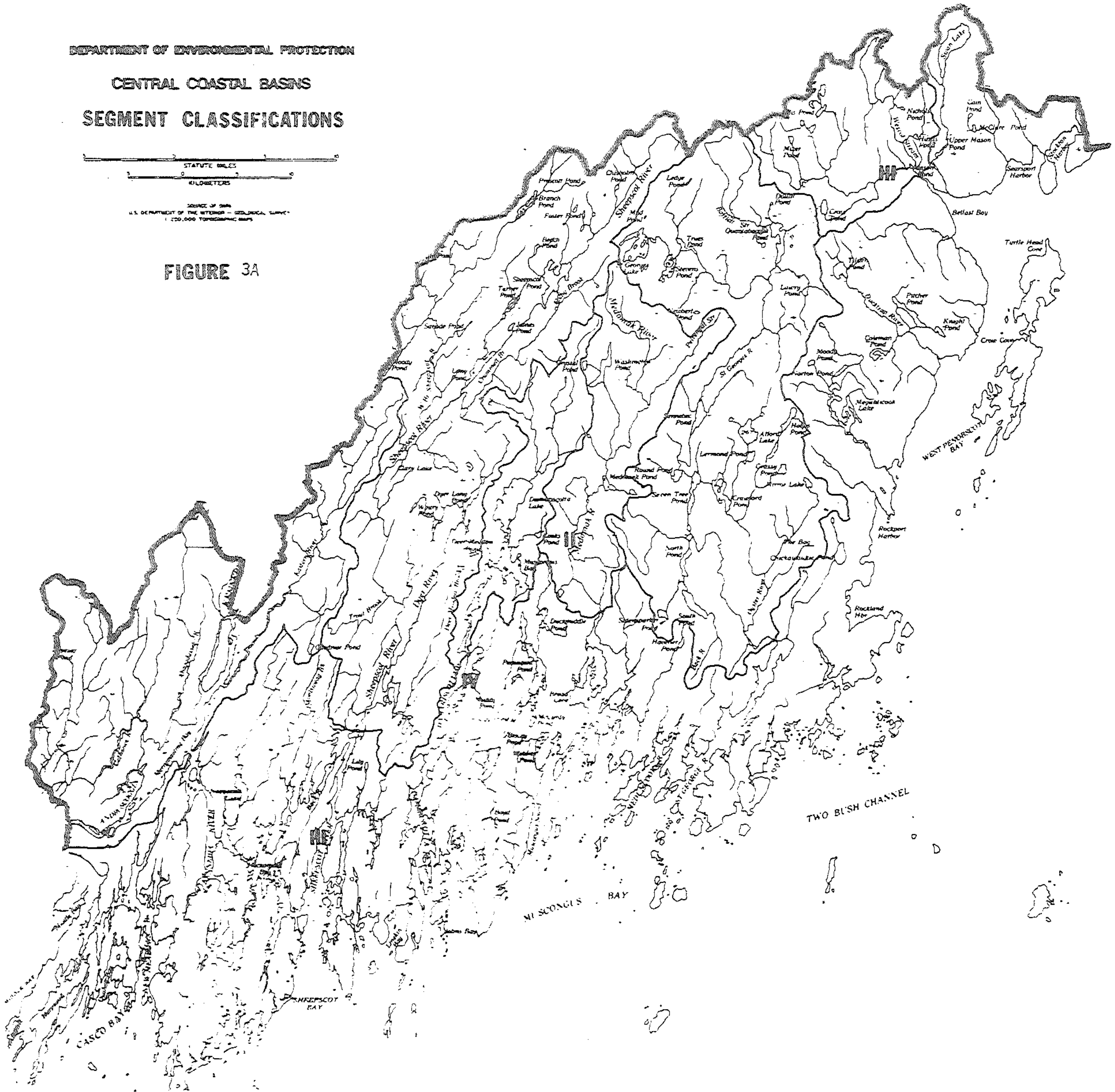
*As of April 1, 1975

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CENTRAL COASTAL BASINS

SEGMENT CLASSIFICATIONS

FIGURE 3A



SEE SECTION III A FOR EXPLANATIONS

Class I. All Water Quality Class (WQ) segments as defined by EPA in 40 CFR Part 130 and as described in the DEP Continuing Planning Process (CPP) pursuant Section 303 (e) of PL 92-500.

Class II. Other severely degraded waters caused by large quantities of untreated municipal and/or industrial wastes causing a nuisance, health hazard, economic losses, or other problems. Also, all Lake Stress Quality waters are Class II, as defined by DEP in the CPP. (These are culturally stressed impoundments which have been so classified due to their trophic state).

Class III. Moderate water quality problems including localized problems. These conditions can usually be corrected with the application of conventional treatment means such as solids removal, BOD removals, and chlorination.

Class IV. High quality waters which requires preservation with little or no sources of water quality degradation. All lakes and ponds which are not designated as either LSQ or WQ are Class IV segments.

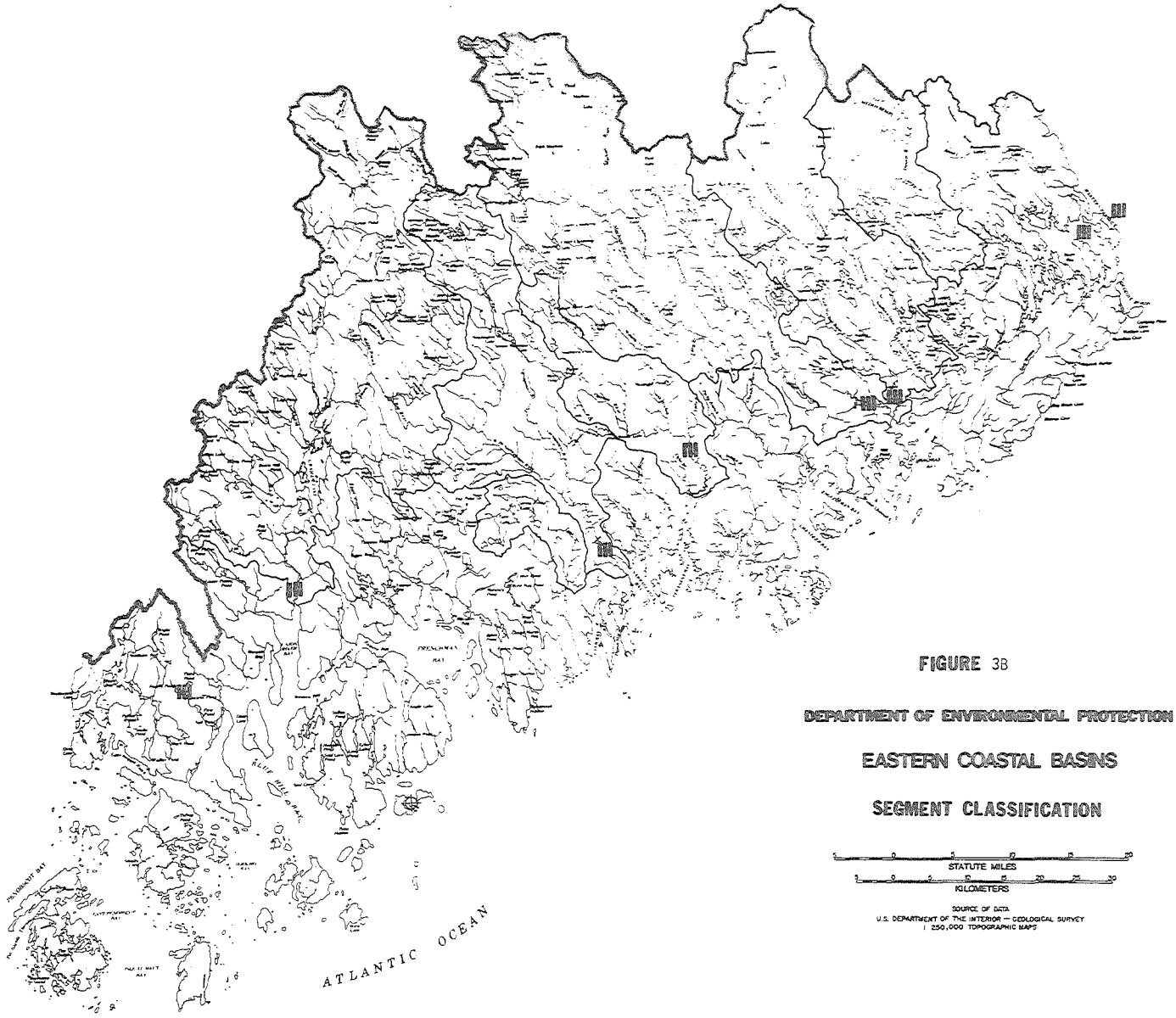


FIGURE 3B

DEPARTMENT OF ENVIRONMENTAL PROTECTION

EASTERN COASTAL BASINS

SEGMENT CLASSIFICATION

STATUTE MILES

KILOMETERS

SOURCE OF DATA
U.S. DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY
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SEE SECTION III-A FOR EXPLANATIONS

received untreated wastes for years. Acres of shellfishing areas in many of these towns have been closed. A few of these towns, such as Thomaston and Waldoboro, which have recently constructed wastewater treatment facilities have seen local shellfishing areas reopened (Table 6).

C. Lakes Water Quality

Lake water quality in the Maine Coastal Basin is also generally considered good. As mentioned previously, there are no Water Quality Segments (WQS) or Lake Stress Quality (LSQ) impoundments in the Basin. The ongoing three (3) year U.S. Geological - DEP Cooperative Limnological Survey is being conducted to obtain detailed water quality information on forty-three (43) Maine lakes. This project includes thirteen (13) lakes in the Maine Coastal Basin. These lakes are listed below:

Beddington	Molasses
Beech Hill	Mopang
Branch	Phillips
Eagle	Pleasant River
Floods	Spectacle
Green	Upper Lead
Hopkins	

The objectives of the study are to:

- gather baseline data on a large number of Maine lakes.
- develop a classification system for Maine lakes according to trophic status.
- determine the impact of shoreline development.
- compare intensive long term sampling efforts with short term sampling.
- determine methods for future water quality data collection.

Table 6

Status of Shellfishing Areas Receiving Discharges from Municipal Wastewater Treatment Facilities in the Maine Coastal Basin*

Facility	Receiving Water	Class of Receiving Water	Acres of Clam Flats Opened Up Due to Facility (DMR Area)	Comments	Year Plant Began Operation
Bar Harbor					
Village	Tidewaters of Bar Harbor	SB-1	None (C-47)		75
DeGregoire Park	Tidewaters of Bar Harbor	SB-1	None (C-49)		74
Hull's Cove	Tidewaters of Bar Harbor	SB-1	None (C-47)		74
Belfast	Belfast Harbor	SC	Under Investigation (C-32)		72
Boothbay Harbor	Boothbay Harbor	SB-1	None (C-23)	Primary Facility	64
Camden	Camden Harbor	SC	None (C-31)		70
Castine	Tidewaters of Castine	SB-2	None (C-36)		74
Machias	Machias River Estuary	SC	Under Investigation (C-55)		75
Mount Desert					
Northeast Harbor	Tidewaters of Mt. Desert	SB-1	240 (C-45)		74
Otter Creek	Tidewaters of Mt. Desert	SB-1	None (C-46)		70
Seal Harbor	Tidewaters of Mt. Desert	SB-1	None (C-46)		73
Somesville	Tidewaters of Mt. Desert	SB-1	None (C-44)		74
Thomaston	St. George River Estuary	SA	1280 (C-27)		67
Waldoboro	Medomak River Estuary	SA	960 (C-26)		68
Wiscasset	Sheepscot River Estuary	SB-1	Seasonal 30 (C-22)		64
			2,510		

*Information from Maine Department of Marine Resources

In keeping with the purposes of the study, the DEP has adopted a lakes classification system based on trophic state and carrying capacity. The system, which differs from other proposed systems because it is based on objective limnological data, incorporates from one to three interrelated parameters to obtain a comparative index of Maine lakes. The parameters are secchi disc transparency, total phosphorus, and chlorophyll a, with secchi disc being the required parameter and at least one of the others being desired. Hopefully this system will allow the impact on lake water quality to be predicted for various levels of development, discharges, etc. in the watershed. It should be noted however, that actual nutrient loads must be used when evaluating individual projects.

The thirteen (13) lakes in the Maine Coastal Basin with sufficient data have been assigned a Trophic State Index (TSI) number by the DEP. These are listed in Appendix III.

IV. Water Pollution Control Program

A. Point Source Wastes

There are a tremendous number of municipal, industrial, and individual waste sources in the Maine Coastal Basin. The impact of these discharges ranges from insignificant to serious water quality degradation. This section will deal with the major sources on a township basis. Figure 4 depicts the municipal and industrial wastewater treatment facilities in the Basin that are completed or under construction.

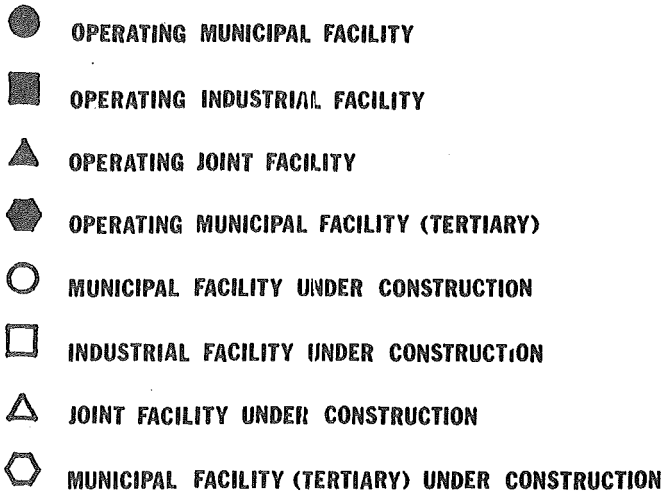
BAR HARBOR

The Town of Bar Harbor is located on Mount Desert Island in Hancock County. The Town had a 1970 population of 3,716 with about sixty-five (65) percent or 2,392 people concentrated in Bar Harbor Village. There are three (3) wastewater collection and treatment systems, one located in the Village, one in Hull's Cove, and another at DeGregoire Park.

The Village system serves 3,100 permanent and 1,300 summer residents via a combined collection system and a 1.2 MGD (million gallons per day) secondary activated sludge treatment facility. The facility is often operating at significantly over capacity due to serious infiltration problems. Two hundred and twenty (220) permanent and six hundred (600) summer residents at Hull's Cove are served by a separate collection system and a secondary activated sludge wastewater treatment facility with a design capacity of 0.065 MGD. Infiltration is a problem throughout a major portion of the system. The effluent is discharged to Class SB-1 Frenchman's Bay. The DeGregoire Park facility serves twenty (20) permanent and seventy (70) summer residents through a separate collection system and a 0.012 MGD "package" secondary treatment facility. This facility also discharges to SB-1 Frenchman's Bay. None of the facilities in the Town include any industrial wastewaters.

BELFAST

The City of Belfast is located in Waldo County where Passaqassawakeaq River enters Penobscot Bay. The 1970 population was 5,957 with about fifty (50) percent


OPERATING MUNICIPAL FACILITY
OPERATING INDUSTRIAL FACILITY
OPERATING JOINT FACILITY
OPERATING MUNICIPAL FACILITY (TERTIARY)
MUNICIPAL FACILITY UNDER CONSTRUCTION
INDUSTRIAL FACILITY UNDER CONSTRUCTION
JOINT FACILITY UNDER CONSTRUCTION
MUNICIPAL FACILITY (TERTIARY) UNDER CONSTRUCTION

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CENTRAL COASTAL BASINS

WASTEWATER TREATMENT FACILITIES

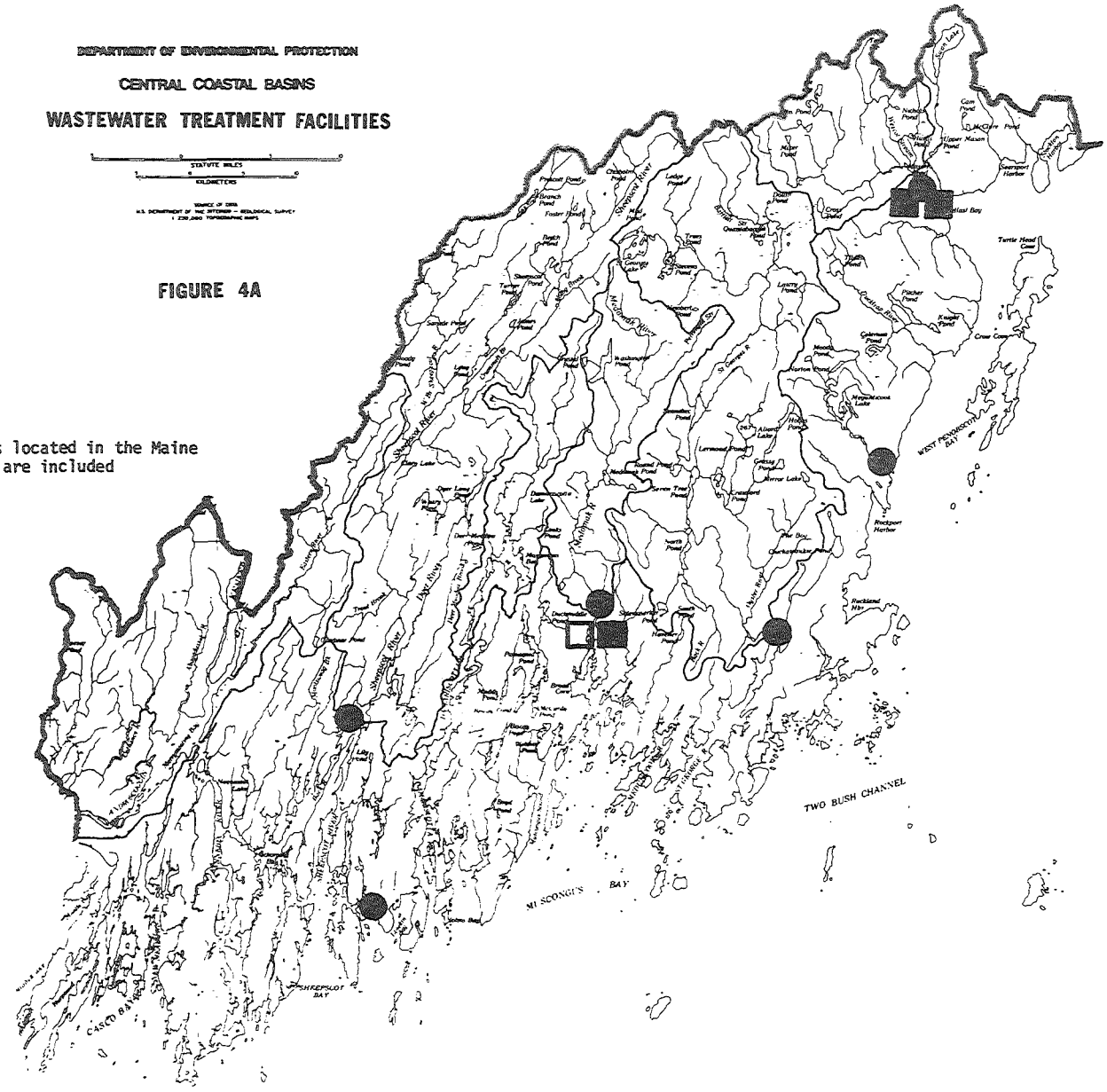
STATUTE MILES

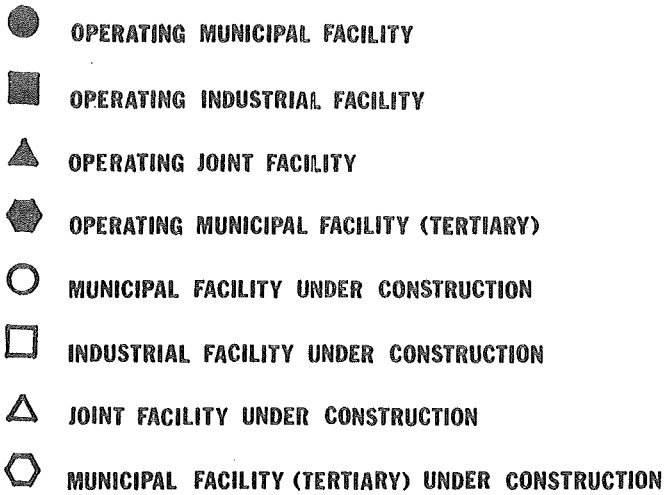
KILOMETERS

SOURCE OF DATA
U.S. DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY
1:250,000 TOPOGRAPHIC MAPS

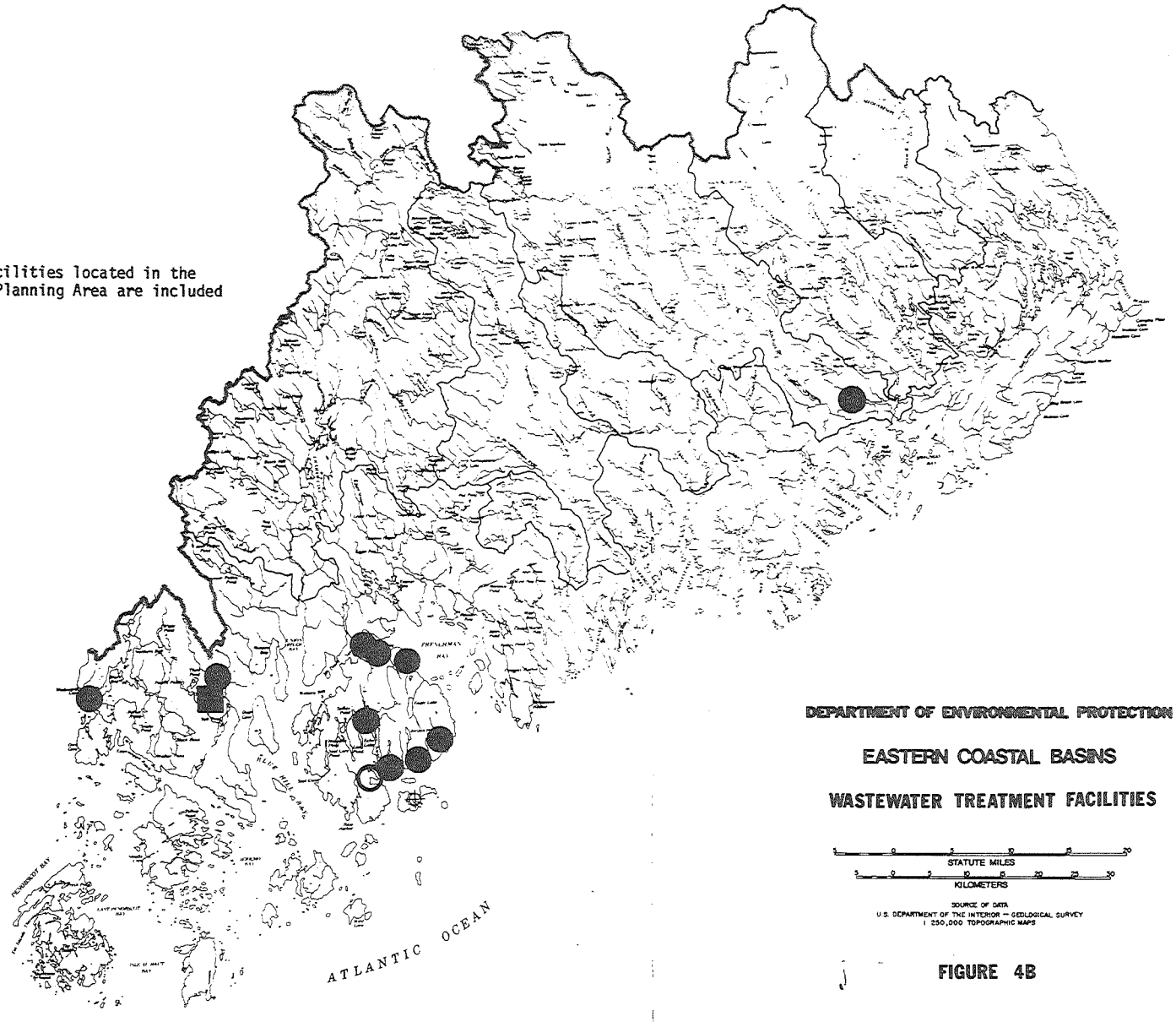
FIGURE 4A

Note: Only those facilities located in the Maine Coastal Basin Planning Area are included




OPERATING MUNICIPAL FACILITY
OPERATING INDUSTRIAL FACILITY
OPERATING JOINT FACILITY
OPERATING MUNICIPAL FACILITY (TERTIARY)
MUNICIPAL FACILITY UNDER CONSTRUCTION
INDUSTRIAL FACILITY UNDER CONSTRUCTION
JOINT FACILITY UNDER CONSTRUCTION
MUNICIPAL FACILITY (TERTIARY) UNDER CONSTRUCTION

Note: Only those facilities located in the Maine Coastal Basin Planning Area are included



DEPARTMENT OF ENVIRONMENTAL PROTECTION

EASTERN COASTAL BASINS

WASTEWATER TREATMENT FACILITIES

STATUTE MILES

KILOMETERS

SOURCE OF DATA
U.S. DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY
1:250,000 TOPOGRAPHIC MAPS

FIGURE 4B

being served by a combined collection system. The wastewater treatment system went into operation in 1972 with a secondary activated sludge facility that discharges to Class SC Belfast Harbor. The facility was designed to accept the wastes from two (2) major industries, Penobscot Frozen Foods and Belfast Canning Company. Presently however, only Penobscot Frozen Foods with a flow of 0.01 MGD has been connected. Due to substantial infiltration problems the facility often operates 0.18 MGD over its average design capacity of 0.51 MGD. In the future the collection system is to be separated.

Belfast Canning Company (Division of Addison Packing Company) presently discharges sanitary wastes from its seafood processing plant to the municipal system. Construction is underway on an oil skimming system to pretreat the can dump wastes prior to discharge to the municipal system. Under this proposal the only wastewater that will be discharged directly will be retort water and screened flume and fish pump water which will go to the Class SC Passagasswakeag River.

Maplewood Packing Company and Penobscot Poultry Processing, both poultry processing plants, have their own wastewater treatment facilities. The method of treatment is physical-chemical air flotation followed by chlorination. The effluents, 0.950 MGD, and 1.491 respectively, are then discharged to the Class SC Passagasswakeag River.

State Sand and Gravel has a discharge of 0.192 MGD to a lagoon from a gravel washing operation. Eighty (80) percent of this is recycled. Excess water from the lagoon is discharged to Wood Stream, a Class B-1 waterway, via an overflow pipe.

Belfast Beverage Company is connected to the municipal system.

BLUE HILL

Blue Hill is located in Hancock County twelve (12) miles southwest of Ellsworth. The Town, with a 1970 population of 1,367, recently put a 0.07 MGD activated sludge

secondary wastewater treatment facility into operation that serves 545 people through a separate collection system. The effluent is discharged to Class SB-1 Blue Hill Harbor.

Kerramerican, Inc., a subsidary of Noranda Mines Ltd., is a mining operation located in the southwestern part of the Town. Copper and Zinc is mined, extracted, and concentrated on site by a process known as froth flotation. Chemically assisted settling lagoons treat 0.378 MGD of surface runoff, underground mine water, and process water and the effluent is discharged to Class B-2 Carleton Stream.

BOOTHBAY

The Town of Boothbay, with a 1970 population of 1,814, presently has no municipal collection or treatment facilities. All disposal is handled on an individual basis through various methods including septic tanks, cesspools, leach fields, and untreated discharges. A preliminary plan was prepared for the Town in 1970 which indicated that each of the three (3) distinct population centers of Boothbay Center, East Boothbay, and Ocean Point should be served by unconnected systems. It was recommended that provisions be made to include Boothbay Center in the existing Boothbay Harbor system and individual facilities be installed for each of the other two (2) areas.

Boothbay has only 15 points on the State Municipal Discharge Priority Point System (Appendix IV), as outlined in the 1975 Continuing Planning Process Report published by the DEP, so it seems unlikely that the Town will be receiving planning or construction grants in the near future.

BAYVILLE VILLAGE CORPORATION (Boothbay)

Bayville is a small coastal community in Lincoln County that straddles the Boothbay Harbor - Boothbay town line. The entire population of approximately one hundred and fifty (150) people is served by a separate collection system however, no treatment is provided prior to discharge to Linekin Bay.

A preliminary plan was prepared which recommended treatment via a septic tank, sand filter, chlorination system. The average design capacity was 0.011 MGD.

Bayville has only 15 points on the State Municipal Discharge Priority Point System so although the plan may be updated in the forseeable future, it will probably be some time before the Corporation receives a construction grant.

BOOTHBAY HARBOR

Boothbay Harbor is a small coastal town with a 1970 population of 2,320, located just south of Boothbay. Approximately seventy-two (72) percent of the population or 1,650 people are presently being served by a collection system and primary wastewater treatment facility that has been in operation since 1964. The design capacity of the facility is 0.64 MGD, but the current average daily flow is 0.35 MGD. The effluent is discharged to Class SB-1 Boothbay Harbor. The collection system is primarily separated but contains five (5) catch basins. Plans have been made to remove these from the system. Infiltration and inflow are both considered problems that need correction as two (2) pumping stations periodically overflow. As the facility needs to be upgraded to comply with recent State and Federal regulations, a secondary system is being designed. The Town however, with 14 points on the State Municipal Discharge Priority Point System, has a relatively low ranking and is unlikely to receive funds for upgrading for some time. As stated above, it has been recommended that the proposed Boothbay Village system be connected to the existing Boothbay Harbor facility.

BOWDOINHAM

The Town of Bowdoinham with a 1970 population of 1,294 presently has no municipal collection or treatment facilities. A 1971 preliminary plan recommended a collection system and a 0.060 MGD secondary treatment facility be constructed to replace the private "straight" pipes and malfunctioning septic tanks, leach fields, and cesspools. The effluent would be discharged to the Class C Cathance River.

Bowdoinham is quite low on the State Municipal Discharge Priority Point System with 14 points. It will probably be quite some time before the Town receives a grant.

CAMDEN

The Town of Camden is located eight (8) miles north of Rockland in Knox County. The 1970 population was 4,115, of which almost eighty-three (83) percent or 3,400 people are presently receiving collection and treatment services through the municipal system. The collection system is basically separate with only five (5) catch basins included. These are scheduled to be removed in the near future. Secondary treatment is accomplished by the extended aeration mode of activated sludge. The facility was designed for an average daily flow of 1.21 MGD and the current flow is 1.0 MGD. The effluent is discharged to Class SC Camden Harbor.

Two (2) of the Town's major industries, Knox Woolen Company and Camden Tanning Corporation, are connected to the municipal system.

CASTINE

The Town of Castine is located on Penobscot Bay in Hancock County seventeen (17) miles south of Bucksport. The Town had a 1970 population of 1,080 of which 980, along with 290 midshipmen from the Maine Maritime Academy, are served by the municipal collection and treatment system. The collection system is separate but due to its age has excessive infiltration. The extended aeration activated sludge secondary treatment facility was put into operation in 1974. The design capacity is 0.13 MGD but the facility has operated at considerably over design capacity because of the infiltration. The effluent is discharged to Class SB-2 tidewaters of Castine Harbor.

CHERRYFIELD

Cherryfield is located on the Narraguagas River in Washington County. Presently, wastewater disposal is handled on an individual basis via private lines, septic tanks, leach fields, and/or cesspools. Generally, the soils in the Town are

not well suited to subsurface disposal. The Town, with a 1970 population of 771, had a preliminary plan prepared in 1973. It recommended constructing a collection and treatment system that would discharge to the Class SC Narraguagus River. An alternative proposed in the plan was to transport the wastes to Milbridge, for treatment at a proposed facility in that Town. However, due to its low position on the State Municipal Discharge Priority Point System it is unreasonable to assume that Cherryfield will be funded in the near future.

A.L. Stewart & Sons and Jasper Wyman & Son operate blueberry canneries in the Town of Cherryfield. Their present DEP licenses and NPDES permits required separation and treatment of sanitary wastes prior to the 1975 processing season and treatment of process wastewaters by the start of the 1976 processing season.

Two fish rearing operations, Deblois Fish Hatchery and Deblois Rearing Pools, are located in the Town. It has been determined that treatment will be necessary and can be accomplished with sedimentation ponds.

DAMARISCOTTA-NEWCASTLE-NOBLEBORO (Great Salt Bay Sanitary District)

A sanitary district was formed in 1972 to prepare for the eventual construction of collection and treatment facilities to serve the built-up portions of Damariscotta, Newcastle, and Nobleboro, coastal communities bordering the Damariscotta River. Presently there are no collection and treatment facilities for these three (3) communities. Disposal is handled privately through private sewers which discharge untreated or septic wastes to the Damariscotta River.

The Sanitary District is quite high on the State Municipal Discharge Priority Point System and consequently has received a Fiscal Year 1976 (FY 76) Section 201 Step 1 (Facilities Plan) grant. Preliminary recommendations indicate that the initial proposed system will serve 1,930 permanent and 100 summer residents in the Damariscotta Center - Newcastle Center vicinity, with a secondary extended aeration - activated sludge facility having an average design capacity of 0.33 MGD.

EAST MACHIAS

The Town of East Machias presently has an insufficient public collection system. A preliminary plan was prepared for the Town in 1971. The plan proposed a collection and treatment system serving 856 or about eighty (80) percent of the 1,057 people in the Town. The collection system would serve the built-up portion of the Town and treatment would be accomplished by a secondary extended aeration-activated sludge "package" treatment facility with a design capacity of 0.090 MGD. Discharge would be to the Class C-East Machias River. However, the Town of East Machias is not included on the State Municipal Discharge Priority Point System. This, combined with the fact that the Town population has consistently decreased during the last century, points to the conclusion that municipal collection and treatment is an unlikely prospect for East Machias, at least in the near future.

EASTPORT

Eastport, a coastal community in Washington County, is the easternmost city in the United States. The 1970 population was 1,989 of which 1,920 or over ninety-six (96) percent are served by the separate municipal collection system. The raw wastes are discharged to Passamaquoddy and Cobscook Bays through numerous outfalls resulting in closed clam flats all around the City.

A preliminary report was completed for the City in 1971 which recommended:

- Close circuit television inspection of the collection system to determine sewer sizes, location, condition, and flow.
- Interceptor lines to transport the wastes to the treatment facilities.
- Three (3) separate treatment facilities, one at Quoddy Village (aerated lagoon), one at Redoubt Hill (septic tank and leach field), and another for the City Proper (aerated lagoon).

Eastport however, is quite low in the State Municipal Discharge Priority Point System with 15 points and is unlikely to be funded for some time.

There are several industries in the City of Eastport. As would be expected,

most of these are dependent on sea products, particularly sardines and pearl essence. Treatment requirements for the sardine industry are basically limited to screening at the present time and there are no guidelines for treatment of wastes from pearl essence extraction operations.

Recently the Board of Environmental Protection (BEP) approved the application of the Pittston Company to construct a 250,000 barrel per day oil refinery and marine oil terminal in the Town of Eastport. The approval was granted more than two (2) years after Pittston submitted its original application. Due to the complexity of this controversial project and the tremendous potential impact on the environment, the approval was subject to numerous conditions which may preclude construction. Environmental organizations and two (2) State departments have filed to appeal the BEP decision.

ELLSWORTH

The City of Ellsworth is located in Hancock County twenty-six (26) miles southeast of Bangor on U.S. Route 1-A. The 1970 population was 4,603, of which about eighty-seven (87) percent or 4,000 people receive collection services through an old combined system which empties into the Union River through twelve (12) outfalls. Infiltration is high due to the extremely poor condition of the lines. Numerous individual outfalls from private homes and commercial establishments also discharge untreated wastes to the Union River.

A facilities plan for the City of Ellsworth was completed in 1975 which recommended that a separate collection and secondary wastewater treatment facility be constructed to serve an initial population of 3,560 and a design population of 6,480 people from Ellsworth, Ellsworth Falls, and West Ellsworth. The wastewater treatment plant will be designed for an average daily flow of 0.648 MGD although the initial flow has been estimated at only 0.356 MGD. The method of treatment recommended in the facilities plan was the rotating disk process

of secondary biological treatment. It was proposed that the old collection system be used only for stormwater. The effluent will be discharged to the Class C Union River.

Ellsworth has been awarded an FY 76 Section 201 Step 2 (Final Plans and Specifications) grant and an FY 76 Step 3 (Construction) grant due to its high position (22 points) on the State Municipal Discharge Priority Point System. Construction is scheduled to begin during 1976.

Hancock County Creamery is connected to the municipal system, Green Lake National Fish Hatchery has a secondary "package" unit followed by subsurface disposal for its sanitary wastes and settling lagoons for its fish rearing wastes.

ISLESBORO

Islesboro is a small island located ten (10) miles northeast of Belfast in Penobscot Bay. One hundred (100) of the island's approximately four hundred (400) residents receive service from an existing collection system. Treatment is provided by a 0.006 MGD septic tank.

A preliminary plan prepared in 1968 recommended installing a 0.010 MGD "package" secondary wastewater treatment facility and the Town proposed to expand the collection system. Although infiltration is not a problem, inflow, primarily from cellar drains, should be corrected.

The plan was updated in 1971 to consider alternative treatment systems. The report recommended that a septic tank, sand filter, chlorination system be considered. However during final design, space considerations necessitated returning to the "package" system.

Due to its position on the list and the fact that the system has been designed for some time, Islesboro should receive construction funds in the near future.

LUBEC

Lubec is located south of Eastport in Washington County. The Town, with a 1970 population of 1,949, has only one (1) municipal collection line. It, along with a private line that serves several dwellings, empties into the ocean. Presently there are no plans for municipal treatment. A consultant was hired to do a preliminary plan, but a lack of funding precluded any work being done. Although Lubec is on the State Municipal Discharge Priority Point System and as such is recognized as a need, it has not been assigned any points. Negotiations for preparation of a facilities plan however, are underway.

Several fish processing industries have been located in Lubec in the past but only three (3) are known to be operating presently. These are Booth Fisheries, McCurdy Fish, and R.J. Peacock Canning Companies. A compliance schedule contained in the DEP license of each of these operations is shown below:

Booth Fisheries and R.J. Peacock Canning Company

a. Report on progress of installation of waste disposal and treatment equipment by March 1, 1976.

b. Achieve effluent limitations for all wastewater discharges by October 1, 1976.

c. Report within 6 months on spill prevention and containment measures and methods to be taken to prevent and/or contain any spills of pulp, chemicals, oil or other contaminents and shall specify means of disposal and/or treatment to be practiced. (April 22, 1975).

The NPDES permit differs from the DEP license in that it requires commencement of wastewater treatment construction activities by October 1, 1975.

McCurdy Fish Company

1. The permittee shall achieve compliance with the effluent

limitations specified for discharges in accordance with the following schedule:

a. Report on design and procurement of all required waste disposal and treatment equipment. - January 1, 1975

b. Report on procurement status and installation of waste disposal and treatment equipment. - June 30, 1975

c. Report on installation of waste disposal and treatment equipment. - March 31, 1976

d. Achieve effluent limitations for all waste water discharges. - September 30, 1976

MACHIAS

Machias is located on U.S. Route 1 at the head of Machias Bay in Washington County. The Town straddles the Machias River at the head of tide just upstream from the confluence of the Middle River. There is an existing collection system that serves about one-half of the 1970 Town population of 2,441. The system is predominantly separated but infiltration is a significant problem.

Machias recently constructed a 1.2 MGD wastewater treatment facility which uses the extended aeration mode of activated sludge for treatment. The facility began operation in 1975 and serves an estimated 1,250 people including the University of Maine at Machias campus. The effluent is discharged to Class SC Machias River. Infiltration and inflow are a problem as flows to the facility during wet weather have exceeded the average daily design capacity.

MILBRIDGE

Milbridge is a small town located in Washington County where the Narraguagus River enters Narraguagus Bay. The Town had a 1970 population of 1,154. Portions of the Milbridge Village area are served by an old and inadequate collection system that empties into Narraguagus Bay. Numerous private lines also discharge to the Bay from the Village area. A facilities plan is presently being prepared for the Town.

Two (2) sardine processing operations are located in Milbridge, Jasper Wyman & Sons and L. Ray Packing Company. Both of these operations are scheduled to have wastewater treatment by the start of the 1976 processing season.

MOUNT DESERT

The Town of Mount Desert is located south of Bar Harbor on Mount Desert Island in Hancock County. The Town had a 1970 population of 1,659 concentrated primarily in four (4) communities. Each of these villages, Northeast Harbor, Otter Creek, Seal Harbor, and Somesville, has a wastewater collection and treatment system.

Northeast Harbor, located at the southern end of Somes Sound, is the largest village in the Town. The treatment facility serves 600 of the 700 permanent residents plus 1,400 summer residents. The facility has a design flow of 0.33 MGD and since it began operation in 1973, the daily flow has averaged 0.18 MGD. Infiltration however, causes a peak flow almost twice as large as the average flow.

Otter Creek, located in southeastern Mount Desert, has a system that provides wastewater collection and treatment for 350 of its 400 year-round residents in addition to serving 1,600 summer residents. The extended aeration-activated sludge facility went into operation in 1970. The design flow of 0.15 MGD appears sufficient to handle peak flows plus growth as the collection system is completely separated and infiltration is not a problem.

Seal Harbor is located about five (5) miles east of Northeast Harbor on the southeastern coast of Mount Desert Island. Eighty-three (83) percent or 250 of the 300 permanent residents are connected to the municipal collection and treatment system. The system also serves 1,300 summer residents. The 0.4 MGD facility uses the extended aeration-activated sludge method of secondary treatment. The collection system is separate but infiltration is a major problem in the old part of the system.

Somesville is located in the northern part of the Town, at the head of Somes Sound. The collection and treatment system serves 100 of 200 permanent residents plus 150 summer residents. The treatment facility is an extended aeration-activated sludge system with an average design capacity of 0.25 MGD.

The effluent from each of the facilities in the Town is discharged to the SB-1 tidewaters of Mount Desert.

NORTH HAVEN

The Town of North Haven is an island located nine (9) miles east of Rockland in Penobscot Bay. Presently a separate collection system serves approximately three

Several industries are included in the design of the facility. These are shown below:

Marine Colloids	
Pen Bay Fisheries	North Lubec Mfg. & Canning
National Sea Products	Seapro
F.J. O'Hara	Port Clyde Packing
Holmes Packing	The Pearl Corp.

Construction of the treatment facility is not yet underway but several of the industries have necessary pre-treatment facilities under construction or completed.

ROCKPORT

Rockport is located in Knox County between Rockland and Camden. The 1970 Town population was 2,067, the majority of which is concentrated in the Village of Rockport where Goose River enters Rockport Harbor. About 750 people in Rockport Village receive collection services but not treatment from private or communal system which discharge to Rockport Harbor. A preliminary plan prepared in 1966 recommended an expanded collection system followed by secondary treatment and eventual discharge to Rockport Harbor. More recently, however, a summary was prepared which recommended that the wastes from different portions of the Town be pumped to Camden and Rockland for treatment.

As Rockport moves higher on the State Municipal Discharge Priority Point list the plan will be updated to reflect recent changes in the facilities plan regulations.

ST. GEORGE

The Town of St. George is a coastal community with a 1970 population of 1,639 in Knox County. There are two (2) developed areas in the Town, Tenants Harbor and Port Clyde.

Tenants Harbor is served by a series of common sewers, which discharge untreated wastes into the ocean. The preliminary plan, prepared in 1969, recommended abandoning these lines entirely. Port Clyde has an existing collection system which the preliminary plan recommended abandoning also. The wastewater treatment method proposed for St. George was extended aeration - activated sludge with a 0.054 MGD facility at Tenants Harbor and a 0.041 MGD facility at Port Clyde.

The plan however, must be updated and as St. George has only 15 points on the State Municipal Discharge Priority Point System, funding in the near future is unlikely.

SEARSPORT

Searsport is located in Waldo County north of Belfast on U.S. Route 1. The Town had a 1970 population of 1,951, the majority of which is concentrated in Searsport Center. There is an existing collection system in the community but no treatment. Untreated wastes from the predominantly separated system are discharged to Penobscot Bay.

A preliminary plan was prepared in 1959 which recommended a combined collection system and primary treatment. The plan was updated in 1969 to conform to State and Federal requirements. The updated plan recommended a separate collection system and secondary treatment. The proposed system would initially serve 950 persons. Recently, Searsport received an FY 76 Step 1 (Facilities Plan) grant to investigate the various alternatives and to recommend a course of action.

Searsport has several oil terminal-storage areas located in the Town. Stormwater from these facilities is treated in oil-water separators and discharged to Searsport Harbor - Penobscot Bay.

Recently it has been reported in several newspapers that Central Maine Power Company - Maine Yankee Atomic Power Company is considering building a nuclear power plant on Sears Island, a 700 acre island located several hundred yards from

the mainland. Discharge would probably consist of uncontaminated condenser cooling water, system wastes, condenser backwash, and treated sanitary wastes. However, applications have not yet been filed.

SOUTHWEST HARBOR

Southwest Harbor is located on the southwestern arm of Mount Desert Island in Hancock County. The 1970 resident population was 1,657 but this increases by approximately one-third during the summer months. Less than ten (10) percent of the population is connected to the present municipal collection system which discharges untreated wastes to Norwood Cove. The majority discharge raw wastes to Southwest Harbor through private lines.

The Town has a collection system and secondary treatment facility under construction to serve about 1,450 permanent and 500 seasonal residents. The 0.375 MGD facility was also designed to accept the wastes from Addison Packing Company, a fish packing plant. Addison has the required pre-treatment facilities under construction.

SQUIRREL ISLAND VILLAGE CORPORATION (Southport)

Squirrel Island is an incorporated village located on an island in the Town of Southport about one (1) mile east of Southport Island. The village presently has a collection system with several outfalls but no treatment. A preliminary plan prepared in 1972 recommended secondary treatment to be accomplished by two (2) facilities because of the seasonal nature of the population. One was to be a batch type activated sludge plant with a capacity of 0.008 MGD and the other an extended aeration-activated sludge facility with a capacity of 0.032 MGD. The small plant would operate early and late in the season and the larger facility would operate to serve the approximately 500 people on the island during the two (2) months of peak population.

Due to its low position on the State Municipal Discharge Priority Point System Squirrel Island is unlikely to receive construction funds for some time.

hundred (300) people but no treatment is provided. A preliminary plan prepared in 1969 proposed secondary treatment for approximately 462 people via an oxidation ditch with an average design capacity of 0.050 MGD. Only about twelve (12) percent of the existing collection system will be incorporated into the proposed system.

The preliminary plan needs to be updated however, North Haven has only 15 points on the State Municipal Discharge Priority Point System and as such will probably not receive funds for some time.

NORTHPORT VILLAGE CORPORATION (Bayside)

Bayside is a small community located in the Town of Northport on Penobscot Bay. Approximately eighty-two (82) percent of the seasonal population of 750 is served by a public collection system. However, only ten (10) year round residences are connected to the existing system. A preliminary plan prepared some time ago recommended a 0.064 MGD secondary facility to be operated at full capacity during the summer months when the population is at its maximum, but only intermittently from November through April to prevent the plant from becoming septic.

A FY 76 Step 1 (facilities plan) grant was awarded to update the plan.

ROCKLAND

The City of Rockland is located on Rockland Harbor in Knox County. The City had a 1970 population of 8,505, of which almost two-thirds is connected to the municipal collection system which discharges to Class SC Rockland Harbor. The majority of the system is combined.

Rockland received an FY 74 construction grant for a secondary wastewater treatment facility. The City has proposed to build an extended aeration-activated sludge facility with an average design capacity of 2.80 MGD and a peak flow capacity of 7.80 MGD.

THOMASTON

The Town of Thomaston is located in Knox County on the St. George River Estuary. The 1970 population of the Town was 2,646, of which 2,160 were concentrated in Thomaston Center. About 2,000 people, 92 percent of the Village population or 75 percent of the Town population, are served by a combined collection and a secondary extended aeration-activated sludge treatment facility which discharges to the Class SA St. George River.

TREMONT

The Town of Tremont is situated on the southwestern shore of Mount Desert Island in Hancock County, approximately twenty-five (25) miles south of Ellsworth. The Town had a 1970 population of 1,003, the majority of which is centered around Bass Harbor in two (2) village areas known as Bernard and Bass Harbor.

Presently, no collection nor treatment services are provided in the Town. Disposal is handled individually through various combinations of septic tanks, leach fields, cesspools, and "straight pipes". A preliminary plan was prepared in 1973 which recommended construction of a conventional wastewater treatment facility with a 0.016 MGD capacity in the initial phase. This initial phase would allow connection of Bass Harbor and the Ferry Terminal at the predicted flows for the year 2000.

An updated plan will be required because of recent changes in facilities plan regulations. Tremont has eighteen (18) points on the State Municipal Discharge Priority Point System and as such, will be considered for a Step 1 grant as funds become available.

UNION

The Town of Union is located on the St. George River in Knox County. The Town with a 1970 population of 1,189 presently has no municipal collection or treatment facilities. Disposal is accomplished through private lines, septic tanks,

leachfields, and/or cesspools. A 1973 preliminary plan recommended a collection and treatment system that would initially serve the built-up portions of the Town and replace the malfunctioning underground units in these areas. Union is included on the State Municipal Discharge Priority Point System and as such is recognized as a need, although as yet no points have been assigned.

Industrial activity in the Town is limited to a blueberry cannery owned by A.L. Stewart and Sons and a limestone quarry. The effluent from the cannery operation consists only of 0.050 MGD of uncontaminated cooling water which is discharged to Class B-1 Seven Tree Pond. The quarry discharges 0.250 MGD from a settling lagoon into Class C St. George River.

VINALHAVEN

Vinalhaven is an island located approximately fourteen (14) miles east of Rockland in Penobscot Bay. The island had a 1970 population of 1,135. Over three-quarters of the population is concentrated around Carver's Harbor on the southern shore of the island. The sewerage facilities are generally inadequate. Disposal ranges from private "straight pipes", septic tanks, leachfields, and cesspools to individual "package" treatment units. A preliminary plan completed in 1972 recommended a municipal collection system and secondary treatment with an extended aeration facility, and discharge to Carver's Harbor.

Vinalhaven has 15 points on the State Municipal Discharge Priority Point System and as such is unlikely to be funded for some time.

WALDOBORO

Waldoboro is a coastal town situated on the Medomak River in Lincoln County. The 1970 population was 3,146 of which 1,400 are connected to the municipal collection and treatment system. The collection system is separate and treatment is accomplished by a 0.20 MGD Rapid Bloc Unit - activated sludge facility. The efflu-

ent is discharged to the Class SA Medomak River Estuary.

Medomak Canning Company, a canned food processing plant, is located in Waldoboro. This facility is licensed to discharge 0.20 MGD of process and cooling waters to a drainage ditch to the Class B-2 Medomak River. The method of treatment is aerated lagoons followed by chlorination.

Sylvania GTE, an electric lamp component manufacturing operation is also located in Waldoboro. Sylvania discharges 0.050 MGD of process water, 0.007 MGD each of sanitary wastes and cooling water into the Class SB-1 Medomak River. The treatment system presently under construction will be a physical-chemical process using lagoons.

WINTER HARBOR

The Town of Winter Harbor is a small coastal town in Hancock County. The 1970 census yielded a population of 1,028, an increase of thirty-six (36) percent over the previous decade. Almost the entire population is concentrated in the Winter Harbor Village area. Nine hundred (900) permanent residents receive services from five (5) public collection systems which, along with numerous private lines, discharge untreated wastes into Winter Harbor.

A preliminary plan was prepared in 1970 which recommended that the Town construct a predominantly new collection system and a 0.126 MGD secondary treatment facility that will initially serve 960 people and discharge to the SB-1 tidewaters of Winter Harbor.

The facilities plan and the revision of the final plans and specifications for Winter Harbor were completed in 1975. Due to a recent EPA policy decision the Town is receiving a combination Step 1, 2, and 3 grant to cover all eligible costs. Construction however, is not yet underway.

WISCASSET

The Town of Wiscasset is located on the Sheepscot River in Lincoln County. The Town had a 1970 population of 2,244, an increase of almost twenty-five (25) percent over the 1960 level. The Town has an existing wastewater collection and treatment system that includes approximately 800 people or thirty-five (35) percent of the Town population. The collection system is separate and infiltration is not seen as a problem. The secondary extended aeration-activated sludge facility has a design capacity of 0.20 MGD although the average daily flow is 0.10 MGD and the effluent is discharged to the SB-1 Sheepscot River.

Central Maine Power Co. (CMP) has two (2) operations in the Town of Wiscasset, Mason Station power plant and Maine Yankee Atomic power plant. Mason Station is a fossil fueled steam power plant. The effluent from this facility consists of 191.5 MGD of condenser cooling water, blowdown, roof, floor, and yard drains, and ash hopper wastes. The effluent is discharged to the SB-1 Sheepscot River. DEP license conditions require CMP to conduct an annual monitoring program to study the biological effects of the operation of Mason Station. This proposal was subsequently approved by the DEP and the Environmental Protection Agency.

Maine Yankee Atomic Power Company (MYAPC) operates a pressurized water nuclear reactor for power generation at Bailey Point. The effluent, 649 MGD of cooling water, treated radioactive and non-radioactive system wastes, and condenser backwash, is discharged to Class SB-1 Montsweag Bay. In 1972 the Environmental Improvement Commission (EIC, predecessor of the BEP) acted on an application from MYAPC to establish an interim 2600 acre mixing zone in Montsweag Bay for two (2) years. During this period MYAPC proposed to conduct post operational studies to determine the effects of the discharge. If adverse effects were indicated MYAPC proposed to remove the Cowseagan Narrows Causeway and replace it with a bridge to increase the tidal flow and flushing of Montsweag Bay. The EIC denied the application and established a two hundred (200) acre mixing zone decreasing to twenty-five (25) acres after two (2) years, a maximum allowable temperature increase at the boundaries of the

mixing zone, and a maximum temperature within the zone.

The Causeway was recently removed as it was found that even with the plant not operating, natural temperatures in the Bay exceeded the limits established by the BEP (EIC). The increased flushing gained from removal of the causeway, along with a recently constructed diffuser, should allow MYAPC to meet the mixing zone criteria. A petition for a license change to allow an increased flow, higher maximum temperatures and to insure that the original monthly mean temperature is maintained except during those months when natural conditions cause the temperatures to exceed the limits, was approved by the BEP.

B. Waste Abatement Summary

As is shown in Tables 7 and 8, there are fifty-nine (59) major waste discharges in the Maine Coastal Basin. Twenty (20) of these discharges or 34.0 percent presently receive treatment. One of these however, the Boothbay Harbor facility, is a primary facility. An additional three (3) or 5 percent have secondary facilities under construction. Three (3) others are funded but not yet under construction. At least three (3) more can meet license requirements without substantial treatment facilities. Ten (10) of the remaining untreated discharges are industries which are obligated to meet State discharge requirements by October 1, 1976. This means that almost two-thirds of the major waste discharges in the Maine Coastal Basin either presently have best practicable treatment or are scheduled to have it soon.

Table 9 lists companies in the Maine Coastal Basin that, according to DEP records, are behind in their compliance schedule milestones and as such, may not meet the treatment deadline of October 1, 1976.

The numerous minor sources such as discharges from private year round dwellings and seasonal homes can not be dismissed. Although these sources might be considered insignificant if taken individually because of the vast numbers there is a potential effect on water quality that is believed to be responsible for

Table 7

Summary of Treatment for Major Discharges in the Maine Coastal Basin

Source	1970 Population	Receiving Waters/Class	Existing Treatment	Projected Treatment	Remarks
Bar Harbor	3,716				
Village		Tidewaters of Bar Harbor/SB-1	2	-	Infiltration problems
DeGregoire Park		Tidewaters of Bar Harbor/SB-1	2	-	
Hull's Cove		Tidewaters of Bar Harbor/SB-1	2	-	Infiltration problems
Belfast	5,957	Belfast Harbor/SC	2	-	
Maplewood Packing	-	Passagassawakeag River/SC	2	-	Physical-Chemical Air Flotation
Penobscot Poultry	-	Passagassawakeag River/SC	2	-	Physical-Chemical Air Flotation
Blue Hill	1,367	Tidewaters of Blue Hill/SB-1	2	-	
Kerramerican	-	Carleton Stream/SB-1	2	-	Chemically assisted settling lagoons
Boothbay	1,814	Tidewaters of Boothbay/SB-1	0	2	
Bayville Village Corp.		Tidewaters of Boothbay/SB-1	0	2	
Boothbay Harbor	2,320	Boothbay Harbor/SB-1	1	2	Infiltration-Inflow problems
Bowdoinham	1,294	Cathance River/C	0	2	
Camden	4,115	Camden Harbor/SC	2	-	Includes Knox Woolen and Camden Tanning
Castine	1,080	Castine Harbor/SB-2	2	-	Excessive Infiltration

Table 7 (continued)

Source	1970 Population	Receiving Waters/Class	Existing Treatment	Projected Treatment	Remarks
Cherryfield	771	Narraguagas River/SC	0	2	
A.L. Stewart	-	Narraguagas River/SC	0	2	
Jasper Wyman	-	Narraguagus River/B-2	0	2	
Deblois Fish Hatchery	-	Bog Stream Hatchery Brook/B-1	0	2	
Deblois Rearing Pools	-	Bog Stream Hatchery Brook/B-1	0	2	
Damariscotta-Newcastle-Nobleboro	3,190 (Total)	Damariscotta River/SB-2	0	2	
East Machias	1,057	East Machias River/C	0	2	
Eastport	1,989	Tidewaters of Eastport/SC	0	2	
B.H. Wilson Fisheries	-	Tidewaters of Eastport/SC	0	*	
Argenta Products	-	Tidewaters of Eastport/SC	0	2	
Holmes Packing	-	Tidewaters of Eastport/SC	0	*	
The Mearl Corp.	-	Broad Cove, Quoddy Bay/ SB-1	0	2	
Ellsworth	4,603	Union River/C	0	2	Funded FY 76
Islesboro		Tidewaters of Islesboro/ SB-1	0	2	
Lubec	1,949	Johnson Bay/SC	0	2	
McCurdy Fish	-	Johnson Bay-Lubec Narrows/ SC	0	*	

Table 7 (continued)

Source	1970 Population	Receiving Waters/Class	Existing Treatment	Projected Treatment	Remarks
R.J. Peacock	-	Lubec Narrows/SC	0	*	
Machias	2,441	Machias River/SC	2	-	
Milbridge	1,154	Narragugus Bay/SB-2	0	2	
Jasper Wyman	-	Narragugus Bay/SB-2	0	*	
L. Ray Packing	-	Narragugus Bay/SB-2	0	*	
Mount Desert	1,659				
Northeast Harbor		Tidewaters of Mount Desert/SB-1	2	-	Opened 240 acres of shellfishing areas
Otter Creek		Tidewaters of Mount Desert/SB-1	2	-	
Seal Harbor		Tidewaters of Mount Desert/SB-1	2	-	
Somesville		Tidewaters of Mount Desert/SB-1	2	-	
North Haven		Tidewaters of North Haven/ SB-2	0	2	
Northport Village Corp. (Bayside)		Tidewaters of Northport/ SA	0	2	
Rockland	8,505	Rockland Harbor/SC	0	2	Funded FY 74
Rockport	2,067	-	0	2	Part to Rockland and part to Camden
Squirrel Island Village Corp.		Tidewaters of Southport/ SB-1	0	2	

Table 7 (continued)

Source	1970 Population	Receiving Waters/Class	Existing Treatment	Projected Treatment	Remarks
St. George		Tidewaters of St. George/ SC	0	2	
Searsport	1,951	Searsport Harbor/SB-1	0	2	Funded FY 76 Step 1
Southwest Harbor		Tidewaters of Southwest/ SB-1	0	2	UC
Thomaston	2,646	Tidewaters of St. George River/SA	2	-	Opened 1280 acres of shellfishing areas
Tremong		Tidewaters of Tremont/SB-1	0	2	
Union	1,189	Crawford Stream/B-1	0	3	
A.L. Stewart	-	Seven Tree Pond/B-1	0		Under study
Vinalhaven	1,135	Carver's Harbor/SB-2	0	2	
Waldoboro	3,146	Medomak River/SA	2	-	Opened 960 acres of shellfishing areas
Medomak Canning	-	Medomak River/B-2	2	-	
Sylvania GTE	-	Medomak River/SB-1	0	2	UC
Winter Harbor	1,028	Tidewaters of Winter Harbor/ SB-1	0	2	FY 75 Construction grant
Wiscasset	2,244	Sheepscot River/SB-1	2	-	
MYAPC	-	Montsweag Bay/SB-1	0	-	Cooling water
Mason Station	-	Montsweag Bay/SB-1	0	2	

0 - No Treatment
1 - Primary Treatment
2 - Secondary Treatment
3 - Tertiary Treatment
UC - Under Construction
* Screening

Table 8

Wastewater Treatment Facility Design Characteristics

Facility	Status of Treatment Facility	Population Served: Initial Or Present Permanent/Seasonal	Population Served: Design Permanent/Seasonal	Flow (MGD): Initial Or Present	Flow (MGD): Design	BOD_5 (lbs/day): Initial or Present: Influent	BOD_5 (lbs/day): Initial or Present: Effluent	BOD_5 (lbs/day): Design: Influent	BOD_5 (lbs/day): Design: Effluent	Type of Collection System	NPDES Permit #	DEP License #	Target Date For Compliance
Bar Harbor													
Village	Operating	3100/4400	3550/5280		1.2	1,415	142			Combined	ME0101214	471	-
DeGregoire Park	Operating	20/110	20/110		0.012	23				Separate	ME0101281	470	-
Hull's Cove	Operating	220/820	300/900	0.03	0.07	114				Separate	ME0101273	469	-
Belfast	Operating	3,000	5,000	0.69	0.51			1,000	100	Combined	ME0101532	569	-
Maplewood Packing Co.	Operating	-	-	0.95			600		200	-	ME0000370	445	-
Penobscot Poultry	Operating	-	-	1.491			800			-	ME0000647	446	-
Blue Hill	Operating	545	625		0.07			75	11	Separate	ME0101231	485	-
Kerramerican	Operating	-	-	0.378						-	ME0002631	628	-
Boothbay	Proposed	-	950/1200		0.011					None			?
Bayville Village Corp.	Proposed	140	228				46			Separate	ME0101654	815	?
Boothbay Harbor	Operating	1,650	2,350	0.35	0.64		250			Combined	ME0100064	309	?
Bowdoinham	Proposed	580	715		0.06	1116				None			?
Camden	Operating	3,400	3,840	1.0	1.21			2,290		Combined	ME0100137	488	-
Castine	Operating	980/1270	1060/1410	0.19	0.13		200			Separate	ME0101192	450	-
Cherryfield	Proposed	-	800		0.08	160				None			?
A.L. Stewart	Proposed	-	-				800		200	-	ME0002232	622	10/76

Table 8 (continued)

Facility	Status of Treatment Facility	Population Served: Initial Or Present Permanent/Seasonal	Population Served: Design Permanent/Seasonal	Flow (MGD): Initial Or Present	Flow (MGD): Design	BOD_5 (lbs/day): Initial or Present Influent	BOD_5 (lbs/day): Initial or Present Effluent	BOD_5 (lbs/day): Design Influent	BOD_5 (lbs/day): Design Effluent	Type Of Collection System	NPDES Permit #	DEP License #	Target Date For Compliance
Jasper Wyman	Proposed	-	-				800		200	-	ME0001953	645	10/76
Damariscotta-Newcastle-Nobleboro	Proposed	1930/2030	3650/3750		0.33			750		None			80
Deblois Fish Hatchery	*	-	-		0.29					-	ME0001031	661	10/76
Deblois Rearing Pools	*	-	-		0.74					-	ME0001023	660	10/76
East Machias	Proposed	856	1,000		0.09	200		171		None			?
Eastport	Proposed	1,920	2,535		0.31	384				Separate	ME0100200	823	?
B.H. Wilson Fisheries	Proposed	-	-	0.120					3,000	-	ME0000761	525	10/76
Argenta Products	Proposed	-	-	0.0027					20	-	ME0000442	668	10/76
Holmes Packing	Proposed	-	-	0.150					3,750	-	ME0000213	788	10/76
The Pearl Corp.	Proposed	-	-	0.136					18	-	ME0000396		
Ellsworth	Funded FY 76	4,000	5,500	0.356	0.648			1,217	1,122	Separate	ME0100889	831	79
Islesboro	Proposed		100		0.010			20		Separate	ME0100269	857	?
Lubec	Proposed		1,400		0.14	280				None			?
McCurdy Fish	Proposed	-	-				571			-	ME0000388	606	10/76
R.J. Peacock	Proposed	-	-				3,077			-	ME0000523	536	10/76
Machias	Operating	1,250			1.2	464	568			Combined	ME0100323	402	

Table 8 (continued)

Facility	Status of Treatment Facility	Population Served: Initial Or Present Permanent/Seasonal	Population Served: Design Permanent/Seasonal	Flow (MGD): Initial Or Present	Flow (MGD): Design	BOD_5 (lbs/day): Initial or Present: Influent	BOD_5 (lbs/day): Initial or Present: Effluent	BOD_5 (lbs/day): Design: Influent	BOD_5 (lbs/day): Design: Effluent	Type of Collection System	NPDES Permit #	DEP License #	Target Date For Compliance
Milbridge	Proposed		900		0.9	180				None	ME0100404	862	?
Jasper Wyman	Proposed	-	-				1,526			-	ME0002305	526	10/76
L. Ray Packing Co.	Proposed	-	-				2,502			-	ME0000591	535	10/76
Mount Desert													
Northeast Harbor	Operating	600/2000	700/2300	0.18	0.33	540				Separate	ME0101346	441	-
Otter Creek	Operating	350/1950	400/2100	0.04	0.15	360				Separate	ME0101338	440	-
Seal Harbor	Operating	250/1550	400/1700	0.12	0.150	60/180				Separate	ME0101354	442	-
Somesville	Operating	150/300	300/650	0.025	0.080	120				Separate	ME0101362	439	-
North Haven	Proposed		462		0.05			93		Separate			?
Northport Village Corp. (Bayside)	Proposed		630		0.064			126		Separate	ME0100901	679	?
Rockland	Funded FY 74	6,675	8,000		2.8	8,513		13,740		Combined	ME0100595	681	78
Rockport	Proposed	2,300	Part to Camden, part to Rockland							Separate			?
Squirrel Island Village Corp.	Proposed		640		0.32			128		None	ME0100650	826	?
St. George	Proposed		950		0.095			190		None			?
Searsport	FY 76 Step 1 Grant	950	1,500		0.15	190				Separate			?
Southwest Harbor	Under Construction		1450/1950		0.375	863				Separate	ME0100641	392	77

Table 8 (continued)

Facility	Status Of Treatment Facility	Population Served		Flow (MGD)		BOD_5 (lbs/day)				Type Of Collection System	NPDES Permit #	DEP License #	Target Date For Compliance
						Initial or Present		Design					
		Initial Or Present Permanent/Seasonal	Design Permanent/Seasonal	Initial Or Present	Design	Influent	Effluent	Influent	Effluent				
Thomaston	Operating	2,000	2,310	0.30	0.45	480				Combined	ME0100668	401	-
Tremont	Proposed									None			?
Union	Proposed		1,300		0.13	260				None			?
A.L. Stewart	Under Study	-	-			Cooling water only				-	ME0022080	221	?
Vinalhaven	Proposed		1,100		0.143	220				None			?
Waldoboro	Operating	1,400	2,000	0.15	0.20	281		330		Separate	ME0100714	498	-
Wedomak Canning	Operating	-	-	0.20					80	-	ME0002038	434	-
Sylvania GTE	Under Construction	-	-	0.65						-	ME0002381	714	10/76
Winter Harbor	Funded FY 75	900	1,250		0.125	180				Separate	ME0100731	562	78
Wiscasset	Operating	800	1,100	0.10	0.20	187				Separate	ME0100757	370	-
Maine Yankee Atomic Plant	*	-	-	649.0						- -	ME0002569	746	-
Mason Station	Under Construction	-	-	191.577						-	ME0000256	599	10/76

*Can meet discharge requirements without substantial treatment facilities

Table 9

Industrial Dischargers that are Behind in Their Compliance Schedules

DEP records indicate that the following companies in the Maine Coastal Basin are behind in their compliance schedule milestones and as such may not meet the treatment deadline of October 1, 1976.

Company	DEP License Number	Town	Item to be in Compliance	Date Due	Status of Item
McCurdy Fish Co.	606	Lubec	Design and Procure Equip.	1/175	No Report on Item
			Procure and Install Equip.	6/30/75	"
			Installation of Equip.	3/31/75	"
C.L. Bickford Co.	609	Vinalhaven	Procure and Install	6/30/75	"
			Disposal and Treatment	3/31/76	"
			Sanitary Separated	6/30/75	"
Robinson Wharf Inc.	611	Southport	Design and Procure Equip.	1/1/75	"
			Procure and Install Sta.	6/30/75	"
			Install and Treatment Equip	3/31/76	"
F.J. O'Hara & Sons	722	Rockland	Procurement report	6/30/75	"
			Contract w/City	10/1/75	"
			Installation	3/31/76	"
North Lubec Mfg. & Canning Co.	796	Rockland	Contract	3/1/76	"
Holmes Packing Co.	802	Rockland	Progress report	3/31/76	"
			Achieve limitation	3/31/76	"
			Contract w/City	3/1/76	"

the closing of certain shellfishing areas. Little quantitative data is available to allow the determination of the effects of seasonal population increases or water quality. However, some shellfishing areas that are closed during the summer and fall are opened in the winter and spring. The individual discharges too are obligated to meet discharge requirements by October 1, 1976.

The DEP is presently taking steps to insure compliance with the statutory deadline. The Department has a regulation to require a septic tank, sand filter, chlorination system as the preferred method of "overboard" discharge. This would mean that, according to the DEP, "Best Practicable Treatment" for an overboard discharge would be a septic tank, sand filter, chlorination system. The DEP has also developed a "canned" septic tank, sand filter, chlorination system, thus eliminating the need for expensive engineering expertise by certain individual homeowners.

The DEP has contracted with the Department of Marine Resources to conduct a sanitary discharge survey along the Maine coast. The survey covered part of the Maine Coastal Basin during the 1975 summer season. This study is explained in the following Section (III. C.).

C. Department of Marine Resources Sanitary Survey

In 1974 the DEP contracted with the Department of Marine Resources (DMR) to conduct a survey of waste discharges to shellfishing areas from Kittery to the mouth of the Kennebec River at Phippsburg. The objectives of the study were to:

- Collect basic water quality data for open, closed, and provisionally open shellfishing areas.
- To locate, identify, quantify, and qualify waste discharges to these areas.
- Facilitate compliance with the Maine statutory deadline by informing dischargers of their responsibilities.

- Estimate productivity of the shellfishing areas.
- Propose sites for the establishment of coastal Primary Monitoring Network (PMN) stations.

In 1975 the project was extended northeast to Cushing. The results of the study will allow the DEP to quantify water pollution abatement benefits and adjust municipal construction priorities to realize the greatest water quality and economic benefits.

Preliminary results from the first year's field work indicated that perhaps direct individual discharges to shellfishing areas were not the major problem, as had been previously supposed. "Feeder Streams" appeared to be much more of a problem. A small sample of these streams was taken during the second season and the results supported the feeder stream contamination theory.

Other results have been reclassification of shellfishing areas, identification of unregistered discharges and problem areas, establishment of coastal PMN stations, and estimates of shellfish growing area productivity.

Additionally in 1975, the study included the Machias River area. This area was included to allow the effects of a new municipal wastewater treatment facility that was going into operation to be measured. Results for the 1975 season are as yet unavailable.

The study has been extended in 1976 to include the coast through Stockton Springs, as well as complete the Machias River area.

D. Non-Point Source Pollution

Non-point sources of pollution are of relatively low priority in the Maine Coastal Basin. The lack of detailed water quality data to quantify even point source problems in the Basin underlines the fact that it will probably be some time before non-point sources receive attention. There are no designated "208" (Area-

wide Waste Treatment Management Planning) areas in the Maine Coastal Basin. However, non-point problems will be investigated under the statewide 208 program, possibly by the respective regional planning commissions under contract to the DEP. In addition, related information and solutions obtained from the five (5) "208" areas during the planning processes may be applied if feasible.

E. Residual Wastes from Wastewater Treatment Processing

Under Title 38 Chapter 13 Sections 1301-1308 (Maine Solid Waste Management Act) each municipality is obligated to provide a solid waste disposal facility for domestic and commercial solid waste generated within the community. Title 38 Chapter 3 Section 421 prohibits these facilities within three hundred (300) feet of a classified body of water. Appendix V contains a list of the solid waste facilities known to be within three hundred (300) feet. In addition Title 30 obligates each municipality to provide for the disposal of all wastes from septic tanks and cesspools within the municipality. It is unlawful to discharge these wastes at a site other than one approved by the DEP, except an individual may deposit septage from his residence on his own land in a suitable manner. Legislation was passed during the 1975 legislative session to allow private parties to have sites approved for common disposal. A list of the DEP approved septic sludge disposal sites is contained in Appendix VI.

Sludge disposal for municipal wastewater treatment facilities is covered under the DEP reviewing process. For a treatment system to be eligible for a construction grant a sludge disposal site must be located and approved. However, this criterion has come about quite recently, therefore, a backlog exists of facilities without approved sites. The DEP is now approving municipal sites under the Solid Waste Management Act. Guidelines have been adopted for evaluation of potential sites. Table 10 shows the municipal wastewater treatment facilities in the Maine Coastal Basin with their respective methods of sludge disposal.

Table 10

Residual Sludge Disposal Methods for Existing Municipal Wastewater Treatment Facilities in the Maine Coastal Basin

Town	Treatment	Type of Wastes	Method of Sludge Handling
Bar Harbor			
Village	Secondary-Activated Sludge Extend Air-Contact Stab	Sanitary	Gravity filtered sludge. No sludge yet, but proposed plans to use as soil conditioner.
DeGregoire Park	Secondary-Activated Sludge	Sanitary	Wet sludge, holding tanks to Village plant for dewatering.
Hull's Cove	Secondary-Oxidation Ditch	Sanitary	Wet sludge, holding tanks to Village plant for dewatering.
Belfast	Secondary-Activated Sludge Extend Air	Sanitary, Industrial	Gravity filtered sludge is buried at a local landfill.
Blue Hill	Secondary-Activated Sludge	Sanitary	Wet sludge - No disposal yet.
Boothbay Harbor	Primary	Sanitary, Industrial	An aerobic digested sludge is dried on sand beds and is spread on local fields.
Camden	Secondary-Activated Sludge	Sanitary, Industrial	Aerobic sludge is dried on sand drying beds and spread on local fields.
Castine	Secondary-Activated Sludge Contact Stab	Sanitary	Gravity filtered sludge is buried at a local landfill.
Machias	Secondary-Activated Sludge	Sanitary	Gravity filtered sludge is buried at a local landfill.

Table 10, continued

Residual Sludge Disposal Methods for Existing Municipal Wastewater Treatment Facilities in the Maine Coastal Basin

Town	Treatment	Type of Wastes	Method of Sludge Handling
Mount Desert			
Northeast Harbor	Secondary-Activated Sludge	Sanitary	Digested Sludge is dried on sand beds. Sludge is buried at a local landfill.
Otter Creek	Secondary-Oxidation Ditch	Sanitary	Wet unfiltered sludge is buried at a local landfill.
Seal Harbor	Secondary-Activated Sludge Extend Air.	Sanitary	Digested sludge is dried on sand beds. Sludge is buried at a local landfill.
Somesville	Secondary-Activated Sludge Extend Air.	Sanitary	Digested sludge is dried on sand beds. Sludge is buried at a local landfill.
Thomaston	Secondary-Activated Sludge Extend Air.	Sanitary	Unfiltered sludge is buried at a local landfill or spread at DEP approved septic sludge disposal site.
Waldoboro	Secondary-Activated Sludge	Sanitary, Industrial	Gravity filtered sludge is spread on Brown's Field.
Wiscasset	Secondary-Activated Sludge	Sanitary	Unfiltered sludge is buried at a local landfill.

V. Monitoring

A. Existing Programs

As was noted in the Introduction, the U.S. Geological Survey maintains six (6) stream gaging stations in the Maine Coastal Basin to collect stream flow information for the National Water Data System. Table 4 above (Section II. B.) indicates the location, drainage area of the station, maximum, minimum, and average flows, and the dates that these stations were established.

Source or compliance monitoring is conducted to determine whether a discharge conforms to State and/or Federal requirements. Municipal and industrial source monitoring is usually done quarterly whereas minor discharges such as home treatment units and oil-water separators are monitored as time permits. Monitoring to verify complaints is carried out as the complaints are received.

The Primary Monitoring Network (PMN) was created to determine the long term characteristics of a water body and/or the effects on the quality of the receiving water of reductions in untreated discharges as new wastewater treatment facilities go into operation. The Primary Monitoring Network formerly consisted of nineteen (19) stations located throughout the State. Monthly grab samples are taken at these sites and tested for the parameters shown below:

Temperature	Nitrite Nitrogen
DO	Nitrate Nitrogen
BOD_5	Phosphate Phosphorus
pH	Total Phosphorus
Turbidity	Zinc
Total Coliform	Mercury
Fecal Coliform	Chromium
Kjeldehl Nitrogen	Color
Ammonia Nitrogen	

Previously there were no PMN stations in the Maine Coastal Basin but in FY 76 as a result of the DMR survey explained in Section IV. C., the DEP added four (4) stations to this trend monitoring network, two (2) of which are located in the Maine Coastal Basin. These are shown below in Table 11.

Table 11

Primary Monitoring Network Stations
in the Maine Coastal Basin

Location	Locational Factors
Medomak River at the head of tide (RM 0.0) (Main Street Bridge in Waldoboro)	DIC
Medomak River (RM 2.9) (water supply pool for Medomak Canning)	BWQ

Locational Factors:

DIC - Downstream from Industrial Center
BWQ - Background Water Quality

Intensive monitoring is conducted to obtain comprehensive water quality data for a particular river or segment of river. These surveys are carried out over a period of time, usually several weeks, for many parameters. The data is then used to identify certain problems and their severity, determine the assimilative capacity of the stream so that load allocations can be calculated, establish base line conditions, decide whether classification revisions are feasible or necessary, and to determine priorities for the water pollution control program. No intensive surveys have been conducted in the Maine Coastal Basin for some time.

B. Present and Future Needs

Water quality data for the rivers, streams, and coastal waters in the Maine Coastal Basin is minimal. Although all of the field personnel were committed for the 1975 sampling season, the need for detailed water quality data in the Basin is recognized.

A two-phase survey of certain waterways in the Basin should be undertaken. Phase I would consist of a season of monthly staff gaging and sampling for basic parameters such as temperature, DO, suspended solids, BOD_5, coliforms, pH, conductivity, color, turbidity, and possibly other parameters specific to each waterway. This data would then be analyzed to determine if water quality problems exist and if so, the more intensive Phase II would be undertaken to determine the extent, location, and cause of the problem.

The priority waterways for these two-phase surveys are listed below:

Waterway	Reason	Comment
Sheepscot River	1	A
Damariscotta River	3	
St. George River	1	
Narraguagus River	3	A
Passagassawakeag River	1	
Dennys River	3	A
Union River	1	A
Eastport Tidewaters*	1	D
Sears Island Tidewaters	1	C

Reasons:

1. Document existing water quality
2. Evaluate abatement efforts
3. Assure protection of unique or high quality waters

Comments:

A. USGS gage located on the waterway
B. Primary Monitoring Network Station located on the waterway
C. Flushing studies
D. Biological survey

*Comprehensive tide and current, marine biological and population, and water quality surveys must be conducted by Pittston Company prior to operation to provide baseline data. These same studies must continue throughout operation to allow determination of the effect of

refinery/terminal operation on the environment. (Findings of Fact and Order, BEP re: Pittston Co. - Oil Refinery and Marine Oil Terminal, Eastport, Maine, 1975.)

The existing water quality information for the tidal portions of the Maine Coastal Basin is also quite scanty. The DEP has a small amount of data. The Department of Marine Resources (DMR) also has information but it is mainly limited to bacteria levels in shellfishing areas. In addition to locating potential PMN stations as mentioned above in Section IV. C. and V. A., the sanitary survey of untreated discharges to shellfishing areas that DMR conducted included limited water quality sampling. As this data becomes available it will be pooled with existing data to determine areas that need intensive monitoring.

Non-point source pollution will receive relatively little attention until water quality data is available so that an evaluation regarding areas of concern can be made.

VI. Additional Planning

A. Facilities Planning

The DEP has developed a Statewide Municipal Discharge Priority Point System as presented in the 1975 Continuing Planning Process, Basin Water Quality Management Planning in Maine. This point system allows the DEP to determine the townships that will receive construction grants pursuant to Section 201 of the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500). Points are given depending on a community's water quality problems. Facilities Plans (Step 1) are the first step towards obtaining a construction grant (Step 3). Communities that received FY 76 Step 1 grants are shown below:

Bayside Village Corporation (Northport)

Great Salt Bay S.D. (Damariscotta, Newcastle, Nobleboro)

*Lubec

*Milbridge

Searsport

Stonington (has since decided to handle wastes individually)

*Facilities Plans prepared with 85% non-interest bearing loan.

Ellsworth was awarded a Step 2 (Final Plans and Specifications) and a Step 3 (construction) grant for FY 76.

B. Statewide 208 Planning

There are no designated Areawide Waste Treatment Management Planning Areas (208 areas) in the Maine Coastal Basin. No areas in the Basin met the designation criteria. Non-designated area 208 planning is the responsiblity of the DEP and must be completed by November 1, 1978. It is anticipated that the DEP will contract wit regional planning commissions for certain portions of the planning functions in the non-designated areas.

C. Other Planning

A resource analysis was published for the Sheepscot River Watershed by the Harvard School of Design under the direction of the Sheepscot Valley Conservation Association. The purpose of the study was to analyze the natural and cultural systems of the watershed as a basis for planning future growth and land use.

The Machias River Watershed Study was prepared for the Bureau of Public Lands, Department of Conservation. This study was undertaken to provide information that would enable intelligent decisions to be made regarding efforts to retain the Machias River as an important and valuable State, regional, and local resource.

The Time and Tide Resource Conservation and Development Project was prepared to promote conservation and proper development in the mid-coastal area. The mid-coastal area is expected to receive heavy development pressures in the near future therefore the citizens have attempted to provide the information for planning in this area.

In addition, a new Resource Conservation and Development Project (Down East RC & D Project) was recently approved for portions of Hancock, Washington, and Penobscot Counties.

D. Updates and Revisions

The Maine Coastal Basin Water Quality Management Plan will be updated as more information becomes available. When the ongoing sanitary survey is completed the DEP may be able to ascertain the effect of the seasonal changes in population on water quality. Segment classifications can be included in the annual Continuing Planning Process also prepared pursuant to Section 303 (e) of the Federal Water Pollution Control Act Amendments of 1972.

Major revision will be unnecessary until a significant amount of water quality data, most likely from intensive surveys, is gathered. This will be completed however, as of November 1, 1978 as specified in 40 CFR 131.20.

Appendices

Appendix I

Title 38 MRSA Section 363
Standards of Classification of Fresh Waters
and Section 364 Standards of Classification of Tidal or Marine Waters

MAINE REVISED STATUTES ANNOTATED
TITLE 38

Sec. 363. Standards of classification of fresh waters. The Board shall have 4 standards for the classification of fresh surface waters.

1971, c. 618.

Class A shall be the highest classification and shall be of such quality that it can be used for recreational purposes, including bathing, and for public water supplies after disinfection. The dissolved oxygen content of such waters shall not be less than 75% saturation or as naturally occurs, and contain not more than 100 coliform bacteria per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which would impart color, turbidity, taste or odor other than that which naturally occurs in said waters, nor shall such matter or substances alter the temperature or hydrogen-ion concentration of these waters or contain chemical constituents which would be harmful or offensive to humans or which would be harmful to animal or aquatic life. No radioactive matter or substance shall be permitted in these waters other than that occurring from natural phenomena.

There shall be no discharge of sewage or other wastes into water of this classification unless specifically licensed by the commission upon finding that no degradation will result to the quality of such waters, and no deposits of such material on the banks of such waters in such a manner that transfer of the material into the waters is likely. Such waters may be used for log driving if such use will not lower its classification.

1971 c. 461, § 2.

Class B, the 2nd hignest classification, shall be divided into 2 designated groups as **B-1** and **B-2.**

B-1. Waters of this class shall be considered the higher quality of the Class B group and shall be acceptable for recreational purposes, including water contact recreation, for use as potable water supply after adequate treatment and for a fish and wildlife habitat. The dissolved oxygen of such waters shall be not less than 75% of saturation, and not less than 5 parts per million at any time. The total coliform bacteria count is not to exceed 300 per 100 milliliters. The fecal coliform bacteria shall not exceed 60 per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification nor shall such matter or substance after the temperature or hydrogen-ion concentration of these waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animals or aquatic life or which adversely affect any other water use in this class. No radioactive matter or substances shall be discharged to these waters which will raise the radio-nuclide concentrations above the standards as established by the United States Public Health Service as being acceptable for drinking water. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of

waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to acquatic life or render such dangerous for human consumption.

B-2. Waters of this class shall be acceptable for recreational purposes including water contact recreation, for industrial and potable water supplies after adequate treatment, and for a fish and wildlife habitat. The disolved oxygen of such waters shall not be less than 60% of saturation, and not less than 5 parts per million at any time. The total coliform bacteria is not to exceed 1,000 per 100 milliliters. The fecal coliform bacteria is not to exceed 200 per 100 milliliters.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease and scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydroben-ion concentration of the waters so substance alter the temprature or hydrogen-ion concentration of the waters so as to render such waters harmful to fish or other aquatic life. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life, or which adversely affect any other water use in this class. There shall be no discharge to these waters which will cause the hydrogen-ion concntration or "pH" of these- waters to fall outside of the 6.0 to 8.5 range. No radioactive matter or substance shall be discharged to these waters which will raise the radio-nuclide concentrations above the standards as established by the United States Public Health Service as being acceptable for drinking water. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of his classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

Class C. waters, the 3rd highest classification, shall be of such quality as to be satisfactory for recreational boating and fishing, for a fish and wildlife habitat and or other uses except potable water supplies and water contact recreation, unless such waters are adequately treated.

The disolved oxygen content of such waters shall not be less than 5 parts per million, except in those cases where the board finds that the natural dissolved oxygen of any such body of water falls below 5 parts per million, in which case the board may grant avariance to this requirement. In no event shall the dissolved oxygen content of such waters be less than 4 parts per million. The total coliform bacteria is not to exceed 5,000 per 100 milliliters. The fecal coliform bacteria is not to exceed 1,000 per 100 milliliters.

1973, c. 423, § 5.

These waters shall be free from sludge deposits, solid refuse and floating solids such a soils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste, or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion content of the waters so as to render such waters harmful to fish or other aquatic life. There shall be no discharge to these waters which will cause tthe hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.0 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are

harmful to humans, animal or aquatic life or which adversely affect any other water use in this class. No radioactive material or substance shall be discharged to these waters which will raise the radio-nuclide concentration above the standards as established by the United States Public Health Service as being acceptable for drinking water.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

CLASS D waters shall be assigned only where a higher water classification cannot be attained after utilizing the best practicable treatment or control of sewage or other wastes. Waters of his class may be used for power generation, navigation and industrial process waters after adequate treatment.

Dissolved oxygen of these waters shall not be less than 2.0 parts per million. The numbers of coliform bacteria allowed in these waters shall be only those amounts which will not, in the determination of the Commission, indicate a condition harmful to the public health or impair any usages ascribed to this classification.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, tubidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of the waters to impair the usages of this classification. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification. Treated wastes discharging to these waters shall not create a public nuisance as defined in Title 17, Section 2802, by the creation of odor producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1967, c. 475, § 4; 1969, c. 431, §§ 1-2; 1971, c. 618.

Sec. 364. Tidal or Marine Waters. The Board shall have 5 standards for classification of tidal waters.

1971, c. 470, § 2; 1971, c. 618.

Marine waters shall include the waters of the Atlantic Ocean, its bays, inlets, etc., to mean high tide within 3 nautical miles from the coast line and all other tidal waters within the State generally subject to the rise and fall of the tides. In estuaries or coastal streams subject to the rise and fall of the tides, tidal or marine water classifications shall apply unless otherwise specified by statute.

CLASS SA, shall be suitable for all clean water usages, including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and

propagation of shellfish and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 20 coliform bacteria per 100 milliliters.
The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area or non-shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurous to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other waste or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof; and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters assigned to this class. There shall be no discharge which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside of the 6.7 to 8.5 range.

There shall be no disposal of any matter or substances that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters would be harmful to humans. animal or aquatic life and their shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish if indigenous to the area.

CLASS SB-1 shall be suitable for all clean water usages including water contact recreation, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish, and for a fish and wildlife habitat. These waters shall contain not less than 6.0 parts per million of dissovled oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 15 per 100 milliliters, not shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of coliform bacteria in a series of samples representative of the waters shall not exceed 240 per 100 milliliters, nor shall more than 10% of the samples exceed 500 coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 50 per 100 milliliters, nor shall more than 10% of the samples exceed 150 fecal coliform bacteria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification, either singly or in combination with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof; and otherwise none in sufficent amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters which are assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of these waters to fall outside the 6.7 to 8.5 range. There shall be no disposal of matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material or which interferes with the propagation of fish or shellfish if idigenous to the area.

CLASS SB-2 shall be suitable for recreational usages, including water contact, and fishing. Such waters shall be suitable for the harvesting and propagation of shellfish, for a fish and wildlife habitat, and suitable or industrial cooling and process uses. These waters shall contain not less than 6.0 parts per million of dissolved oxygen at all times. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 milliliters, nor shall more than 10% of the samples exceed 230 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 15 per 100 milliliters, nor shall more than 10% of the samples exceed 50 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of coliform bacteria in a series of samples representative of the waters shall not exceed 500 per 100 milileters, nor shall more than 10% of the samples exceed 1,000 coliform bacteria per 100 milliliters. In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 100 per 100 millilters, nor shall more than 10% of the samples exceed 200 fecal coliform bacteria per 100 milliliters. There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial wastes or other wastes and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those having received treatment for the adequate removal of waste constituents including but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in

combination with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof; and otherwise none in sufficient amounts to make the waters unsafe or unsuitable for bathing or impair the waters for any other best usage as determined for the specific waters assigned to this class. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of the receiving waters to fall outside of the 6.7 to 8.5 range. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption. These waters shall be free of any matter or substance which alters the composition of bottom fauna, which adversely affects the physical or chemical nature of bottom material, or which interferes with the propagation of fish or shellfish if indigenous to this area.

CLASS SC, the 4th highest classification, shall be of such quality as to be satisfactory for recreational boating, fishing and other similar uses except primary water contact. Such waters may be used for the propagation of indigenous shellfish to be harvested for depuration purposes, for a fish and wildlife habitat, and for industrial cooling and process uses. The dissolved oxygen content of such waters shall not be less than 5 parts per million at any time. The median numbers of coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 700 per 100 milliliters, nor shall more than 10% of the samples exceed 2,300 coliform bacteria per 100 milliliters. The median numbers of fecal coliform bacteria in any series of samples representative of waters in the shellfish growing area shall not be in excess of 150 per 100 milliliters, nor shall more than 10% of the samples exceed 500 fecal coliform bacteria per 100 milliliters. In a non-shellfish growing area the median number of coliform bacteria in a series of samples representative of the waters shall not exceed 1,500 per 100 milliliters nor shall more than 10% of the samples exceed 5,000 coliform bacteria per 100 milliliters.

In a non-shellfish growing area the median numbers of fecal coliform bacteria in a series of samples representative of the waters shall not exceed 300 per 100 millilitrs, nor shall more than 10% of the samples exceed 1,000 fecal coliform batceria per 100 milliliters.

There shall be no floating solids, settleable solids, oil or sludge deposits attributable to sewage, industrial waste or other wastes, and no deposit of garbage, cinders, ashes, oils, sludge or other refuse. There shall be no discharge of sewage or other wastes, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic materials, such that these treated wastes will not lower the standards or alter the usages of this classification, nor shall such disposal of sewage or waste be injurious to aquatic life or render such dangerous for human consumption.

There shall be no toxic wastes, deleterious substances, colored or other wastes or heated liquids discharged to waters of this classification either singly or in combinations with other substances or wastes in such amounts or at such temperatures as to be injurious to edible fish or shellfish or to the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, or odor thereof or impair the waters for any other discharge ascribed to waters of this classification. There shall be no waste discharge which will cause the hydrogen-ion concentration or "pH" of the receiving waters to fall outside the 6.7 to 8.5 range. There shall be no disposal of any matter or substance that con-

tains chemical constituents which are harmful to humans, animal or aquatic life or which adversely affects any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animals or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

CLASS SD waters shall be assigned only where a higher water classification cannot be attained after utilizing the best practicable treatment or control of sewage or other wastes. Waters of this class may be used for power generation, navigation, industrial process waters or cooling waters, and for migration of fish. Dissolved oxygen of these waters shall not be less than 3.0 parts per million at any time. The numbers of coliform bacteria allowed in these waters shall be only those amounts which will not, in the determination of the Board, indicate a condition harmful to the public health or impair any usages ascribed to this classification.

1971, c. 618.

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which imparts color, turbidity, taste or odor which would impair the usages ascribed to this classification, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of the waters so as to impair the usages of this classification. There shall be no disposal of any matter or substance that contains chemical constituents which are harmful to humans or which adversely affect any other water use in this class. No radioactive matter or substance shall be permitted in these waters which would be harmful to humans, animal or aquatic life and there shall be no disposal of any matter or substance which would result in radio-nuclide concentrations in edible fish or other aquatic life thereby rendering them dangerous for human consumption.

There shall be no disposal of sewage, industrial wastes or other wastes in such waters, except those which have received treatment for the adequate removal of waste constituents including, but not limited to, solids, color, turbidity, taste, odor or toxic material, such that these treated wastes will not lower the standards or altar the usages of this classification. Treated wastes discharged to these waters shall not create a public nuisance as defined in Title 17, Section 2802, by the creation of odor-producing sludge banks and deposits or other nuisance conditions.

With respect to all classifications hereinbefore set forth, the Board may take such actions as may be appropriate for the best interests of the public, when it finds that any such classification is temporarily lowered due to abnormal conditions of temperature or stream flow.

1967, c. 475, § 5; 1969, c. 431, § 3; 1970, c. 581, § 2; 1971, c. 618.

Appendix II

Excerpts from
Title 38 MRSA Section 369 and 370, 371
Classifications of Coastal Streams and Tidal Waters, Great Ponds

Hancock County

1955, c. 426, §§ 1-7

Those waters draining directly or indirectly into tidal waters of Hancock County with the exception of those tributary to the Penobscot River Estuary north of a line drawn due east from Fort Point in Stockton Springs.

1. All coastal streams, direct and indirect segments thereof, draining to tidewaters of Hancock county, not otherwise specified or classified, with the exception of those tributary to the Penobscot River Estuary north of a line drawn due east from Fort Point in Stockton Springs—Class B-1.

2. **Blue Hill**

A. Carleton Stream, main stem, between First Pond and Second Pond—Unclassified.

B. Carleton Stream, main stem, from the outlet of First Pond to tidewater at Salt Pond—Unclassified.

C. Unnamed Stream at edge of Blue Hill Village entering tidewater near "Big Rock"—Class C.
1967, c. 304, § 20.

D. Unnamed Stream flowing from near "Old Cemetery" to the Town Wharf —Class C.
1967, c. 304, § 20.

E. Mill Brook Stream from a point just above the sewer of the consolidated school to its outlet at tidewater—Class C.

F. Unnamed Stream about 100 yards east of Mill Brook Stream—Class C.
1967, c. 304, § 20.

3. **Brooksville.**

A. Outlet of Walker Pond, from the dam at Lymeburner's Mill to tidewater —Class B-2.

B. Shepardson Brook (or Mill Brook), main stem, from Route 176 to its outlet at tidewater—Class C.

4. **Ellsworth.**

A. Card Brook, main stem, from the Farm Pond about 250 yards west of U. S. Highway No. 1 to tidewater—Class B-2.
1963, c. 23.

B. Gilpatrick Brook, main stem, from bridge at U. S. Highway No. 1 to its outlet into the Union River—Class B-2.

C. Union River, main stem, from head of Graham Lake to bridge at U. S. Highway No. 1 at Ellsworth Falls—Class B-2.

D. Union River, main stem, from bridge at U. S. Highway No. 1 at Ellsworth Falls to tidewater—Class C.

E. Unnamed Stream south of Laurel Street in Ellsworth—Class C.

5. **Franklin.** Unnamed Stream flowing near railroad station in Franklin Village to Hop Bay—Class C.

6. **Gouldsboro.** All coastal streams, direct and indirect segments, discharging to tidewater on the easterly mainland of Gouldsboro—Class C.

7. **Lamoine.** Spring Brook below washer at Grindle's gravel pit—Class C.

8. **Penobscot.**

A. Clements Brook, main stem, from tidewater to a point 100 feet upstream of Route 166—Class B-2.

B. Tributary of Winslow Stream entering from the south of South Penobscot Village from its confluence with Winslow Stream to the crossing of Route 177—Class B-2.

C. Winslow Stream, main stem, from tidewater to dam at the sawmill of S. C. Condon—Class C.

1967, c. 304, § 21.

9. **Sedgwick.**

A. Sargent Brook at Sargentville Village, main stem, from tidewater to a point 300 feet upstream of the highway—Class C.

B. Three Unnamed Streams entering tidewater immediately north of Sedgwick Village—Class C.

C. Unnamed Stream entering tidewater at the head of Salt Pond near North Sedgwick—Class B-2.

10. **Trenton.** Stony Brook from Route 3 crossing to tidewater—Class C.

11. **Waltham.** Webb Brook, main stem, from dam immediately downstream of bridge on Route 179 to its outlet to Graham Lake—Class B-2.

12. **Winter Harbor.** Coastal streams between the southerly point of Schoodic Peninsula to the Winter Harbor-Gouldsboro town line—Class C.

Knox County

1955, c. 426, § 1

St. George River Drainage System

1. All segments and tributaries direct and indirect of the St. George River Drainage System, above tidewater, not otherwise defined or classified—Class C.

2. All segments and tributaries direct and indirect of the St. George River above the outlet of St. George Lake in Liberty—Class B-1.

3. Castner Brook below Hillcrest Poultry Plant—Class C.

4. Crawford Pond Outlet and Crawford Pond tributaries—Class B-1.

5. Fuller Brook and its tributaries—Class B-1.

6. North and South Pond tributaries and outlet to the St. George River—Class B-1.

Other Coastal Streams of Knox County

1. **Camden.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Camden, not otherwise specified or classified—Class B-1.

B. Megunticook River, main stem, below a point 300 feet above the dam at the Mount Battle Mill—Class C.

2. **Cushing.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Cushing—Class B-1.

3. **Friendship.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Friendship unless otherwise specified or classified — Class B-1.

B. Goose River, main stem, tidewater to dam at the Herbert Tibbetts' sawmill—Class C.

C. Goose River, main stem, from Tibbetts' sawmill dam to the outlet of Havener Pond—Class B-2.

4. **Owls Head.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Owls Head—Class C.

5. **Rockland.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the City of Rockland—Class C.

6. **Rockport.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Rockport, unless otherwise described or classified—Class C.

B. Goose River and its tributaries below the highway bridge near Simonton Corners—Class B-2.

C. Goose River and its tributaries above the highway bridge near Simonton Corners—Class B-1.

D. Lily Pond outlet—Class B-2.

7. **St. George.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of St. George, unless otherwise described or classified - Class C.

B. Unnamed Stream and its tributaries above tidewater; entering tidewater at the northwesterly corner of Tenant's Harbor—Class B-1.

C. Unnamed Stream and its tributaries, above tidewater, entering tidewater at the head of Long Cove—Class B-1.

8. **South Thomaston.**

A. All coastal streams, direct and indirect segments thereof, drainage to tidewater in the Town of South Thomaston—Class C.

9. **Thomaston.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Thomaston, unless otherwise described or classified — Class B-1.

B. Mill River, main stem, from tidewater to a point ½ mile above tidewater —Class C.

C. Oyster River, main stem, from tidewater to a point 200 feet upstream of Packard's Mill—Class C.

D. Oyster River, main stem, from a point 200 feet upstream of Packard's Mill to the junction with the tributary of which is the outlet of Rocky Pond—Class B-2.

E. Tributary of Oyster River, main stem, coming from Rocky Pond between the Route 17 bridge at West Rockport and the junction with Oyster River—Class B-2.

F. Unnamed Stream flowing from Mace's Pond to Chickawaukee Pond—Class B-2.

10. **Warren.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewaters of the St. George River Estuary unless otherwise specified or classified—Class B-1.

B. Oyster River, See: Thomaston above.

C. Unnamed Stream and its tributaries to St. George River tidewater near Warren-Cushing boundary upstream of a point 500 feet above South Warren-North Cushing road—Class B-2.

D. Unnamed Stream to St. George River tidewater near Warren-Cushing boundary between a point 500 feet above the South Warren-North Cushing road to tidewater—Class C.

E. Unnamed Stream and its tributaries above tidewater which enters tidewater of the St. George River ½ mile below the South Warren bridge—Class B-2.

11. Other coastal streams. All coastal streams, direct and indirect segments thereof, draining to the tidal waters of Knox County, not otherwise specified or classified—Class B-1.

1973, c. 423, § 4.

Lincoln County

1955, c. 426, § 1

Those waters draining directly or indirectly into tidal waters of Lincoln County.

Damariscotta River Drainage

1. All segments and tributaries of the Damariscotta River, not otherwise defined, above tidewater—Class B-1.

2. Damariscotta River, main stem, from the outlet of Damariscotta Lake to tidewater at Salt Bay—Class B-2.

3. Inlet of Damariscotta Lake at Jefferson Village, from the outlet of the mill pond above Jefferson Village to the lake—Class B-2.

Medomak River Drainage

1. All segments and tributaries of the Medomak River Drainage, not otherwise defined or classified, above tidewater—Class B-2.

2. Tributaries of Little Medomak Brook, prinicipally in the Town of Washington—Class B-1.

Sheepscot River Drainage

1. All segments and tributaries of the Sheepscot River Drainage above tidewater not otherwise defined or classified—Class B-1.

2. Sheepscot River, main stem, from tidewater to junction of East and West Branches—Class B-2.

3. Sheepscot River, West Branch, main stem, from outlet of Branch Pond to junction of the East and West Branches—Class B-2.

4. Turner Pond outlet in Somerville Plantation from Turner Pond to Long Pond—Class B-2.

Other Coastal Streams of Lincoln County

1. **Alna.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Alna, not otherwise specified or classified, with the exception of the Sheepscot River Drainage above tidewater—Class B-1.

B. Ben Brook, main stem, downstream of the second road crossing above its mouth—Class B-2.

C. Unnamed Stream and its tributaries entering tidewater of the Sheepscot River at a point approximately one mile due east of the Alna Cemetery—Class B-2.

D. Unnamed Stream at Head Tide Village entering the Sheepscot River about 0.15 mile below the Route 218 crossing—Class B-2.

2. **Boothbay.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Boothbay, not otherwise specified or classified—Class B-2.

B. Adams Pond—Class B-1.

3. **Boothbay Harbor.**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Boothbay Harbor, not otherwise specified or classified—Class B-2.

B. Meadow Brook and its tributaries entering Lewis Cove—Class B-1.

C. Unnamed Brook and its tributaries entering the most easterly cove of Campbell Pond—Class B-1.

4. **Bremen**

A. All coastal streams, direct and indirect segments thereof, draining to tidewater in the Town of Bremen—Class B-1.

5. **Bristol.**

A. All coastal streams entering tidewater between the Bristol-Damariscotta town line and the Bristol-South Bristol town line—Class B-2.

B. All coastal streams entering tidewater between the Bristol-South Bristol town line and the head of tide on the Pemaquid River, not otherwise specified or classified—Class B-2.

C. All coastal streams entering tidewater between the head of tide on the Pemaquid River and the Bristol-Bremen town line, not otherwise specified or classified—Class B-1.

D. Pemaquid River, segments and tributaries thereof, not otherwise defined, above tidewater—Class B-1.

E. Pemaquid River,, main stem, entrance to Boyd Pond to tidewater—Class B-2.

F. Pemaquid River, main stem, from dam upstream of Bristol Village to the entrance of Boyd Pond—Class C.

G. Unnamed Stream entering a cove in the tidewater of Pemaquid River immediately west of Pemaquid Village—Class B-1.

H. Unnamed Stream, above tidewater, entering Buck Cove in the Town of Bristol—Class B-2.

6. **Damariscotta.**

A. All coastal streams entering tidewaters of the Damariscotta River—Class B-2.

7. **Dresden.** See: Section 368, Kennebec River.

8. **Edgecomb.**

A. All coastal streams, segments and tributaries thereof, draining to tidewater in the Town of Edgecomb, not otherwise specified or classified—Class B-1.

B. All coastal streams, segments and tributaries thereof, draining to tidewater between (not including) the outlet of Lily Pond to the Edgecomb-Boothbay town line—Class B-2.

C. All coastal streams, segments and tributaries thereof, draining to tidewater between the Edgecomb-Boothbay line on the Damariscotta River and Bennett Neck—Class B-2.

9. **Newcastle.**

A. All coastal streams draining to tidewaters of the Damariscotta River in the Town of Newcastle—Class B-1.

B. All coastal streams draining to tidewaters of the Sheepscot River Estuary in the Town of Newcastle—Class B-1.

10. **Nobleboro.**

A. All coastal streams draining to tidewaters of the Damariscotta River in the Town of Nobleboro—Class B-2.

11. **South Bristol.**

A. All coastal streams and segments thereof draining to tidewaters in the Town of South Bristol, unless otherwise specified or classified—Class B-2.

B. Unnamed Stream entering tidewater about ½ mile above Prentiss Cove at the Bristol-South Bristol boundary—Class B-1.

12. **Southport.**

A. All coastal streams and segments thereof draining to tidewater in the Town of Southport—Class B-1.

13. **Waldoboro.**

A. All coastal streams and segments thereof draining to tidewater in the Town of Waldoboro except as otherwise specified or classified and with the exception of the Medomak River and its tributaries above head of tide—Class B-1.

1963, c. 54, § 2.

B. Goose River. See: Knox County Coastal Streams.

14. **Westport.**

A. All coastal streams and segments thereof draining to tidewaters in the town of Wesport—Class C.

1967, c. 304, § 22.

15. **Wiscasset.**

A. All coastal streams and segments thereof draining to tidewaters in the Town of Wiscasset, not otherwise specified or classified—Class B-1.

B. Unnamed Stream and tributaries entering tidewater by way of Chewonke Creek—Class B-2.

C. Unnamed Stream and tributaries in Wiscasset entering the tidal estuary which lies immediately west of Bailey Point—Class B-2.

D. Ward Brook and tributaries—Class B-2.

16. Other coastal streams. All coastal streams, direct and indirect segments thereof, draining to the tidal waters of Lincoln County, not otherwise specified or classified—Class B-1.

1973, c. 423, § 5.

Sagadahoc County

Those streams above tidewater which drain to tidal waters of Sagadahoc County, directly or indirectly, not including that portion of Merrymeeting Bay north and west of the Chops at Bath or those streams draining to the Androscoggin River Estuary—Class C.

1967, c. 304, § 23.

Waldo County

1955, c. 426, §§ 1-7

Those streams above tidewater which drain to tidal waters of Waldo County between the Waldo-Knox County line to Fort Point in Stockton Springs.

1. Coastal streams, segments and tributaries thereof, not otherwise described, above tidewater, entering tidewater between the Knox-Waldo County line and the head of tide on the Little River at the Northport-Belfast boundary—Class B-1.

2. Coastal streams, segments and tributaries thereof, not otherwise defined, above tidewater, entering tidewater between the head of tide on Goose River and Fort Point in Stockton Springs—Class C.

3. Ducktrap River, segments and tributaries thereof, not otherwise described, above tidewater—Class B-1.

4. Goose River (Belfast), main stem, below the upstream crossing of Route 101—Class C.

5. Goose River (Belfast), segments and tributaries thereof, not otherwise defined above tidewater—Class B-2.

6. Little River, Northport-Belfast, segments and tributaries thereof, not otherwise defined above tidewater—Class B-1.

7. Mill Brook and its tributaries in Searsport upstream of a bridge site on an abandoned road about 1½ miles northerly of the village at Searsport which includes McClures Pond and Cain Pond—Class B-1.

8. Mixer Pond (Morrill and Knox) tributaries—Class B-1.

9. Passagassawaukeag River, segments and tributaries thereof, not otherwise defined, above tidewater—Class B-2.

10. Passagassawaukeag River Drainage above the outlet of Ellis Pond, to include Ellis Pond, Halfmoon Pond, Passagassawaukeag Lake and their respective tributaries—Class B-1.

11. Sanborn Pond and Dutton Pond tributaries in Morrill and Brooks—Class B-1.

12. Shaw Brook and its tributaries in Northport—Class B-2.

13. Unnamed Stream entering tidewater at Lincolnville Beach—Class B-2.

14. Unnamed Stream and its tributaries entering tidewater at the northwest corner of Long Cove—Class B-1.

15. Wescott Stream, entering tidewater in Belfast, segments and tributaries thereof not otherwise defined, above tidewater—Class B-1.

16. Other coastal streams of Waldo County. All coastal streams, direct and indirect segments thereof, draining to the tidal waters of Waldo County, not otherwise specified or classified—Class B-1.

1973, c. 423, § c.

Washington County

1955, c. 426, § 7

Those streams above tidewater which drain to tidal waters of Washington County, directly or indirectly, including those which drain to the tidal waters of the St. Croix River.

1. All coastal streams, segments and tributaries thereof, not otherwise defined, above tidewater, entering the tidal waters of Washington County from the Washington-Hancock County line to and including those to the tidal waters of the St. Croix River—Class B-1.

2. Boyden Stream, main stem, from the outlet of Boyden Pond to the first road crossing below Boyden Pond—Class B-2.

3. Chandler River and its tributaries above the Highway Bridge on Route 1 —Class A.

4. Dennys River and its tributaries above Highway Bridge on Route 1 in the Town of Dennysville—Class A.

5. Dennys River, main stem, from tidewater to the Bridge at U. S. Highway No. 1 at Dennysville—Class B-2.

6. Dyke Brook, East Branch, main stem in Columbia from tidewater to the crossing of the Maine Central Railroad—Class C.

7. East Machias River and its tributaries above the Highway Bridge on Route 191—Class A.

8. East Machias River, main stem, from head of tide to a point 2,000 feet upstream of the dam of the Bangor Hydro-Electric Co.—Class C.

9. Machias River and its tributaries above the mill pond at Whitneyville—Class A.

10. Machias River, main stem, from the dam creating the mill pond in Whitneyville to the site of the low dam opposite the ends of West Street and Hardwood Street in Machias—Class B-2.

11. Machias River, main stem, between the site of the low dam approximately opposite the ends of West Street and Hardwood Street in Machias to the head of tide—Class C.

12. Middle River, main stem, between the 2nd upstream crossing of Route 192 and tidewater—Class B-2.

13. Narraguagus River, East and West Branches and their tributaries, above the confluence of the 2 streams—Class A.

14. Narraguagus River, main stem, between tidewater and the bridge of the Maine Central Railroad—Class B-2.

15. Orange River and its tributaries above the highway bridge on Route 1—Class A.

16. Orange River, main stem, between tidewater and the highway bridge at U. S. Highway No. 1 in Whiting—Class B-2.

17. Pennamaquan River, main stem, between the crossing of the Eastport Branch of the Maine Central Railroad and tidewater—Class B-2.

18. Pleasant River, main stem, from tidewater to a point 1,000 feet above tidewater—Class B-2.

19. Tributary of Tunk Stream, the outlet of Round Pond, from Round Pond to the confluence with the main stem of Tunk Stream—Class B-2.

20. Tunk Stream, main stem, from the bridge at Unionville to tidewater—Class B-2.

21. Unnamed Stream entering northerly end of Brooks Cove in Robbinston—Class C.

22. Unnamed Stream immediately north of Schoolhouse Lane in Robbinston—Class C.

23. Unnamed Stream at easterly edge of Columbia Falls Village from tidewater to Maine Central Railroad near Pleasant River Canning Company plant—Class C.

24. Unnamed Stream entering tidewater portion of St. Croix River at Calais crossing North Street between Beech and Union Streets—Class C.

1971, c. 138, § 2.

Time schedule. The time schedule for compliance with the foregoing reclassifications shall be as set forth in the Revised Statutes, Title 38, section 451, subsection 1, as amended.

1971, c. 138, § 3.

25. Unnamed Stream passing through Harrington Village, the segment thereof, between tidewater and a point immediately upstream of the school sewer—Class C.

26. Unnamed Stream flowing through Dennysville Village immediately west of school building—Class B-2.

27. Whitten Parrin Stream in T 7, S.D. and Steuben—Class C.

28. Wiggins Brook at South Trescott, main stem, between Route 191 and tidewater—Class C.

Hancock County

1963, c. 320

1. **Bar Harbor.**

A. Tidewater from a point 500 yards south of Bear Brook to the Mount Dessert-Bar Harbor town line, with exception of Otter Cove north of latitude 44°-18.75'—Class SA.

B. Tidewaters within the Town of Bar Harbor not specifically mentioned or described—Class SB-1.
1968, c. 516, § 1.

2. **Blue Hill.**

A. Tidewater from Sand Point and southerly a distance of 500 yards—Class SB-2.

B. Tidewaters of Salt Pond—Class SB-1.

C. Tidewater from the most southerly bridge crossing at Salt Pond at the "Nub" northerly and easterly including all bays and estuaries to the Blue Hill-Surry town line—Class SB-1.

D. Tidewater within the Town of Blue Hill not previously mentioned or described—Class SA.

3. **Brooklin.**

A. Tidewaters of Herrick Bay north of a line drawn due east from a point of land at latitude 44°-16'-18"—Class SB-2.

B. Tidewater from the tidal portion of the Benjamin River and including this river, to latitude 44°-15.5' at Center Harbor—Class SB-1.

C. Tidewaters of Salt Bay—Class SB-1.

D. Tidewater within the Town of Brooklin not otherwise mentioned or described—Class SA.

4. **Brooksville.**

A. Tidewater from Blake Point at longitude 68°-48' to a point of land south of Horseshoe Cove at latitude 44°-19.25'—Class SB-1.
1968, c. 516 § 2.

B. Tidewaters forming the estuary known as Bagaduce River in the Town of Brooksville and east of a point of land at approximately N. 44°-24' by W. 68°-46.3' (just south of Lords Cove)—Class SA.
1963, c. 516, § 2.

C. Orcutt Harbor north of latitude 44°-20.75'—Class SB-1.
1968, c. 516, § 2.

D. Easterly shoreline of Bucks Harbor from latitude 44°-20'-10" south of longitude 68°-44.5'—Class SB-2.

E. Westerly shoreline of Bucks Harbor south of latitude 44°-20'-10" easterly to longitude 68°-44.5' at Norembega—Class SB-2.

F. Tidewater of Bucks Harbor north of latitude 44°-20'-10"—Class SB-1.
1968, c. 516, § 2.

G. Tidewater along the shoreline at Norembega from longitude 68°-44.5' southeast to longitude 68°-43.25'—Class SB-1.
1968, c. 516, § 2.

H. Tidewater from longitude 68°-42.25' near Herricks Village to Sedgwick-Brooksville town line—Class SB-1.

I. Tidewater within this town along its southerly shoreline from Blake Point to the Sedgwick town line not previously mentioned or described—Class S.A.

J. Tidal waters from a point of land just south of Lord's Cove at approximately N. 44°-24' by W. 68°-46.3'" on the Bagaduce Estuary around Cape Rosier to Blake's Point—Class SB-1.
1965, c. 179, § 3; 1968, c. 516, § 2.

5. **Castine.**

A. Tidewaters in the Town of Castine between a point on Dice Head due south of the lighthouse to the point of land at approximately N. 44°-24', W. 68°-47'—Class SB-2.
1963, c. 274, § 3.

B. Tidewaters of the estuary known as Bagaduce River bordering on Castine east of a point of land at approximately N. 44°-24'—Class SA.

C. Tidal waters of Castine bordering the Penobscot River Estuary between the Penobscot-Castine boundary and a point of land at approximately N. 44°-27', W. 68°-47'—Class SB-1.
1965, c. 179, § 4.

6. **Deer Isle.**

A. Tidewater bordering the settled area of Eggemoggin between longitude 68°-44' and latitude 44°-18.25'—Class SB-1.

B. Tidewater of Blastrow Cove in Little Deer Isle—Class SB-2.
1969, c. 121, § 1.

C. Tidewaters on the westerly shoreline south of latitude 44°-14.25' to the Deer Isle-Stonington town line, including Northwest Harbor, Pressey Cove and Sheephead Island—Class SB-1.

D. Tidewater from the Stonington-Deer Isle town line at the Holt Pond outlet to the northeasterly point of land at latitude 44°-13.25' at Greenlaw Cove and including Stinson Neck—Class SB-1.

E. Tidewaters of Town of Deer Isle not otherwise mentioned or described—Class SA.

7. **Ellsworth.**

A. All tidal waters within the City of Ellsworth—Class SB-1.
1968, c. 156, § 3.

8. **Franklin.**

A. All tidal waters within the Town of Franklin—Class SB-1.

9. **Gouldsboro.**

A. All tidewaters within the Town of Gouldsboro—Class SB-1.
1968, c. 156, § 4.

10. **Hancock.**

A. Tidewaters of Hancock north and westerly of a line drawn due west from Pecks Point in waters known as Kilkenney Cove, Skillins River and Youngs Bay—Class SB-2.
1967, c. 153, § 1.

B. Tidewaters of the Town of Hancock not otherwise specified or described—Class SB-1.
1968, c. 156, § 5.

11. **Lamoine.**

A. Tidewaters from the Hancock-Lamoine town line at Kilkenney Cove south to a line drawn due west from Pecks Point in the Town of Hancock—Class SB-2.
1967, c. 153, § 2.

B. Tidewaters within the Town of Lamoine not otherwise specified or classified—Class SB-1.
1967, c. 153, § 2.

12. **Mount Desert.**

A. Tidewater from Otter Cove south of latitude 44°-18.75' to Ingraham Point—Class SA.

B. Tidewaters within the Town of Mt. Desert not otherwise specified or classified—Class SB-1.
1968, c. 516, § 6.

13. **Penobscot.**

A. Tidewaters of the estuary known as Bagaduce River bordering on Penobscot—Class SA.

B. Tidal waters of Penobscot bordering the Penobscot River estuary—Class SB-1.
1967, c. 179, § 5.

14. Sedgwick.

A. Tidewaters of the estuary known as Bagaduce River bordering on Sedgwick—Class SA.

B. Remaining tidewaters within the Town of Sedgwick not otherwise specified or classified—Class SB-1.

15. Sorrento.

A. All tidewaters within the Town of Sorrento—Class SB-1.

16. Southwest Harbor.

A. All tidewaters within the Town of Southwest Harbor—Class SB-1.
1968, c. 516, § 7.

17. Stonington.
1969, c. 121, § 2.

A. Tidewater from the Moose Island Bridge to Ames Pond outlet including waters of Moose Island—Class SB-2.

B. Tidewaters within the Town of Stonington not otherwise specified or classified—Class SB-1.

18. Sullivan.

A. All tidal waters within the Town of Sullivan—Class SB-1.

19. Surry.

A. All tidal waters within the Town of Surry—Class SB-1.
1968, c. 516, § 8.

20. Swans Island.

A. All tidal waters within the Town of Swans Island—Class SB-1.
1968, c. 156, § 8.

21. Tremont.

A. All tidal waters within the Town of Tremont—Class SB-1.
1968, c. 516, § 8.

22. Trenton.

A. All tidal waters within the Town of Trenton—Class SB-1.
1968, c. 516, § 8.

23. Winter Harbor.

A. All tidal waters within the Town of Winter Harbor—Class SB-1.
1968, c. 516, § 8.

24. Cranberry Isles.

A. All tidal waters within the Town of Cranberry Isles—Class SB-1.
1968, c. 156, § 9.

25. Long Island Plantation.

A. All tidal waters within Long Island Plantation—Class SB-1.
1968, c. 516, § 9.

26. Exceptions.
1968, c. 516, § 10.

A. A municipality, sewer district, person, firm, corporation or other legal entity shall not be deemed subject to penalty under this subchapter at any time prior to October 1, 1976 with respect to any of said classification in Hancock County if by such time he or it, with regard to facilities designed to achieve compliance with the applicable classification shall have completed all the steps required to be then completed by the following schedule:

1. Preliminary plans and engineer's estimates shall be completed and submitted to the Board of Environmental Protection on or before October 1, 1969.

2. Arrangements for administration and financing shall be completed on or before October 1, 1971.

3. Detailed engineering and final plan formulation shall be completed on or before January 1, 1972.

4. Detailed plans and specifications shall be approved by the Water and Air Board of Environmental Protection and construction begun prior to June 1, 1973.

5. Construction shall be completed and in operation on or before October 1, 1976.

1971, c. 618.

Knox County

1963, c. 274, § 3

General classification—Tidewaters of Knox County not otherwise specifically designated—Class SA (includes: Cushing, Warren, Thomaston)

1. **Camden.**

A. Tidewater bordering Camden from Northeast Point to Ogier Point except that assigned to Class "C"—Class SB-1.

B. Tidewater bordering Camden from Metcalf Point to Eaton Point—Class SC.

2. **Cushing.**

A. Tidewaters bordering Cushing—Class SA.

3. **Friendship.**

A. Tidewaters of Friendship Harbor north of a line drawn from the point of land opposite the northerly tip of Garrison Island to Jameson Point—Class SC.

4. **North Haven.**

A. Shoreline of North Haven for ½ mile east of the point of land on the eastern side of Brown's Cove—Class SB-2.

5. **Owls Head.**

A. Tidewaters from the point of land immediately southwest of Cresent Beach to the Owls Head-Rockland town line—Class SC.

6. **Rockland.**

A. All tributaries in the City of Rockland—Class SC.

7. **Rockport.**

A. Rockport Harbor north of a line extended due east from end of Sea Street, near Harkness Brook—Class SC.

B. Tidewater from Rockland Town Line to the next point of land to the north—Class SC.

C. Clam Cove in Rockport from Brewster Point to Pine Hill—Class SB-2.

D. Rockport Harbor north of a line due west of Beauchamp Point except that portion assigned to Class "C"—Class SB-1.

8. **St. George.**

A. Tidewaters between a point 100 yards south of the cannery at Port Clyde and the point of land west of Fish Cove—Class SC.

B. Tennants Harbor west of a North-South line at the harbor entrance (approximately longitude 69°-12' W.)—Class SC.

C. Small Cove just northeast of Tenants Harbor, north of a line drawn due west from point of land forming east side of cove—Class SB-1.

D. Tidewaters between Marshall Point and Hooper Point not assigned to Class "C"—Class SB-1.

9. **South Thomaston.**

A. Northerly cove of Seal Harbor near Sprucehead—Class SB-1.

B. Shoreline St. George River south of Hospital Point—Class SB-1.

C. Weskcag River north of a line due west from Hayden Point—Class SB-1.

10. **Thomaston.**

A. All tidal waters bordering Thomaston—Class SA.

11. **Vinalhaven.**

A. Tidewaters of Carvers Harbor and Sand Cove from the point on the south side of Sand Cove to the bridge to Lane Island—Class SB-2.

12. **Warren.**

A. Tidewaters of Oyster River—Class SB-1.

B. Tidal waters of Warren not otherwise specified—Class SA.

Lincoln County

1963, c. 274, § 3

1. **Alna.**

A. All tidal waters within the Town of Alna—Class SB-1.
1963, c. 320.

2. **Boothbay.**

A. All tidewaters within the Town of Boothbay—Class SB-1.

3. **Boothbay Harbor.**

A. Tidal waters bordering the Town of Boothbay Harbor northerly of a line drawn due east from the point of land off Commercial Street nearest McFarland Island—Class SB-2.

B. Tidal waters not otherwise classified within the Town of Boothbay Harbor—Class SB-1.

4. **Bremen.**

A. All tidewaters within the Town of Bremen—Class SA.

5. **Bristol.**

A. All tidewaters not otherwise described or classified within the Town of Bristol—Class SA.

B. Pemaquid Harbor and New Harbor, including back cove in Bristol from Fish Point to a point 100 yards east of Gilbert's Wharf—Class SC.

C. Tidewaters in the Town of Bristol from Fish Point to the point of land east of Johns River, except that segment assigned to Class SC, and Round Pond Harbor inside the closest points on north and south—Class SB-2.

D. Tidewater of Long Cove north of a line drawn due west from the point of land extending southward on the east side of the cove—Class SB-1.

6. **Damariscotta.**

A. All tidal waters not otherwise described or classified—Class SB-1.

B. Tidewaters from latitude 44°-2.7" (near present Route #1 Bridge) south to latitude 44°-1.6" (south of Day Cove)—Class SB-2.
1967, c. 304, § 24.

7. **Edgecomb.**

A. All tidal waters bordering the easterly shoreline of Edgecomb—Class SA.

B. All tidal waters bordering the westerly shoreline of the Town of Edgecomb —Class SB-1.
1963, c. 320.

8. **Newcastle.**

A. Tidal waters not otherwise classified or described within the Town of Newcastle on its easterly shoreline—Class SA.

B. Tidewater from head of tide at Damariscotta Mills in Newcastle south to the Railroad Bridge—Class SB-2.
1967, c. 304, § 25.

C. All tidal waters bordering the westerly shoreline of the Town of Newcastle —Class SB-1.
1963, c. 320.

D. Tidewaters from the Railroad Bridge at Damariscotta Mills south to a point at latitude 44°-2.7' (near present Route #1 Bridge)—Class SB-1.
1967, c. 304, § 25.

E. Tidewaters from a point at latitude 44°-2.7' (near present Route #1 Bridge) to a point of land at latitude 44°-1.6' (about ½ mile above Little Point)—Class SB-2.
1967, c. 304, § 25.

F. Tidewaters of the Damariscotta River from a point of land at latitude 44°-1.6' (about ½ mile above Little Point) south of Little Point—Class SB-1.
1967, c. 304, § 25.

9. Nobleboro.

A. Head of tide at Damariscotta Mills in Nobleboro to Railroad Bridge—Class SB-2.
1967, c. 304, § 26.

B. Tidewaters in Nobleboro not othewise classified or described—Class SB-1.

10. South Bristol.

A. All tidewaters within the Town of South Bristol not otherwise classified or described—Class SA.

B. Tidewaters south of a line drawn due east from Jones Point except waters around Inner Herron Island and Thrumpcap Island—Class SC.

11. Southport.

A. All tidal waters bordering on the Town of Southport--Class SB-1.
1963, c. 320.

12. Waldoboro.

A. All tidewaters within the Town of Waldoboro not otherwise classified or described—Class SA.

B. Tidewaters north of a line drawn from Hoffses Pt. to Waltz Pt.—Class SB-1.

13. Westport.

A. All tidal waters within the Town of Westport—Class SB-1.
1963, c. 320.

14. Wiscasset.

A. All tidal waters within the Town of Wiscasset—Class SB-1.
1963, c. 320.

Sagadahoc County

1. General classification.

A. All tidal waters of Sagadahoc County not otherwise classified or described, with the exception of Merrymeeting Bay north and west of the Chops and the Kennebec River, tidal estuary, from the Chops, so called, southerly to a line drawn between the most easterly point of land at the southerly end of Popham Beach in Phippsburg and the southernmost extension of Bay Point in Georgetown—Class SB-1.
1963, c. 274, § 3.

2. Other category.

A. Tidal waters of the Sasanoa River bordering the Town of Arrowsic, between the Kennebec River and Upper Hell Gate—Class SB-2.
1961, c. 273.

B. Tidal waters bordering the Town of Woolwich between the junction of the so-called Sasanoa River and the Kennebec River and Upper Hell Gate on the Sasanoa River—Class SB-2.
1961, c. 273.

Waldo County

1963, c. 274, § 3

1. **Belfast.**

A. Tidewaters from the Northport-Belfast town line to "The Battery" in Belfast—Class SB-1.

B. Tidewaters between "The Battery" and a point opposite the swimming pool at the city partk—Class SB-2.

C. Tidewaters between a point opposite the swimming pool at Belfast city park and the mouth of Goose River, except for portions otherwise classified or described—Class SC.
1967, c. 155.

D. The portion of the tidal estuary of the Passagassawaukeag River upstream at the site of a bridge about one mile upstream of the Route 1 Bridge at Belfast—Class SB-2.

E. Tidewaters between Goose River and the Searsport-Belfast town line—Class SB-1.

2. **Frankfort.**

3. **Islesboro.**

A. Tidewaters within the Town of Islesboro not otherwise designated or classified—Class SA.

B. Tidewaters from Marshall Pt. to Coombs Pt.—Class SB-1.

C. Dark Harbor inside the tidal dam—Class SB-1.

D. Segment of coast between Grindle Pt. and the point of land to the east of Broad Cove—Class SB-1.

4. **Lincolnville.**

A. Tidewaters within the Town of Lincolnville not otherwise described or classified—Class SA.

B. Tidewater creek or estuary of small stream which rises near Carver's Corner—Class SC.

C. Tidewaters between the Islesboro Ferry wharf, Lincolnville, and a point 1,000 feet north of the tidewater creek at Lincolnville Beach, or estuary of small stream, which rises near Carver's Corner except for the waters of this tidal creek—Class SB-2.

D. Tidewater of the mouth of Ducktrap River from the head of tide to a point approximately 1,000 feet southeasterly of Route 1—Class SB-1.

5. **Northport.**

A. All tidewaters within the Town of Northport not otherwise described or classified—Class SA.

B. Tidewaters between Saturday Cove and the Northport-Belfast town line—Class SB-1.

6. **Searsport.**

A. All tidewaters within the Town of Searsport not otherwise described or classified—Class SA.

B. Tidewater from Belfast-Searsport town line and the point of land in Searsport Harbor which is formed by the landing or wharf at the end of Steamboat Avenue—Class SB-1.

C. From the wharf at the end of Steamboat Avenue in Searsport to a point opposite the site of the Searsport Railroad Station—Class SB-2.

D. Tidewaters between a point opposite the site of the Searsport Railroad Station and a point 100 yards east of the wharf at Summers Fertilizer Company—Class SB-1.

7. Stockton Springs.

A. Tidewater from Ft. Point westerly to the Stockton Springs-Searsport town line—Class SB-1.

B. From a point on the westerly bank of the Penobscot River Estuary at a point where a line drawn in a westerly direction through the southernmost point of Verona Island intersects this bank southerly to Fort Point on Cape Jellison—Class SB-1.

1965, c. 179, § 6.

8. Effective date.

A. The classifications set forth in subsection 7 shall become effective on October 1, 1965. A municipality, sewer district, person, firm, corporation or other legal entity shall not be deemed in violation of these sections at any time or times prior to October 1, 1976 with respect to those classifications if by such time or times he or it with respect to any project necessary to achieve compliance with the applicable classification shall have completed all steps required to then be completed by the following schedule:

(1) Preliminary plans and engineers' estimates involving municipal and other publically owned projects shall be completed on or before October 1, 1968 and plans for required abatement steps by others shall be submitted and approved not later than October 1, 1969.

(2) Arrangements for administration and financing shall be completed on or before October 1, 1971. In the case of municipal projects this period is to include definite scheduling or grants-in-aids.

(3) Detailed plans and specifications shall be approved by the Board of Environmental Protection and construction begun prior to June 1, 1973.

(4) All requirements are to be completed and in operation on or before October 1, 1976.

1965, c. 179, § 7. 1967, c. 475, § 9; 1971, c. 618.

Washington County

1963, c. 274, § 3

1. Addison.

A. All tidewaters of Addison not otherwise described or classified—Class SA.

B. Tidewaters between a line extending due east from Whites Pt. to the east side shore and the Columbia Falls-Addison town boundary—Class SB-1.

C. Tidewaters in Addison north of a line across the estuary of Indian River 100 yards below the Route 187 Bridge at Indian River Village—Class SB-2.

2. Beals.

A. Tidewaters of Beals not otherwise classified—Class SA.

B. Tidewaters around the northern end of Beals Island between Indian Pt. and the point of land on Beals Island nearest French House Island—Class SB-2.

3. Calais.

A. Tidewaters from the Calais-Robbinston town line to a point of land immediately upstream of Devils Head in Calais—Class SB-2.

B. Tidewaters of the St. Croix River estuary from the point of land immediately upstream of Devils Head in Calais to the head of tide also in Calais—Class SC.

4. **Cherryfield.**

A. Tidewaters of Narraguagus River estuary—Class SC.

5. **Columbia.**

A. Tidewaters of West Brook estuary above the Columbia-Addison town boundary--Class SB-2.

6. **Columbia Falls.**

A. Tidewater portions of the Pleasant River above the Columbia Falls-Addison town boundary—Class SC.

7. **Cutler.**

A. Tidewaters within the Town of Cutler not otherwise classified—Class SA.

B. Tidewaters of Cutler Harbor inside a line running northeast from the point of land approximately at N. 44°-39.3' and W. 67°-12.4'—Class SB-2.

C. Tidewaters of Money Cove inside the tidal falls—Class SB-1.

8. **Dennysville.**

A. Tidewaters within the Town of Dennysville not otherwise classified—Class SB-1.

B. Tidewaters of Dennys Bay and River west of Hinckley Pt.—Class SC.

9. **East Machias.**

A. All tidewaters within the Town of East Machias—Class SC.

10. **Eastport.**

A. Tidewaters of Eastport not otherwise classified or described—Class SA.

B. Tidewaters of Bar Harbor in Eastport from the fill between northwesterly point of Moose Island and Carlow Island and the old highway bridge from the mainland to Moose Island—Class SB-2.

C. Tidewaters of Carryingplace Cove, east of a line drawn from the point of land at approximately N. 44°-55.3', W. 67°-01.7' to the point of land at approximately N. 44°-55.3', W. 67°-01.7'—Class SB-1.

D. Tidewaters of Prince Cove west of a line extending from Estes Head to the most southerly extension of the point of land on which Country Road, so called, is located—Class SB-2.

E. Tidal waters not otherwise classified between Shackford Head and the point of land near Dog Island in Eastport—Class SC.

11. **Edmunds.**

A. Tidewaters of Edmunds not otherwise classified or described—Class SA.

B. Orange River estuary and Whiting Bay from a line drawn across the bay in a northwesterly and southwesterly direction through Wilbur Pt. and the easterly boundary of Whiting—Class SB-1.

C. Tidewaters of Dennys River in Edmunds west of a line drawn due south from Hinckley Point in Dennysville—Class SC.

D. Tidewater of Dennys River Estuary and Bay east of a line drawn due south from Hinckley Pt. in Dennysville to a point of land at approximately N. 44°154.5' W. 67°-11.7'—Class SB-1.

12. **Harrington.**

A. All tidewaters of Harrington not otherwise described or classified—Class SA.

B. Tidewaters of Mill River and Cole Creek Estuary northwesterly of Oak Pt. in Harrington—Class SB-1.

C. Tidewaters bordering Harrington west and south of a line across the Harrington River at a point 1,000 feet down-river of the canning factory in Harrington--Class SC.

D. Tidewaters west and north of a line across the Harrington River drawn due east from Oliver Lord Pt., except those west and north of a line across the Harrington River at a point 1,000 feet downriver of the canning factory at Harrington—Class SB-2.

13. **Jonesboro.**

A. All tidewaters in Jonesboro not otherwise described or classified—Class S.A.

B. Tidewaters of the Chandler River in Jonesboro upstream of a line drawn normal to the stream at a point 2/10 mile below the Route 1 Bridge at Jonesboro Village—Class SC.

C. Tidewaters along the Chandler River in Jonesboro betwen a line normal to the stream at a point 2/10 mile below the Route 1 Bridge at Jonesboro Village and a line drawn from Carlton Point to Deep Hole Point—Class SB-1.

14. **Jonesport.**

A. All tidewaters of Jonesport not otherwise described or classified—Class S.A.

B. Tidewaters in Jonesport north of a line across the estuary of Indian River 100 yards below the Route 187 Bridge at Indian River Village—Class SB-2.

C. Tidewaters between Hopkins Pt. and Indian Pt.—Class SC.

15. **Lubec.**

A. All tidewaters of Lubec not otherwise described or classified—Class SA.

B. Tidewaters of Bailey's Mistake west of a line drawn due north from Balch Head in the Town of Trescott—Class SB-1.

C. Tidewaters between a point 1,000 yards westerly of Leadurney Pt. and a point 100 yards south of the creek entering tidewater approximately 2/10 mile south of Woodward Pt.—Class SB-1.

D. Tidewaters between Leadurney Pt. and a point 1,000 yards westerly along the shore—Class SB-2.

E. Tidewaters between Leadurney Pt. and a point of land approximately N. 44°-51.2' and W. 67°-00.3'—Class SC.

F. Tidewaters between the site of the North Lubec Ferry landing and a point of land at approximately N. 44°-51.2' and W. 67°-00.3'—Class SB-1.

16. **Machias.**

A. All tidewaters within the Town of Machias not otherwise specified or classified—Class SC.

B. All tidewaters of Little Kennebec Bay—Class SA.

17. **Machiasport.**

A. All tidewaters not otherwise described or classified—Class SA.

B. Tidewaters of Machias and East Machias Rivers north of a line drawn from Ft. O'Brien Pt. to Randall Pt. in Machiasport—Class SC.

18. **Milbridge.**

A. All tidewaters of Millbridge not otherwise described or classified—Class S.A.

B. Tidewaters north and west of a line from Fish Pt. to the point of land approximately N. 44°-31.8' by W. 67°-52.5'—Class SC.

C. Tidewaters of Wyman Cove from Mitchell Pt. to a wharf location approximately 0.4 mile northerly from Mitchell Pt.—Class SB-2.

D. Tidewaters north and west of a line from Timmy Pt. to Fickett Pt., except those defined as Class "SC"—Class SB-1.

E. Tidewaters of the Mill River and Cole Creek estuary southwesterly, westerly and northerly of Blasket Pt.—Class SB-1.

19. **Pembroke.**

A. Tidewaters of Pembroke not otherwise described or classified—Class SA.

B. Tidewater estuaries of Cobscook River and Wilson Stream in Pembroke lying north and west of a line drawn from the point of land at approximately N. 44°- 54.5' W. 67°-11.7' in Edmunds, due northeasterly to the Pembroke shore except those portions in Dennysville described as lying west of a line drawn due south from Hinckley Pt.—Class SB-1.

C. Tidewaters of Pennamaquam River and Meadow Brook estuaries in Pembroke north and west of a line drawn due east and west through a point of land at N. 44°-56.5', W. 67°-10'—Class SC.

D. All waters of Hersey Cove and tidewaters of the Pennamaquam River north and west of a line drawn due south from the headland forming the easterly side of the entrance to Hersey Cove to Leighton Neck—Class SB-1.

20. **Perry.**

A. All tidewaters of Perry not otherwise described or classified—Class SA.

B. Tidewaters of small cove, the first cove westerly of Eastport Branch of Maine Central Railroad, southwest of Pleasant Point school at Pleasant Pt.—Class SB-1.

C. Tidewaters of Little River above the Route 1 Bridge—Class SB-2.

21. **Robbinston.**

A. Tidewaters from Liberty Pt. north to Calais-Robbinston town line—Class SB-2.

B. Tidewaters from Liberty Pt. south to Robbinston-Perry town line—Class SB-1.

22. **Roque Bluffs.**

A. All tidewaters within the Town of Roque Bluffs—Class SA.

23. **Steuben.**

A. All tidewaters within the Town of Steuben—Class SA.

24. **Trescott.**

A. All tidewaters not otherwise described or classified within the Town of Trescott—Class SA.

B. Tidewaters of Bailey's Mistake in the Town of Trescott west of a line drawn due north from Balch Head in Trescott—Class SB-1.

C. Tiedwaters of Whiting Bay, between a line drawn across the bay northwesterly and southeasterly though Wilbur Pt. and the easterly boundary of Whiting—Class SB-1.

25. **Whiting.**

A. Tidewaters of Whiting not otherwise described or classified—Class SA.

B. Tidewaters southwesterly of the easterly boundary of Whiting—Class SB-2.

C. Tidewaters of Holmes Bay for a distance of 100 yards around the canning factory—Class SB-2.

§ 371. Great ponds

Great Ponds

1957, c. 322, § 10

1. All great ponds within the State of Maine shall be classified herewith as not less than Class B-1, except as otherwise provided in this section. The board, upon application by any interested person, shall hold a hearing in accordance with the classification procedure and if it shall find it is for the best interests of the public that such waters or any part thereof should be otherwise classified, it shall do so in accordance with the classification procedure of this subchapter.

1957, c. 322, § 10.

2. Sebago Lake in the Towns of Naples, Casco, Raymond, Windham, Standish, Baldwin and Sebago in Cumberland County – Class A.

1957, c. 322, § 10.

3. Lake Wassookeag in the Town of Dexter, Penobscot County – Class A.

1957, c. 322, § 2.

4. Upper Mattawamkeag Lake (Island Falls) – Class C.

5. Mattakeunk Pond (Lee) – Class C.

6. Lily Pond (Rockport) – Class B-2.

7. Lower Mattawamkeag Lake (Island Falls-T4, R3) – Class B-2.

8. Madawaska Lake (T16, R4, Westmanland) – Class A.

9. Second Pond in the Town of Blue Hill in Hancock County – Unclassified.

1963, c. 420, § 3; 1967, c. 342, § 1.

10. Lake Auburn in the City of Auburn, Androscoggin County – Class A.

1971, c. 335.

11. Little Wilson Pond and its outlet tributary to Lake Auburn in the City of Auburn and the Town of Turner, Androscoggin County – Class A.

1971, c. 335.

12. Pleaseant Lake, located in Island Falls, T4, R3 – Class A.

1973, c. 29.

1955, c. 426, § 8; 1957, c. 322, §§ 2, 10; 1963, c. 420, § 3; 1967, c. 342, § 1; 1971, c. 335; 1973, c. 29.

Appendix III

Trophic State Index of Lakes in the Maine Coastal Basin*

	Hydraulic Residence Time (Yrs.)	Mean Depth (W)	TSI**
Beddington	0.04	5.5	39
Beech Hill	2.6	11.6	26
Branch	1.35	9.8	29
Eagle	0.16	13.7	36
Green	0.88	11.0	28
Hopkins	1.5	6.7	31
Molasses	1.1	5.2	31
Mopang	1.4	6.7	31
Phillips	1.04	9.4	29
Pleasant River	0.4	4.3	33
Spectacle	0.14	2.4	37
Upper Lead	1.7	7.3	33

*The trophic state index runs from 0 to 100 with 0 being assigned to lakes with low productivity. Most Maine lakes fall between 20 and 60.

**For a more detailed explanation of the TSI refer to Draft, Proposed Classification of the Great Ponds of Maine. Maine DEP, October, 1975.

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MUNICIPAL PRIORITY POINT SYSTEM

The Department of Environmental Protection as part of its Annual State Strategy has to prepare a Municipal Priority Point System to place proposed construction projects in relative priority that take into account national and Maine problem areas.

The system contains eight (8) basic priorities grouped into three broad categories; serious water quality problems, treaties and statutes, and minor water quality problems.

The first group, serious water quality problems, contains three priorities, Water Supply and Shellfisheries Protection, both with 20 points, and Nuisance with 19 points. The second group has two priorities, U.S. Treaty Obligations with 17 points, and Statutory Time Schedules with 16 points. The last group contains three priorities ranging from 14 to 12 points.

In addition to these eight basic priorities, there are six (6) add-on categories with points values ranging from 10 to 2. These add-on categories are identified as A through F.

This system is used to develop both the one year construction project list and also the Municipal Discharge Inventory list, or long term construction project list.

All eight priorities and the six add-ons are discussed in detail below:

BASE POINTS

Priority 1 Water Supply Protection — 20 Points

The project to be funded will eliminate a source of water supply contamination. This priority denotes that a potential public health hazard does exist and that without such project, alternative sources of water would be required or additional water treatment would be necessary.

Priority 2 Shellfisheries Protection — 20 Points

This priority denotes that the project will eliminate a source of shellfisheries contamination. The project will eliminate sources of waste that are partially or wholly responsible for a shellfishery area which is presently closed.

Priority 3 Severe Environmental Nuisance — 19 Points

This priority denotes that a serious problem exists in the proposed project area, such as large municipal waste loads discharging into small bodies of water which cause a substantial lowering of the dissolved oxygen content of the waterway, a substantial portion of the project area is on malfunctioning subsurface disposal facilities causing potential severe health hazard or potential economic losses in recreational areas because of untreated or inadequately treated sewage wastes.

Priority 4 Treaty Obligations — 17 Points

This priority indicates that the project is located in an area covered by the Boundary Waters Act of 1909 which states that both Canada and the U.S. would not dirty the waters of the other country.

Priority 5 Statutory Time Schedule 16 Points

This priority denotes that the project is on a statutory time schedule enacted by the Maine Legislature. These schedules include the Kennebec River, the Penobscot River, Hancock County, Waldo County, the Mousam River, and Section 451 of the Maine Revised Statutes, Annotated. (Hereto referred to as the "451" Schedule).

Priority 6 Misc. Water Quality Problems 14 Points

This priority denotes that the problem is not as severe as those in Priority #3 but will require abatement or corrective action. This priority takes into account local problems such as limited area of project is on malfunctioning subsurface disposal systems.

Priority 7 Necessary to Maintain Water Quality 13 Points

This priority is given to problems which are not creating a nuisance or serious conditions other than violating an assigned water quality standard. This would be applicable to a small discharge located on a relatively large river where bacterial pollution may be a problem.

Priority 8 Upgrading Facility 12 Points

This priority is assigned projects which require additional facility consturction. This would be applied to a primary treatment facility being upgraded to secondary, a secondary facility being upgraded to tertiary, or any facility requiring expansion, corrective action, or other renovation.

ADD-ON POINTS

A. Order and Directive 10 Points

A project which has been ordered by a Federal Court, a Maine Court, or the Board of Environmental Protection, will receive ten (10) points in addition to its base point total.

B. EPA Priority Basin 3 Points

A project located in an EPA Priority Basin will receive three additional points. The St. Croix and the Androscoggin River Basins in Maine are EPA Priority Basins at the present time.

C. Located on a Class I Segment 4 Points

Any project located on a Class I Segment as defined by DEP in its Segment Classification System developed pursuant to Title 40 of the Code of Federal Regulations, Part 130.41, (40 CFR 130.41), will receive four (4) additional points.

D. Located on a Class II Segment 3 Points

See C above for definition

E. Location on a Class III Segment 2 Points

See C above for definition.

F. Discharge Effects Lake System — 4 Points

If the proposed project discharges into a lake system or tributary thereof, four (4) additional points are added to the Project's priority point total.

PRIORITY	BASE POINTS	A ORDER AND DIRECTIVE +10	B EPA PRIORITY BASIN +3	PROJECT LOCATION* C CLASS I SEGMENT +4	D CLASS II SEGMENT +3	E CLASS III SEGMENT +2	F DISCHARGE EFFECTS LAKE SYSTEM +4	TOTAL MAXIMUM POINTS
1. Water Supply Protection	20							41
2. Shellfisheries Protection	20							41
3. Nuisance	19							40
4. Treaty Obligation (U.S.)	17							38
5. Statutory Time Schedule (Me.)	16							37
6. Misc. Water Quality Problems	14							35
7. Necessary to Maintain Water Quality	13							34
8. Upgrading Facility	12							33

* See DEP Segment Classification

STATE MUNICIPAL DISCHARGE INVENTORY

	BASE	ADD-ON
29 Points		
Sabattus	3	B,D,F
27 Points		
Manchester S.D.	1	D,F
Monmouth S.D.	1	D,F
26 Points		
Jackman S.D.	1	E,F
23 Points		
Aroostook-Prestile T.D. (Caribou)	3	C
Old Orchard Beach	3	C
Portland (Portland Water Dist.)	3	C
Scarborough S.D.	2	D
Westbrook (Portland Water Dist.)	3	C
22 Points		
Bridgton	5	E,F
Brunswick S.D. (Int.)	5	B,D
Cape Elizabeth (North)(P.W.D.)	3	D
Dexter	6	C,F
Dixfield	5	B,D
Ellsworth	2	E
Freeport S.D.	2	E
Great Salt Bay S.D.	2	E
Island Falls	5	E.F
Mechanic Falls S.D.	5	B,D
Mexico S.D.	5	B,D
Bayside Village Corp. (Northport)	2	E
Patten	5	E,F
Searsport	2	E
South Portland	3	D
Topsham S.D.	5	B,D
Wells S.D.	2	E
Winter Harbor	2	E
York S.D.	2	E
21 Points		
Aroostook-Prestile Treatment Dist. (Presque Isle)	4	C
Grand Isle	4	C
Madawaska	4	C
Washburn	4	C
20 Points		
Corinna S.D.	8	C,F
Danforth	7	B,F
East Millinocket	5	C

Millinocket	5	C
Newport S.D.	5	C
Pittsfield	5	C
Sanford S.D.	8	C,F
Winslow	5	C

19 Points

Bangor (Kenduskeag Interceptor Extension)	5	D
Bangor (Penobscot Interceptor)	5	D
Farmingdale	5	D
Frenchville	4	E
Gardiner	5	D
Hallowell W.D.	5	D
Hampden	5	D
Howland	5	D
Lincoln S.D.	5	D
Milford	5	D
Norridgewock W.D.	5	D
Norway	8	B,C
Old Town	5	D
Peru	7	B,D
Randolph	5	D
Veazie S.D.	5	D
Wilton	5	D
Winterport S.D.	5	D

18 Points

Biddeford Pool	5	E
Brunswick S.D. (WWTF)	5	D
Bucksport	5	E
Clinton W.D.	6	C
Dover-Foxcroft	5	E
Guilford-Sangerville S.D.	5	E
Islesboro	5	E
Kezar Falls (Porter & Parsonfield)	5	E
Medway	6	C
Stonington	5	E
Tremont	5	E
Vassalboro S.D.	5	E

17 Points

Cape Elizabeth (South) (Portland W.D.)	6	D

16 Points

Brownville	6	E
Cumberland	7	D
Enfield	7	D
Gorham (Little Falls) (PWD)	5	
Limerick S.D.	6	E
Milo W.D.	6	E
North Berwick S.D.	6	E
Rockport	6	E
Kennebunk S.D.	8	C
Mars Hill U.D.	8	C

15 Points

Augusta S.D. (Sec.)	8	D
Bangor (Sec.)	8	D
Bayville Village Corp. (Boothbay)	7	E
Boothbay	7	E
Cherryfield	7	E
Eastport	7	E
Eliot	7	E
Kingfield	7	E
Kittery	7	E
North Anson	7	E
North Haven	7	E
Phillips	7	E
Richmond U.D. (Sec.)	8	D
St. George	7	E
Saco (Camp Ellis)	7	E
Squirrel Island Village Corp. (Southport)	7	E
Vinalhaven	7	E
Warren	7	E

14 Points

Ashland W. & S.D.	8	E
Blaine	6	
Boothbay Harbor S.D. (Sec.)	8	E
Bowdoinham	6	
Canton	6	
Eagle Lake W. &. S.D.	6	
Gorham (P.W.D.)	6	
Harrison	6	
Monson	6	
Monticello	6	
South Berwick S.D.	8	E

13 Points

Mattawamkeag	7
North Windham (P.W.D.)	7

12 Points

Limestone W. & S.D.	8

The following projects have not been assigned specific priority numbers but are considered needs:

Alfred
Andover
Auburn
Belgrade
Blaine
Buxton
Carmel
Cornish
Littleton
Lubec
Minot
North Yarmouth
Poland
Oxford
Rome
Sherman

Buckfield
Burnham
Eustis
Falmouth (Portland W.D.)
Fryeburg
Gray
Greenwood
Harmony
Herman
Hiram
Holden
Hollis
Limington
Sinclair
Sidney
Smithfield
Orrington
Union
Wayne
Woolwich
Woodstock
Mercer

* Developed from D.E.P. Municipal Priority Point System

Appendix V

Towns in the Maine Coastal Basin Taken to 300 Foot Hearings Under Title 38 Section 421

Town	Watercourse	Situation
Blue Hill	Trib to Peter's Brook	No dumping w/in 300' after 7/1/75 Dumping limited to areas used prior to 5/1/74. Plans for new site by 7/1/74
Bristol	Trib to Pemaquid River	No dumping w/in 200' of stream. Fence erected to prevent blowing of refuse into Stream.
Culter	Unnamed Stream	Not in violation.
Eastport	Cobscook Bay	All oper. cease by 5/175 Prelim. dis. plan by 7/1/74 Final plans by 10/15/74
East Machias	Saltmarsh on E. Machias River	Disposal w/in 300' cease by 7/1/75. Physical restriction to dumping in the marsh by 12/15/74. Preliminary plans by 1/15/75.
Franklin	Mill Stream	Cease dis. w/in 300' by 7/1/75. Physical restrictions so dumping in SE only. Preliminary plans for new site by 7/1/74.
Georgetown	Robinson Cove	Disposal w/in 300' by 5/1/75. Preliminary plans for new site by 7/1/74. Plans for altering dis. after 7/1/75 by 10/15/74.
Georgetown (Robinhood Marina Ralph Becker)	Salt marsh trib to Knubble Bay	Variance if: only deniolition, lumber, and stumpage wastes disposal here, no sawdust, paper, bottles, cans, other metals, plastics, or food wastes w/in 300' of the trib variance is for two years.
Harpswell	Long Reach	Dis. w/in 300' cease by 5/1/75. Preliminary plans for new site by 7/1/74. Plans for dis. after 7/1/75 by 10/15/74.
Harrington	Harrington River	All oper. w/in 300' cease by 5/1/75. Final plans for dis. by 10/15/74. Working face of dump moved back 50'. Physical barriers to prevent dis. in swamp by 7/1/74. Preliminary plans by 7/1/74.

Towns in the Maine Coastal Basin...

Town	Watercourse	Situation
Liberty	Trib. to Sheepscot River	Physical changes made by 7/1/74 so the direction of operation be paralleled to end at least 50' from the above mentioned stream. Preliminary plans for a new site by 7/1/74. Plans for dis. after 7/1/75 by 10/15/74.
Lubec	Trib. to Wallace Cove	Variance if: stream diversion is done by 5/5/75. No refuse dumped w/in 250' of new stream channel after 5/15/75. Existing stream channel is filled up, soil by 5/15/75. Variance is for two years.
Milbridge	Trib. to Narraguagus Bay	All oper. w/in 300' cease as of 5/1/75. Alternate plans for dis. by 10/15/74. Preliminary plans by 7/1/74.
Montville	True's Pond	All operations w/in 300' of True's Pond cease by 11/15/74. Final plans submitted 10/15/74.
Northport	Unnamed Streams	All oper. w/in 300' cease by 11/1/74. Final plans for alternate dis. by 10/15/74. Preliminary plans by 7/1/74.
Pembroke	Pennamaquan River	All dis. w/in 300' will cease as of 5/1/75. Final plans for alternate disposal by 10/15/74. Preliminary plans by 7/1/74.
Southwest Harbor (Ben C. Worcester)	Trib. to surface water runoff to Marshall Brook	Variance if: final plans for surface water diversion by 7/1/74. All diversion of surface water by 11/15/74. Variance is for two years.
Stonington	Trib. to Swamp Hold Pond	All oper. w/in 300' of swamp cease as of 5/1/75. Final plans for alternate disposal by 10/15/74. Preliminary plans by 7/1/74.
Tremont	Trib. to Bass Harbor	All oper. w/in 300' of the marsh cease as of 7/15/74. Refuse w/in 300' must be packed and covered with salt.
Waldoboro	Demuth Brook	All dis. w/in 300' cease by 5/1/75. No dis. w/in 50' of Demuth Brook after 5/24/74. Preliminary plans by 7/1/74. Plans for dis. after 7/1/75 by 10/15/74.

Town	Watercourse	Situation
Whitefield	West Branch of Sheepscot River	Variance if: no dumping w/in 280' of the river. Dump area w/in 280' of river is covered and seeded. Variance is for two years. Use of site after 7/1/75 is subject to compliance with SWM Regulations.

Appendix VI

DEP Approved Septic Sludge Disposal Site Operators
in the Maine Coastal Basin

Mr. Paul Harris
Interstate Septic Tank Service
54 Beechwood Street
Thomaston, Maine 04861

Mr. James Clark
Belfast,
Maine 04915

Mr. Peter Cotter
Town of Boothbay
Boothbay, Maine 04537

Office of the Selectmen
Municipality of South Bristol
P.O. Walpole, Maine 04573

Mr. Harry M. Scott
Town Manager
P.O. Box 86
Stonington, Maine 04681

Mr. L. Grant Duell
Selectman
Vinalhaven, Maine 04863

Mr. Harold A. Campbell, Chairman
Board of Selectmen
Wiscasset, Maine 04578

Mr. Robert W. Baker, Selectman
Town of New Castle
Sheepscot, Maine 04566

Mr. Richard S. Colcord
RFD #1
Searsport Terrace Trailer Park
Belfast, Maine 04915

Mr. Leon Johnson
Selectman, Town of Jefferson
Jefferson, Maine 04348

Mr. Harold J. Nealey
Selectman, Town of Northport
RFD #2
Lincolnville, Maine 04849

Mr. Peter A. Garland
Town Manager
Town Office
Searsport, Maine 04974