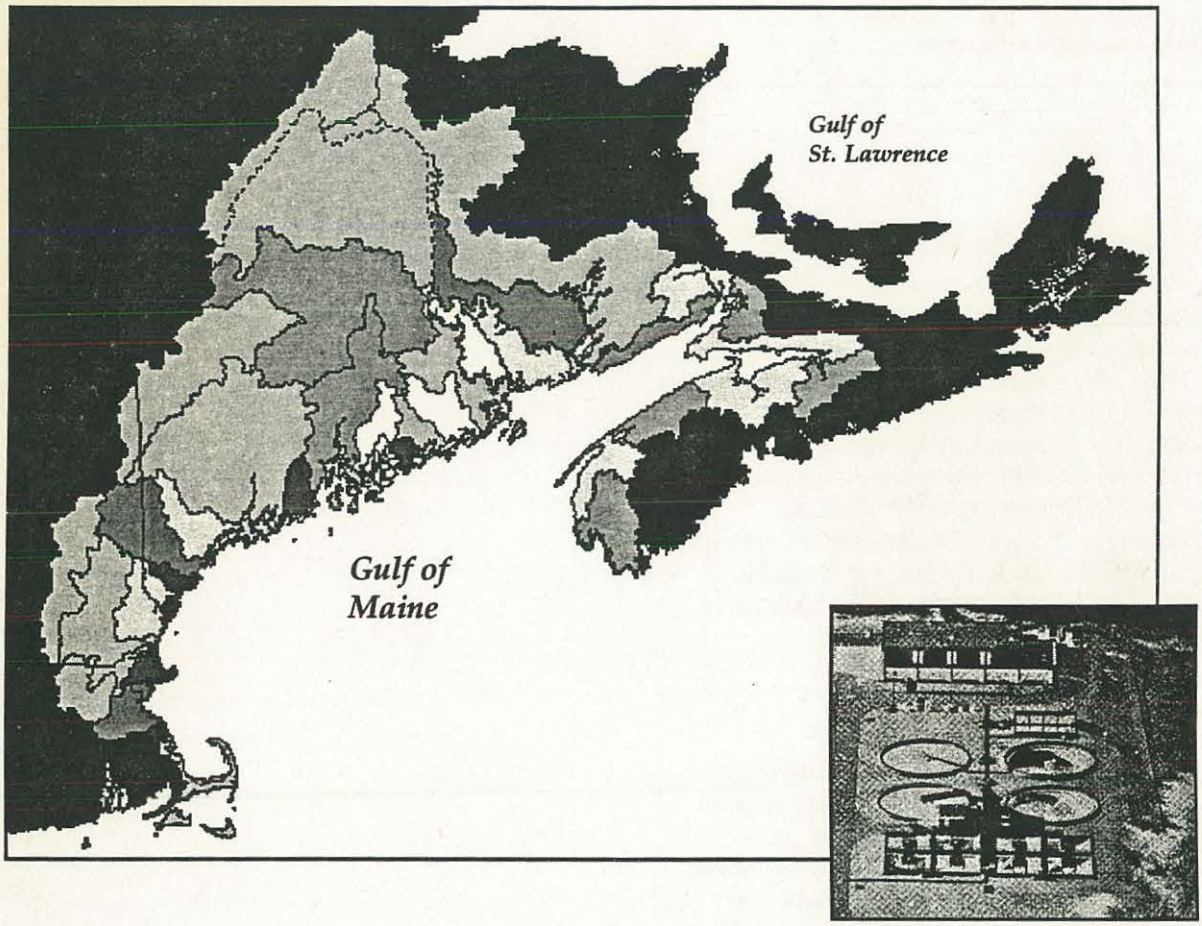
THE NATIONAL COASTAL POLLUTANT DISCHARGE INVENTORY

Gulf of Maine Point Source Inventory

A Summary by Watershed for 1991



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Pollution Sources Characterization Branch
Strategic Environmental Assessments Division
National Oceanic and Atmospheric Administration
Silver Spring, MD 20910

Project Team

Percy A. Pacheco, Project Leader

Anthony S. Pait - Report author

Sheila J. Arenstam - Programming and analysis
Alice E. DeSouza - GIS analysis and support
Daniel R.G. Farrow - Technical review
Jamie Higgins - Graphics support

Gulf of Maine Point Source Inventory

This document presents the results of the first phase of NOAA's Gulf of Maine Project, completed in December 1994. The information contained within the database and this report reflect the comments and additional data provided by the reviewers during the summer of 1994. Direct any comments, questions or problems relating to the National Coastal Pollutant Discharge Inventory (NCPDI) Point Source Inventory to Percy A. Pacheco or Daniel R. G. Farrow at the address on the inside of the back cover.

Acknowledgments

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Introduction

This report summarizes the information contained in the Gulf of Maine Point Source Inventory (hereafter, the "Inventory"). The Inventory includes structural data and pollutant discharge estimates for 273 major and 1,751 minor direct discharging point source facilities located in the U.S. and Canadian watersheds draining to the Gulf of Maine. Estimates of annual and seasonal discharges are made for 15 pollutants for a base year of 1991, using a combination of monitoring data, permit limits, and typical engineering values.

This report and the digital database on which the report is based were developed as part of an interagency agreement between the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA), to build a point source inventory for the Gulf of Maine Program. The program was organized in 1989 as a cooperative effort between Federal and State (or Provincial) agencies in the United States and Canada to address and act upon environmental issues of concern, such as the sustainable use of the Gulf's marine resources and the prevention of harm to the Gulf ecosystem.

This is the final report from this phase of the project. Comments and additional data received from the review of the January 1994 draft helped refine and improve the database and this report.

Purpose. This report provides a concise summary of the number, type, location, and pollutant discharge characteristics of point source dischargers by watershed. The information contained within the report can provide resource managers with valuable insights as to which facilities are important contributors of pollutant discharges to the coastal waters of the Gulf of Maine.

The report and Inventory were compiled by the Pollution Sources Characterization Branch of NOAA's Strategic Environmental Assessments Division. The Gulf of Maine Point Source Inventory is maintained within NOAA's National Coastal Pollutant Discharge Inventory (NCPDI), and is available on two IBM-compatible floppy diskettes (3.5-inch) in an ASCII format. The seven deliverable files archived on the two diskettes contain facility information and pollutant discharge estimates by facility and individual pipe.

- *The NCPDI Gulf of Maine study area comprises over 68,000 square miles.*
- *The 1990 population within the study area was approximately 6.8 million.*
- *There are 1,553 direct discharging industrial facilities, 378 wastewater treatment plants (WWTPs), and 93 power plants in the Gulf of Maine.*
- *WWTPs and paper mills are the largest dischargers of pollutants.*
- *The Deer Island/Nut Island WWTP complex in Boston, Massachusetts is the single largest single discharger for the majority of pollutants in the Inventory.*
- *The largest industrial discharger in the study area is the International Paper Company in the Sheepscot Bay watershed in Maine.*
- *Approximately 84 percent of the process flow discharges were from facilities located in the United States.*

Contents and Organization. This report is organized into two major sections. The first contains an analysis of the data; the second a series of detailed appendices. The first section includes a characterization of the point source dischargers in the Gulf of Maine, along with discussions on data sources, differences between U.S. and Canadian data, estimation methods, an assessment of data quality including limitations, and potential ways of improving the Inventory. Discharge estimates are aggregated by watershed rather than by county so that estimates can be more easily related to water quality impacts in each watershed.

The 14 appendices in this report contain individual facility characteristics and annual pollutant load estimates; list, for each pollutant, the most significant dischargers; show the percentage of each pollutant estimate based on monitored versus permit, typical pollutant concentration, and other data; present individual estimates of pollutant discharges for all major and significant minor facilities in the study area; present the number and type of facilities in each watershed; summarize, for each watershed, the annual pollutant discharges by major point source category; contain a series of maps showing the

location of major and significant minor point source facilities; and identify the watersheds, hydrologic units, and counties in the region. A glossary of terms has also been included (Appendix 14).

Study Area. The Gulf of Maine study area (hereafter, the "study area") is shown in Figure 1. The information in the Inventory can be organized by three spatial units. The first is by watershed.

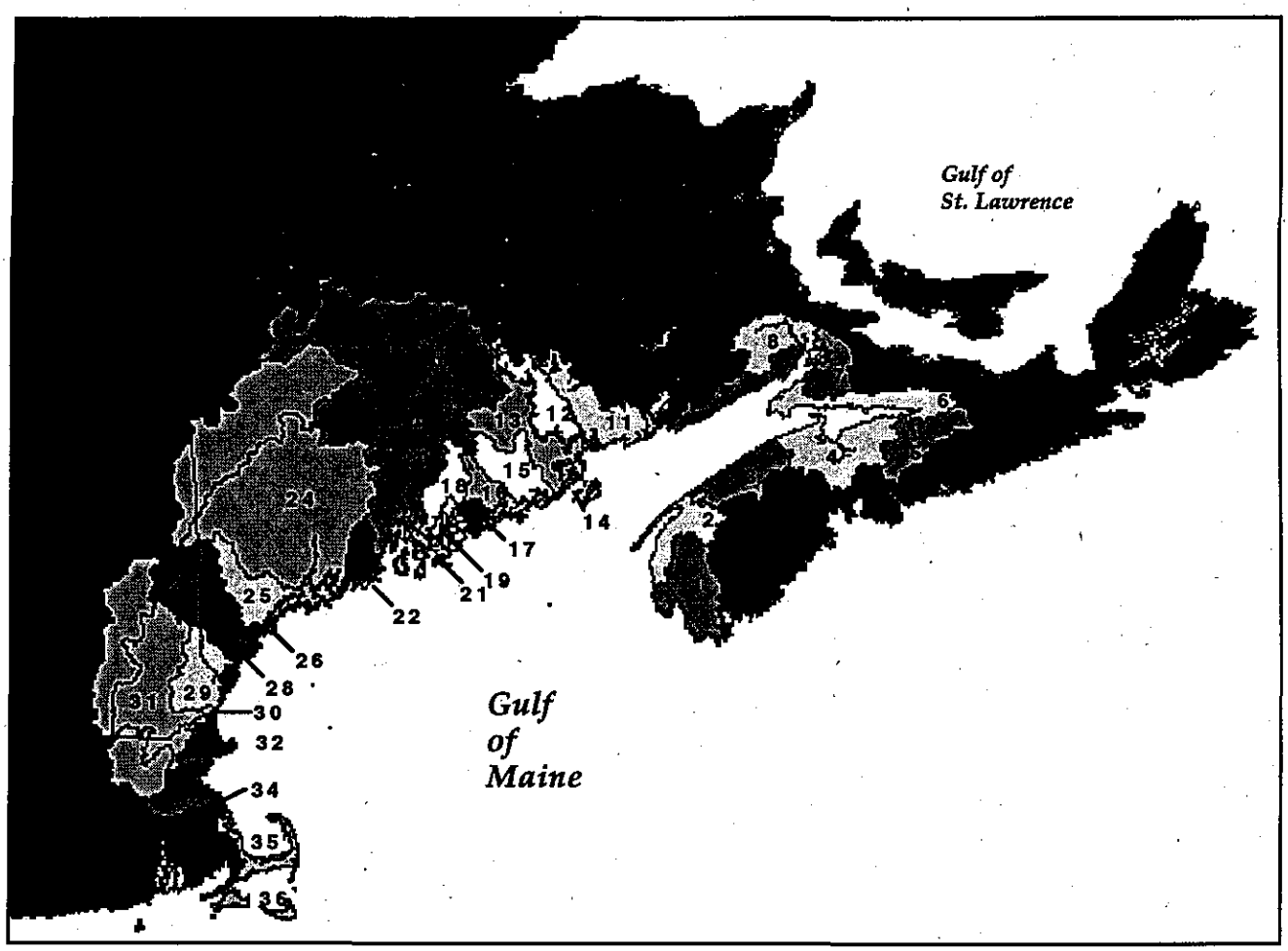
There are 25 major watersheds (13 U.S. and 12 Canadian) and 11 minor coastal drainage areas (CDAs) in the study area. The watersheds are also listed in Appendix 9 and 12. In this report, the numbering system used to identify the major watersheds in the United States is the same as that used in NOAA's National Estuarine Inventory. Canadian watersheds are defined using hydrologic information from Environment Canada.

The data can also be organized by hydrologic units, which comprise the watersheds. In the United States, the U.S. Geological Survey (USGS) has defined a hydrologic cataloging unit as a geographic area representing all or part of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature. Cataloging units generally have an area of at least 1,800 km^2 (695 mi^2). In Canada, hydrologic units were identified using the Hydrometric Map Supplements produced by the Water Resources Branch of Environment Canada. Appendix 10 contains a list of the

Table 1. *Pollutants in the NCPDI Gulf of Maine Inventory*

Pollutant	Description	Annual Units
Flow	Wastewater discharge from a point source. Flow can be process, cooling, sanitary, storm, other, or a combination of these.	Million Gallons
BOD	Biochemical Oxygen Demand; Measure of organic material that can be readily oxidized through microbial degradation.	Pounds
TSS	Total Suspended Solids; Measure of suspended solid materials.	Pounds
Total Nitrogen	Measure of all forms of nitrogen (i.e., nitrate, ammonia, and organic forms).	Pounds
Total Phosphorus	Measure of all forms of phosphorus (i.e., ortho and para compounds).	Pounds
Heavy Metals Arsenic Cadmium Chromium Copper Iron Lead Mercury Zinc	A group of elements present in the environment from natural and anthropogenic sources that can produce toxic effects, even in small concentrations.	Pounds
Oil & Grease	A mixture of hydrocarbons comprised of hundreds of chemical compounds found in petroleum.	Pounds
FCB	Fecal Coliform Bacteria. Used as an indicator of raw or partially treated human sewage.	Cells

Figure 1. Study Area for the Gulf of Maine Point Source Inventory



Canadian and U.S. Watersheds

Map ID	Code	Watershed	Map ID	Code	Watershed
1	C010	Yarmouth	19	N046	Coastal Drainage Area
2	C020	St. Mary's Bay	20	N050	Penobscot Bay
3	C030	Annapolis Basin	21	N052	Coastal Drainage Area
4	C040	Avon River	22	N055	Coastal Drainage Area
5	C050	Shubenacadie River	23	N060	Muscongus Bay
6	C060	Minas/Cobequid Shore	24	N070	Sheepscot Bay
7	C070	Cumberland Basin	25	N080	Casco Bay
8	C080	Shepody Shore	26	N086	Coastal Drainage Area
9	C090	Fundy Shore	27	N090	Saco Bay
10	C100	Saint John River	28	N096	Coastal Drainage Area
11	C110	Magaguadavic Digdeguash/ Maces Bay	29	N100	Great Bay
			30	N106	Coastal Drainage Area
12	C120	St. Croix River	31	N110	Merrimack River
13	N010	Passamaquoddy Bay	32	N115	Coastal Drainage Area
14	N016	Coastal Drainage Area	33	N120	Massachusetts Bay
15	N020	Englishman Bay	34	N125	Coastal Drainage Area
16	N030	Narraguagus Bay	35	N130	Cape Cod Bay
17	N036	Coastal Drainage Area	36	N135	Coastal Drainage Area
18	N040	Blue Hill Bay			

Note: The Saint John River watershed (C100) is shared by the U.S. and Canada.

57 hydrologic units in the study area.

Counties are the third spatial unit into which the data can be organized. Appendix 11 contains a list of the 61 counties in the study area, along with their 1990 population and areas. A county was included if it was part of any watershed in the study area.

There are currently no discharge estimates available for Quebec, even though a small part of this province is contained in one of the watersheds. This information could be incorporated into the Inventory in the future if the data became available.

Pollutants in the Inventory. The Inventory includes estimates for the 15 pollutants listed in Table 1 (including eight heavy metals). These pollutants were included because they represent substances whose presence in the aquatic environment is of concern in terms of both water quality and human health effects. They are also some of the more frequently monitored pollutants.

Table 1 includes the annual units by which each pollutant parameter in the database is measured. Annual flow is given in millions of gallons. Discharges for the remaining pollutants are given in pounds, with the exception of fecal coliform bacteria which is given in cells. In addition, seasonal, monthly, and daily discharge estimates are available for each of the 15 pollutant types in the Inventory.

Additional Pollutant Discharge Information. The background files in the database for the Gulf of Maine also include information on the permit limits and monitored discharges for 305 other pollutant parameters, a subset of the more than 1,600 parameters that can be reported in EPA's Permit and Compliance System (PCS) database. Information for most of these additional parameters such as chlorine, pH, and a suite of organic pollutants is very incomplete, as few permits require facilities to monitor for these pollutants. Typically, facilities are required only to monitor for those pollutants in the effluent judged to be of greatest concern.

Major/Minor, and Significant Minor Facility Designations. Point source facilities listed in the database are designated as being either major, significant minor or minor. The definition of these classifications varies between the U.S., New Brunswick and Nova Scotia.

Major/Minor Designations. The major/minor designation for the point sources in the U.S. portion of the study area was assigned using a system developed by the EPA. In this system, WWTPs are classified as being major if the flow is greater than one million gallons per day, or if the population served is greater than 10,000. An industrial discharger is classified as a major facility if it scores more than 80 on a numerical rating system. The system assigns points based on an assessment of five characteristics of the permittee's discharges including: 1) toxic pollutant potential; 2) flow/streamflow volume; 3) traditional pollutants; 4) potential public health impacts; and 5) water-quality factors.

In New Brunswick, WWTPs were classified as being major facilities if the population served was greater than 10,000 per day. Industrial point sources were classified as being major facilities based on discharges of BOD and TSS. Specifically, industrial facilities were classified as being major if they discharged more than 300 pounds of either BOD or TSS per day. In Nova Scotia, major and minor WWTPs and industrial facilities were identified by personnel from the Nova Scotia Department of the Environment.

Significant Minor Facilities. In addition to major and minor facilities, significant minors were also identified. Although smaller than the major facilities in the region, significant minor facilities are important contributors of one or more of the pollutant parameters included in the database.

In the U.S., significant minor facilities were defined by the NCPDI as those minor industrial or WWTP facilities with greater than two million gallons per day of process flow. Using EPA's system, a WWTP with a flow of greater than one million gallons per day should have appeared in the PCS database as a major facility. Instead of reassigning the WWTP as a major facility, the NCPDI reclassified it as a significant minor facility. Fortunately, there was only one WWTP in the U.S. portion of the study area that had to be classified as a significant minor facility. Significant minors for Nova Scotia were defined in the same way as in the U.S. New Brunswick defined significant minor WWTPs as those minor facilities serving more than 2,500 people per day. For industries, New Brunswick defined significant minors as those minor facilities discharging more than 75 pounds per day of

BOD or TSS.

Using the Inventory. The NCPDI database is intended to be a screening tool to enable region-wide resource allocation and decision-making. From this perspective, it is not necessary that estimates for individual sources be as accurate as they would be for very detailed analyses. The estimates are useful in setting priorities regarding how to manage and protect individual rivers and estuaries in the study area, and can contribute to a better understanding of the impact that point source discharges have on water quality.

Results

The major results drawn from the analysis of the database are:

• There are a total of 2,024 active point source facilities (273 major and 1,751 minor) in the study area (Appendix 6 and 7). The location of the major and significant minor facilities is shown in the panel maps in Appendix 8.

• Sixty-nine percent of the identified active facilities in the study area are located in the United States.

• There are 1,061 active industrial facilities, 252 wastewater treatment plants (WWTPs), and 85 power plants located in the United States; in Canada there are 492 industrial facilities, 126 WWTPs, and 8 power plants.

• Forty percent of the facilities (803 out of 2,024) in the study area are located in two watersheds in the United States: Massachusetts Bay and Merrimack River (Figure 2). No other single watershed in the Gulf of Maine accounts for more than eight percent of the facilities in the region (Appendix 3).

• The major point source dischargers in the study area are WWTPs and pulp and paper mills (Appendix 2).

• Sixty-seven percent of the 378 WWTPs in the study area are located in the United States; the Merrimack River watershed had the greatest number of WWTPs in the U.S. portion of the study area (60). The Saint John River watershed, which is split between the U.S. and Canada, had the greatest number of WWTPs in the Gulf of Maine with 69 (Appendix 3).

• The Massachusetts Water Resources Authority (MWRA) is permitted to discharge effluent from the primary-level treatment complex at Deer and Nut islands, a WWTP complex located in Boston, Massachusetts (Appendix 8). The MWRA-Deer Island/Nut Island complex is the largest overall discharger in the Gulf of Maine. This complex has the highest discharges of any facility for 12 of the 15 pollutants in the Inventory (Appendix 2), and is responsible more than 50 percent of the region's discharge of biochemical oxygen demand (BOD), total suspended solids (TSS), and iron.

It should be noted that there are three combined sewer overflow (CSO) treatment facilities associated with this complex: Cottage Farm, Prison Point, and Somerville Marginal. A CSO system receives both domestic waste and urban runoff. At times of very high flow, such as during heavy rainfall, the system can overflow resulting in the discharge of raw sewage. Three other CSO facilities in the area, Constitution Beach, Fox Point, and Commercial Point are owned and operated by the Authority but are currently included in the Boston Water and Sewer Commission permit (MA0101192). Discharge estimates for the MWRA-Deer Island/Nut Island complex and for the rest of the Gulf of Maine do not take into account overflow discharges from CSO facilities.

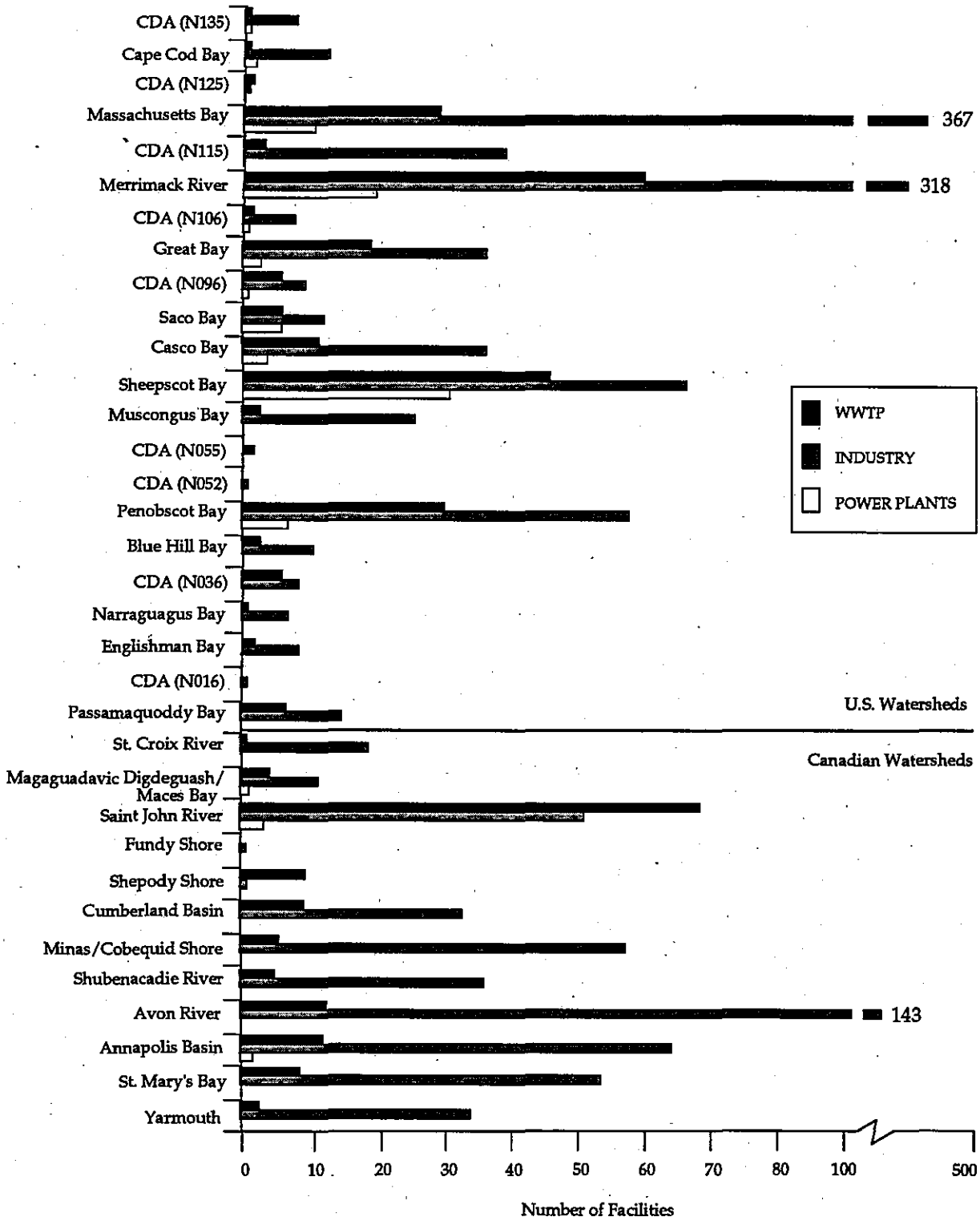
• Of the 1,553 industrial facilities in the Gulf of Maine, 685 (approximately 44 percent) are in the Massachusetts Bay and the Merrimack River watersheds. In the Canadian portion of the study area, the Avon River watershed contains approximately nine percent (143) of the industrial facilities in the study area (Appendix 3).

• The International Paper Company in Maine is the largest industrial discharger in the study area, accounting for the largest industrial discharges of process wastewater, BOD, TSS, chromium, and zinc (Appendix 2).

• Of the 93 power plants in the Gulf of Maine, over 91 percent are located in the United States; the Sheepscot Bay watershed had the greatest number with 31.

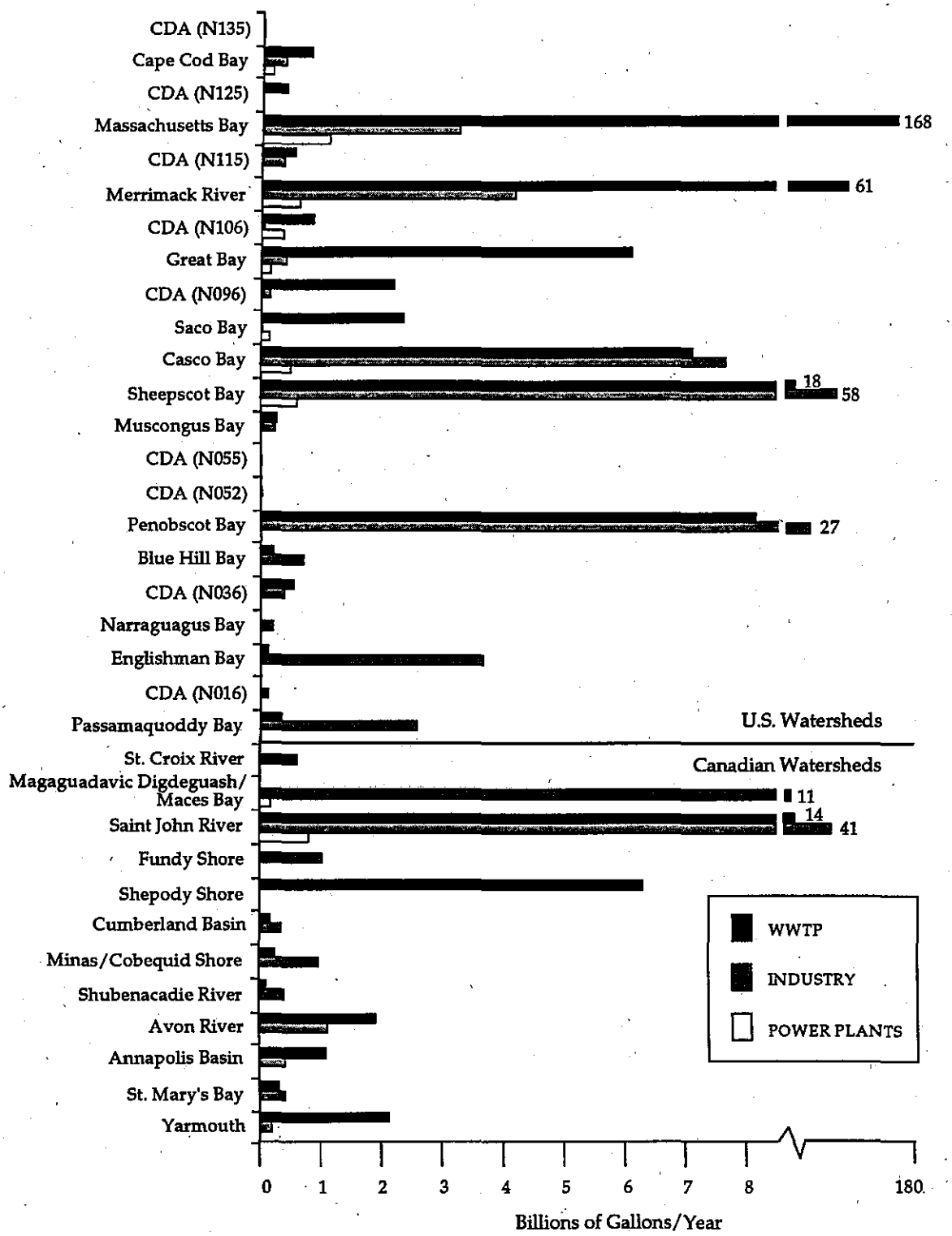
• U.S. facilities account for approximately 84 percent of the process flow discharged into the Gulf of Maine (Appendix 5). The Massachusetts Bay watershed had the highest annual process flow (173 billion gallons) in the study area. The MWRA-Deer Island (95 billion gallons) and the MWRA-Nut Island (44 billion gallons) complex (Appendix 1) account for over 80 percent of the total process flow for the watershed.

Figure 2. Number of Point Source Facilities by Watershed and Major Point Source Category in the Gulf of Maine Study Area, 1991



Note: There are 10 major and 16 minor point source facilities located in the U.S. portion of the St. John River watershed that discharge to Canadian waters.

Figure 3. *Annual Process Flow by Watershed and Major Point Source Category in the Gulf of Maine Study Area, 1991*



Note: There are 10 major and 16 minor point source facilities located in the U.S. portion of the St. John River watershed that discharge to Canadian waters.

The Sheepscot Bay watershed has the second highest process flow (76 billion gallons) followed by the Merrimack River (66 billion gallons) (Figure 3). The Saint John River watershed in Canada and the U.S. accounts for over 56 billion gallons of process flow annually. Together, these four watersheds account for over 78 percent of the total process flow in the study area.

• The source of the process flow for the Massachusetts Bay and Merrimack River watersheds is primarily WWTPs, while industry is the major source of process flow for the Sheepscot Bay and St. John River watersheds.

• In the U.S. portion of the study area, WWTPs contribute the greatest portion of the pollutant load discharged into the Gulf of Maine (Appendix 3). WWTPs account for over 50 percent of the total load discharged for all 15 pollutants, although industrial facilities are responsible for approximately 38 percent of the chromium discharges in the study area.

• In the Canadian portion of the study area, WWTPs are responsible for the greatest portion of the total pollutant loads for total nitrogen, total phosphorus, arsenic, cadmium, chromium, copper, iron, lead, mercury, oil and grease, and fecal coliform bacteria, while industries have higher discharges of process flow, BOD, TSS, and zinc.

• The 93 power plants in the study area contribute about 72 percent of the total flow discharged from all point source categories (Appendix 3). Most of this flow is once-through cooling water, which has little net addition of pollutants. However, some power plants have process water discharges that are comparable to loads discharged from major industrial facilities.

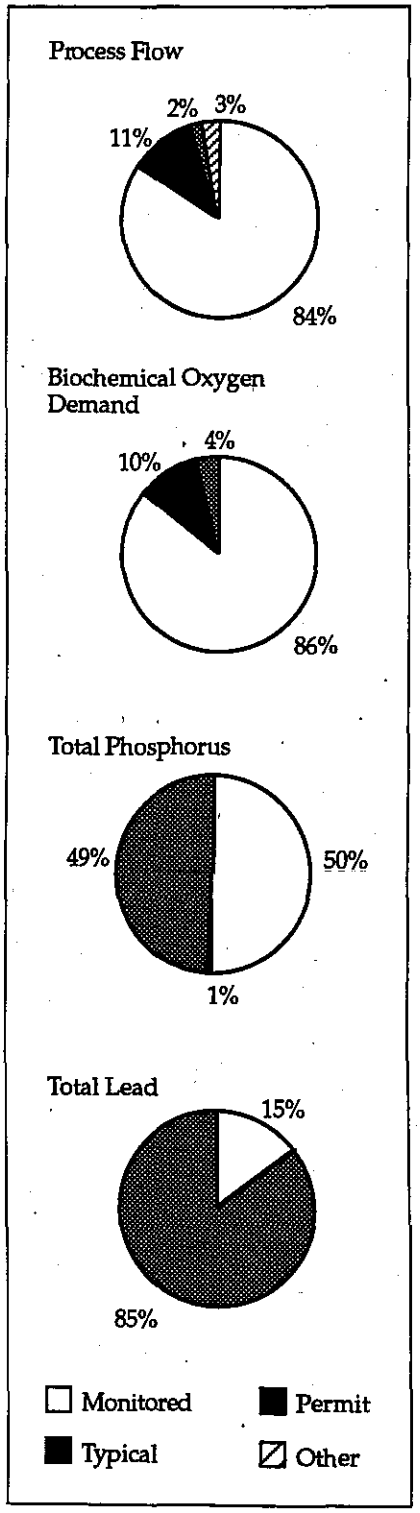
• The amount of monitoring data available varies by pollutant, country, and industry type (Appendix 4 and 5). Overall, the only pollutants within the NCPDI for which monitoring data are generally available in the U.S. are flow, BOD, TSS, and phosphorus (Figure 4 and Appendix 5). For Canadian watersheds, monitoring data were generally available for flow and TSS (Figure 5 and Appendix 5). The remaining parameters for Canadian facilities were estimated using typical pollutant concentration values (Appendix 5).

Data Sources

Information was gathered from a variety of data sources to build the Inventory of point source dischargers, and to compile the pollutant data needed to make discharge estimates. In this section, U.S. and Canadian data sources are discussed separately.

United States. A variety of sources were used to make point source loading estimates for the United States. The major source was EPA's Permit and Compliance System (PCS). In the United States, each point source facility that discharges to surface waters is required to have a National Pollutant Discharge Elimination System (NPDES) permit. The permit contains discharge limits for pollutants that the facility discharges and outlines the facility's monitoring require-

Figure 4. *Basis of Loading Estimates for Selected Pollutants in the U.S. Portion of the Gulf of Maine Study Area, 1991*



ments. The results of the waste stream monitoring are reported to the State or Federal regulatory agency in monthly or quarterly Discharge Monitoring Reports (DMRs). The DMR data can be obtained either from the PCS database or from State permit files. PCS, a computerized information management system, is used for tracking the permit, compliance, and enforcement-status data for the NPDES.

In addition to the PCS, the 1992 Construction Grants Needs Survey was also used when compiling the Inventory. The Needs Survey is an inventory of all existing or proposed publicly owned WWTPs needing construction to meet the requirements of the Clean Water Act. Data on flow and treatment level were used from the Needs Survey. All data for the United States were received in a digital format.

When possible, the project team filled in missing facility data. For example, when no latitude/longitude information was available, facility locations were estimated using the coordinates of the facility's zip code or the centroid of the city. Watershed codes and hydrologic unit codes were also assigned when necessary.

Canada. The data used to make the point source loading estimates for the Canadian point source facilities came from the New Brunswick and the Nova Scotia Departments of the Environment. New Brunswick used a private contractor to assemble the facility data, and data were received in a digital format for major and significant minor facilities.

Personnel from the Department of the Environment in Nova Scotia identified the major facilities in the Province. As with the United States, the project team attempted to fill in missing facility data including location, watershed codes, hydrologic units, and pollutant discharge characteristics.

U.S. and Canadian Data Variables

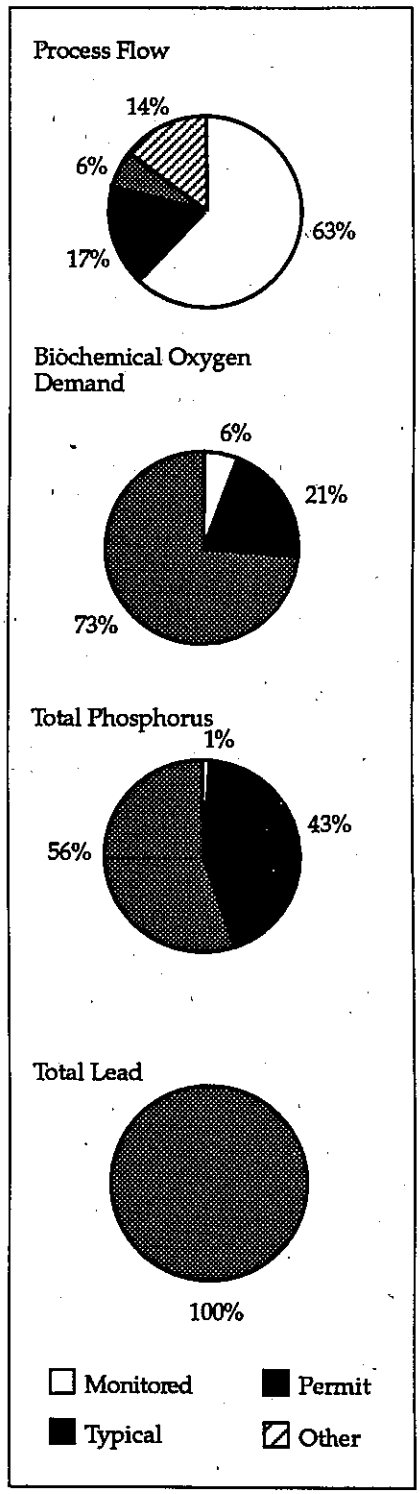
Although most of the variables in the database are the same for U.S. and Canadian facilities, some differences exist. For example, in the United States, the NPDES number, which appears as the variable NPID in the database, uniquely identifies the facility with a nine-character code established by the EPA. In Canada, a different coding system is used. In order to achieve consistency in the Gulf of Maine database, a nine-character "NPID number" was created by the project team for Canadian facilities.

In some cases, a variable used for point source facilities in the United States was not used for Canadian facilities. For example, variables for area code, region, and city code are blank for Canadian facilities, as they were either not appropriate or unavailable. Appendix 13 contains a complete description of the differences between the U.S. and Canadian data variables.

Load Estimation Methods

The same load estimation techniques were used for the United States and Canada, once the data received were placed in the

Figure 5. Basis of Loading Estimates for Selected Pollutants in the Canadian Portion of the Gulf of Maine Study Area, 1991



standardized format. The NCPDI load estimation method makes estimates for each active pipe discharging pollutants to surface waters. The pipe-level estimates are then summed to give a facility total.

Estimates are based on monitoring data when available. Monitoring data in the United States are taken from NPDES compliance monitoring results, reported in each facility's DMR. If monitoring data are not available, NPDES permit limits are used. In Canada, facility and discharge data were received from the Departments of Environment of New Brunswick and Nova Scotia. Some monitored and permit data were also available.

If no monitoring or permit data are available, typical pollutant concentrations (TPC) are used to estimate loads. TPCs, developed as part of earlier work for the NCPDI, are assigned based on the type of industrial or commercial activity taking place at the facility or, if the facility is a WWTP, the level of sewage treatment. Daily pollutant discharges are computed, then adjusted to annual discharges by multiplying daily discharges by the days of discharge as reported on the facility's permit application, or assumed for the pipe based on the facility's NCPDI discharge category. Seasonal loads are computed by prorating the annual load using seasonality factors generated from the number of months reporting in the season, or assigned based on the NCPDI discharge category. A more detailed description of the load estimation methods can be found in the NCPDI Point Source Methods Document published in 1993.

How Good is the Inventory?

The Inventory characterizes the number, type, and location of direct discharging facilities in the study area, and provides the best estimates available of the pollutant discharges from these facilities. The value of this information to the user depends on the completeness, timeliness, and accuracy of the data compiled.

A key component of this work was the effort to gather and use as much monitored pollutant discharge data as possible to improve the accuracy of the discharge estimates. Ideally, all pollutant discharge estimates would be based on monitoring data. Unfortunately, the available monitoring data for the U.S. and Canada are incomplete.

Completeness. An extensive effort was made to generate a comprehensive inventory of facilities in the study area. The inventory of facilities received for the U.S. was fairly complete. Following the review of the draft report and database, the New Brunswick Department of the Environment personnel provided a list of additional facilities along with pollutant discharge characteristics for these and other facilities in the database. Their input significantly improved the New Brunswick discharge estimates.

For Nova Scotia, although the Department of Environment provided a fairly complete list of the major and minor facilities in the study area, data on individual facility characteristics (e.g., latitude/longitude, facility type, flow, and pollutant concentrations) was very incomplete. The location of all facilities in Nova Scotia had to be approximated using city latitude/longitude coordinates, and pollutant discharge estimates were based almost entirely on typical pollutant concentrations.

It should be understood that compiling a complete and current inventory of facilities in an area is difficult. In any given time period, some facilities start or change operations, others cease operations either temporarily or permanently, and some change ownership and name. Resolving discrepancies in the exact number, type, and discharge characteristics of facilities in an area is time consuming and often unsuccessful. Nevertheless, the Project Team believes the Inventory to contain a fairly complete listing of the dischargers in the study area, although additional work would continue to improve the accuracy of the inventory.

Timeliness. The data in the Inventory were collected for a base year of 1991, and are most representative of discharges for that year. For screening-level assessments, loading estimates can be considered reasonably representative of discharges from 1991 to 1993. In general, this assumption is better for discharges from WWTPs, which vary less over time, than from industrial activities, which are more sensitive to changes in production levels tied to economic conditions.

The user should keep in mind that many of the discharge estimates were based on TPCs. As noted above, TPCs or typical pollutant concentrations are assigned to an industrial facility or WWTP when no monitoring or permit data is available. Subse-

quent to the completion of the first draft of this report, the NCPDI developed a new set of TPCs for WWTPs (Appendix 14). These values were based on some of the most recent literature and have now been incorporated into the database and this report. For industrial facilities, however, TPC values are based on information that is 10-15 years old. An assessment has not yet been made to determine if these typical concentrations are still representative of the discharge category. Because such a large proportion of the discharge estimates are based on TPCs, it is a potential source of error, particularly for discharges from industrial facilities.

Availability of Monitoring Data. The availability of monitoring data varies by pollutant, as was seen in Figures 4 and 5. In the United States, monitoring data for flow, BOD, TSS, and phosphorus are generally available, while the availability of metals data is poor. For example, approximately 82 percent of the estimate for BOD for U.S. facilities in the study area is based on monitoring data. For nitrogen, arsenic, cadmium, and chromium, however, less than 10 percent of the estimates are based on monitoring data (Appendix 5). For the Canadian facilities, while permit monitoring data were generally available (i.e., for New Brunswick), for flow and TSS, the availability of monitoring data for the 13 other pollutants was very poor (Appendix 5).

Nitrogen and Phosphorus. Although the NCPDI makes nutrient discharge estimates using total nitrogen and phosphorus data, it should be noted that facilities sometimes monitor for other forms of these two nutrients. For example, while 94 percent of the monitoring data for phosphorus was for total phosphorus, none of the monitoring data for nitrogen was for total nitrogen. Other forms of nitrogen such as ammonia, dithiocarbonate, and nitrate are more frequently monitored.

Although efforts were made to collect and use monitoring data, the fact that the vast majority of permits for point source facilities in the study area only require monitoring for conventional parameters raises the question of whether monitoring for additional pollutants should be required, at least for the major facilities that contribute the bulk of the pollutant loadings. The estimates in the NCPDI can be used to identify those major facilities for which additional permit requirements should be considered.

Accuracy of the Estimates. As discussed above, the capability to generate accurate discharge estimates is limited by the scarcity of monitoring data for the majority of pollutants covered in the Inventory. As a result, for many pollutants carried in the NCPDI, load estimates were based on assumptions about typical pollutant concentrations in the waste stream, the volume of flow in the pipe, and the type of wastewater (i.e., process, cooling, a combination of both, or domestic sewage effluent). These assumptions, while based on best engineering judgement, may result in inaccurate or even totally erroneous estimates in some cases. In addition, there is no way to quantify the error by assigning numerical confidence limits to the estimates. However, by tagging each discharge estimate with a data source and computational basis code, an effort has been made to provide the user with a means to evaluate the relative confidence that can be placed on the estimate. A future goal is to make more comparisons between NCPDI estimates and monitoring studies of individual plants as a means of improving the accuracy of the data.

How Can the Inventory be Improved?

There are a number of ways the Inventory can be improved. One of the most important is locating and incorporating additional monitoring or permit data for point source facilities in the study area, particularly for Nova Scotia. In addition, there are other components that could be added to enhance the overall characterization capabilities for the Gulf of Maine Program.

Completing the Canadian Portion of the Inventory. The Inventory can be significantly improved with additional monitoring and facility information for Nova Scotia. More complete data would result in more accurate and complete discharge estimates for the study area.

Refining Minor Facility Information. The accuracy of the data in the Inventory could also be increased by improving information for minor point source facilities. While New Brunswick and Nova Scotia provided additional information for minor facilities during the review, most of the pollutant discharge estimates for minor facilities not only in the Canadian portion of the

study area, but also in the U.S. still rely heavily on TPCs. Discharge data for these smaller facilities would help improve the accuracy of the database.

Improving Spatial Resolution. The eight-digit hydrologic cataloging unit is the smallest watershed-based spatial unit by which the information in the current Inventory can be aggregated. Users at the State and Provincial level may need to aggregate data by smaller watershed units such as 10-, 12-, or even 14-digit subbasins for more detailed watershed management decisions. Assigning facilities to these subbasins can be accomplished using a geographic information system if the digital boundary files defining the smaller watersheds are available. Alternatively, reporting the river reach number for U.S. facilities, or the Canadian equivalent would greatly improve the accurate aggregation of facilities into small watershed units. The reach number is an 11-digit code developed by the USGS and the EPA and is made up of the eight-digit USGS cataloging unit code and the three-digit EPA segment number.

Increasing Access to the Inventory. Putting all or a portion of the Inventory into a desktop information system would make the data more accessible to a broader group of managers and analysts. These desktop systems can be designed to have a user-friendly interface that provides simple mapping, analysis, and data manipulation capabilities. Systems can be expanded with additional data and analysis capabilities as the need arises to address specific water quality problems.

Overlay of Other Data. There are a variety of other data that could be added to the Inventory to improve the utility of the Gulf of Maine Project. For example, data generated by the States to satisfy the Section 305b requirements of the Clean Water Act could be overlaid with discharge data to pinpoint pollution sources. Information on shellfish closures maintained by NOAA could also be used to help correlate shellfish closures with pollutant discharges. Finally, NOAA monitors benthic organisms and analyzes sediments through its National Status and Trends Program to gage the health of the nation's coastal waters. This information could be used to correlate the presence or effects of pollution with point source discharges. The same type of information from Canada could be used in a similar manner.

Adding Nonpoint Sources of Pollution. Though not an improvement to the point source inventory, adding a nonpoint source component would provide a more complete picture for the region, as discharges from nonpoint sources such as farmlands and urban areas may also be significant sources of pollution in the Gulf of Maine. The Project Team is currently working on developing estimates of nonpoint source discharges for the U.S. portion of the drainage. Incorporation of nonpoint source estimates for the Canadian portion would create a complete pollution source characterization inventory for the Gulf of Maine.

For more information on this project, contact:

Percy A Pacheco
Pollution Sources Characterization Branch
Strategic Environmental Assessments Division
National Oceanic and Atmospheric Administration
1305 East-West Highway, SSMC4
Silver Spring, MD 20910
(301) 713-3000, ext. 155
e-mail:
ppacheco@seamail.nos.noaa.gov

Appendix 1.
Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
	Cape Cod Bay (N130)											
01-N130-001	PLYMOUTH WWTP	MA0100587	M	4952	41°58'00"	070°45'00"	PLYMOUTH HARBOR	807	807 M	184 M	202 M	128 T
01-N130-002	BOSTON ED. - #1 PILGRIM PLANT	MA0003557	M	4911	41°56'39"	070°34'46"	CAPE COD BAY	186,920	4 B	0 T	2 B	0 T
01-N130-003	CANAL ELEC. CO.	MA0004928	M	4911	41°46'14"	070°30'35"	CAPE COD CANAL	188,638	154 M	0 T	39 B	0 T
	Total							376,364	964	184	242	128
	Coastal Drainage Area (N125)											
01-N125-001	MARSHFIELD WWTP	MA0101737	M	4952	42°05'30"	070°38'55"	MASSACHUSETTS BAY	389	389 M	23 M	35 M	62 T
	Total							389	389	23	35	62
	Massachusetts Bay (N120)											
02-N120-001	BOSTON WTR. & SEW. COMM. WWTP	MA0101192	M	4952	42°20'48"	071°02'27"	BOSTON HARBOR	175	175 T	37 T	44 T	28 T
02-N120-002	CHARLES RIVER P C D WWTP	MA0102598	M	4952	42°08'24"	071°23'48"	CHARLES RIVER	1,258	1,258 M	22 M	89 T	32 T
02-N120-003	CITY OF CAMBRIDGE WWTP	MA0101974	M	4952	42°21'54"	071°06'18"	CHARLES RIVER BASIN/ALEWIFE BROOK	175	175 T	37 T	44 T	28 T
02-N120-004	CITY OF CHELSEA WWTP	MA0101877	M	4952	42°23'48"	071°01'59"	CHELSEA AND MYSTIC RIVERS	175	175 T	37 T	44 T	28 T
02-N120-005	CITY OF SOMERVILLE WWTP	MA0101982	M	4952	42°22'48"	071°05'30"	ALEWIFE BRK/MYSTIC RIV/CHARLES RIV	175	175 T	37 T	44 T	28 T
02-N120-006	CONCORD WWTP	MA0100668	M	4952	42°22'50"	071°15'17"	CONCORD RIVER	438	438 P	110 P	110 P	69 T
02-N120-007	DANVERS SEW. LIFT STA. WWTP	MA0101672	M	4952	42°34'12"	070°56'12"	PORTER RIV/ CRANE RIV/ CRANE BROOK	175	175 T	37 T	44 T	28 T
02-N120-008	GLOUCESTER WWTP	MA0100625	M	4952	42°35'36"	070°40'32"	GLOUCESTER HARBOR (ATLANTIC OCEAN)	1,214	1,214 M	1,532 M	1,081 M	233 T
02-N120-009	HULL WWTP	MA0101231	M	4952	42°18'00"	070°54'00"	ATLANTIC OCEAN/HINGHAM BAY	617	617 M	48 M	86 M	98 T
02-N120-010	LYNN WWTP	MA0100552	M	4952	42°27'11"	070°57'23"	LYNN HARBOR (BROAD SOUND)	9,985	9,985 M	1,425 B	2,121 B	1,583 T
02-N120-011	MANCHESTER WWTP	MA0100871	M	4952	42°34'24"	070°46'20"	MANCHESTER HARBOR	210	210 M	125 M	113 M	33 T
02-N120-012	MARBLEHEAD WTR. & SEW. COMM. WWTP	MA0100374	M	4952	42°28'50"	070°50'10"	MASSACHUSETTS BAY	1,460	1,460 O	305 T	366 T	232 T
02-N120-013	MCI NORFOLK - WALPOLE DEPT. COR. WWTP	MA0102253	M	4952	42°08'42"	071°15'00"	STOP RIVER TO CHARLES RIVER	113	113 M	11 M	28 T	18 T
02-N120-014	MEDFIELD WWTP	MA0100978	M	4952	42°11'26"	071°20'03"	CHARLES RIVER	110	110 O	7 M	4 M	10 T
02-N120-015	MILFORD WWTP	MA0100579	M	4952	42°07'13"	071°30'27"	CHARLES RIVER	442	442 O	31 M	37 M	11 T
02-N120-016	MWRA WWTP - DEER ISLAND & NUT ISLAND	MA0102351	M	4952	42°20'55"	070°57'41"	BOST HRBR/CHARLES RIVER/QUINCY BAY	139,154	139,154 M	162,257 M	90,831 M	26,707 T
02-N120-017	ROCKLAND WWTP	MA0101923	M	4952	42°06'27"	070°53'59"	FRENCH STREAM	523	523 M	37 M	33 M	48 T
02-N120-018	SOUTH ESSEX S D WWTP	MA0100501	M	4952	42°30'00"	070°55'00"	SALEM HARBOR	10,103	10,103 M	3,760 P	5,669 M	1,939 T
02-N120-019	SWAMPSCOTT WWTP	MA0101907	M	4952	42°28'03"	070°54'12"	NAHANT BAY	919	919 M	297 P	525 M	176 T
02-N120-020	BOSTON EDISON CO. - L STREET STA.	MA0004731	M	4911	42°20'21"	071°02'06"	BOSTON HARBOR	210,234	394 M	0 T	99 T	0 T
02-N120-021	BOSTON EDISON CO. - MYSTIC STA.	MA0004740	M	4911	42°23'20"	071°04'06"	MYSTIC RIVER	225,603	152 M	0 T	38 T	0 T
02-N120-022	CAMBRIDGE ELEC. LIGHT CO. KENDAL SQUARE	MA0004898	M	4911	42°21'47"	071°04'48"	CHARLES RIVER VIA BROAD CANAL	19,396	0 B	0 T	0 T	0 T
02-N120-023	NEW ENGLAND PWR. CO. SALEM HBR. STA.	MA0005096	M	4911	42°31'00"	070°54'00"	SALEM HARBOR (ATLANTIC OCEAN)	248,570	591 M	0 T	148 T	0 T
02-N120-024	CLEAN HARBORS OF BRAINTREE, INC.	MA0031551	M	2899	42°14'09"	070°58'25"	WEYMOUTH FORE RIVER	-	-	-	-	-
02-N120-025	EXXON CO. USA EVERETT TERM.	MA0000833	M	5171	42°24'00"	071°03'30"	MYSTIC RIVER / ISLAND END	4	4 B	<0.1 T	<0.1 B	0 T
02-N120-026	FOXBORO CO. - COCASSETT PLANT	MA0004111	M	3471	42°04'16"	071°15'00"	TAUNTON RIVER - ROBINSON BROOK	0	0 M	0 T	0 T	0 T
02-N120-027	FOXBORO CO. - NEPONSET PLANT	MA0004120	M	3471	42°04'23"	071°15'03"	NEPONSET RESERVOIR	1	0 M	0 T	0 T	0 T
02-N120-028	GENERAL ELEC. CO.	MA0003905	M	3511	42°27'00"	070°58'30"	SAUGUS RIVER	23,091	320 B	27 T	27 T	8 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates: TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	PCB (billion cells)
	Cape Cod Bay (N130)											
01-N130-001	PLYMOUTH WWTP	19 T	9 T	4 T	4 T	27 T	370 T	34 T	0 T	88 T	75 T	2,538 M
01-N130-002	BOSTON ED. - #1 PILGRIM PLANT	0 T	0 T	<0.1 T	0 T	283 T	3 T	<0.1 T	<0.1 T	2 T	1 T	0 T
01-N130-003	CANAL ELEC. CO.	0 T	9 T	1 T	8 T	320 B	76 B	1 T	0 T	90 T	19 B	0 T
	Total	**19**	**19**	**6**	**12**	**630**	**449**	**35**	**1**	**180**	**95**	**2,538**
	Coastal Drainage Area (N125)											
01-N125-001	MARSHFIELD WWTP	9 T	5 T	2 T	2 T	1 T	178 T	16 T	0 T	42 T	36 T	831 M
	Total	**9**	**5**	**2**	**2**	**1**	**178**	**16**	**0**	**42**	**36**	**831**
	Massachusetts Bay (N120)											
02-N120-001	BOSTON WTR. & SEW. COMM. WWTP	4 T	2 T	1 T	1 T	1 T	80 T	7 T	0 T	19 T	16 T	1,324 T
02-N120-002	CHARLES RIVER P C D WWTP	14 P	3 T	1 T	1 T	6 T	26 T	2 T	0 T	18 T	59 T	4,763 T
02-N120-003	CITY OF CAMBRIDGE WWTP	4 T	2 T	1 T	1 T	1 T	80 T	7 T	0 T	19 T	16 T	1,324 T
02-N120-004	CITY OF CHELSEA WWTP	4 T	2 T	1 T	1 T	1 T	80 T	7 T	0 T	19 T	16 T	1,324 T
02-N120-005	CITY OF SOMERVILLE WWTP	4 T	2 T	1 T	1 T	1 T	80 T	7 T	0 T	19 T	16 T	1,324 T
02-N120-006	CONCORD WWTP	6 P	5 T	2 T	2 T	2 T	201 T	18 T	0 T	48 T	41 T	6,631 P
02-N120-007	DANVERS SEW. LIFT STA. WWTP	4 T	2 T	1 T	1 T	1 T	80 T	7 T	0 T	19 T	16 T	1,324 T
02-N120-008	GLOUCESTER WWTP	81 T	16 T	13 T	226 T	176 T	1,115 T	89 T	1 T	296 T	130 M	919,152 T
02-N120-009	HULL WWTP	14 T	7 T	3 T	3 T	2 T	283 T	26 T	0 T	67 T	29 M	1,573 M
02-N120-010	LYNN WWTP	233 T	117 T	54 T	50 T	333 T	4,583 T	417 T	5 T	1,083 T	376 B	75,586 T
02-N120-011	MANCHESTER WWTP	5 T	3 T	1 T	1 T	1 T	96 T	9 T	0 T	23 T	20 T	2,173 M
02-N120-012	MARBLEHEAD WTR. & SEW. COMM. WWTP	34 T	17 T	8 T	7 T	5 T	670 T	61 T	1 T	158 T	136 T	11,052 T
02-N120-013	MCI NORFOLK - WALPOLE DEPT. COR. WWTP	2 M	1 T	1 T	1 T	0 T	52 T	5 T	0 T	12 T	11 T	210 M
02-N120-014	MEDFIELD WWTP	<0.1 M	1 T	0 T	0 T	2 T	26 T	5 T	<0.1 T	7 T	8 T	310 M
02-N120-015	MILFORD WWTP	1 M	1 T	1 T	0 T	2 T	9 T	1 T	0 T	6 T	21 T	1,672 T
02-N120-016	MWRA WWTP - DEER ISLAND & NUT ISLAND	4,175 M	175 M	82 M	479 M	6,789 M	127,729 T	1,171 M	23 M	8,253 M	10,440 B	263,913 M
02-N120-017	ROCKLAND WWTP	4 T	4 T	2 T	2 T	10 T	126 T	22 T	0 T	32 T	37 T	1,119 M
02-N120-018	SOUTH ESSEX S D WWTP	674 T	131 T	107 T	1,880 T	1,467 T	9,274 T	738 T	9 T	2,466 T	1,347 M	7,648,122 T
02-N120-019	SWAMPSCOTT WWTP	61 T	12 T	10 T	171 T	133 T	843 T	67 T	1 T	224 T	212 T	695,368 T
02-N120-020	BOSTON EDISON CO. - L STREET STA.	0 T	23 T	3 T	20 T	366 B	263 T	3 T	0 T	230 T	49 T	0 T
02-N120-021	BOSTON EDISON CO. - MYSTIC STA.	0 T	9 T	1 T	8 T	394 B	21 B	1 T	0 T	89 T	7 B	0 T
02-N120-022	CAMBRIDGE ELEC. LIGHT CO. KENDAL SQUARE	0 T	0 T	0 T	0 T	24 T	0 T	0 T	0 T	0 T	0 T	0 T
02-N120-023	NEW ENGLAND PWR. CO. SALEM HBR. STA.	0 T	35 T	4 T	30 T	458 T	395 T	5 T	1 T	345 T	74 T	0 T
02-N120-024	CLEAN HARBORS OF BRAINTREE, INC.	-	-	-	-	-	-	-	-	-	-	-
02-N120-025	EXXON CO. USA EVERETT TERM.	<0.1 T	<0.1 T	<0.1 T	0 T	0 T	3 T	0 T	<0.1 T	0 T	0 B	33 T
02-N120-026	FOXBORO CO. - COCASSETT PLANT	0 T	0 T	0 T	0 T	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T
02-N120-027	FOXBORO CO. - NEPONSET PLANT	0 T	0 T	0 T	0 T	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T
02-N120-028	GENERAL ELEC. CO.	2 T	0 T	3 T	19 T	55 T	134 T	3 T	1 T	27 T	12 B	0 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ⊕ in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
02-N120-029	GRANT GEAR INC.	MA0029262	M	3566	42°11'35"	071°12'00"	MEADOW BROOK TO NEPONSET RIVER	0	- M	-	-	-
02-N120-030	MOBIL OIL CORP.	MA0004006	M	5171	42°22'27"	071°00'56"	CHELSEA RIVER	127	127 M	25 T	13 B	12 T
02-N120-031	MONSANTO CORP.	MA0000809	M	2819	42°24'00"	071°04'30"	MYSTIC RIVER	35	35 M	0 T	14 T	1 T
02-N120-032	MWRA - REVERE SUGAR ASBESTOS RMV	MA0103128	M	1795	42°21'30"	071°04'00"	MYSTIC RIVER	-	-	-	-	-
02-N120-033	PATRIOT PAPER CORP.	MA0033383	M	2621	42°15'30"	071°06'45"	NEPONSET RIVER	-	-	-	-	-
02-N120-034	PLYMOUTH RUBBER CO. INC.	MA0000884	M	3069	42°09'22"	071°09'07"	NEPONSET RIVER - EAST BRANCH	677	0 M	0 T	0 T	0 T
02-N120-035	RANDOLPH - HOLBROOK WSTP	MA0021415	●	4941	42°09'42"	071°02'18"	GREAT POND	1,278	1,278 O	0 T	354 T	0 T
02-N120-036	RESCO RESOURCE RECOV. FAC.	MA0028193	M	4953	42°27'54"	071°00'43"	SAUGUS RIVER	3,402	0 M	0 T	0 T	0 T
	Total							899,839	170,321	170,202	102,003	31,348
	Coastal Drainage Area (N115)											
02-N115-001	IPSWICH WWTP	MA0100609	M	4952	42°41'47"	070°52'14"	GREENWOOD CREEK TO IPSWITCH RIVER	333	333 M	41 M	165 P	53 T
02-N115-002	ROCKPORT WWTP	MA0100145	M	4952	42°39'07"	070°37'12"	SANDY BAY (ATLANTIC OCEAN)	208	208 M	27 M	22 M	33 T
02-N115-003	BOSTIK DIV. EMHART INDS.	MA0001180	M	2891	42°34'09"	071°01'57"	IPSWICH RIVER	347	267 M	7 T	9 T	0 T
02-N115-004	OLIN CORP.	MA0005304	M	2869	42°31'43"	071°09'13"	HALLS BROOK	7	7 P	3 T	<0.1 T	0 T
	Total							895	815	78	196	86
	Merrimack River (N110)											
03-N110-001	AMESBURY WTR. POLL ABAT FAC. WWTP	MA0101745	M	4952	42°50'26"	070°55'39"	MERRIMACK & BACK RIVERS	582	582 M	224 M	261 M	92 T
03-N110-002	ASHLAND WWTP	NH0100005	M	4952	43°41'24"	071°38'43"	SQUAM RIVER	30	30 M	3 M	3 M	5 T
03-N110-003	AYER WWTP	MA0100013	M	4952	42°33'39"	071°36'13"	NASHUA RIVER	499	499 M	112 M	100 M	79 T
03-N110-004	BILLERICA WWTP	MA0101711	M	4952	42°35'00"	071°16'00"	CONCORD RIVER	273	273 M	35 M	37 M	43 T
03-N110-005	CONCORD - HALL STREET WWTP	NH0100901	M	4952	43°11'27"	071°31'19"	MERRIMACK RIVER	2,701	2,701 M	1,205 B	1,262 B	428 T
03-N110-006	CONCORD - PENACOOK WWTP	NH0100331	M	4952	43°17'02"	071°35'09"	MERRIMACK RIVER	210	210 M	10 M	53 T	33 T
03-N110-007	DERRY WWTP	NH0100056	M	4952	42°53'00"	071°20'00"	MERRIMACK RIVER	1,124	1,124 M	491 B	514 B	178 T
03-N110-008	EAST FITCHBURG WWTP	MA0100986	M	4952	42°32'49"	071°45'11"	NASHUA RIVER, NORTH BRANCH	3,011	3,011 M	175 M	210 M	75 T
03-N110-009	FRANKLIN REG. WWTP	NH0100960	M	4952	43°24'46"	071°39'05"	MERRIMACK RIVER	1,931	1,931 M	207 M	128 M	306 T
03-N110-010	GOFFSTOWN WWTP	NH0100081	M	4952	43°01'03"	071°35'42"	PISCATAGUOG RIVER	-	-	-	-	-
03-N110-011	GREATER LAWRENCE S D WWTP	MA0100447	M	4952	42°42'58"	071°07'48"	MERRIMACK RIVER	13,502	13,502 M	2,271 M	1,611 M	2,141 T
03-N110-012	HAVERHILL WWTP	MA0101621	M	4952	42°45'35"	071°03'32"	MERRIMACK RIVER	4,010	4,010 M	371 M	411 M	636 T
03-N110-013	HENNIKER WWTP	NH0100102	M	4952	43°10'33"	071°49'01"	CONTOOCOOK RIVER	57	57 M	4 M	14 T	9 T
03-N110-014	HOOKSETT WWTP	NH0100129	M	4952	43°04'14"	071°27'45"	MERRIMACK RIVER	190	190 M	18 M	31 M	30 T
03-N110-015	HUDSON WWTP	MA0101788	M	4952	42°24'08"	071°32'32"	ASSABET RIVER	756	756 M	100 M	86 M	19 T
03-N110-016	LEOMINSTER DPW WWTP	MA0100617	M	4952	42°30'00"	071°45'00"	NORTH NASHUA RIVER	2,269	2,269 M	118 M	68 M	57 T
03-N110-017	LINCOLN WWTP	NH0100706	M	4952	44°02'14"	071°40'30"	PEMIGEWASSETT RIVER - EAST BRANCH	240	240 M	50 T	169 B	38 T
03-N110-018	LOWELL REG. WTR. & W W UTIL. WWTP	MA0100633	M	4952	42°38'28"	071°20'21"	MERRIMACK RIV/CONCORD RIV/BEAVER BR	9,508	9,508 M	1,051 M	1,018 M	1,508 T
03-N110-019	MANCHESTER WWTP	NH0100447	M	4952	42°55'08"	071°27'12"	MERRIMACK RIVER & PISCATAQUOG RIVER	7,303	7,303 M	2,373 B	2,373 B	1,158 T
03-N110-020	MARLBOROUGH EASTERLY WWTP	MA0100498	M	4952	42°25'00"	071°33'00"	HOP BROOK	1,138	1,138 M	55 M	59 M	29 T
03-N110-021	MARLBOROUGH WESTERLY WWTP	MA0100480	M	4952	42°20'29"	071°36'51"	ASSABET RIVER	582	582 M	39 M	52 M	15 T
03-N110-022	MAYNARD WWTP	MA0101001	M	4952	42°26'27"	071°26'29"	ASSABET RIVER	338	338 M	63 M	67 M	54 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates: TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
02-N120-029	GRANT GEAR INC.	-	-	-	-	-	-	-	-	-	-	-
02-N120-030	MOBIL OIL CORP.	7 T	0 T	0 T	4 T	4 T	74 T	2 B	<0.1 T	11 T	5 B	961 T
02-N120-031	MONSANTO CORP.	0 T	1 B	1 T	2 B	2 B	1 T	6 B	0 B	2 M	0 T	0 T
02-N120-032	MWRA - REVERE SUGAR ASBESTOS RMV	-	-	-	-	-	-	-	-	-	-	-
02-N120-033	PATRIOT PAPER CORP.	-	-	-	-	-	-	-	-	-	-	-
02-N120-034	PLYMOUTH RUBBER CO. INC.	0 T	0 T	0 T	0 T	3 M	0 T	0 T	0 T	0 T	0 T	0 T
02-N120-035	RANDOLPH - HOLBROOK WSTP	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
02-N120-036	RESCO RESOURCE RECOV. FAC.	0 T	0 T	0 T	0 T	6 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**5,337**	**570**	**302**	**2,910**	**10,242**	**146,324**	**2,686**	**43**	**13,493**	**13,094**	**9,639,256**
	Coastal Drainage Area (N115)											
02-N115-001	IPSWICH WWTP	8 T	4 T	2 T	2 T	1 T	153 T	14 T	0 T	36 T	31 T	1,491 M
02-N115-002	ROCKPORT WWTP	5 T	2 T	1 T	1 T	1 T	95 T	8 M	0 T	23 T	19 T	918 M
02-N115-003	BOSTIK DIV. EMHART INDS.	<0.1 T	0 T	0 T	111 T	223 T	0 T	0 T	0 T	223 T	0 T	0 T
02-N115-004	OLIN CORP.	0 T	0 T	0 T	0 T	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**13**	**6**	**3**	**114**	**225**	**248**	**22**	**0**	**282**	**51**	**2,409**
	Merrimack River (N110)											
03-N110-001	AMESBURY WTR. POLL ABAT FAC. WWTP	14 T	7 T	3 T	1 M	1 M	267 T	24 T	0 T	63 T	54 T	2,560 M
03-N110-002	ASHLAND WWTP	<0.1 T	0 T	0 T	0 T	0 M	14 T	1 T	<0.1 T	3 T	3 T	224 T
03-N110-003	AYER WWTP	12 T	6 T	3 T	3 T	2 T	229 T	21 T	0 T	54 T	47 T	4,946 P
03-N110-004	BILLERICA WWTP	6 T	3 T	2 T	1 T	1 T	125 T	11 T	0 T	30 T	26 T	2,069 T
03-N110-005	CONCORD - HALL STREET WWTP	63 T	32 T	15 T	14 T	9 T	1,240 T	113 T	1 T	293 T	252 T	20,447 T
03-N110-006	CONCORD - PENACOOK WWTP	5 T	2 T	1 T	1 T	1 T	96 T	9 T	0 T	23 T	20 T	1,587 T
03-N110-007	DERRY WWTP	26 T	13 T	6 T	6 T	4 T	516 T	47 T	1 T	122 T	105 T	8,510 T
03-N110-008	EAST FITCHBURG WWTP	7 M	6 T	3 T	3 T	14 T	63 T	5 T	1 T	44 T	141 T	11,398 T
03-N110-009	FRANKLIN REG. WWTP	45 T	23 T	11 T	10 T	6 T	886 T	81 T	1 T	210 T	181 T	14,621 T
03-N110-010	GOFFSTOWN WWTP	-	-	-	-	-	-	-	-	-	-	-
03-N110-011	GREATER LAWRENCE S D WWTP	316 T	158 T	73 T	68 T	45 T	6,197 T	563 T	6 T	1,465 T	1,262 T	102,210 T
03-N110-012	HAVERHILL WWTP	94 T	47 T	22 T	20 T	13 T	1,840 T	167 T	2 T	435 T	375 T	100,022 P
03-N110-013	HENNIKER WWTP	1 T	1 T	0 T	0 T	0 T	26 T	2 T	<0.1 T	6 T	5 T	431 T
03-N110-014	HOOKSETT WWTP	4 T	2 T	1 T	1 T	1 T	87 T	8 T	0 T	21 T	18 T	1,437 T
03-N110-015	HUDSON WWTP	6 T	2 T	1 T	1 T	4 T	16 T	1 T	0 T	11 T	35 T	5,938 M
03-N110-016	LEOMINSTER DPW WWTP	4 M	5 T	3 T	2 T	10 T	47 T	4 T	1 T	33 T	106 T	8,589 T
03-N110-017	LINCOLN WWTP	6 T	3 T	1 T	1 T	1 T	110 T	10 T	0 T	26 T	22 T	1,818 T
03-N110-018	LOWELL REG. WTR. & W W UTIL. WWTP	222 T	111 T	52 T	48 T	32 T	4,364 T	397 T	4 T	1,031 T	889 T	26,246 M
03-N110-019	MANCHESTER WWTP	171 T	85 T	40 T	37 T	24 T	3,352 T	305 T	3 T	792 T	683 T	55,282 T
03-N110-020	MARLBOROUGH EASTERLY WWTP	4 M	2 T	1 T	1 T	5 T	24 T	2 T	0 T	17 T	53 T	3,045 M
03-N110-021	MARLBOROUGH WESTERLY WWTP	5 T	1 T	1 T	1 T	3 T	12 T	1 T	0 T	9 T	27 T	2,202 T
03-N110-022	MAYNARD WWTP	8 T	4 T	2 T	2 T	1 T	155 T	14 T	0 T	37 T	32 T	2,274 M

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow			Annual Pollutant Load Estimates								
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)		BOD (1000 lbs)		TSS (1000 lbs)		TN (1000 lbs)	
03-N110-023	MERRIMACK WWTP	NH0100161	M	4952	42°48'38"	071°28'34"	MERRIMACK RIVER	2,161	2,161	M	719	B	852	B	343	T
03-N110-024	MILFORD WWTP	NH0100471	M	4952	42°49'38"	071°37'37"	SOUHEGAN RIVER	430	430	M	41	M	28	M	39	T
03-N110-025	MWRA - CLINTON WWTP	MA0100404	M	4952	42°25'52"	071°40'50"	NASHUA RIVER,SOUTH BR	1,000	1,000	M	183	P	183	P	192	T
03-N110-026	NASHUA WWTP	NH0100170	M	4952	42°44'46"	071°26'37"	MERRIMACK RIVER & NASHUA RIVER	2,461	2,461	M	289	M	186	M	390	T
03-N110-027	NEWBURYPORT WWTP	MA0101427	M	4952	42°48'34"	070°51'41"	MERRIMACK RIVER	952	952	M	187	M	68	M	151	T
03-N110-028	PETERBOROUGH WWTP	NH0100650	M	4952	42°52'00"	071°55'00"	CONTOOCOOK RIVER	144	144	M	21	M	36	M	23	T
03-N110-029	PITTSFIELD WWTP	NH0100986	M	4952	43°17'00"	071°18'00"	SUNCOOK RIVER	36	36	M	5	M	3	M	6	T
03-N110-030	PLYMOUTH VILLAGE WWTP	NH0100242	M	4952	43°50'00"	071°40'00"	PEMIGEWASSET RIVER	131	131	M	64	P	18	M	25	T
03-N110-031	SALISBURY WWTP	MA0102873	M	4952	42°50'11"	070°53'13"	TIDAL CREEK TO MERRIMACK RIVER	151	151	M	6	T	11	T	4	T
03-N110-032	SUNCOOK WWTP	NH0100714	M	4952	43°07'40"	071°27'50"	MERRIMACK RIVER	261	261	M	32	M	24	M	41	T
03-N110-033	WATERVILLE VALLEY WWTP	NH0100781	M	4952	43°56'45"	071°30'43"	MAD RIVER	75	75	M	3	M	5	T	2	T
03-N110-034	WEST FITCHBURG WWTP	MA0101281	M	4952	42°35'00"	071°48'00"	NASHUA RIVER, NORTH BRANCH	1,733	1,733	M	158	M	96	M	159	T
03-N110-035	WESTBOROUGH WWTP	MA0100412	M	4952	42°16'51"	071°38'08"	ASSABET RIVER	478	478	O	48	M	34	T	12	T
03-N110-036	BIO - ENERGY CORP.	NH0021652	M	4911	43°11'29"	071°44'51"	CONTOOCOOK RIVER VIA HYDRO RACEWAY	244	244	B	0	T	61	T	0	T
03-N110-037	BRIDGEWATER PWR. CO.	NH0022021	M	4911	43°42'57"	071°39'37"	PEMIGEWASSET RIVER	0	0	M	0	T	<0.1	T	0	T
03-N110-038	P. S. OF NH - MERRIMACK STA.	NH0001465	M	4911	43°08'10"	071°28'00"	UNNAMED TRIBUTARY OF SOUHEGAN RIVER	89,121	390	M	0	T	153	B	0	T
03-N110-039	A T & T CO.	MA0001261	M	3661	42°43'54"	071°07'12"	MERRIMACK RIVER	78	71	B	0	T	7	T	0	T
03-N110-040	GOULD INC.	MA0000281	M	3613	42°49'26"	070°53'26"	MERRIMACK RIVER	5	5	M	0	T	<0.1	M	0	T
03-N110-041	GTE SYLVANIA INC. PRODS. CORP.	NH0001325	M	3641	43°06'40"	071°55'00"	BEARDS BROOK TO CONTOOCOOK NORTH BR	0	0	M	0	T	0	T	0	T
03-N110-042	HITCHINER MFG. CO. INC.	NH0001376	M	3324	42°50'00"	071°45'00"	UNNAMED TRIBUTARY TO SOUHEGAN RIVER	79	79	M	0	T	23	T	4	T
03-N110-043	HOLLINGSWORTH & VOSE CO.	MA0004561	M	2621	42°36'47"	071°38'05"	SQUANNACOOK RIVER	694	694	M	45	M	35	M	8	T
03-N110-044	JAMES RIVER PAPER CO. - PEPPEREL DIV.	MA0005185	M	2621	42°40'00"	071°34'36"	NASHUA RIVER	465	465	T	67	T	110	T	5	T
03-N110-045	MONADNOCK PAPER MILLS, INC.	NH0000230	M	2621	43°00'30"	071°55'50"	CONTOOCOOK RIVER	240	240	M	62	B	76	B	3	T
03-N110-046	NEW ENGLAND PLATING CO.	MA0005088	M	3471	42°16'39"	071°47'41"	BLACKSTONE RIV.-MILL BROOK STORM DR	50	50	M	0	T	2	M	0	T
03-N110-047	NOVACOR CHEMICALS INC.	MA0000442	M	2821	42°30'49"	071°45'00"	WASS BROOK	2	1	M	<0.1	M	<0.1	T	0	T
03-N110-048	PAPERTECH CORP.	NH0001511	M	2611	43°11'30"	071°44'45"	CONTOOCOOK RIVER	39	25	M	8	B	11	B	0	T
03-N110-049	PROCESS ENGR. INC.	NH0020788	M	3441	42°50'15"	071°06'15"	LITTLE RIVER VIA UNNAMED TRIBUTARY	0	0	M	0	T	<0.1	M	0	T
03-N110-050	RAYTHEON CO. (WAYLAND)	MA0001511	M	3625	42°21'55"	071°22'05"	SUDBURY RIVER	64	38	M	8	T	8	T	4	T
03-N110-051	RAYTHEON CORP.	MA0001414	M	3672	42°36'32"	071°17'35"	CONCORD RIVER	25	25	M	4	T	2	B	2	T
03-N110-052	SILICON TRANSISTOR CORP.	MA0025241	M	3674	42°36'20"	071°20'00"	RIVER MEADOW BROOK	15	0	M	0	T	0	T	0	T
03-N110-053	SURRETTE AMERICA. DIV. OF ATL. BATTERY	NH0001015	M	3691	43°26'26"	071°35'42"	WINNEPEASAUKEE RIVER	0	0	M	0	T	<0.1	P	0	T
03-N110-054	U. S. A. F. NEW BOSTON A. F. S.	NH0090077	M	9711	42°56'39"	071°37'20"	BEAVER POND VIA UNNAMED STREAM	4	4	B	2	B	2	B	0	T
03-N110-055	VERYFINE PRODS. INC.	MA0004936	M	2033	42°32'21"	071°30'54"	MILL BROOK	57	57	M	23	M	117	T	0	T
03-N110-056	W. R. GRACE & CO. GTE	NH0000591	M	2899	42°42'59"	071°26'23"	MERRIMACK RIVER	122	122	M	0	T	44	M	2	T
03-N110-057	WESTFORD ANODIZING CORP.	MA0024414	M	3471	42°35'47"	071°27'59"	STONEY BROOK	4	4	M	0	T	<0.1	M	0	T
03-N110-058	WYMAN - GORDON INVESTMENT CASTING CO.	NH0001023	M	3621	43°26'30"	071°35'09"	WINNIPEASAUKEE RIVER	28	6	M	0	T	<0.1	B	0	T
	Total							151,603	62,787		10,946		10,719		8,348	
	Coastal Drainage Area (N106)															
03-N106-001	HAMPTON WWTP	NH0100625	M	4952	42°56'00"	070°51'00"	TIDE MILL CREEK VIA TRIBUTARY	774	774	M	71	M	50	M	123	T
03-N106-002	P. S. OF NH - SEABROOK STA.	NH0020338	M	4911	42°53'43"	070°47'27"	ATLANTIC OCEAN & BROWNS RIVER	33,250	358	M	0	T	86	B	0	T
03-N106-003	K. J. QUINN & CO. INC.	NH0001091	M	2821	42°53'00"	070°52'45"	CAINS BROOK	18	1	M	<0.1	T	<0.1	B	0	T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Map Ref. Num.	Watershed (Code) Facility Name	TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
		Annual Pollutant Load Estimates										
03-N110-023	MERRIMACK WWTP	51 T	25 T	12 T	11 T	7 T	992 T	90 T	1 T	234 T	202 T	16,357 T
03-N110-024	MILFORD WWTP	4 T	3 T	1 T	1 T	8 T	103 T	18 T	0 T	27 T	30 T	2,440 T
03-N110-025	MWRA - CLINTON WWTP	67 T	13 T	11 T	186 T	145 T	918 T	73 T	1 T	244 T	162 T	756,984 T
03-N110-026	NASHUA WWTP	58 T	29 T	13 T	12 T	8 T	1,129 T	103 T	1 T	267 T	230 T	18,628 T
03-N110-027	NEWBURYPORT WWTP	22 T	11 T	8 M	22 M	68 M	236 M	71 M	0 T	34 M	89 T	3,027 M
03-N110-028	PETERBOROUGH WWTP	3 T	2 T	1 T	1 T	1 T	66 T	6 T	0 T	16 T	13 T	1,088 T
03-N110-029	PITTSFIELD WWTP	<0.1 T	0 T	0 T	0 T	0 T	17 T	2 T	<0.1 T	4 T	3 T	273 T
03-N110-030	PLYMOUTH VILLAGE WWTP	9 T	2 T	1 T	25 T	19 T	121 T	10 T	0 T	32 T	30 T	99,470 T
03-N110-031	SALISBURY WWTP	1 T	0 T	0 T	0 T	1 T	3 T	0 T	<0.1 T	2 T	7 T	1,347 P
03-N110-032	SUNCOOK WWTP	6 T	3 T	1 T	1 T	1 T	120 T	11 T	0 T	28 T	24 T	1,976 T
03-N110-033	WATERVILLE VALLEY WWTP	<0.1 T	0 T	0 T	0 T	0 T	2 T	0 T	<0.1 T	1 T	4 T	285 T
03-N110-034	WEST FITCHBURG WWTP	70 P	12 T	6 T	5 T	33 T	416 T	74 T	1 T	107 T	122 T	9,841 T
03-N110-035	WESTBOROUGH WWTP	4 T	1 T	1 T	0 T	2 T	10 T	1 T	0 T	7 T	22 T	4,882 M
03-N110-036	BIO - ENERGY CORP.	0 T	14 T	2 T	12 T	18 T	163 T	2 T	0 T	143 T	31 T	0 T
03-N110-037	BRIDGEWATER PWR. CO.	0 T	<0.1 T	<0.1 T	<0.1 T	<0.1 T	0 T	<0.1 T	<0.1 T	0 T	<0.1 T	0 T
03-N110-038	P. S. OF NH - MERRIMACK STA.	0 T	13 T	2 T	11 T	17 T	145 T	2 T	0 T	127 T	27 T	0 T
03-N110-039	A T & T CO.	0 T	0 T	6 T	35 T	47 T	0 T	12 T	0 T	29 T	7 T	0 T
03-N110-040	GOULD INC.	0 T	0 T	0 T	2 T	2 M	0 T	1 T	0 T	2 T	0 M	0 T
03-N110-041	GTE SYLVANIA INC. PRODS. CORP.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
03-N110-042	HITCHINER MFG. CO. INC.	0 T	0 T	0 T	0 T	3 T	79 T	46 T	0 T	126 T	2 M	0 T
03-N110-043	HOLLINGSWORTH & VOSE CO.	0 T	0 T	0 T	17 T	6 T	0 T	6 T	0 T	116 T	0 T	0 T
03-N110-044	JAMES RIVER PAPER CO. - PEPPEREL DIV.	0 T	0 T	0 T	12 T	4 T	0 T	4 T	<0.1 T	78 T	0 T	0 T
03-N110-045	MONADNOCK PAPER MILLS, INC.	0 T	0 T	0 T	6 T	2 T	0 T	2 T	<0.1 T	40 T	0 T	0 T
03-N110-046	NEW ENGLAND PLATING CO.	0 T	0 T	4 T	25 T	33 T	0 T	8 T	0 T	29 M	2 M	0 T
03-N110-047	NOVACOR CHEMICALS INC.	0 T	<0.1 T	<0.1 T	1 T	0 T	0 T	<0.1 T	<0.1 T	0 M	0 P	0 T
03-N110-048	PAPERTECH CORP.	0 T	0 T	0 T	1 T	0 T	0 T	0 T	<0.1 T	4 T	0 T	0 T
03-N110-049	PROCESS ENGR. INC.	0 T	0 T	<0.1 T	0 T	0 T	0 T	<0.1 T	0 T	0 T	<0.1 M	0 T
03-N110-050	RAYTHEON CO. (WAYLAND)	2 T	0 T	0 T	1 T	1 T	21 T	2 T	<0.1 T	3 T	4 T	289 B
03-N110-051	RAYTHEON CORP.	<0.1 T	1 T	1 T	2 T	5 B	6 T	2 T	<0.1 T	4 B	1 M	0 T
03-N110-052	SILICON TRANSISTOR CORP.	0 T	0 T	0 T	0 T	0 M	0 T	0 T	0 T	0 T	0 T	0 T
03-N110-053	SURRETTE AMERICA. DIV. OF ATL. BATTERY	0 T	0 T	<0.1 T	2 T	0 T	<0.1 T	0 P	<0.1 T	9 T	<0.1 T	0 T
03-N110-054	U. S. A. F. NEW BOSTON A. F. S.	<0.1 T	<0.1 T	<0.1 T	0 T	0 T	3 T	0 T	<0.1 T	0 T	0 T	32 T
03-N110-055	VERYFINE PRODS. INC.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
03-N110-056	W. R. GRACE & CO. GTE	0 T	4 T	3 T	6 M	9 M	2 T	20 T	0 T	38 M	0 T	0 T
03-N110-057	WESTFORD ANODIZING CORP.	0 T	0 T	0 T	1 M	1 M	0 T	1 T	0 T	2 M	0 M	0 T
03-N110-058	WYMAN - GORDON INVESTMENT CASTING CO.	0 T	0 T	1 T	3 T	4 T	0 T	1 T	0 T	2 T	0 B	0 T
	Total	1,317	646	314	619	621	24,217	2,353	27	6,479	5,347	1,292,770
	Coastal Drainage Area (N106)											
03-N106-001	HAMPTON WWTP	18 T	9 T	4 T	4 T	3 T	355 T	32 T	0 T	84 T	72 T	5,858 T
03-N106-002	P. S. OF NH - SEABROOK STA.	0 T	21 T	3 T	18 T	82 T	239 T	3 T	0 T	209 T	45 T	0 T
03-N106-003	K. J. QUINN & CO. INC.	0 T	<0.1 T	<0.1 T	1 T	0 T	0 T	<0.1 T	<0.1 T	0 T	0 B	0 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
03-N106-004	MORTON INTERNAT. INC.	NH0022306	M	2821	42°53'00"	070°52'45"	CAINS BROOK	59	29 B	6 T	12 T	8 T
	Total							34,101	1,162	77	148	131
	Great Bay (N100)											
03-N100-001	BERWICK SEW. DIST. WWTP	ME0101397	M	4952	43°15'20"	070°50'40"	SALMON FALLS RIVER	69	69 M	37 M	23 M	11 T
03-N100-002	DOVER - HUCKLEBERRY HILL WWTP	NH0101311	M	4952	43°11'00"	070°51'00"	GREAT BAY	419	419 M	47 M	50 M	66 T
03-N100-003	DURHAM WWTP	NH0100455	M	4952	43°08'06"	070°54'13"	OYSTER RIVER ESTUARY	708	708 M	119 B	134 B	112 T
03-N100-004	EXETER WWTP	NH0100871	M	4952	42°59'05"	070°56'51"	SQUAMSCOTT RIVER	756	756 M	75 M	89 M	120 T
03-N100-005	FARMINGTON WWTP	NH0100854	M	4952	43°23'13"	071°03'03"	COCHECO RIVER	79	79 M	32 P	7 M	13 T
03-N100-006	KITTERY WWTP	ME0100285	M	4952	43°06'00"	070°45'30"	PISCATAQUA RIVER	453	453 M	96 M	142 M	72 T
03-N100-007	NEWMARKET WWTP	NH0100196	M	4952	43°04'00"	070°57'00"	LAMPREY RIVER	199	199 M	29 M	21 M	32 T
03-N100-008	PORTSMOUTH - PIERCE ISLAND WWTP	NH0100234	M	4952	43°04'23"	070°44'27"	PISCATAQUA RIVER	1,011	1,011 M	901 M	553 M	194 T
03-N100-009	ROCHESTER WWTP	NH0100668	M	4952	43°16'13"	070°58'22"	COCHECO RIVER	1,508	1,508 M	315 T	156 M	239 T
03-N100-010	SOMERSWORTH WWTP	NH0100277	M	4952	43°15'06"	070°50'30"	SALMON FALLS RIVER	400	400 M	48 M	27 M	64 T
03-N100-011	P. S. OF NH - NEWINGTON STA.	NH0001601	M	4911	43°05'58"	070°47'31"	PISCATAQUA ESTUARY	101,007	24 M	0 T	6 T	0 T
03-N100-012	P. S. OF NH - SCHILLER STA.	NH0001473	M	4911	43°05'52"	070°47'03"	PISCATAQUA RIVER	6,098	90 B	0 T	23 T	0 T
03-N100-013	KANE GONIC BRICK CORP.	NH0021512	M	3251	43°17'00"	070°56'00"	COCHECO RIVER VIA STREAM+STORMSEWER	0	0 B	<0.1 T	<0.1 B	0 T
03-N100-014	KANE GONIC BRICK CORP.	NH0021521	M	1522	43°16'00"	070°52'00"		85	42 T	9 T	8 T	4 T
03-N100-015	MILLIPORE OF NEW HAMPSHIRE, INC.	NH0022055	M	8734	43°01'00"	071°00'00"	TAYLOR RIVER	0	0 B	<0.1 T	<0.1 B	<0.1 T
03-N100-016	PRATT & WHITNEY	ME0022861	M	3724	43°18'37"	070°43'29"	GREAT WORKS RIVER	120	50 P	5 T	6 B	2 T
03-N100-017	TILOTSON RUBBER CO. INC.	NH0000469	M	2822	43°22'24"	070°59'01"	SALMON FALLS RIVER	0	0 M	0 T	0 T	0 T
03-N100-018	U. S. A. F. PEASE A. F. B.	NH0090000	M	9711	43°04'07"	070°48'00"	GREAT BAY	1,194	123 M	9 M	23 T	12 T
	Total							114,106	5,930	1,720	1,267	939
	Coastal Drainage Area (N096)											
03-N096-001	KENNEBUNK SEW. DIST. WWTP	ME0100935	M	4952	43°22'47"	070°32'20"	MOUSAM RIVER	331	331 M	52 M	32 M	52 T
03-N096-002	KENNEBUNKPORT WWTP	ME0101184	M	4952	43°21'39"	070°28'11"	KENNEBUNK RIVER	94	94 M	12 M	8 M	15 T
03-N096-003	OGUNQUIT SEW. DIST. WWTP	ME0100986	M	4952	43°15'54"	070°35'21"	OGUNQUIT RIVER	52	52 M	9 M	5 M	8 T
03-N096-004	SANFORD SEW. DIST. WWTP	ME0100617	M	4952	43°24'37"	070°43'36"	MOUSAM RIVER	1,090	1,090 M	53 M	62 M	27 T
03-N096-005	WELLS SAN. DIST. WWTP	ME0100790	M	4952	43°17'10"	070°34'17"	ATLANTIC OCEAN, SACO RIVER	216	216 M	34 M	12 M	34 T
03-N096-006	YORK SEW. DIST. WWTP	ME0101222	M	4952	43°10'53"	070°36'27"	ATLANTIC OCEAN (CAPE NEDDICK RIVER)	414	414 M	146 P	107 M	66 T
	Total							2,196	2,196	306	226	203
	Saco Bay (N090)											
04-N090-001	BIDDEFORD WWTP	ME0100048	M	4952	43°30'00"	070°28'00"	SACO RIVER	105	105 M	22 T	26 T	17 T
04-N090-002	SACO WWTP	ME0101117	M	4952	43°29'40"	070°26'30"	SACO RIVER	691	691 M	77 M	73 M	110 T
04-N090-003	SCARBOROUGH SAN. DIST. WWTP	ME0102059	M	4952	43°32'55"	070°18'58"	ATLANTIC OCEAN-SCARBORO TIDEWATERS	402	402 M	45 M	34 M	64 T
04-N090-004	TOWN OF OLD ORCHARD BEACH WWTP	ME0101524	M	4952	43°30'06"	070°23'56"	GOOSEFARE BROOK	1,095	1,095 O	68 M	274 T	174 T
	Total							2,292	2,292	213	407	363

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
03-N106-004	MORTON INTERNAT. INC.	0 T	1 T	0 T	17 T	3 T	0 T	1 T	0 T	7 T	4 T	0 T
	Total	18	31	7	39	87	594	36	1	301	121	5,858
	Great Bay (N100)											
03-N100-001	BERWICK SEW. DIST. WWTP	2 T	1 T	0 T	0 T	0 T	32 T	3 T	<0.1 T	8 T	1 M	525 T
03-N100-002	DOVER - HUCKLEBERRY HILL WWTP	10 T	5 T	2 T	2 T	1 T	192 T	18 T	0 T	45 T	39 T	3,169 T
03-N100-003	DURHAM WWTP	17 T	8 T	4 T	4 T	2 T	325 T	30 T	0 T	77 T	66 T	5,360 T
03-N100-004	EXETER WWTP	18 T	9 T	4 T	4 T	3 T	347 T	32 T	0 T	82 T	71 T	5,720 T
03-N100-005	FARMINGTON WWTP	2 T	1 T	0 T	0 T	0 T	36 T	3 T	<0.1 T	9 T	7 T	596 T
03-N100-006	KITTERY WWTP	11 T	5 T	3 T	2 T	2 T	208 T	19 T	0 T	49 T	42 T	3,426 T
03-N100-007	NEWMARKET WWTP	5 T	2 T	1 T	1 T	1 T	92 T	8 T	0 T	22 T	19 T	1,509 T
03-N100-008	PORTSMOUTH - PIERCE ISLAND WWTP	68 T	13 T	11 T	188 T	147 T	928 T	74 T	1 T	247 T	262 M	765,365 T
03-N100-009	ROCHESTER WWTP	35 T	18 T	8 T	8 T	5 T	692 T	63 T	1 T	164 T	141 T	11,411 T
03-N100-010	SOMERSWORTH WWTP	9 T	5 T	2 T	2 T	1 M	184 T	17 T	0 T	43 T	37 T	3,030 T
03-N100-011	P. S. OF NH - NEWINGTON STA.	0 T	1 T	0 T	1 T	170 B	10 B	1 B	<0.1 T	14 T	1 B	0 T
03-N100-012	P. S. OF NH - SCHILLER STA.	0 T	5 T	1 T	5 T	17 B	53 B	1 T	0 T	53 T	9 B	0 T
03-N100-013	KANE GONIC BRICK CORP.	0 T	0 T	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
03-N100-014	KANE GONIC BRICK CORP.	3 T	0 T	<0.1 T	1 T	2 T	25 T	2 T	<0.1 T	4 T	4 T	321 T
03-N100-015	MILLIPORE OF NEW HAMPSHIRE, INC.	<0.1 T	<0.1 T	<0.1 T	<0.1 T	<0.1 T	0 T	<0.1 T	<0.1 T	<0.1 T	<0.1 T	2 T
03-N100-016	PRATT & WHITNEY	<0.1 T	0 T	2 T	1 T	1 B	33 T	4 T	<0.1 T	11 B	6 B	0 T
03-N100-017	TILOTSON RUBBER CO. INC.	0 T	0 T	0 T	0 T	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T
03-N100-018	U. S. A. F. PEASE A. F. B.	7 T	0 T	0 T	4 T	4 T	72 T	5 T	<0.1 T	10 T	12 T	929 T
	Total	186	74	39	224	356	3,228	278	3	835	718	801,363
	Coastal Drainage Area (N096)											
03-N096-001	KENNEBUNK SEW. DIST. WWTP	8 T	4 T	2 T	2 T	1 T	152 T	14 T	0 T	36 T	31 T	2,503 T
03-N096-002	KENNEBUNKPORT WWTP	2 T	1 T	1 T	1 T	0 T	43 T	4 T	<0.1 T	10 T	9 T	708 T
03-N096-003	OGUNQUIT SEW. DIST. WWTP	1 T	1 T	0 T	0 T	0 T	24 T	2 T	<0.1 T	6 T	5 T	392 T
03-N096-004	SANFORD SEW. DIST. WWTP	9 T	2 T	1 T	2 M	5 M	23 T	2 T	0 T	6 M	51 T	4,127 T
03-N096-005	WELLS SAN. DIST. WWTP	5 T	3 T	1 T	1 T	1 T	99 T	9 T	0 T	23 T	20 T	1,633 T
03-N096-006	YORK SEW. DIST. WWTP	10 T	5 T	2 T	2 T	1 T	190 T	17 T	0 T	45 T	39 T	3,134 T
	Total	35	15	7	7	9	530	48	1	126	154	12,496
	Saco Bay (N090)											
04-N090-001	BIDDEFORD WWTP	2 T	1 T	1 T	1 T	0 T	48 T	4 T	<0.1 T	11 T	10 T	488 P
04-N090-002	SACO WWTP	16 T	8 T	4 T	4 T	2 T	317 T	29 T	0 T	75 T	65 T	5,228 T
04-N090-003	SCARBOROUGH SAN. DIST. WWTP	9 T	5 T	2 T	2 T	1 T	185 T	17 T	0 T	44 T	38 T	3,043 T
04-N090-004	TOWN OF OLD ORCHARD BEACH WWTP	26 T	13 T	6 T	6 T	4 T	503 T	46 T	1 T	119 T	102 T	8,289 T
	Total	54	27	12	12	8	1,052	96	1	249	214	17,048

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
	Casco Bay (N080)											
04-N080-001	FREEPORT SEW. DIST. WWTP	ME0101036	M	4952	43°49'55"	070°06'11"	HARRASEEKET ESTUARY	190	190 M	8 M	12 M	30 T
04-N080-002	PORTLAND WTR. DIST. WWTP	ME0102075	M	4952	43°44'60"	070°09'20"	CASCO BAYOT RIVER	3,428	3,428 M	715 T	185 M	544 T
04-N080-003	SOUTH PORTLAND WWTP	ME0100633	M	4952	43°38'20"	070°15'29"	FORE RIVER & CASCO BAY	2,172	2,172 M	453 T	299 M	344 T
04-N080-004	TOWN OF FALMOUTH WWTP	ME0100218	M	4952	43°42'08"	070°14'37"	PRESUMPSCOT RIVER ESTUARY	142	142 O	61 M	64 M	23 T
04-N080-005	WESTBROOK WWTP	ME0100846	●	4952	43°40'36"	070°21'48"	PRESUMPSCOTT RIVER	952	952 M	153 M	157 M	151 T
04-N080-006	YARMOUTH WWTP	ME0100765	M	4952	43°46'20"	070°08'08"	ROYAL RIVER	55	55 O	19 M	15 M	9 T
04-N080-007	CENTRAL ME PWR. - WYMAN STA.	ME0000272	M	4911	43°47'29"	070°09'55"	CASCO BAY	19,319	482 B	0 T	86 B	0 T
04-N080-008	B P OIL CO. INC.	ME0001821	M	5171	43°37'47"	070°17'32"	LOWER MILL POND	96	- P	-	-	-
04-N080-009	CLEAN HARBORS - WILLIAMS TERM.	ME0021571	M	5171	43°38'17"	070°17'31"	ROLLING MILLS POND (LOWER FORE RIV)	1	- T	-	-	-
04-N080-010	CUMBERLAND FARMS, INC.	ME0022314	M	5171	43°39'12"	070°14'19"	CASCO BAY	87	- P	-	-	-
04-N080-011	GETTY TERMS. CORP.	ME0021016	M	5171	43°39'33"	070°18'26"	FORE RIVER	91	- P	-	-	-
04-N080-012	GTE PRODS. CORP.	ME0002399	M	3496	43°44'55"	070°32'25"	LITTLE RIVER-NORTH BRANCH	11	11 B	0 T	1 T	0 T
04-N080-013	KOCH FUELS INC.	ME0002372	M	5171	43°38'21"	070°17'33"	FORE RIVER	94	- P	-	-	-
04-N080-014	MOBIL PORTLAND TERM.	ME0000485	M	5172	43°39'00"	070°12'00"	FORE RIVER	54	- P	-	-	-
04-N080-015	NORTHEAST PETROLEUM	ME0001775	M	5171	43°37'47"	070°17'32"	BARBERRY CREEK	1	- T	-	-	-
04-N080-016	S. D. WARREN CO.	ME0002321	M	2621	43°41'03"	070°21'03"	PRESUMPSCOT RIVER	8,553	6,781 B	1,031 B	2,569 B	79 T
04-N080-017	STAR ENTERPRISE	ME0002291	M	5171	43°38'29"	070°17'17"	FORE RIVER	91	- P	-	-	-
	Total							35,339	14,215	2,439	3,387	1,180
	Sheepscot Bay (N070)											
05-N070-001	ANSON - MADISON SAN. DIST. WWTP	ME0101389	M	4952	44°47'43"	069°53'05"	KENNEBEC RIVER	560	560 M	176 M	148 M	89 T
05-N070-002	AUGUSTA WWTP	ME0100013	M	4952	44°18'06"	069°46'45"	KENNEBEC RIVER	1,535	1,535 M	320 T	206 M	243 T
05-N070-003	BATH WWTP	ME0100021	M	4952	43°55'00"	069°50'00"	KENNEBEC RIVER	796	796 M	157 M	176 M	126 T
05-N070-004	BERLIN WWTP	NH0100013	M	4952	44°27'12"	071°11'08"	ANDROSCOGGIN RIVER	776	776 M	42 M	194 T	123 T
05-N070-005	BOOTHBAY HARBOR SEW. DIST. WWTP	ME0100064	M	4952	43°51'03"	069°38'00"	BOOTHBAY HARBOR	175	175 O	165 M	65 M	34 T
05-N070-006	BRUNSWICK SEW. DIST. WWTP	ME0100102	M	4952	43°54'57"	069°56'51"	ANDROSCROGGIN RIVER	971	971 M	451 M	285 M	154 T
05-N070-007	CITY OF GARDINER WWTP	ME0101702	M	4952	44°11'36"	069°45'33"	KENNEBEC RIVER	434	434 M	64 M	57 M	69 T
05-N070-008	CORINNA SEW. DIST. WWTP	ME0100153	M	4952	44°54'54"	069°15'25"	SEBASTICOOK RIVER, EAST BRANCH	58	58 M	4 M	7 M	9 T
05-N070-009	FARMINGTON WWTP	ME0101249	M	4952	44°39'16"	070°08'27"	SANDY RIVER	167	167 M	55 P	44 M	27 T
05-N070-010	HARTLAND WWTP	ME0101443	M	4952	44°53'00"	069°27'00"	WEST BRANCH SEBASTICOOK RIVER	416	416 O	87 T	104 T	66 T
05-N070-011	KENNEBEC SAN. DIST. WWTP	ME0100854	M	4952	44°31'36"	069°39'23"	KENNEBEC RIVER	3,954	3,954 M	317 M	520 M	627 T
05-N070-012	LEWISTON AUBURN WWTP	ME0101478	M	4952	44°04'30"	070°12'18"	ANDROSCOGGIN RIVER	3,947	3,947 M	268 M	253 M	626 T
05-N070-013	LISBON WWTP	ME0100307	M	4952	43°59'41"	070°02'59"	ANDROSCOGGIN AND SABATTUS RIVERS	296	296 M	40 M	18 M	47 T
05-N070-014	MECHANIC FALLS WWTP	ME0100391	M	4952	44°07'00"	070°23'00"	LITTLE ANDROSCOGGIN RIVER	179	179 P	45 P	45 P	28 T
05-N070-015	PARIS UTIL. DIST. WWTP	ME0100951	M	4952	44°12'46"	070°31'06"	LITTLE ANDROSCOGGIN RIVER	329	329 O	69 T	82 T	52 T
05-N070-016	RANGELEY WWTP	ME0100579	M	4952	44°58'00"	070°37'00"	HALEY POND	32	32 M	1 M	3 M	3 T
05-N070-017	RUMFORD - MEXICO WWTP	ME0100552	M	4952	44°32'24"	070°31'15"	ANDROSCOGGIN RIVER	465	465 M	54 M	61 M	74 T
05-N070-018	SKOWHEGAN WWTP	ME0100625	M	4952	44°46'09"	069°42'32"	KENNEBEC RIVER	230	230 O	38 M	21 M	37 T
05-N070-019	TOWN OF LIVERMORE FALLS WWTP	ME0100315	M	4952	44°28'07"	070°11'04"	ANDROSCOGGIN RIVER	478	478 O	43 M	37 M	76 T
05-N070-020	TOWN OF NORWAY WWTP	ME0100455	M	4952	44°15'00"	070°30'00"	LITTLE ANDROSCOGGIN	128	128 M	19 M	17 M	20 T
05-N070-021	TOWN OF OAKLAND WWTP	ME0100463	M	4952	44°33'11"	069°42'22"	MESSALONSKEE STREAM	166	166 M	39 M	25 M	26 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates: TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
	Casco Bay (N080)											
04-N080-001	FREEPORT SEW. DIST. WWTP	4 T	2 T	1 T	1 T	0 M	87 T	8 T	0 T	21 T	18 T	1,442 T
04-N080-002	PORTLAND WTR. DIST. WWTP	80 T	40 T	19 T	17 T	10 M	1,573 T	143 T	2 T	372 T	320 T	25,952 T
04-N080-003	SOUTH PORTLAND WWTP	51 T	25 T	12 T	11 T	7 T	997 T	91 T	1 T	236 T	203 T	16,443 T
04-N080-004	TOWN OF FALMOUTH WWTP	3 T	2 T	1 T	1 T	1 T	65 T	6 T	0 T	15 T	13 T	1,078 T
04-N080-005	WESTBROOK WWTP	22 T	11 T	5 T	5 T	3 T	437 T	40 T	0 T	103 T	89 T	12,434 P
04-N080-006	YARMOUTH WWTP	1 T	1 T	0 T	0 T	0 T	25 T	2 T	<0.1 T	6 T	5 T	415 T
04-N080-007	CENTRAL ME PWR. - WYMAN STA.	0 T	28 T	4 T	24 T	62 B	565 B	4 T	1 T	282 T	60 B	0 T
04-N080-008	B P OIL CO. INC.	-	-	-	-	-	-	-	-	-	-	-
04-N080-009	CLEAN HARBORS - WILLIAMS TERM.	-	-	-	-	-	-	-	-	-	-	-
04-N080-010	CUMBERLAND FARMS, INC.	-	-	-	-	-	-	-	-	-	-	-
04-N080-011	GETTY TERMS. CORP.	-	-	-	-	-	-	-	-	-	-	-
04-N080-012	GTE PRODS. CORP.	0 T	0 T	1 T	6 T	8 T	0 T	2 B	0 T	5 T	1 T	0 T
04-N080-013	KOCH FUELS INC.	-	-	-	-	-	-	-	-	-	-	-
04-N080-014	MOBIL PORTLAND TERM.	-	-	-	-	-	-	-	-	-	-	-
04-N080-015	NORTHEAST PETROLEUM	-	-	-	-	-	-	-	-	-	-	-
04-N080-016	S. D. WARREN CO.	0 T	0 T	0 T	170 T	60 T	0 T	57 T	1 T	1,132 T	0 T	0 T
04-N080-017	STAR ENTERPRISE	-	-	-	-	-	-	-	-	-	-	-
	Total	162	109	42	234	150	3,750	352	4	2,171	710	57,763
	Sheepscot Bay (N070)											
05-N070-001	ANSON - MADISON SAN. DIST. WWTP	13 T	7 T	3 T	3 T	19 T	257 T	23 T	0 T	61 T	52 T	4,237 T
05-N070-002	AUGUSTA WWTP	36 T	18 T	8 T	8 T	5 T	704 T	64 T	1 T	167 T	143 T	11,617 T
05-N070-003	BATH WWTP	19 T	9 T	4 T	4 T	3 T	366 T	33 T	0 T	86 T	74 T	6,028 T
05-N070-004	BERLIN WWTP	18 T	9 T	4 T	4 T	3 T	356 T	32 T	0 T	84 T	73 T	5,872 T
05-N070-005	BOOTHBAY HARBOR SEW. DIST. WWTP	12 T	2 T	2 T	33 T	25 T	161 T	13 T	0 T	43 T	40 T	132,626 T
05-N070-006	BRUNSWICK SEW. DIST. WWTP	23 T	11 T	5 T	5 T	32 T	445 T	41 T	0 T	105 T	91 T	7,347 T
05-N070-007	CITY OF GARDINER WWTP	10 T	5 T	2 T	2 T	1 T	199 T	18 T	0 T	47 T	41 T	3,287 T
05-N070-008	CORINNA SEW. DIST. WWTP	1 T	1 T	0 T	0 T	2 T	27 T	2 T	<0.1 T	6 T	3 M	438 T
05-N070-009	FARMINGTON WWTP	4 T	2 T	1 T	1 T	1 T	77 T	7 T	0 T	18 T	16 T	1,267 T
05-N070-010	HARTLAND WWTP	10 T	5 T	2 T	2 T	1 M	191 T	17 T	0 T	45 T	39 T	3,150 T
05-N070-011	KENNEBEC SAN. DIST. WWTP	92 T	46 T	21 T	20 T	13 T	1,815 T	165 T	2 T	429 T	370 T	29,930 T
05-N070-012	LEWISTON AUBURN WWTP	92 T	46 T	21 T	20 T	13 T	1,812 T	165 T	2 T	428 T	369 T	29,879 T
05-N070-013	LISBON WWTP	7 T	4 T	2 T	2 T	1 T	136 T	12 T	0 T	32 T	28 T	2,243 T
05-N070-014	MECHANIC FALLS WWTP	4 T	2 T	1 T	1 T	1 T	82 T	8 T	0 T	19 T	17 T	1,354 T
05-N070-015	PARIS UTIL. DIST. WWTP	8 T	4 T	2 T	2 T	1 T	151 T	14 T	0 T	36 T	31 T	2,487 T
05-N070-016	RANGELEY WWTP	<0.1 M	0 T	0 T	0 T	1 T	8 T	1 T	<0.1 T	2 T	2 T	180 T
05-N070-017	RUMFORD - MEXICO WWTP	11 T	5 T	3 T	2 T	2 T	214 T	19 T	0 T	51 T	44 T	3,523 T
05-N070-018	SKOWHEGAN WWTP	5 T	3 T	1 T	1 T	1 T	106 T	10 T	0 T	25 T	22 T	1,741 T
05-N070-019	TOWN OF LIVERMORE FALLS WWTP	11 T	6 T	3 T	2 T	2 T	219 T	20 T	0 T	52 T	45 T	3,620 T
05-N070-020	TOWN OF NORWAY WWTP	3 T	2 T	1 T	1 T	0 T	59 T	5 T	0 T	14 T	12 T	965 T
05-N070-021	TOWN OF OAKLAND WWTP	2 M	2 T	1 T	3 M	1 T	76 T	7 T	0 T	18 T	16 T	1,255 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P = permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
05-N070-022	TOWN OF PITTSFIELD WWTP	ME0100528	M	4952	44°45'49"	069°22'41"	SEBASTICOOK RIVER	365	365 M	29 M	28 M	58 T
05-N070-023	TOWN OF WILTON WWTP	ME0101915	M	4952	44°37'00"	070°13'00"	WILSON STREAM	68	68 M	14 M	10 M	11 T
05-N070-024	MAINE YANKEE ATOMIC PWR. CO.	ME0002569	M	4911	43°57'03"	069°41'45"	MONTSWEAG BAY -(BAILEY COVE)	72,770	99 B	0 T	25 B	0 T
05-N070-025	BOISE CASCADE CORP.	ME0002054	M	2621	44°32'53"	070°32'19"	ANDROSCOGGIN RIVER	17,850	11,924 P	4,208 B	11,538 B	139 T
05-N070-026	INTERNAT. PAPER CO.	ME0001937	M	2621	44°30'15"	070°15'00"	ANDROSCOGGIN RIVER	17,886	17,886 P	6,207 P	13,355 P	209 T
05-N070-027	JAMES RIVER - BERLIN	NH0000655	M	2611	44°28'14"	071°10'25"	ANDROSCOGGIN RIVER	10,665	9,447 M	0 T	0 T	0 T
05-N070-028	KENNEBEC AQUACULTURE	ME0110132	●	0921	45 10 00	070 05 00	KENNEBEC RIVER	1,260	1,260 M	51 T	63 T	7 T
05-N070-029	MARICULTURE PROD. LTD. - BINGHAM HATCH	ME0110159	●	0921	45°03'12"	069°53'00"	KENNEBEC RIVER	2,338	2,338 M	34 M	117 T	14 T
05-N070-030	PEJEPSCOT INDUSTRIAL PARK	ME0002071	M	2611	43°57'29"	070°01'25"	ANDROSCOGGIN RIVER	14	12 M	2 T	3 T	0 T
05-N070-031	ROBINSON MFG. OXFORD	ME0002526	M	2231	44°07'54"	070°29'41"	THOMPSON LAKE	64	64 M	13 T	40 B	0 T
05-N070-032	S.D. WARREN CO.	ME0021521	M	2621	44°42'13"	069°38'55"	KENNEBEC RIVER	8,878	8,878 M	1,000 M	2,212 M	104 T
05-N070-033	SCOTT PAPER CO.	ME0002178	M	2621	44°33'19"	069°37'28"	KENNEBEC RIVER	9,612	2,568 B	0 T	0 T	0 T
05-N070-034	STATLER IND. INC.	ME0002224	M	2621	44°19'35"	069°44'17"	KENNEBEC RIVER	1,790	1,790 M	688 M	669 M	21 T
05-N070-035	WILTON TANNING CO.	ME0000752	M	3111	44°36'40"	070°11'40"	WILSON STREAM	20	18 M	3 B	4 B	7 T
	Total							**159,669**	**72,808**	**14,701**	**30,431**	**3,125**
	Muscongus Bay (N060)											
05-N060-001	THOMASTON WWTP	ME0100668	M	4952	44°04'19"	069°10'56"	ST GEORGE RIVER	179	179 M	15 M	16 M	28 T
05-N060-002	GTE SYLVANIA - WALDOBORO	ME0002381	M	3648	44°05'04"	069°22'39"	MEDOMAK RIVER ESTUARY	16	4 B	0 T	1 B	0 T
	Total							**195**	**183**	**15**	**17**	**28**
	Penobscot Bay (N050)											
06-N050-001	BANGOR WWTP	ME0100781	M	4952	44°46'48"	068°46'54"	PENOBSCOT RIVER,KENDUSKEAG STREAM	2,777	2,777 M	822 P	1,539 M	440 T
06-N050-002	BREWER WWTP	ME0100072	M	4952	44°49'00"	068°40'00"	PENOBSCOT RIVER	1,089	1,089 M	92 M	103 M	173 T
06-N050-003	CAMDEN WWTP	ME0100137	M	4952	44°12'37"	069°04'26"	CAMDEN HARBOR	274	274 M	68 M	28 M	43 T
06-N050-004	CITY OF BELFAST WWTP	ME0101532	M	4952	44°25'41"	069°00'23"	BELFAST HARBOR	207	207 M	26 M	12 M	33 T
06-N050-005	CITY OF OLD TOWN WWTP	ME0100471	M	4952	44°55'35"	068°38'34"	PENOBSCOT RIVER	402	402 M	53 M	40 M	64 T
06-N050-006	CITY OF ROCKLAND WWTP	ME0100595	M	4952	44°06'00"	069°06'00"	ROCKLAND HARBOR	847	847 M	486 P	97 M	134 T
06-N050-007	FORT KENT UTIL. DIST. WWTP	ME0100234	M	4952	45°15'08"	068°35'03"	FISH RIVER	46	46 M	7 M	4 M	7 T
06-N050-008	GUILFORD - SANGERVILLE WWTP	ME0102032	M	4952	45°10'37"	069°21'12"	PISCATAQUIS RIVER	45	45 M	2 M	4 M	7 T
06-N050-009	LINCOLN SAN. DIST. WWTP	ME0101796	M	4952	45°22'31"	068°30'27"	PENOBSCOT RIVER	244	244 M	29 M	29 M	39 T
06-N050-010	MILLINOCKET WWTP	ME0100803	M	4952	45°38'21"	068°40'39"	WEST BRANCH PENOBSCOT RIVER	567	567 P	213 P	213 P	90 T
06-N050-011	TOWN OF BUCKSPORT WWTP	ME0100111	M	4952	44°34'07"	068°46'19"	PENOBSCOT RIVER TIDAL WATERS	233	233 B	192 B	132 B	45 T
06-N050-012	TOWN OF ORONO WWTP	ME0100498	M	4952	44°52'42"	068°40'09"	PENOBSCOT RIVER	672	672 P	140 T	168 P	107 T
06-N050-013	CHAMPION INTERNAT.	ME0002160	M	2671	44°34'21"	068°48'32"	PENOBSCOT RIVER	7,878	4,712 M	940 T	956 B	440 T
06-N050-014	GREAT NORTHERN PAPER, INC.	ME0000167	M	2621	45°38'44"	068°42'15"	PENOBSCOT RIVER	29,546	3,241 P	468 T	768 T	38 T
06-N050-015	GREAT NORTHERN PAPER, INC.	ME0000175	M	2621	45°35'00"	068°35'00"	PENOBSCOT RIVER,W BR	9,078	7,766 M	468 B	531 B	91 T
06-N050-016	JAMES RIVER CORP.	ME0002020	M	2621	44°55'03"	068°38'08"	PENOBSCOT RIVER	6,001	5,830 M	1,353 B	2,763 B	68 T
06-N050-017	LCP CHEMICALS - MAINE	ME0000639	M	2812	44°44'20"	068°49'45"	PENOBSCOT RIVER - TIDAL WATERS	32	32 M	0 T	9 M	1 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates: TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
05-N070-022	TOWN OF PITTSFIELD WWTP	9 T	4 T	2 T	2 T	1 T	167 T	15 T	0 T	40 T	34 T	2,759 T
05-N070-023	TOWN OF WILTON WWTP	2 T	1 T	0 T	0 T	0 T	31 T	3 T	<0.1 T	7 T	6 T	517 T
05-N070-024	MAINE YANKEE ATOMIC PWR. CO.	0 T	6 T	1 T	5 T	125 T	70 B	1 T	0 T	64 B	12 B	0 T
05-N070-025	BOISE CASCADE CORP.	0 T	0 T	0 T	299 T	109 T	0 T	100 T	1 T	1,990 T	0 T	0 T
05-N070-026	INTERNAT. PAPER CO.	0 T	0 T	0 T	448 T	149 T	0 T	149 T	2 T	2,985 T	0 T	0 T
05-N070-027	JAMES RIVER - BERLIN	0 T	0 T	0 T	0 T	17 T	0 T	0 T	0 T	0 T	0 T	0 T
05-N070-028	KENNEBEC AQUACULTURE	<0.1 M	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
05-N070-029	MARICULTURE PROD. LTD. - BINGHAM HATCH	3 M	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
05-N070-030	PEJEPSCOT INDUSTRIAL PARK	0 T	0 T	0 T	0 T	0 T	0 T	0 T	<0.1 T	2 T	0 T	0 T
05-N070-031	ROBINSON MFG. OXFORD	0 T	1 T	0 T	21 T	1 T	0 T	5 T	0 T	123 T	0 T	0 T
05-N070-032	S.D. WARREN CO.	0 T	0 T	0 T	222 T	74 T	0 T	74 T	1 T	1,482 T	0 T	0 T
05-N070-033	SCOTT PAPER CO.	0 T	0 T	0 T	0 T	16 T	0 T	0 T	0 T	0 T	0 T	0 T
05-N070-034	STATLER IND. INC.	0 T	0 T	0 T	45 T	15 T	0 T	15 T	0 T	299 T	0 T	0 T
05-N070-035	WILTON TANNING CO.	0 T	0 T	0 T	73 T	0 B	0 T	1 T	<0.1 T	2 T	1 B	0 T
	Total	**394**	**200**	**92**	**1,229**	**635**	**7,727**	**1,040**	**11**	**8,760**	**1,578**	**256,319**
	Muscongus Bay (N060)											
05-N060-001	THOMASTON WWTP	4 T	2 T	1 T	1 T	1 T	82 T	8 T	0 T	19 T	17 T	1,357 T
05-N060-002	GTE SYLVANIA - WALDOBORO	0 T	0 T	0 T	2 T	3 T	0 T	1 T	0 T	2 T	0 T	0 T
	Total	**4**	**2**	**1**	**3**	**3**	**82**	**8**	**0**	**21**	**17**	**1,357**
	Penobscot Bay (N050)											
06-N050-001	BANGOR WWTP	65 T	32 T	15 T	14 T	93 T	1,274 T	116 T	1 T	301 T	260 T	21,020 T
06-N050-002	BREWER WWTP	25 T	13 T	6 T	5 T	4 T	500 T	45 T	1 T	118 T	102 T	8,240 T
06-N050-003	CAMDEN WWTP	6 T	3 T	2 T	5 M	1 T	126 T	11 T	0 T	30 T	26 T	2,073 T
06-N050-004	CITY OF BELFAST WWTP	5 T	2 T	1 T	1 T	1 T	95 T	9 T	0 T	23 T	19 T	1,569 T
06-N050-005	CITY OF OLD TOWN WWTP	9 T	5 T	2 T	2 T	1 T	185 T	17 T	0 T	44 T	38 T	3,043 T
06-N050-006	CITY OF ROCKLAND WWTP	20 T	10 T	5 T	4 T	3 T	389 T	35 T	0 T	92 T	79 T	6,408 T
06-N050-007	FORT KENT UTIL. DIST. WWTP	1 T	1 T	0 T	0 T	0 T	21 T	2 T	<0.1 T	5 T	4 T	349 T
06-N050-008	GUILFORD - SANGERVILLE WWTP	1 T	1 T	0 T	0 T	0 T	21 T	2 T	<0.1 T	5 T	4 T	339 T
06-N050-009	LINCOLN SAN. DIST. WWTP	6 T	3 T	1 T	1 T	1 T	112 T	10 T	0 T	27 T	23 T	1,848 T
06-N050-010	MILLINOCKET WWTP	13 T	7 T	3 T	3 T	2 T	260 T	24 T	0 T	62 T	53 T	4,290 T
06-N050-011	TOWN OF BUCKSPORT WWTP	16 T	3 T	3 T	43 T	34 T	214 T	17 T	0 T	57 T	54 T	176,075 T
06-N050-012	TOWN OF ORONO WWTP	16 T	8 T	4 T	3 T	2 T	308 T	28 T	0 T	73 T	63 T	5,084 T
06-N050-013	CHAMPION INTERNAT.	275 T	12 T	4 T	157 T	163 T	2,752 T	197 T	1 T	393 T	440 T	35,666 T
06-N050-014	GREAT NORTHERN PAPER, INC.	0 T	0 T	0 T	81 T	68 T	0 T	27 T	0 T	541 T	0 T	0 T
06-N050-015	GREAT NORTHERN PAPER, INC.	0 T	0 T	0 T	194 T	67 T	0 T	65 T	1 T	1,296 T	0 T	0 T
06-N050-016	JAMES RIVER CORP.	0 T	0 T	0 T	146 T	49 T	0 T	49 T	1 T	973 T	0 T	0 T
06-N050-017	LCP CHEMICALS - MAINE	0 T	1 T	1 T	2 T	2 T	1 T	5 T	<0.1 T	5 T	0 T	0 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
06-N050-018	LINCOLN PULP & PAPER CO.	ME0002003	M	2611	45°22'15"	068°31'15"	PENOBSCOT R-MATTANACOOK STREAM	4,010	4,010 M	0 T	0 T	0 T
	Total							63,947	32,992	5,357	7,396	1,819
	Blue Hill Bay (N040)											
06-N040-001	ELLSWORTH WWTP	ME0100889	M	4952	44°32'12"	068°25'19"	UNION RIVER	153	153 O	77 P	77 P	24 T
06-N040-002	SOUTHWEST HARBOR WWTP	ME0100641	M	4952	44°20'00"	068°25'00"	ATLANTIC OCEAN	63	63 M	8 M	8 M	10 T
	Total							216	216	85	85	34
	Coastal Drainage Area (N036)											
06-N036-001	BAR HARBOR WWTP	ME0101214	M	4952	44°22'48"	068°12'23"	FRENCHMAN BAY ATLANTIC OCEAN	369	369 M	55 M	36 M	59 T
06-N036-002	TOWN OF MOUNT DESERT WWTP	ME0101346	M	4952	44°17'48"	068°18'02"	SOMES SOUND TIDEWATERS OF MT DESERT	52	52 M	5 M	6 M	8 T
	Total							421	421	60	42	67
	Englishman Bay (N020)											
07-N020-001	MACHIAS WWTP	ME0100323	M	4952	44°43'13"	067°27'15"	MACHIAS RIVER	116	116 M	20 M	18 M	18 T
07-N020-002	CONNORS AQUACULTURE E. MACHIAS	ME0110086	●	0921	44°00'00"	067°22'00"	CHASE MILLS STREAM	3,676	3,676 P	61 P	61 P	22 T
	Total							3,792	3,792	81	79	40
	Passamaquoddy Bay (N010)											
07-N010-001	CITY OF CALAIS WWTP	ME0100129	M	4952	45°11'18"	067°16'20"	ST CROIX RIVER	170	170 M	50 M	51 M	27 T
07-N010-002	TOWN OF BAILEYVILLE WWTP	ME0101320	M	4952	45°09'00"	067°24'00"	ST CROIX RIVER	37	37 O	10 M	11 M	6 T
07-N010-003	GEORGIA - PACIFIC CORP.	ME0001872	M	2621	45°09'24"	067°24'12"	ST CROIX RIVER	2,170	2,164 M	1,494 B	513 T	25 T
	Total							2,376	2,370	1,554	575	58
	Saint Croix River (C120)											
07-C120-001	ST STEPHEN WWTP	NBS-110	*	4952	45°11'32"	067°16'17"	ST CROIX RIVER	67	67 B	12 B	18 B	11 T
07-C120-002	OAK BAY HATCH. LTD.	NBI-0096	M	0921	45°12'49"	067°11'52"	OAK BAY BAY OF FUNDY	423	423 O	17 T	21 T	3 T
	Total							490	490	29	39	13
	Magaguadavic Digdeguash/Maces Bay (C110)											
07-C110-001	NB PWR. CORP. - COLESON COVE THERMA	NBI-0156	*	4911	45°03'40"	066°13'00"	BAY OF FUNDY	182	182 M	0 T	14 M	0 T
07-C110-002	AQUACULTURE COMPONENTS PLANT	NBI-0100	*	0921	45°39'40"	067°08'10"	MAGAGUADAVIC RIVER	174	174 T	7 T	9 T	1 T
07-C110-003	CONNORS BROS., LTD. - LK. UTOPIA H	NBI378-90	M	0921	45°12'24"	066°46'47"	LAKE UTOPIA	3,306	3,306 M	132 T	166 T	19 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

		Annual Pollutant Load Estimates										
Map Ref. Num.	Watershed (Code) Facility Name	TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
06-N050-018	LINCOLN PULP & PAPER CO.	0 T	0 T	0 T	0 T	7 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**458**	**100**	**46**	**663**	**496**	**6,256**	**659**	**6**	**4,043**	**1,164**	**266,004**
	Blue Hill Bay (N040)											
06-N040-001	ELLSWORTH WWTP	4 T	2 T	1 T	1 T	1 T	70 T	6 T	0 T	17 T	14 T	1,161 T
06-N040-002	SOUTHWEST HARBOR WWTP	2 T	1 T	0 T	0 T	0 T	29 T	3 T	<0.1 T	7 T	6 T	476 T
	Total	**5**	**3**	**1**	**1**	**1**	**99**	**9**	**0**	**23**	**20**	**1,636**
	Coastal Drainage Area (N036)											
06-N036-001	BAR HARBOR WWTP	9 T	4 T	2 T	2 T	1 T	169 T	15 T	0 T	40 T	35 T	4,310 P
06-N036-002	TOWN OF MOUNT DESERT WWTP	1 T	1 T	0 T	0 T	0 T	24 T	2 T	<0.1 T	6 T	5 T	392 T
	Total	**10**	**5**	**2**	**2**	**1**	**193**	**18**	**0**	**46**	**39**	**4,702**
	Englishman Bay (N020)											
07-N020-001	MACHIAS WWTP	3 T	1 T	1 T	1 T	0 T	53 T	5 T	0 T	13 T	11 T	880 T
07-N020-002	CONNORS AQUACULTURE E. MACHIAS	1 P	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**4**	**1**	**1**	**1**	**0**	**53**	**5**	**0**	**13**	**11**	**880**
	Passamaquoddy Bay (N010)											
07-N010-001	CITY OF CALAIS WWTP	4 T	2 T	1 T	1 T	1 T	78 T	7 T	0 T	18 T	16 T	1,285 T
07-N010-002	TOWN OF BAILEYVILLE WWTP	<0.1 T	0 T	0 T	0 T	0 T	17 T	2 T	<0.1 T	4 T	3 T	276 T
07-N010-003	GEORGIA - PACIFIC CORP.	0 T	0 T	0 T	54 T	18 T	0 T	18 T	0 T	361 T	0 T	0 T
	Total	**5**	**2**	**1**	**55**	**19**	**95**	**27**	**0**	**384**	**19**	**1,561**
	Saint Croix River (C120)											
07-C120-001	ST STEPHEN WWTP	2 B	1 T	0 T	0 T	2 T	31 T	3 T	<0.1 T	7 T	6 T	505 T
07-C120-002	OAK BAY HATCH. LTD.	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**2**	**1**	**0**	**0**	**2**	**31**	**3**	**<0.1**	**7**	**6**	**505**
	Magaguadavic Digdeguash/Maces Bay (C110)											
07-C110-001	NB PWR. CORP. - COLESON COVE THERMA	0 T	11 T	1 T	9 T	14 T	121 T	2 T	0 T	106 T	23 T	0 T
07-C110-002	AQUACULTURE COMPONENTS PLANT	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
07-C110-003	CONNORS BROS., LTD. - LK. UTOPIA H	1 M	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

Notes: 1) Basis of loading estimate codes: M = monitoring data; P = permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 2) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 3) A ● in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 4) The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
07-C110-004	CONNORS BROS., LTD. PLANT 10	NBI451-90	M	0919	45°03'12"	066°47'53"	BLACKS HARBOUR BAY OF FUNDY	348	348 O	1,212 T	619 T	66 T
07-C110-005	CONNORS BROS. LTD.	NBI-0191	*	0919	45°03'08"	066°47'54"	BAY OF FUNDY	-	-	-	-	-
07-C110-006	LAKE UTOPIA PAPER LTD.	NBI-0044	M	2621	45°09'23"	066°46'18"	LETANG ESTUARY	766	383 M	55 T	91 T	5 T
07-C110-007	SEA FARMS CANADA INC. - DIGDEGUASH	NBI379-90	M	0921	45°12'53"	066°54'01"	MAGAGUADAVIC RIVER	7,221	7,221 M	289 T	362 T	42 T
	Total							**11,997**	**11,613**	**1,696**	**1,259**	**133**
	Saint John River (C100)											
08-C100-001	BARKERS POINT WWTP	NBS-9	M	4952	45°57'33"	066°37'06"	SAINT JOHN RIVER	2,957	2,957 B	440 B	439 B	469 T
08-C100-002	CARIBOU UTIL. DIST. WWTP	ME0100145	M	4952	46°51'04"	067°57'12"	AROOSTOOK RIVER	420	420 M	38 M	72 M	67 T
08-C100-003	CFB GAGETOWN	NBS-59	M	4952	45°51'27"	066°25'53"	SAINT JOHN RIVER	438	438 P	73 P	146 P	69 T
08-C100-004	EDMUNDSTON #2, COTE LANE	NBS-51	M	4952	47°21'41"	068°19'21"	SAINT JOHN RIVER	62	62 B	14 B	23 B	10 T
08-C100-005	FAIRVALE WWTP	NBS-53	*	4952	45°23'59"	065°59'47"	KENNEBECASIS RIVER	99	99 B	19 B	35 B	16 T
08-C100-006	FORT FAIRFIELD U. D. WWTP	ME0100226	M	4952	46°46'43"	067°50'42"	AROOSTOOK RIVER	48	48 M	50 M	34 M	8 T
08-C100-007	GARDEN CREEK WWTP	NBS-55	M	4952	45°57'47"	066°42'27"	SAINT JOHN RIVER	44	44 T	9 T	11 T	7 T
08-C100-008	GRAND BAY WWTP	NBS-61	*	4952	45°18'08"	066°11'21"	GRAND BAY	157	157 B	32 B	39 B	25 T
08-C100-009	GRAND FALLS NORTH WWTP	NBS-10	*	4952	47°02'30"	067°44'29"	SAINT JOHN RIVER	53	53 B	16 B	19 B	10 T
08-C100-010	GRAND FALLS SOUTH WWTP	NBS-11	*	4952	47°03'14"	067°44'24"	LITTLE RIVER	37	37 B	8 B	10 B	6 T
08-C100-011	HAMPTON SOUTH WWTP	NBS-62	*	4952	45°31'34"	065°49'59"	OSSEKEAG CREEK	7	7 M	2 M	3 M	1 T
08-C100-012	HAZEN CREEK WWTP	NBS-13	M	4952	45°15'53"	066°00'59"	HAZEN CREEK	1,095	1,095 B	192 B	168 B	174 T
08-C100-013	HOULTON WTR. CO. WWTP	ME0101290	M	4952	46°08'53"	067°49'37"	MEDUXNEKEAG RIVER	437	437 M	91 T	109 T	69 T
08-C100-014	LANCASTER WWTP	NBS-105	M	4952	45°14'28"	066°06'45"	BAY OF FUNDY	1,309	1,309 B	189 B	345 B	208 T
08-C100-015	LIMESTONE WWTP	ME0101095	M	4952	46°54'24"	067°48'52"	LIMESTONE STREAM	37	37 O	10 M	11 M	6 T
08-C100-016	LINCOLN WWTP	NBS-56	*	4952	45°54'11"	066°35'20"	SAINT JOHN RIVER	20	20 B	5 B	6 B	3 T
08-C100-017	MARSH CREEK WWTP	NBS-14	M	4952	45°17'10"	066°02'39"	MARSH CREEK	2,190	2,190 B	345 B	361 B	347 T
08-C100-018	MILLIDGEVILLE WWTP	NBS-16	M	4952	45°17'13"	066°06'55"	SAINT JOHN RIVER	2,099	2,099 B	365 B	297 B	333 T
08-C100-019	MINTO WWTP	NBS-18	*	4952	46°04'43"	066°02'59"	NEWCASTLE STREAM	1	1 T	<0.1 T	<0.1 T	0 T
08-C100-020	PRESQUE ISLE WWTP	ME0100561	M	4952	46°41'34"	068°00'59"	PRESQUE ISLE STREAM	1,814	1,814 O	95 M	454 T	288 T
08-C100-021	QUISPAMSIS WWTP	NBS-82	*	4952	45°24'46"	065°58'56"	SALMON CREEK	142	142 B	27 B	46 B	23 T
08-C100-022	SUSSEX WWTP	NBS-117	*	4952	45°43'00"	065°32'14"	KENNEBACASIS RIVER	93	93 B	15 B	28 B	15 T
08-C100-023	TOWN OF VAN BUREN WWTP	ME0100684	M	4952	47°09'51"	067°56'20"	ST.JOHNS RIVER	161	161 M	12 M	10 M	26 T
08-C100-024	WOODSTOCK WWTP	NBS-23	*	4952	46°08'45"	067°34'24"	SAINT JOHN RIVER	18	18 T	4 T	4 T	3 T
08-C100-025	NB PWR. CORP. - GRAND LAKE THERMAL	NBI-0136	M	4911	46°04'10"	066°00'30"	GRAND LAKE	773	773 M	0 T	60 M	0 T
08-C100-026	A E STALEY MFG. CO.	ME0002216	M	2046	46°06'24"	067°52'59"	MEDUXNEKEAG RIVER	18	11 M	6 B	6 B	4 T
08-C100-027	CHAR - TEC LTD.	NBI-0376	*	0921	45°39'00"	065°33'00"	PARLEE BROOK	174	174 T	7 T	9 T	1 T
08-C100-028	FRASER INC.	NBI485-90	M	2611	47°22'03"	068°16'12"	SAINT JOHN RIVER	5,596	5,596 M	808 T	1,326 T	65 T
08-C100-029	FRASER PAPER LTD.	ME0000159	M	2621	47°21'28"	068°19'42"	SAINT JOHN RIVER	4,531	4,531 M	0 T	0 T	0 T
08-C100-030	HUMPTY - DUMPTY FOODS LTD.	NBI-0417	M	2099	46°17'44"	067°31'08"	SAINT JOHN RIVER	10	10 M	4 T	4 T	1 T
08-C100-031	IRVING OIL LTD. REFINING DIV.	NBI-0302	M	2911	45°17'00"	066°00'40"	LITTLE RIVER SAINT JOHN HARBOUR	1,650	413 M	47 T	280 M	23 T
08-C100-032	IRVING PAPER LTD.	NBI-0083	M	2621	45°16'38"	066°01'37"	LITTLE RIVER SAINT JOHN HARBOUR	3,054	3,054 M	441 T	724 T	36 T
08-C100-033	IRVING PULP & PAPER LTD.	NBI-0052	M	2611	45°15'47"	066°05'28"	SAINT JOHN RIVER SAINT JOHN HARBOUR	7,272	7,272 M	1,050 T	4,551 M	85 T
08-C100-034	IRVING TISSUE CO. LTD.	NBI-0219	M	2621	45°15'32"	066°05'25"	SAINT JOHN RIVER SAINT JOHN HARBOUR	999	999 M	144 T	237 T	12 T
08-C100-035	LANTIC SUGAR LTD.	NBI525-90	M	2062	45°15'48"	066°03'30"	SAINT JOHN HARBOUR	4	4 M	2 T	5 T	0 T
08-C100-036	LANTIC SUGAR LTD. PIPE#1	NBI-0105	M	2046	45°15'52"	066°03'23"	ST. JOHN HARBOUR	123	11 M	2 T	2 T	4 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates: TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
07-C110-004	CONNORS BROS., LTD. PLANT 10	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
07-C110-005	CONNORS BROS. LTD.	-	-	-	-	-	-	-	-	-	-	-
07-C110-006	LAKE UTOPIA PAPER LTD.	0 T	0 T	0 T	10 T	3 T	0 T	3 T	<0.1 T	64 T	0 T	0 T
07-C110-007	SEA FARMS CANADA INC. - DIGDEGUASH	3 M	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	4	11	1	19	17	121	5	0	170	23	0
	Saint John River (C100)											
08-C100-001	BARKERS POINT WWTP	72 B	35 T	16 T	15 T	99 T	1,357 T	123 T	1 T	321 T	276 T	22,381 T
08-C100-002	CARIBOU UTIL. DIST. WWTP	10 T	5 T	2 T	2 T	1 T	193 T	18 T	0 T	46 T	39 T	3,180 T
08-C100-003	CFB GAGETOWN	11 P	5 T	2 T	2 T	15 T	201 T	18 T	0 T	48 T	41 T	3,316 T
08-C100-004	EDMUNDSTON #2, COTE LANE	1 B	1 T	0 T	0 T	2 T	29 T	3 T	<0.1 T	7 T	6 T	469 T
08-C100-005	FAIRVALE WWTP	2 B	1 T	1 T	1 T	3 T	46 T	4 T	<0.1 T	11 T	9 T	752 T
08-C100-006	FORT FAIRFIELD U. D. WWTP	1 T	1 T	0 T	0 T	0 T	22 T	2 T	<0.1 T	5 T	5 M	365 T
08-C100-007	GARDEN CREEK WWTP	1 T	1 T	0 T	0 T	2 T	20 T	2 T	<0.1 T	5 T	4 T	334 T
08-C100-008	GRAND BAY WWTP	4 B	2 T	1 T	1 T	5 T	72 T	7 T	0 T	17 T	15 T	1,189 T
08-C100-009	GRAND FALLS NORTH WWTP	1 B	1 T	1 T	10 T	8 T	48 T	4 T	<0.1 T	13 T	9 T	39,894 T
08-C100-010	GRAND FALLS SOUTH WWTP	<0.1 B	0 T	0 T	0 T	1 T	17 T	2 T	<0.1 T	4 T	4 T	282 T
08-C100-011	HAMPTON SOUTH WWTP	<0.1 M	0 T	0 T	1 T	1 T	6 T	1 T	<0.1 T	2 T	1 T	5,014 T
08-C100-012	HAZEN CREEK WWTP	27 B	13 T	6 T	6 T	37 T	503 T	46 T	1 T	119 T	102 T	8,289 T
08-C100-013	HOULTON WTR. CO. WWTP	10 T	5 T	2 T	2 T	2 T	201 T	18 T	0 T	47 T	41 T	3,306 T
08-C100-014	LANCASTER WWTP	32 B	15 T	7 T	7 T	44 T	601 T	55 T	1 T	142 T	122 T	9,909 T
08-C100-015	LIMESTONE WWTP	<0.1 T	0 T	0 T	0 T	0 T	17 T	2 T	<0.1 T	4 T	3 T	276 T
08-C100-016	LINCOLN WWTP	<0.1 B	0 T	0 T	0 T	1 T	9 T	1 T	<0.1 T	2 T	2 T	153 T
08-C100-017	MARSH CREEK WWTP	53 B	26 T	12 T	11 T	73 T	1,005 T	91 T	1 T	238 T	205 T	16,578 T
08-C100-018	MILLIDGEVILLE WWTP	51 B	25 T	11 T	11 T	70 T	963 T	88 T	1 T	228 T	196 T	15,888 T
08-C100-019	MINTO WWTP	<0.1 T	<0.1 T	<0.1 T	<0.1 T	<0.1 T	1 T	0 T	<0.1 T	0 T	0 T	11 T
08-C100-020	PRESQUE ISLE WWTP	42 T	21 T	10 T	9 T	6 T	833 T	76 T	1 T	197 T	170 T	13,732 T
08-C100-021	QUISPAMSIS WWTP	4 B	2 T	1 T	1 T	5 T	65 T	6 T	0 T	15 T	13 T	1,073 T
08-C100-022	SUSSEX WWTP	2 B	1 T	1 T	1 T	3 T	43 T	4 T	<0.1 T	10 T	9 T	703 T
08-C100-023	TOWN OF VAN BUREN WWTP	4 T	2 T	1 T	1 T	1 T	74 T	7 T	0 T	18 T	15 T	1,218 T
08-C100-024	WOODSTOCK WWTP	<0.1 T	0 T	0 T	0 T	1 T	8 T	1 T	<0.1 T	2 T	2 T	132 T
08-C100-025	NB PWR. CORP. - GRAND LAKE THERMAL	0 T	45 T	6 T	39 T	58 T	516 T	7 T	1 T	452 T	97 T	0 T
08-C100-026	A E STALEY MFG. CO.	2 T	0 T	0 T	0 T	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-027	CHAR - TEC LTD.	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-028	FRASER INC.	0 T	0 T	0 T	140 T	47 T	0 T	47 T	1 T	934 T	0 T	0 T
08-C100-029	FRASER PAPER LTD.	0 T	0 T	0 T	0 T	8 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-030	HUMPTY - DUMPTY FOODS LTD.	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-031	IRVING OIL LTD. REFINING DIV.	0 T	0 T	0 T	34 T	3 T	0 T	2 T	0 T	34 T	59 T	0 T
08-C100-032	IRVING PAPER LTD.	0 T	0 T	0 T	76 T	26 T	0 T	26 T	0 T	510 T	0 T	0 T
08-C100-033	IRVING PULP & PAPER LTD.	0 T	0 T	0 T	182 T	61 T	0 T	61 T	1 T	1,214 T	0 T	0 T
08-C100-034	IRVING TISSUE CO. LTD.	0 T	0 T	0 T	25 T	8 T	0 T	8 T	0 T	167 T	0 T	0 T
08-C100-035	LANTIC SUGAR LTD.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-036	LANTIC SUGAR LTD. PIPE#1	2 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
08-C100-037	MCCAIN FOODS LTD. - FLORENCEVILLE	NBI-314	M	2037	46°26'54"	067°36'59"	SAINT JOHN RIVER	522	522 M	505 T	948 M	0 T
08-C100-038	MCCAIN FOODS LTD. - GRAND FALLS	NBI-000	M	2037	47°03'42"	067°46'34"	SAINT JOHN RIVER	219	219 M	212 T	249 M	0 T
08-C100-039	MCCAIN FOODS, INC.	ME0000566	M	2037	46°41'51"	067°59'33"	AROOSTOOK RIVER	35	35 M	9 M	17 M	0 T
08-C100-040	MOOSEHEAD BREWERIES LTD.	NBI-001	M	2082	45°15'25"	066°05'45"	SAINT JOHN RIVER SAINT JOHN HARBOUR	10	10 T	18 T	3 T	1 T
08-C100-041	N.B. COAL LTD. - FIRE RD.	NBI-266	●	1211	46°06'40"	066°15'10"		1,902	951 P	0 T	71 T	0 T
08-C100-042	NADEAU POULTRY FARMS LTD.	NBI-0154	*	2015	47°14'42"	068°42'59"	SAINT JOHN RIVER	53	53 M	11 T	9 M	5 T
08-C100-043	POTACAN MINING CO.	NBI-0076	M	1474	45°33'30"	065°34'32"	BAY OF FUNDY	209	209 M	0 T	16 T	0 T
08-C100-044	SAC LORING AFB WWTP	ME0090174	M	9711	46°54'58"	067°55'36"	GREENLAW BROOK	525	525 M	67 B	67 B	83 T
08-C100-045	SEA FARMS CANADA INC. - SOUTH OROM	NBI381-90	M	0921	45°26'40"	066°38'48"	SOUTH OROMOCTO RIVER	4,957	4,957 M	199 T	248 T	29 T
08-C100-046	SEA FARMS CANADA INC. - SPRINGDALE	NBI433-90	M	0921	45°46'14"	065°19'29"	SOUTH KENNEBACASIS RIVER	1,338	1,338 O	54 T	67 T	8 T
08-C100-047	ST. ANNE - NACKAWIC PULP CO.	NBI-0086	M	2611	46°00'43"	067°13'33"	SAINT JOHN RIVER	6,866	6,180 M	892 T	2,131 M	72 T
08-C100-048	TAY FALLS FARMS LTD.	NBI380-90	M	0921	46°13'56"	066°46'30"	TAY RIVER	1,459	1,459 O	58 T	73 T	9 T
08-C100-049	WOLVERTON - MUNIAC STREAM	NBI469-90	M	0921	46°39'02"	067°40'07"	MUNIAC STREAM	1,050	1,050 O	42 T	53 T	6 T
08-C100-050	WOLVERTON'S FISH HATCH. - COLDSTREAM	NBI512-90	●	0921	46°20'35"	067°28'45"	COLDSTREAM	973	973 M	39 T	21 M	6 T
	Total							**58,058**	**55,063**	**6,664**	**13,846**	**2,629**
	Fundy Shore (C090)											
09-C090-001	CROOKED CK. HATCH. LTD.	NBI521-90	●	0921	45°44'41"	064°44'50"	CROOKED CREEK	1,289	1,289 M	52 T	65 T	8 T
	Total							**1,289**	**1,289**	**52**	**65**	**8**
	Shepody Shore (C080)											
09-C080-001	MONCTON SEWERAGE COMMISSION	NBS-12	M	4952	46°04'25"	064°45'57"	PETITCODIAC RIVER	6,388	6,388 P	1,599 P	1,599 P	1,226 T
	Total							**6,388**	**6,388**	**1,599**	**1,599**	**1,226**
	Cumberland Basin (C070)											
09-C070-001	SACKVILLE WWTP	NBS-89	*	4952	45°53'23"	064°21'09"	TANTRAMAR RIVER	23	23 M	7 M	11 M	4 T
09-C070-002	IMP AEROSPACE COMPONENTS LTD.	NS92-010	M	3728	45°49'00"	064°13'00"		61	61 T	6 T	6 T	2 T
09-C070-003	SIFTO SALT DIVISION	NS90-024	M	1481	45°46'00"	064°15'00"		-	-	-	-	-
	Total							**84**	**84**	**13**	**17**	**6**
	Minas/Cobequid Shore (C060)											
10-C060-001	DOMTAR INC.	NS88-089	M	2491	45°22'45"	063°10'00"		2	2 T	<0.1 T	<0.1 T	0 T
10-C060-002	E-Z-EM CANADA INC.	NS91-061	M	9999	45°25'00"	063°25'45"		4	4 T	<0.1 T	<0.1 T	0 T
10-C060-003	INLAND RE-REFINING CO. LTD.	NS89-084	M	2911	45°21'00"	063°16'00"		486	486 T	55 T	106 T	28 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
		Annual Pollutant Load Estimates										
08-C100-037	MCCAIN FOODS LTD. - FLORENCEVILLE	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-038	MCCAIN FOODS LTD. - GRAND FALLS	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-039	MCCAIN FOODS, INC.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-040	MOOSEHEAD BREWERIES LTD.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-041	N.B. COAL LTD. - FIRE RD.	0 T	0 T	0 T	0 T	0 T	318 T	0 T	0 T	0 T	0 T	0 T
08-C100-042	NADEAU POULTRY FARMS LTD.	3 T	0 T	<0.1 T	2 T	2 T	31 T	2 T	<0.1 T	5 T	5 T	404 T
08-C100-043	POTACAN MINING CO.	0 T	0 T	0 T	0 T	0 T	70 T	0 T	0 T	0 T	0 T	0 T
08-C100-044	SAC LORING AFB WWTP	12 T	6 T	3 T	3 T	18 T	242 T	22 T	0 T	57 T	49 T	1,733 B
08-C100-045	SEA FARMS CANADA INC. - SOUTH OROM	1 M	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-046	SEA FARMS CANADA INC. - SPRINGDALE	1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-047	ST. ANNE - NACKAWIC PULP CO.	0 T	0 T	0 T	155 T	52 T	0 T	52 T	1 T	1,031 T	0 T	0 T
08-C100-048	TAY FALLS FARMS LTD.	1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-049	WOLVERTON - MUNIAC STREAM	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
08-C100-050	WOLVERTON'S FISH HATCH. - COLDSTREAM	<0.1 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**356**	**212**	**84**	**735**	**639**	**7,508**	**800**	**10**	**8,901**	**1,499**	**150,582**
	Fundy Shore (C090)											
09-C090-001	CROOKED CK. HATCH. LTD.	<0.1 M	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	**<0.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Shepody Shore (C080)											
09-C080-001	MONCTON SEWERAGE COMMISSION	160 P	83 T	67 T	1,189 T	927 T	5,863 T	466 T	6 T	1,559 T	1,034 T	4,835,338 T
	Total	**160**	**83**	**67**	**1,189**	**927**	**5,863**	**466**	**6**	**1,559**	**1,034**	**4,835,338**
	Cumberland Basin (C070)											
09-C070-001	SACKVILLE WWTP	<0.1 M	0 T	0 T	4 T	3 T	21 T	2 T	<0.1 T	6 T	4 T	17,411 T
09-C070-002	IMP AEROSPACE COMPONENTS LTD.	<0.1 T	1 T	3 T	2 T	5 T	41 T	5 T	0 T	10 T	2 T	0 T
09-C070-003	SIFTO SALT DIVISION	-	-	-	-	-	-	-	-	-	-	-
	Total	**<0.1**	**1**	**3**	**6**	**8**	**62**	**7**	**0**	**16**	**5**	**17,411**
	Minas/Cobequid Shore (C060)											
10-C060-001	DOMTAR INC.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
10-C060-002	E-Z-EM CANADA INC.	<0.1 T	<0.1 T	<0.1 T	0 T	0 T	2 T	0 T	<0.1 T	0 T	0 T	26 T
10-C060-003	INLAND RE-REFINING CO. LTD.	0 T	0 T	0 T	41 T	4 T	0 T	2 T	0 T	41 T	69 T	0 T

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Facility Characteristics								Annual Flow		Annual Pollutant Load Estimates		
Map Ref. Num.	Watershed (Code) Facility Name	Facility Discharge Permit Number	Major/ Minor Code	SIC Code	Latitude	Longitude	Receiving Water	Total (million gal.)	Process (million gal.)	BOD (1000 lbs)	TSS (1000 lbs)	TN (1000 lbs)
10-C060-004	ROTHESAY RENDERING PLANT	NS1190003	M	2077	45°21'00"	063°22'00"		219	219 T	81 T	108 T	20 T
	Total							711	711	137	215	48
	Avon River (C040)											
10-C040-001	KINGS COUNTY REGIONAL STP	NSWWTP48	M	4952	45°04'00"	064°26'00"	CORNWALLIS RIVER	794	794 O	166 T	199 T	126 T
10-C040-002	WOLFVILLE STP	NSWWTP51	M	4952	45°05'00"	064°22'00"	MINAS BASIN	365	365 O	210 T	192 T	70 T
10-C040-003	CANADA PACKERS LTD.	NS76-107	M	2015	45°07'45"	064°27'30"		-	-	-	-	-
10-C040-004	CANADIAN KEYS FIBRES CO. LTD.	NS76-051	M	2679	45°04'00"	064°08'00"		-	-	-	-	-
10-C040-005	ELLS BROS. LTD.	NS79-231	M	9999	45°08'00"	064°28'00"		4	4 T	<0.1 T	<0.1 T	0 T
10-C040-006	FUNDY GYPSUM CO. LTD.	NS91-039	M	1459	45°00'00"	064°03'15"		-	-	-	-	-
10-C040-007	FUNDY GYPSUM CO. LTD.	NS91-041	M	1459	44°58'45"	064°05'00"		-	-	-	-	-
10-C040-008	GOODFELLOW LUMBER INC.	NS85-183	M	2491	44°58'00"	064°30'00"		2	2 T	<0.1 T	<0.1 T	0 T
10-C040-009	MINAS BASIN PULP & PAPER LTD.	NS87-065	M	2621	45°04'00"	064°08'00"		465	465 T	67 T	110 T	5 T
	Total							1,629	1,629	444	502	202
	Saint Mary's Bay (C020)											
11-C020-001	COMEAU'S SEA FOODS LTD.	NS89-106	M	2091	44°16'00"	066°08'00"		8	8 T	28 T	14 T	2 T
11-C020-002	WEYMOUTH SEA PRODUCTS LTD.	NS80-119	M	2091	44°25'00"	066°00'00"		8	8 T	28 T	14 T	2 T
	Total							16	16	55	28	3
	Yarmouth (C010)											
11-C010-001	YARMOUTH STP	NSWWTP01	M	4952	43°50'00"	066°07'00"	YARMOUTH HARBOUR	2,117	2,117 O	1,219 T	1,113 T	406 T
11-C010-002	FISH REDUCTION LTD.	NS75-230	M	2091	43°35'00"	065°33'00"		8	8 T	28 T	14 T	2 T
11-C010-003	LAWRENCE SWEENY FISHERIES LTD.	NSINDU01	M	5146	43°31'30"	065°44'00"		-	-	-	-	-
11-C010-004	PROTAN SCOTIA MARINE CANADA LTD.	NS91-028	M	2869	43°33'00"	065°45'00"		60	60 T	22 T	8 T	0 T
	Total							2,185	2,185	1,268	1,135	408

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that there were no estimates for that parameter.

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Appendix 1. Individual Facility Characteristics, Annual Pollutant Load Estimates, and Basis of Estimates for Major and Significant Minor Facilities, 1991

Map Ref. Num.	Watershed (Code) Facility Name	Annual Pollutant Load Estimates										
		TP (1000 lbs)	As (10 lbs)	Cd (10 lbs)	Cr (10 lbs)	Cu (10 lbs)	Fe (10 lbs)	Pb (10 lbs)	Hg (10 lbs)	Zn (10 lbs)	O&G (1000 lbs)	FCB (billion cells)
10-C060-004	ROTHESAY RENDERING PLANT	5 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	3,319 T
	Total	6	<0.1	<0.1	41	4	2	2	0	41	70	3,346
	Avon River (C040)											
10-C040-001	KINGS COUNTY REGIONAL STP	19 T	9 T	4 T	4 T	3 T	364 T	33 T	0 T	86 T	74 T	6,010 T
10-C040-002	WOLFVILLE STP	24 T	5 T	4 T	68 T	53 T	335 T	27 T	0 T	89 T	84 T	276,305 T
10-C040-003	CANADA PACKERS LTD.	-	-	-	-	-	-	-	-	-	-	-
10-C040-004	CANADIAN KEYS FIBRES CO. LTD.	-	-	-	-	-	-	-	-	-	-	-
10-C040-005	ELLS BROS. LTD.	<0.1 T	<0.1 T	<0.1 T	0 T	0 T	2 T	0 T	<0.1 T	0 T	0 T	26 T
10-C040-006	FUNDY GYPSUM CO. LTD.	-	-	-	-	-	-	-	-	-	-	-
10-C040-007	FUNDY GYPSUM CO. LTD.	-	-	-	-	-	-	-	-	-	-	-
10-C040-008	GOODFELLOW LUMBER INC.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
10-C040-009	MINAS BASIN PULP & PAPER LTD.	0 T	0 T	0 T	12 T	4 T	0 T	4 T	<0.1 T	78 T	0 T	0 T
	Total	43	14	8	84	60	701	64	1	253	159	282,341
	Saint Mary's Bay (C020)											
11-C020-001	COMEAU'S SEA FOODS LTD.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
11-C020-002	WEYMOUTH SEA PRODUCTS LTD.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	0	0	0	0	0	0	0	0	0	0	0
	Yarmouth (C010)											
11-C010-001	YARMOUTH STP	141 T	27 T	22 T	394 T	307 T	1,943 T	155 T	2 T	517 T	488 T	1,602,569 T
11-C010-002	FISH REDUCTION LTD.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
11-C010-003	LAWRENCE SWEENY FISHERIES LTD.	-	-	-	-	-	-	-	-	-	-	-
11-C010-004	PROTAN SCOTIA MARINE CANADA LTD.	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T	0 T
	Total	141	27	22	394	307	1,943	155	2	517	488	1,602,569

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Appendix 2.
Top Ten Dischargers by Pollutant, 1991

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Map Ref. #	NPDES Number	Facility Name	SIC Code	SIC Name	Discharge Estimate	Basis Code
Total Flow in million gallons						
02-N120-023	MA0005096	NEW ENGLAND PWR. CO. SALEM HBR. STA.	4911	Electric services	248,570	M
02-N120-021	MA0004740	BOSTON EDISON CO. - MYSTIC STA.	4911	Electric services	225,603	M
02-N120-020	MA0004731	BOSTON EDISON CO. - L STREET STA.	4911	Electric services	210,234	M
01-N130-003	MA0004928	CANAL ELEC. CO.	4911	Electric services	188,638	M
01-N130-002	MA0003557	BOSTON ED. - #1 PILGRIM PLANT	4911	Electric services	186,919	B
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	139,154	M
03-N100-011	NH0001601	P. S. OF NH - NEWINGTON STA.	4911	Electric services	101,007	M
03-N110-038	NH0001465	P. S. OF NH - MERRIMACK STA.	4911	Electric services	89,121	M
05-N070-024	ME0002569	MAINE YANKEE ATOMIC PWR. CO.	4911	Electric services	72,770	B
03-N106-002	NH0020338	P. S. OF NH - SEABROOK STA.	4911	Electric services	33,250	M
Total Process Flow in million gallons						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	139,154	M
05-N070-026	ME0001937	INTERNAT. PAPER CO.	2621	Paper mills	17,886	P
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	13,502	M
05-N070-025	ME0002054	BOISE CASCADE CORP.	2621	Paper mills	11,924	P
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	10,103	M
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	9,985	M
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	9,508	M
05-N070-027	NH0000655	JAMES RIVER - BERLIN	2611	Pulp mills	9,447	M
05-N070-032	ME0021521	S.D. WARREN CO.	2621	Paper mills	8,878	M
06-N050-015	ME0000175	GREAT NORTHERN PAPER, INC.	2621	Paper mills	7,766	M
Biochemical Oxygen Demand in 1000 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	162,257	M
05-N070-026	ME0001937	INTERNAT. PAPER CO.	2621	Paper mills	6,207	P
05-N070-025	ME0002054	BOISE CASCADE CORP.	2621	Paper mills	4,208	B
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	3,760	P
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	2,373	B
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	2,271	M
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	1,599	P
02-N120-008	MA0100625	GLOUCESTER WWTP	4952	Sewerage systems	1,532	M
07-N010-004	ME0001872	GEORGIA - PACIFIC CORP.	2621	Paper mills	1,494	B
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	1,425	B
Total Suspended Solids in 1000 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	90,831	M
05-N070-026	ME0001937	INTERNAT. PAPER CO.	2621	Paper mills	13,355	P
05-N070-025	ME0002054	BOISE CASCADE CORP.	2621	Paper mills	11,538	B
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	5,669	M
08-C100-033	NBI-0052	IRVING PULP & PAPER LTD.	2611	Pulp mills	4,551	M
06-N050-016	ME0002020	JAMES RIVER CORP.	2621	Paper mills	2,763	B
04-N080-016	ME0002321	S. D. WARREN CO.	2621	Paper mills	2,569	B
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	2,373	B
05-N070-032	ME0021521	S.D. WARREN CO.	2621	Paper mills	2,212	M
08-C100-047	NBI-0086	ST. ANNE - NACKAWIC PULP CO.	2611	Pulp mills	2,131	M
Total Nitrogen in 1000 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	26,707	T
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	2,141	T
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	1,939	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	1,583	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	1,507	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	1,226	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	1,158	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	636	T
05-N070-011	ME0100854	KENNEBEC SAN. DIST. WWTP	4952	Sewerage systems	627	T
05-N070-012	ME0101478	LEWISTON AUBURN WWTP	4952	Sewerage systems	626	T

Abbreviations: SIC, Standard Industrial Classification.

Basis Codes: B, value from both monitoring and typical pollutant concentration, permit data, or other data; M, monitored data; P, permit data; T, typical concentration data.

Note: The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 2. Top Ten Dischargers by Pollutant, 1991

Map Ref. #	NPDES Number	Facility Name	SIC Code	SIC Name	Discharge Estimate	Basis Code
Total Phosphorus in 1000 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	4,175	M
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	674	T
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	315	T
06-N050-013	ME0002160	CHAMPION INTERNAT.	2671	Paper coated & laminated, packaging	275	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	233	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	222	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	171	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	160	P
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	141	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	94	T
Total Arsenic in 10 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	175	M
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	158	T
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	131	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	117	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	111	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	85	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	83	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	47	T
05-N070-011	ME0100854	KENNEBEC SAN. DIST. WWTP	4952	Sewerage systems	46	T
05-N070-012	ME0101478	LEWISTON AUBURN WWTP	4952	Sewerage systems	46	T
Total Cadmium in 10 lbs						
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	107	T
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	82	M
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	73	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	67	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	54	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	52	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	40	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	22	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	22	T
05-N070-011	ME0100854	KENNEBEC SAN. DIST. WWTP	4952	Sewerage systems	21	T
Total Chromium in 10 lbs						
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	1,880	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	1,189	T
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	479	M
05-N070-026	ME0001937	INTERNAT. PAPER CO.	2621	Paper mills	448	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	394	T
05-N070-025	ME0002054	BOISE CASCADE CORP.	2621	Paper mills	298	T
02-N120-008	MA0100625	GLOUCESTER WWTP	4952	Sewerage systems	226	T
05-N070-032	ME0021521	S.D. WARREN CO.	2621	Paper mills	222	T
06-N050-015	ME0000175	GREAT NORTHERN PAPER, INC.	2621	Paper mills	194	T
03-N100-008	NH0100234	PORTSMOUTH - PIERCE ISLAND WWTP	4952	Sewerage systems	188	T
Total Copper in 10 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	6,789	M
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	1,467	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	927	T
02-N120-023	MA0005096	NEW ENGLAND PWR. CO. SALEM HBR. STA.	4911	Electric services	458	T
02-N120-021	MA0004740	BOSTON EDISON CO. - MYSTIC STA.	4911	Electric services	394	B
02-N120-020	MA0004731	BOSTON EDISON CO. - L STREET STA.	4911	Electric services	365	B
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	333	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	307	T
01-N130-002	MA0003557	BOSTON ED. - #1 PILGRIM PLANT	4911	Electric services	283	T

Abbreviations: SIC, Standard Industrial Classification.

Basis Codes: B, value from both monitoring and typical pollutant concentration, permit data, or other data; M, monitored data; P, permit data; T, typical concentration data.

Note: The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 2. Top Ten Dischargers by Pollutant, 1991

Map Ref. #	NPDES Number	Facility Name	SIC Code	SIC Name	Discharge Estimate	Basis Code
Total Iron in 10 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	127,729	T
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	9,274	T
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	6,197	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	5,863	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	4,583	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	4,364	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	3,352	T
06-N050-013	ME0002160	CHAMPION INTERNAT.	2671	Paper coated & laminated, packaging	2,752	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	1,943	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	1,840	T
Total Lead in 10 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	1,171	M
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	738	T
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	563	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	466	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	417	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	397	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	305	T
06-N050-013	ME0002160	CHAMPION INTERNAT.	2671	Paper coated & laminated, packaging	197	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	167	T
05-N070-011	ME0100854	KENNEBEC SAN. DIST. WWTP	4952	Sewerage systems	165	T
Total Mercury in 10 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	23	M
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	9	T
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	6	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	6	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	5	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	4	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	3	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	2	T
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	2	T
05-N070-011	ME0100854	KENNEBEC SAN. DIST. WWTP	4952	Sewerage systems	2	T
Total Zinc in 10 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	8,253	M
05-N070-026	ME0001937	INTERNAT. PAPER CO.	2621	Paper mills	2,985	T
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	2,466	T
05-N070-025	ME0002054	BOISE CASCADE CORP.	2621	Paper mills	1,990	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	1,559	T
05-N070-032	ME0021521	S.D. WARREN CO.	2621	Paper mills	1,482	T
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	1,465	T
06-N050-015	ME0000175	GREAT NORTHERN PAPER, INC.	2621	Paper mills	1,296	T
08-C100-033	NBI-0052	IRVING PULP & PAPER LTD.	2611	Pulp mills	1,214	T
04-N080-016	ME0002321	S. D. WARREN CO.	2621	Paper mills	1,132	T
Oil and Grease in 1000 lbs						
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	10,440	B
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	1,347	M
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	4952	Sewerage systems	1,262	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	1,034	T
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	4952	Sewerage systems	889	T
03-N110-019	NH0100447	MANCHESTER WWTP	4952	Sewerage systems	683	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	488	T
06-N050-013	ME0002160	CHAMPION INTERNAT.	2671	Paper coated & laminated, packaging	440	T
02-N120-010	MA0100552	LYNN WWTP	4952	Sewerage systems	376	B
03-N110-012	MA0101621	HAVERHILL WWTP	4952	Sewerage systems	375	T

Abbreviations: SIC, Standard Industrial Classification.

Basis Codes: B, value from both monitoring and typical pollutant concentration, permit data, or other data; M, monitored data; P, permit data; T, typical concentration data.

Note: The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 2. Top Ten Dischargers by Pollutant, 1991

Map Ref. #	NPDES Number	Facility Name	SIC Code	SIC Name	Discharge Estimate	Basis Code
Fecal Coliform Bacteria in billion cells						
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	4952	Sewerage systems	7,648,122	T
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	4952	Sewerage systems	4,835,338	T
11-C010-001	NSWWTP01	YARMOUTH STP	4952	Sewerage systems	1,602,569	T
02-N120-008	MA0100625	GLOUCESTER WWTP	4952	Sewerage systems	919,152	T
03-N100-008	NH0100234	PORTSMOUTH - PIERCE ISLAND WWTP	4952	Sewerage systems	765,365	T
03-N110-025	MA0100404	MWRA - CLINTON WWTP	4952	Sewerage systems	756,984	T
02-N120-019	MA0101907	SWAMPSCOTT WWTP	4952	Sewerage systems	695,368	T
10-C040-001	NSWWTP51	WOLFVILLE STP	4952	Sewerage systems	276,305	T
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND	4952	Sewerage systems	263,913	M
06-N050-011	ME0100111	TOWN OF BUCKSPORT WWTP	4952	Sewerage systems	176,075	T

Abbreviations: SIC, Standard Industrial Classification.

Basis Codes: B, value from both monitoring and typical pollutant concentration, permit data, or other data; M, monitored data; P, permit data; T, typical concentration data.

Note: The Map Ref. Num. refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)].

Appendix 3.
Pollutant Loads by Major Source Category and Percent of Annual Discharge by Watershed, 1991

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow (million gal.)		Process Flow (million gal.)		BOD (1,000 lbs)		TSS (1,000 lbs)		TN (1,000 lbs)		TP (1,000 lbs)		As (10 lbs)		Cd (10 lbs)	
Coastal Drainage Area (N135)																	
Industry	8	1	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	1	7,634	(0.4)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
WWTP	1	17	(<0.1)	17	(<0.1)	10	(<0.1)	9	(<0.1)	3	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)
All Categories	**10**	**7,653**	**(0.4)**	**19**	**(<0.1)**	**10**	**(<0.1)**	**9**	**(<0.1)**	**3**	**(<0.1)**	**1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**
Cape Cod Bay (N130)																	
Industry	13	349	(<0.1)	349	(0.1)	14	(<0.1)	18	(<0.1)	2	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	2	375,557	(17.9)	158	(<0.1)	0	(0)	41	(<0.1)	0	(0)	0	(0)	9	(0.4)	1	(0.1)
WWTP	1	807	(<0.1)	807	(0.2)	184	(0.1)	202	(0.1)	128	(0.2)	19	(0.2)	9	(0.4)	4	(0.4)
All Categories	**16**	**376,713**	**(18)**	**1,313**	**(0.3)**	**198**	**(0.1)**	**260**	**(0.1)**	**130**	**(0.2)**	**19**	**(0.2)**	**19**	**(0.8)**	**6**	**(0.5)**
Coastal Drainage Area (N125)																	
Industry	1	1	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	406	(<0.1)	406	(0.1)	27	(<0.1)	39	(<0.1)	64	(0.1)	9	(0.1)	5	(0.2)	2	(0.2)
All Categories	**3**	**407**	**(<0.1)**	**407**	**(0.1)**	**27**	**(<0.1)**	**40**	**(<0.1)**	**64**	**(0.1)**	**10**	**(0.1)**	**5**	**(0.2)**	**2**	**(0.2)**
Massachusetts Bay (N120)																	
Industry	367	31,073	(1.5)	3,290	(0.7)	255	(0.1)	835	(0.5)	194	(0.4)	27	(0.3)	19	(0.8)	14	(1.2)
Power Plants	10	744,595	(35.5)	1,140	(0.2)	0	(0)	285	(0.2)	0	(0)	0	(0)	66	(2.8)	9	(0.7)
WWTP	29	168,280	(8)	168,280	(35.3)	170,362	(75.7)	101,550	(55.9)	31,465	(57.5)	5,348	(58.9)	512	(21.7)	294	(24.9)
All Categories	**406**	**943,949**	**(45)**	**172,711**	**(36.2)**	**170,616**	**(75.9)**	**102,670**	**(56.6)**	**31,658**	**(57.8)**	**5,375**	**(59.2)**	**597**	**(25.3)**	**316**	**(26.8)**
Coastal Drainage Area (N115)																	
Industry	39	447	(<0.1)	367	(0.1)	28	(<0.1)	47	(<0.1)	24	(<0.1)	1	(<0.1)	2	(0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	558	(<0.1)	558	(0.1)	72	(<0.1)	190	(0.1)	88	(0.2)	13	(0.1)	7	(0.3)	3	(0.3)
All Categories	**42**	**1,005**	**(<0.1)**	**925**	**(0.2)**	**101**	**(<0.1)**	**237**	**(0.1)**	**113**	**(0.2)**	**14**	**(0.2)**	**9**	**(0.4)**	**3**	**(0.3)**
Merrimack River (N110)																	
Industry	318	4,813	(0.2)	4,200	(0.9)	536	(0.2)	862	(0.5)	238	(0.4)	31	(0.3)	15	(0.6)	35	(3)
Power Plants	19	112,332	(5.4)	669	(0.1)	0	(0)	223	(0.1)	0	(0)	0	(0)	29	(1.2)	4	(0.3)
WWTP	60	61,409	(2.9)	61,409	(12.9)	11,029	(4.9)	10,389	(5.7)	8,500	(15.5)	1,342	(14.8)	627	(26.6)	301	(25.5)
All Categories	**397**	**178,553**	**(8.5)**	**66,278**	**(13.9)**	**11,565**	**(5.1)**	**11,474**	**(6.3)**	**8,738**	**(16)**	**1,373**	**(15.1)**	**671**	**(28.4)**	**339**	**(28.8)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr (10 lbs)		Cu (10 lbs)		Fe (10 lbs)		Pb (10 lbs)		Hg (10 lbs)		Zn (10 lbs)		O&G (1000 lbs)		FCB (billion cells)	
Coastal Drainage Area (N135)																	
Industry	8	<1	(<0.1)	<1	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	10	(<0.1)
Power Plants	1	0	(0)	13	(0.1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
WWTP	1	3	(<0.1)	3	(<0.1)	16	(<0.1)	1	(<0.1)	<1	(<0.1)	4	(<0.1)	3	(<0.1)	13,235	(0.1)
All Categories	**10**	**3**	**(<0.1)**	**15**	**(0.1)**	**17**	**(<0.1)**	**1**	**(<0.1)**	**<1**	**(<0.1)**	**4**	**(<0.1)**	**3**	**(<0.1)**	**13,245**	**(0.1)**
Cape Cod Bay (N130)																	
Industry	13	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	3	(<0.1)
Power Plants	2	8	(0.1)	603	(3.7)	79	(<0.1)	1	(<0.1)	<1	(0.1)	92	(0.2)	20	(0.1)	0	(0)
WWTP	1	4	(<0.1)	27	(0.2)	370	(0.2)	34	(0.3)	<1	(0.3)	88	(0.2)	75	(0.3)	2,538	(<0.1)
All Categories	**16**	**12**	**(0.1)**	**630**	**(3.9)**	**449**	**(0.2)**	**35**	**(0.3)**	**1**	**(0.4)**	**180**	**(0.4)**	**95**	**(0.3)**	**2,541**	**(<0.1)**
Coastal Drainage Area (N125)																	
Industry	1	<1	(<0.1)	<1	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	7	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	2	(<0.1)	1	(<0.1)	186	(0.1)	17	(0.2)	<1	(0.1)	44	(0.1)	38	(0.1)	963	(<0.1)
All Categories	**3**	**2**	**(<0.1)**	**1**	**(<0.1)**	**187**	**(0.1)**	**17**	**(0.2)**	**<1**	**(0.1)**	**44**	**(0.1)**	**38**	**(0.1)**	**970**	**(<0.1)**
Massachusetts Bay (N120)																	
Industry	367	353	(3.7)	149	(0.9)	620	(0.3)	94	(0.9)	2	(1.9)	246	(0.5)	126	(0.4)	3,747	(<0.1)
Power Plants	10	57	(0.6)	1,310	(8.1)	679	(0.3)	9	(0.1)	1	(0.9)	664	(1.4)	130	(0.5)	0	(0)
WWTP	29	2,836	(29.9)	8,936	(55.3)	145,836	(66.8)	2,702	(26.9)	42	(32.9)	12,885	(26.7)	13,028	(46.3)	9,659,121	(49.2)
All Categories	**406**	**3,246**	**(34.3)**	**10,396**	**(64.3)**	**147,136**	**(67.4)**	**2,805**	**(27.9)**	**45**	**(35.6)**	**13,796**	**(28.6)**	**13,284**	**(47.3)**	**9,662,868**	**(49.2)**
Coastal Drainage Area (N115)																	
Industry	39	161	(1.7)	231	(1.4)	3	(<0.1)	2	(<0.1)	<1	(0.2)	245	(0.5)	12	(<0.1)	90	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	3	(<0.1)	2	(<0.1)	256	(0.1)	23	(0.2)	<1	(0.2)	61	(0.1)	52	(0.2)	2,542	(<0.1)
All Categories	**42**	**164**	**(1.7)**	**233**	**(1.4)**	**260**	**(0.1)**	**25**	**(0.3)**	**1**	**(0.4)**	**305**	**(0.6)**	**64**	**(0.2)**	**2,632**	**(<0.1)**
Merrimack River (N110)																	
Industry	318	312	(3.3)	275	(1.7)	582	(0.3)	170	(1.7)	2	(1.2)	741	(1.5)	130	(0.5)	8,905	(<0.1)
Power Plants	19	25	(0.3)	50	(0.3)	332	(0.2)	4	(<0.1)	<1	(0.4)	290	(0.6)	62	(0.2)	0	(0)
WWTP	60	491	(5.2)	476	(2.9)	24,329	(11.1)	2,292	(22.8)	27	(20.8)	5,852	(12.1)	5,381	(19.1)	1,314,195	(6.7)
All Categories	**397**	**828**	**(8.7)**	**802**	**(5)**	**25,243**	**(11.6)**	**2,466**	**(24.6)**	**29**	**(22.4)**	**6,884**	**(14.3)**	**5,573**	**(19.8)**	**1,323,100**	**(6.7)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow (million gal.)		Process Flow (million gal.)		BOD (1,000 lbs)		TSS (1,000 lbs)		TN (1,000 lbs)		TP (1,000 lbs)		As (10 lbs)		Cd (10 lbs)	
Coastal Drainage Area (N106)																	
Industry	7	79	(<0.1)	32	(<0.1)	6	(<0.1)	12	(<0.1)	9	(<0.1)	<1	(<0.1)	1	(<0.1)	<1	(<0.1)
Power Plants	1	33,250	(1.6)	358	(0.1)	0	(0)	86	(<0.1)	0	(0)	0	(0)	21	(0.9)	3	(0.2)
WWTP	2	791	(<0.1)	791	(0.2)	75	(<0.1)	55	(<0.1)	125	(0.2)	18	(0.2)	9	(0.4)	4	(0.4)
All Categories	**10**	**34,120**	**(1.6)**	**1,181**	**(0.2)**	**81**	**(<0.1)**	**153**	**(0.1)**	**134**	**(0.2)**	**19**	**(0.2)**	**31**	**(1.3)**	**7**	**(0.6)**
Great Bay (N100)																	
Industry	37	1,776	(0.1)	481	(0.1)	39	(<0.1)	59	(<0.1)	21	(<0.1)	11	(0.1)	1	(<0.1)	4	(0.4)
Power Plants	3	107,106	(5.1)	114	(<0.1)	0	(0)	28	(<0.1)	0	(0)	0	(0)	7	(0.3)	1	(0.1)
WWTP	19	6,147	(0.3)	6,147	(1.3)	1,812	(0.8)	1,333	(0.7)	1,008	(1.8)	187	(2.1)	73	(3.1)	39	(3.3)
All Categories	**59**	**115,029**	**(5.5)**	**6,742**	**(1.4)**	**1,850**	**(0.8)**	**1,421**	**(0.8)**	**1,029**	**(1.9)**	**199**	**(2.2)**	**81**	**(3.4)**	**44**	**(3.7)**
Coastal Drainage Area (N096)																	
Industry	9	789	(<0.1)	100	(<0.1)	14	(<0.1)	18	(<0.1)	8	(<0.1)	4	(<0.1)	1	(0.1)	2	(0.1)
Power Plants	1	3	(<0.1)	3	(<0.1)	0	(0)	1	(<0.1)	0	(0)	0	(0)	<1	(<0.1)	<1	(<0.1)
WWTP	6	2,196	(0.1)	2,196	(0.5)	306	(0.1)	226	(0.1)	203	(0.4)	35	(0.4)	15	(0.6)	7	(0.6)
All Categories	**16**	**2,988**	**(0.1)**	**2,299**	**(0.5)**	**320**	**(0.1)**	**245**	**(0.1)**	**210**	**(0.4)**	**39**	**(0.4)**	**17**	**(0.7)**	**9**	**(0.7)**
Saco Bay (N090)																	
Industry	12	10,225	(0.5)	15	(<0.1)	3	(<0.1)	5	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	6	247	(<0.1)	119	(<0.1)	0	(0)	30	(<0.1)	0	(0)	0	(0)	7	(0.3)	1	(0.1)
WWTP	6	2,445	(0.1)	2,445	(0.5)	243	(0.1)	442	(0.2)	388	(0.7)	57	(0.6)	29	(1.2)	13	(1.1)
All Categories	**24**	**12,918**	**(0.6)**	**2,580**	**(0.5)**	**246**	**(0.1)**	**476**	**(0.3)**	**389**	**(0.7)**	**57**	**(0.6)**	**36**	**(1.5)**	**14**	**(1.2)**
Casco Bay (N080)																	
Industry	37	12,419	(0.6)	7,600	(1.6)	1,120	(0.5)	2,662	(1.5)	125	(0.2)	8	(0.1)	3	(0.1)	2	(0.2)
Power Plants	4	19,325	(0.9)	488	(0.1)	0	(0)	87	(<0.1)	0	(0)	0	(0)	29	(1.2)	4	(0.3)
WWTP	11	7,170	(0.3)	7,170	(1.5)	1,438	(0.6)	831	(0.5)	1,137	(2.1)	168	(1.8)	84	(3.5)	39	(3.3)
All Categories	**52**	**38,913**	**(1.9)**	**15,258**	**(3.2)**	**2,558**	**(1.1)**	**3,581**	**(2)**	**1,262**	**(2.3)**	**176**	**(1.9)**	**115**	**(4.9)**	**45**	**(3.8)**
Sheepscot Bay (N070)																	
Industry	68	79,855	(3.8)	57,740	(12.1)	12,541	(5.6)	28,327	(15.6)	547	(1)	14	(0.2)	4	(0.2)	2	(0.1)
Power Plants	31	105,797	(5)	568	(0.1)	0	(0)	157	(0.1)	0	(0)	0	(0)	33	(1.4)	4	(0.4)
WWTP	46	17,544	(0.8)	17,544	(3.7)	2,746	(1.2)	2,662	(1.5)	2,784	(5.1)	415	(4.6)	205	(8.7)	96	(8.1)
All Categories	**145**	**203,195**	**(9.7)**	**75,851**	**(15.9)**	**15,287**	**(6.8)**	**31,146**	**(17.2)**	**3,330**	**(6.1)**	**430**	**(4.7)**	**242**	**(10.2)**	**102**	**(8.6)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr (10 lbs)		Cu (10 lbs)		Fe (10 lbs)		Pb (10 lbs)		Hg (10 lbs)		Zn (10 lbs)		O&G (1000 lbs)		FCB (billion cells)	
Coastal Drainage Area (N106)																	
Industry	7	18	(0.2)	3	(<0.1)	1	(<0.1)	1	(<0.1)	<1	(0.1)	8	(<0.1)	4	(<0.1)	14	(<0.1)
Power Plants	1	18	(0.2)	82	(0.5)	239	(0.1)	3	(<0.1)	<1	(0.3)	209	(0.4)	45	(0.2)	0	(0)
WWTP	2	4	(<0.1)	3	(<0.1)	363	(0.2)	33	(0.3)	<1	(0.3)	86	(0.2)	74	(0.3)	5,990	(<0.1)
All Categories	10	40	(0.4)	87	(0.5)	603	(0.3)	37	(0.4)	1	(0.6)	303	(0.6)	123	(0.4)	6,004	(<0.1)
Great Bay (N100)																	
Industry	37	26	(0.3)	26	(0.2)	143	(0.1)	16	(0.2)	<1	(0.1)	38	(0.1)	30	(0.1)	1,383	(<0.1)
Power Plants	3	6	(0.1)	187	(1.2)	63	(<0.1)	2	(<0.1)	<1	(0.1)	66	(0.1)	10	(<0.1)	0	(0)
WWTP	19	214	(2.3)	164	(1)	3,285	(1.5)	288	(2.9)	3	(2.6)	804	(1.7)	737	(2.6)	804,244	(4.1)
All Categories	59	245	(2.6)	376	(2.3)	3,491	(1.6)	306	(3)	3	(2.7)	908	(1.9)	777	(2.8)	805,627	(4.1)
Coastal Drainage Area (N096)																	
Industry	9	4	(<0.1)	6	(<0.1)	103	(<0.1)	5	(0.1)	<1	(<0.1)	12	(<0.1)	7	(<0.1)	563	(<0.1)
Power Plants	1	<1	(<0.1)	<1	(<0.1)	2	(<0.1)	<1	(<0.1)	<1	(<0.1)	2	(<0.1)	<1	(<0.1)	0	(0)
WWTP	6	7	(0.1)	9	(0.1)	530	(0.2)	48	(0.5)	1	(0.6)	126	(0.3)	154	(0.5)	12,496	(0.1)
All Categories	16	12	(0.1)	16	(0.1)	635	(0.3)	53	(0.5)	1	(0.6)	140	(0.3)	162	(0.6)	13,059	(0.1)
Saco Bay (N090)																	
Industry	12	<1	(<0.1)	17	(0.1)	4	(<0.1)	<1	(<0.1)	<1	(<0.1)	1	(<0.1)	1	(<0.1)	63	(<0.1)
Power Plants	6	6	(0.1)	9	(0.1)	79	(<0.1)	1	(<0.1)	<1	(0.1)	69	(0.1)	15	(0.1)	0	(0)
WWTP	6	12	(0.1)	8	(0.1)	1,122	(0.5)	102	(1)	1	(0.9)	265	(0.5)	229	(0.8)	18,208	(0.1)
All Categories	24	18	(0.2)	34	(0.2)	1,206	(0.6)	103	(1)	1	(1)	336	(0.7)	244	(0.9)	18,271	(0.1)
Casco Bay (N080)																	
Industry	37	178	(1.9)	77	(0.5)	135	(0.1)	70	(0.7)	1	(0.5)	1,166	(2.4)	28	(0.1)	2,149	(<0.1)
Power Plants	4	24	(0.3)	62	(0.4)	569	(0.3)	4	(<0.1)	<1	(0.4)	285	(0.6)	61	(0.2)	0	(0)
WWTP	11	36	(0.4)	24	(0.1)	3,290	(1.5)	299	(3)	3	(2.6)	778	(1.6)	670	(2.4)	59,501	(0.3)
All Categories	52	238	(2.5)	163	(1)	3,994	(1.8)	374	(3.7)	4	(3.5)	2,229	(4.6)	759	(2.7)	61,650	(0.3)
Sheepscot Bay (N070)																	
Industry	68	1,130	(11.9)	408	(2.5)	119	(0.1)	376	(3.7)	4	(2.7)	7,009	(14.5)	64	(0.2)	1,606	(<0.1)
Power Plants	31	28	(0.3)	201	(1.2)	430	(0.2)	5	(<0.1)	1	(0.4)	338	(0.7)	71	(0.3)	0	(0)
WWTP	46	126	(1.3)	135	(0.8)	8,130	(3.7)	738	(7.4)	8	(6.4)	1,927	(4)	1,664	(5.9)	285,909	(1.5)
All Categories	145	1,285	(13.6)	744	(4.6)	8,679	(4)	1,120	(11.1)	12	(9.6)	9,274	(19.2)	1,798	(6.4)	287,515	(1.5)

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Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow (million gal.)		Process Flow (million gal.)		BOD (1,000 lbs)		TSS (1,000 lbs)		TN (1,000 lbs)		TP (1,000 lbs)		As (10 lbs)		Cd (10 lbs)	
Muscongus Bay (N060)																	
Industry	25	861	(<0.1)	301	(0.1)	9	(<0.1)	34	(<0.1)	2	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	340	(<0.1)	340	(0.1)	35	(<0.1)	36	(<0.1)	54	(0.1)	8	(0.1)	4	(0.2)	2	(0.2)
All Categories	**28**	**1,201**	**(0.1)**	**641**	**(0.1)**	**44**	**(<0.1)**	**70**	**(<0.1)**	**56**	**(0.1)**	**9**	**(0.1)**	**4**	**(0.2)**	**2**	**(0.2)**
Coastal Drainage Area (N055)																	
Industry	2	10	(<0.1)	10	(<0.1)	2	(<0.1)	2	(<0.1)	1	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**2**	**10**	**(<0.1)**	**10**	**(<0.1)**	**2**	**(<0.1)**	**2**	**(<0.1)**	**1**	**(<0.1)**	**1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**
Coastal Drainage Area (N052)																	
Industry	1	32	(<0.1)	32	(<0.1)	170	(0.1)	65	(<0.1)	6	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**1**	**32**	**(<0.1)**	**32**	**(<0.1)**	**170**	**(0.1)**	**65**	**(<0.1)**	**6**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**
Penobscot Bay (N050)																	
Industry	58	61,742	(2.9)	26,506	(5.6)	4,136	(1.8)	5,533	(3)	699	(1.3)	280	(3.1)	13	(0.6)	5	(0.4)
Power Plants	7	10,082	(0.5)	60	(<0.1)	0	(0)	15	(<0.1)	0	(0)	0	(0)	3	(0.1)	<1	(<0.1)
WWTP	30	8,261	(0.4)	8,261	(1.7)	2,439	(1.1)	2,588	(1.4)	1,321	(2.4)	209	(2.3)	97	(4.1)	47	(4)
All Categories	**95**	**80,085**	**(3.8)**	**34,827**	**(7.3)**	**6,575**	**(2.9)**	**8,137**	**(4.5)**	**2,020**	**(3.7)**	**488**	**(5.4)**	**114**	**(4.8)**	**52**	**(4.4)**
Blue Hill Bay (N040)																	
Industry	10	773	(<0.1)	773	(0.2)	12	(<0.1)	17	(<0.1)	1	(<0.1)	<1	(<0.1)	1	(<0.1)	1	(0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	230	(<0.1)	230	(<0.1)	89	(<0.1)	89	(<0.1)	37	(0.1)	5	(0.1)	3	(0.1)	1	(0.1)
All Categories	**13**	**1,004**	**(<0.1)**	**1,004**	**(0.2)**	**101**	**(<0.1)**	**106**	**(0.1)**	**38**	**(0.1)**	**6**	**(0.1)**	**4**	**(0.2)**	**2**	**(0.2)**
Coastal Drainage Area (N036)																	
Industry	8	418	(<0.1)	418	(0.1)	184	(0.1)	117	(0.1)	13	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	515	(<0.1)	515	(0.1)	70	(<0.1)	60	(<0.1)	82	(0.1)	12	(0.1)	6	(0.3)	3	(0.2)
All Categories	**14**	**933**	**(<0.1)**	**933**	**(0.2)**	**254**	**(0.1)**	**177**	**(0.1)**	**95**	**(0.2)**	**13**	**(0.1)**	**6**	**(0.3)**	**3**	**(0.2)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr (10 lbs)		Cu (10 lbs)		Fe (10 lbs)		Pb (10 lbs)		Hg (10 lbs)		Zn (10 lbs)		O&G (1000 lbs)		FCB (billion cells)	
Muscongus Bay (N060)																	
Industry	25	2	(<0.1)	4	(<0.1)	35	(<0.1)	4	(<0.1)	<1	(<0.1)	2	(<0.1)	1	(<0.1)	79	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	2	(<0.1)	1	(<0.1)	156	(0.1)	14	(0.1)	<1	(0.1)	37	(0.1)	32	(0.1)	2,373	(<0.1)
All Categories	**28**	**4**	**(<0.1)**	**5**	**(<0.1)**	**191**	**(0.1)**	**19**	**(0.2)**	**<1**	**(0.1)**	**39**	**(0.1)**	**33**	**(0.1)**	**2,452**	**(<0.1)**
Coastal Drainage Area (N055)																	
Industry	2	<1	(<0.1)	<1	(<0.1)	6	(<0.1)	<1	(<0.1)	<1	(<0.1)	1	(<0.1)	1	(<0.1)	73	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**2**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**6**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**1**	**(<0.1)**	**1**	**(<0.1)**	**73**	**(<0.1)**
Coastal Drainage Area (N052)																	
Industry	1	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**1**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**<1**	**(<0.1)**	**1**	**(<0.1)**
Penobscot Bay (N050)																	
Industry	58	585	(6.2)	365	(2.3)	2,789	(1.3)	346	(3.4)	3	(2.1)	3,238	(6.7)	446	(1.6)	36,101	(0.2)
Power Plants	7	3	(<0.1)	21	(0.1)	40	(<0.1)	<1	(<0.1)	<1	(<0.1)	35	(0.1)	7	(<0.1)	0	(0)
WWTP	30	112	(1.2)	163	(1)	3,953	(1.8)	356	(3.5)	4	(3.1)	947	(2)	820	(2.9)	328,119	(1.7)
All Categories	**95**	**700**	**(7.4)**	**549**	**(3.4)**	**6,782**	**(3.1)**	**702**	**(7)**	**7**	**(5.2)**	**4,219**	**(8.7)**	**1,273**	**(4.5)**	**364,221**	**(1.9)**
Blue Hill Bay (N040)																	
Industry	10	2	(<0.1)	4	(<0.1)	56	(<0.1)	2	(<0.1)	<1	(<0.1)	5	(<0.1)	<1	(<0.1)	1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	1	(<0.1)	1	(<0.1)	106	(<0.1)	10	(0.1)	<1	(0.1)	25	(0.1)	22	(0.1)	1,744	(<0.1)
All Categories	**13**	**3**	**(<0.1)**	**5**	**(<0.1)**	**162**	**(0.1)**	**11**	**(0.1)**	**<1**	**(0.1)**	**30**	**(0.1)**	**22**	**(0.1)**	**1,745**	**(<0.1)**
Coastal Drainage Area (N036)																	
Industry	8	<1	(<0.1)	1	(<0.1)	9	(<0.1)	1	(<0.1)	<1	(<0.1)	2	(<0.1)	2	(<0.1)	188	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	3	(<0.1)	2	(<0.1)	236	(0.1)	21	(0.2)	<1	(0.2)	56	(0.1)	48	(0.2)	5,415	(<0.1)
All Categories	**14**	**3**	**(<0.1)**	**2**	**(<0.1)**	**246**	**(0.1)**	**22**	**(0.2)**	**<1**	**(0.2)**	**58**	**(0.1)**	**50**	**(0.2)**	**5,603**	**(<0.1)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow (million gal.)		Process Flow (million gal.)		BOD (1,000 lbs)		TSS (1,000 lbs)		TN (1,000 lbs)		TP (1,000 lbs)		As (10 lbs)		Cd (10 lbs)	
Narraguagus Bay (N030)																	
Industry	6	232	(<0.1)	230	(<0.1)	73	(<0.1)	61	(<0.1)	22	(<0.1)	13	(0.1)	1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	1	26	(<0.1)	26	(<0.1)	5	(<0.1)	6	(<0.1)	4	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)
All Categories	**7**	**257**	**(<0.1)**	**256**	**(0.1)**	**78**	**(<0.1)**	**67**	**(<0.1)**	**26**	**(<0.1)**	**13**	**(0.1)**	**1**	**(<0.1)**	**<1**	**(<0.1)**
Englishman Bay (N020)																	
Industry	8	3,692	(0.2)	3,685	(0.8)	63	(<0.1)	65	(<0.1)	23	(<0.1)	1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	120	(<0.1)	120	(<0.1)	20	(<0.1)	18	(<0.1)	19	(<0.1)	3	(<0.1)	1	(0.1)	1	(0.1)
All Categories	**10**	**3,812**	**(0.2)**	**3,805**	**(0.8)**	**84**	**(<0.1)**	**83**	**(<0.1)**	**42**	**(0.1)**	**4**	**(<0.1)**	**2**	**(0.1)**	**1**	**(0.1)**
Coastal Drainage Area (N016)																	
Industry	1	131	(<0.1)	131	(<0.1)	0	(0)	36	(<0.1)	0	(0)	0	(0)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**1**	**131**	**(<0.1)**	**131**	**(<0.1)**	**0**	**(0)**	**36**	**(<0.1)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**
Passamaquoddy Bay (N010)																	
Industry	14	2,640	(0.1)	2,628	(0.6)	1,684	(0.7)	854	(0.5)	38	(0.1)	<1	(<0.1)	8	(0.4)	6	(0.5)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	7	328	(<0.1)	328	(0.1)	92	(<0.1)	93	(0.1)	53	(0.1)	9	(0.1)	4	(0.2)	2	(0.2)
All Categories	**21**	**2,968**	**(0.1)**	**2,956**	**(0.6)**	**1,776**	**(0.8)**	**947**	**(0.5)**	**91**	**(0.2)**	**9**	**(0.1)**	**12**	**(0.5)**	**8**	**(0.7)**
Saint Croix River (C120)																	
Industry	18	615	(<0.1)	615	(0.1)	25	(<0.1)	31	(<0.1)	4	(<0.1)	1	(<0.1)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	67	(<0.1)	67	(<0.1)	12	(<0.1)	18	(<0.1)	11	(<0.1)	2	(<0.1)	1	(<0.1)	<1	(<0.1)
All Categories	**20**	**682**	**(<0.1)**	**682**	**(0.1)**	**37**	**(<0.1)**	**49**	**(<0.1)**	**14**	**(<0.1)**	**2**	**(<0.1)**	**1**	**(<0.1)**	**<1**	**(<0.1)**
Magaguadavic Digdeguash/Maces Bay (C110)																	
Industry	11	11,815	(0.6)	11,432	(2.[illegible])	1,696	(0.8)	1,245	(0.7)	133	(0.2)	4	(<0.1)	0	(0)	0	(0)
Power Plants	2	183	(<0.1)	183	(<0.1)	0	(0)	14	(<0.1)	0	(0)	0	(0)	11	(0.5)	1	(0.1)
WWTP	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**17**	**11,998**	**(0.6)**	**11,615**	**(2.4)**	**1,696**	**(0.8)**	**1,260**	**(0.7)**	**133**	**(0.2)**	**4**	**(<0.1)**	**11**	**(0.5)**	**1**	**(0.1)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr (10 lbs)		Cu (10 lbs)		Fe (10 lbs)		Pb (10 lbs)		Hg (10 lbs)		Zn (10 lbs)		O&G (1000 lbs)		FCB (billion cells)	
Narraguagus Bay (N030)																	
Industry	6	7	(0.1)	7	(<0.1)	128	(0.1)	9	(0.1)	<1	(<0.1)	18	(<0.1)	21	(0.1)	1,661	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	1	<1	(<0.1)	<1	(<0.1)	12	(<0.1)	1	(<0.1)	<1	(<0.1)	3	(<0.1)	2	(<0.1)	193	(<0.1)
All Categories	**7**	**7**	**(0.1)**	**7**	**(<0.1)**	**139**	**(0.1)**	**10**	**(0.1)**	**<1**	**(0.1)**	**21**	**(<0.1)**	**23**	**(0.1)**	**1,855**	**(<0.1)**
Englishman Bay (N020)																	
Industry	8	<1	(<0.1)	<1	(<0.1)	4	(<0.1)	<1	(<0.1)	<1	(<0.1)	1	(<0.1)	1	(<0.1)	71	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	1	(<0.1)	<1	(<0.1)	55	(<0.1)	5	(<0.1)	<1	(<0.1)	13	(<0.1)	11	(<0.1)	907	(<0.1)
All Categories	**10**	**1**	**(<0.1)**	**1**	**(<0.1)**	**59**	**(<0.1)**	**5**	**(0.1)**	**<1**	**(<0.1)**	**14**	**(<0.1)**	**12**	**(<0.1)**	**978**	**(<0.1)**
Coastal Drainage Area (N016)																	
Industry	1	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**1**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**
Passamaquoddy Bay (N010)																	
Industry	14	69	(0.7)	33	(0.2)	5	(<0.1)	60	(0.6)	1	(0.4)	403	(0.8)	<1	(<0.1)	11	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	7	8	(0.1)	6	(<0.1)	167	(0.1)	15	(0.1)	<1	(0.1)	41	(0.1)	36	(0.1)	29,798	(0.2)
All Categories	**21**	**77**	**(0.8)**	**39**	**(0.2)**	**172**	**(0.1)**	**74**	**(0.7)**	**1**	**(0.6)**	**443**	**(0.9)**	**36**	**(0.1)**	**29,809**	**(0.2)**
Saint Croix River (C120)																	
Industry	18	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	<1	(<0.1)	2	(<0.1)	31	(<0.1)	3	(<0.1)	<1	(<0.1)	7	(<0.1)	6	(<0.1)	505	(<0.1)
All Categories	**20**	**<1**	**(<0.1)**	**2**	**(<0.1)**	**31**	**(<0.1)**	**3**	**(<0.1)**	**<1**	**(<0.1)**	**7**	**(<0.1)**	**6**	**(<0.1)**	**505**	**(<0.1)**
Magaguadavic Digdeguash/Maces Bay (C110)																	
Industry	11	10	(0.1)	3	(<0.1)	0	(0)	3	(<0.1)	<1	(<0.1)	64	(0.1)	0	(0)	0	(0)
Power Plants	2	9	(0.1)	14	(0.1)	122	(0.1)	2	(<0.1)	<1	(0.1)	107	(0.2)	23	(0.1)	0	(0)
WWTP	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**17**	**19**	**(0.2)**	**17**	**(0.1)**	**122**	**(0.1)**	**5**	**(<0.1)**	**<1**	**(0.2)**	**171**	**(0.4)**	**23**	**(0.1)**	**0**	**(0)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow (million gal.)		Process Flow (million gal.)		BOD (1,000 lbs)		TSS (1,000 lbs)		TN (1,000 lbs)		TP (1,000 lbs)		As (10 lbs)		Cd (10 lbs)	
Saint John River (C100)																	
Industry	51	44,028	(2.1)	41,014	(8.6)	4,636	(2.1)	11,157	(6.1)	453	(0.8)	26	(0.3)	6	(0.3)	3	(0.2)
Power Plants	4	2,936	(0.1)	805	(0.2)	0	(0)	68	(<0.1)	0	(0)	0	(0)	47	(2)	6	(0.5)
WWTP	69	14,389	(0.7)	14,389	(3)	2,183	(1)	2,780	(1.5)	2,283	(4.2)	346	(3.8)	168	(7.1)	78	(6.6)
All Categories	**124**	**61,353**	**(2.9)**	**56,209**	**(11.8)**	**6,818**	**(3)**	**14,004**	**(7.7)**	**2,737**	**(5)**	**372**	**(4.1)**	**221**	**(9.4)**	**87**	**(7.4)**
Fundy Shore (C090)																	
Industry	1	1,289	(0.1)	1,289	(0.3)	52	(<0.1)	65	(<0.1)	8	(<0.1)	<1	(<0.1)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**1**	**1,289**	**(0.1)**	**1,289**	**(0.3)**	**52**	**(<0.1)**	**65**	**(<0.1)**	**8**	**(<0.1)**	**<1**	**(<0.1)**	**0**	**(0)**	**0**	**(0)**
Shepody Shore (C080)																	
Industry	1	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	6,388	(0.3)	6,388	(1.3)	1,599	(0.7)	1,599	(0.9)	1,226	(2.2)	160	(1.8)	83	(3.5)	67	(5.7)
All Categories	**10**	**6,388**	**(0.3)**	**6,388**	**(1.3)**	**1,599**	**(0.7)**	**1,599**	**(0.9)**	**1,226**	**(2.2)**	**160**	**(1.8)**	**83**	**(3.5)**	**67**	**(5.7)**
Cumberland Basin (C070)																	
Industry	33	370	(<0.1)	370	(0.1)	35	(<0.1)	61	(<0.1)	14	(<0.1)	5	(0.1)	2	(0.1)	3	(0.2)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	143	(<0.1)	143	(<0.1)	32	(<0.1)	41	(<0.1)	23	(<0.1)	3	(<0.1)	2	(0.1)	1	(0.1)
All Categories	**42**	**513**	**(<0.1)**	**513**	**(0.1)**	**67**	**(<0.1)**	**102**	**(0.1)**	**37**	**(0.1)**	**9**	**(0.1)**	**4**	**(0.1)**	**4**	**(0.3)**
Minas/Cobequid Shore (C060)																	
Industry	58	989	(<0.1)	989	(0.2)	154	(0.1)	271	(0.1)	56	(0.1)	7	(0.1)	1	(0.1)	3	(0.3)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	358	(<0.1)	358	(0.1)	75	(<0.1)	90	(<0.1)	57	(0.1)	8	(0.1)	4	(0.2)	2	(0.2)
All Categories	**64**	**1,347**	**(0.1)**	**1,347**	**(0.3)**	**229**	**(0.1)**	**360**	**(0.2)**	**113**	**(0.2)**	**15**	**(0.2)**	**6**	**(0.2)**	**5**	**(0.4)**
Shubenacadie River (C050)																	
Industry	36	437	(<0.1)	437	(0.1)	6	(<0.1)	71	(<0.1)	3	(<0.1)	<1	(<0.1)	<1	(<0.1)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	5	108	(<0.1)	108	(<0.1)	22	(<0.1)	27	(<0.1)	17	(<0.1)	3	(<0.1)	1	(0.1)	1	(<0.1)
All Categories	**41**	**544**	**(<0.1)**	**544**	**(0.1)**	**28**	**(<0.1)**	**98**	**(0.1)**	**20**	**(<0.1)**	**3**	**(<0.1)**	**1**	**(0.1)**	**1**	**(<0.1)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr (10 lbs)		Cu (10 lbs)		Fe (10 lbs)		Pb (10 lbs)		Hg (10 lbs)		Zn (10 lbs)		O&G (1000 lbs)		FCB (billion cells)	
Saint John River (C100)																	
Industry	51	617	(6.5)	223	(1.4)	674	(0.3)	219	(2.2)	2	(2)	3,951	(8.2)	113	(0.4)	2,415	(<0.1)
Power Plants	4	40	(0.4)	61	(0.4)	538	(0.2)	7	(0.1)	1	(0.6)	470	(1)	101	(0.4)	0	(0)
WWTP	69	83	(0.9)	383	(2.4)	6,631	(3)	602	(6)	7	(5.2)	1,569	(3.2)	1,350	(4.8)	152,922	(0.8)
All Categories	**124**	**740**	**(7.8)**	**667**	**(4.1)**	**7,842**	**(3.6)**	**828**	**(8.2)**	**10**	**(7.8)**	**5,991**	**(12.4)**	**1,564**	**(5.6)**	**155,337**	**(0.8)**
Fundy Shore (C090)																	
Industry	1	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	**1**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**
Shepody Shore (C080)																	
Industry	1	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	<1	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	1,189	(12.5)	927	(5.7)	5,863	(2.7)	466	(4.6)	6	(4.6)	1,559	(3.2)	1,034	(3.7)	4,835,338	(24.6)
All Categories	**10**	**1,189**	**(12.5)**	**927**	**(5.7)**	**5,863**	**(2.7)**	**466**	**(4.6)**	**6**	**(4.6)**	**1,559**	**(3.2)**	**1,034**	**(3.7)**	**4,835,338**	**(24.6)**
Cumberland Basin (C070)																	
Industry	33	22	(0.2)	8	(0.1)	122	(0.1)	10	(0.1)	<1	(0.3)	75	(0.2)	20	(0.1)	451	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	5	(0.1)	4	(<0.1)	76	(<0.1)	7	(0.1)	<1	(0.1)	19	(<0.1)	15	(0.1)	18,320	(0.1)
All Categories	**42**	**27**	**(0.3)**	**12**	**(0.1)**	**198**	**(0.1)**	**16**	**(0.2)**	**<1**	**(0.3)**	**94**	**(0.2)**	**35**	**(0.1)**	**18,771**	**(0.1)**
Minas/Cobequid Shore (C060)																	
Industry	58	56	(0.6)	10	(0.1)	61	(<0.1)	33	(0.3)	1	(0.4)	62	(0.1)	90	(0.3)	3,515	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	2	(<0.1)	1	(<0.1)	164	(0.1)	15	(0.1)	<1	(0.1)	39	(0.1)	33	(0.1)	2,708	(<0.1)
All Categories	**64**	**58**	**(0.6)**	**11**	**(0.1)**	**225**	**(0.1)**	**48**	**(0.5)**	**1**	**(0.5)**	**100**	**(0.2)**	**124**	**(0.4)**	**6,222**	**(<0.1)**
Shubenacadie River (C050)																	
Industry	36	4	(<0.1)	<1	(<0.1)	97	(<0.1)	14	(0.1)	<1	(<0.1)	4	(<0.1)	7	(<0.1)	16	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	5	1	(<0.1)	<1	(<0.1)	49	(<0.1)	4	(<0.1)	<1	(<0.1)	12	(<0.1)	10	(<0.1)	815	(<0.1)
All Categories	**41**	**5**	**(0.1)**	**1**	**(<0.1)**	**146**	**(0.1)**	**18**	**(0.2)**	**<1**	**(0.1)**	**16**	**(<0.1)**	**17**	**(0.1)**	**831**	**(<0.1)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow (million gal.)		Process Flow (million gal.)		BOD (1,000 lbs)		TSS (1,000 lbs)		TN (1,000 lbs)		TP (1,000 lbs)		As (10 lbs)		Cd (10 lbs)	
Avon River (C040)																	
Industry	143	1,059	(0.1)	1,059	(0.2)	131	(0.1)	224	(0.1)	20	(<0.1)	6	(0.1)	<1	(<0.1)	3	(0.3)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	13	1,924	(0.1)	1,924	(0.4)	584	(0.3)	618	(0.3)	322	(0.6)	66	(0.7)	23	(1)	13	(1.1)
All Categories	**156**	**2,983**	**(0.1)**	**2,983**	**(0.6)**	**714**	**(0.3)**	**842**	**(0.5)**	**342**	**(0.6)**	**72**	**(0.8)**	**23**	**(1)**	**16**	**(1.4)**
Annapolis Basin (C030)																	
Industry	64	457	(<0.1)	457	(0.1)	8	(<0.1)	43	(<0.1)	1	(<0.1)	1	(<0.1)	<1	(<0.1)	2	(0.2)
Power Plants	2	6	(<0.1)	6	(<0.1)	0	(0)	1	(<0.1)	0	(0)	0	(0)	<1	(<0.1)	<1	(<0.1)
WWTP	12	1,334	(0.1)	1,334	(0.3)	278	(0.1)	334	(0.2)	212	(0.4)	31	(0.3)	16	(0.7)	7	(0.6)
All Categories	**78**	**1,797**	**(0.1)**	**1,797**	**(0.4)**	**287**	**(0.1)**	**379**	**(0.2)**	**213**	**(0.4)**	**32**	**(0.4)**	**16**	**(0.7)**	**10**	**(0.8)**
Saint Mary's Bay (C020)																	
Industry	54	433	(<0.1)	433	(0.1)	84	(<0.1)	89	(<0.1)	5	(<0.1)	<1	(<0.1)	<1	(<0.1)	5	(0.4)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	8	372	(<0.1)	372	(0.1)	78	(<0.1)	93	(0.1)	59	(0.1)	9	(0.1)	4	(0.2)	2	(0.2)
All Categories	**62**	**805**	**(<0.1)**	**805**	**(0.2)**	**162**	**(0.1)**	**182**	**(0.1)**	**64**	**(0.1)**	**9**	**(0.1)**	**4**	**(0.2)**	**7**	**(0.6)**
Yarmouth (C010)																	
Industry	34	232	(<0.1)	232	(<0.1)	77	(<0.1)	69	(<0.1)	3	(<0.1)	<1	(<0.1)	2	(0.1)	3	(0.3)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	2,126	(0.1)	2,126	(0.4)	1,221	(0.5)	1,115	(0.6)	408	(0.7)	142	(1.6)	27	(1.2)	22	(1.9)
All Categories	**37**	**2,358**	**(0.1)**	**2,358**	**(0.5)**	**1,298**	**(0.6)**	**1,184**	**(0.7)**	**411**	**(0.8)**	**142**	**(1.6)**	**30**	**(1.3)**	**25**	**(2.1)**
Total																	
Industry	1,553	274,082	(13.1)	167,219	(35.1)	27,794	(12.4)	52,956	(29.2)	2,672	(4.9)	444	(4.9)	80	(3.4)	94	(8)
Power Plants	93	1,519,053	(72.4)	4,670	(1)	0	(0)	1,036	(0.6)	0	(0)	0	(0)	263	(11.1)	34	(2.9)
WWTP	378	304,798	(14.5)	304,798	(63.9)	197,137	(87.6)	127,536	(70.3)	52,080	(95.1)	8,629	(95.1)	2,019	(85.5)	1,052	(89.1)
All Categories	**2,024**	**2,097,933**	**(100)**	**476,687**	**(100)**	**224,931**	**(100)**	**181,528**	**(100)**	**54,752**	**(100)**	**9,073**	**(100)**	**2,362**	**(100)**	**1,181**	**(100)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 3. Pollutant Loads by Major Source Category and Percent of Annual Total Discharge by Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr (10 lbs)		Cu (10 lbs)		Fe (10 lbs)		Pb (10 lbs)		Hg (10 lbs)		Zn (10 lbs)		O&G (1000 lbs)		FCB (billion cells)	
Avon River (C040)																	
Industry	143	25	(0.3)	10	(0.1)	157	(0.1)	42	(0.4)	<1	(0.1)	106	(0.2)	13	(<0.1)	1,748	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	13	100	(1.1)	77	(0.5)	1,111	(0.5)	96	(1)	1	(0.9)	276	(0.6)	248	(0.9)	386,581	(2)
All Categories	**156**	**124**	**(1.3)**	**87**	**(0.5)**	**1,267**	**(0.6)**	**137**	**(1.4)**	**1**	**(0.9)**	**382**	**(0.8)**	**260**	**(0.9)**	**388,329**	**(2)**
Annapolis Basin (C030)																	
Industry	64	5	(0.1)	3	(<0.1)	159	(0.1)	23	(0.2)	<1	(<0.1)	5	(<0.1)	5	(<0.1)	76	(<0.1)
Power Plants	2	<1	(<0.1)	<1	(<0.1)	4	(<0.1)	<1	(<0.1)	<1	(<0.1)	3	(<0.1)	1	(<0.1)	0	(0)
WWTP	12	7	(0.1)	4	(<0.1)	612	(0.3)	56	(0.6)	1	(0.5)	145	(0.3)	125	(0.4)	10,099	(0.1)
All Categories	**78**	**12**	**(0.1)**	**8**	**(<0.1)**	**775**	**(0.4)**	**79**	**(0.8)**	**1**	**(0.5)**	**153**	**(0.3)**	**131**	**(0.5)**	**10,175**	**(0.1)**
Saint Mary's Bay (C020)																	
Industry	54	11	(0.1)	5	(<0.1)	142	(0.1)	46	(0.5)	<1	(<0.1)	10	(<0.1)	9	(<0.1)	199	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	8	2	(<0.1)	1	(<0.1)	171	(0.1)	16	(0.2)	<1	(0.1)	40	(0.1)	35	(0.1)	2,818	(<0.1)
All Categories	**62**	**13**	**(0.1)**	**6**	**(<0.1)**	**313**	**(0.1)**	**61**	**(0.6)**	**<1**	**(0.2)**	**51**	**(0.1)**	**44**	**(0.2)**	**3,017**	**(<0.1)**
Yarmouth (C010)																	
Industry	34	7	(0.1)	4	(<0.1)	53	(<0.1)	37	(0.4)	<1	(<0.1)	10	(<0.1)	13	(<0.1)	16	(<0.1)
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	394	(4.2)	307	(1.9)	1,947	(0.9)	155	(1.5)	2	(1.5)	518	(1.1)	488	(1.7)	1,602,638	(8.2)
All Categories	**37**	**401**	**(4.2)**	**312**	**(1.9)**	**2,000**	**(0.9)**	**192**	**(1.9)**	**2**	**(1.5)**	**528**	**(1.1)**	**501**	**(1.8)**	**1,602,654**	**(8.2)**
Total																	
Industry	1,553	3,606	(38)	1,873	(11.6)	6,207	(2.8)	1,584	(15.8)	16	(12.2)	17,425	(36.1)	1,143	(4.1)	65,162	(0.3)
Power Plants	93	225	(2.4)	2,614	(16.2)	3,175	(1.5)	38	(0.4)	5	(3.5)	2,632	(5.5)	546	(1.9)	0	(0)
WWTP	378	5,646	(59.6)	11,670	(72.2)	209,056	(95.7)	8,419	(83.8)	108	(84.3)	28,223	(58.5)	26,419	(94)	19560236	(99.7)
All Categories	**2,024**	**9,477**	**(100)**	**16,157**	**(100)**	**218,438**	**(100)**	**10,041**	**(100)**	**128**	**(100)**	**48,279**	**(100)**	**28,109**	**(100)**	**19625398**	**(100)**

Abbreviations: EDA, Estuarine Drainage Area; CDA, Coastal Drainage Area; BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Values in parentheses represent the percentage of the load contributed by point source category, compared to the total for all sources in the study area. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 4.
Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Appendix 4. Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow				Process Flow				BOD				TSS				TN				TP				As				Cd			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Coastal Drainage Area (N135)																																	
Industry	8	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	1	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WWTP	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Cape Cod Bay (N130)																																	
Industry	13	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	2	95	5	0	0	100	0	0	0	0	0	0	0	79	4	17	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	1	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	16	95	5	<1	0	73	0	27	0	93	0	7	0	90	1	9	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N125)																																	
Industry	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	96	0	4	0	96	0	4	0	87	0	13	0	89	0	11	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	3	95	0	5	0	95	0	5	0	86	0	14	0	89	0	11	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Massachusetts Bay (N120)																																	
Industry	367	57	34	5	4	15	<1	45	41	0	1	99	0	1	<1	99	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	10	95	1	4	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	29	98	<1	1	2	98	<1	1	2	97	2	<1	0	99	<1	1	0	0	0	100	0	78	<1	21	0	34	0	66	0	28	0	72	0
All Categories	406	94	2	4	<1	96	<1	1	2	97	2	1	0	98	<1	2	0	0	0	100	0	78	<1	22	0	29	0	71	0	26	0	74	0
Coastal Drainage Area (N115)																																	
Industry	39	78	2	21	0	73	2	25	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	97	0	3	0	97	0	3	0	95	0	5	0	11	86	2	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	42	88	1	11	0	87	1	12	0	68	0	32	0	9	69	22	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Merrimack River (N110)																																	
Industry	318	33	24	43	<1	36	15	49	<1	26	13	62	0	20	11	69	0	0	<1	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	19	80	<1	20	0	94	1	5	0	0	0	0	0	0	69	31	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	60	97	1	<1	2	97	1	<1	2	51	42	7	0	44	46	10	0	0	0	100	0	1	5	94	0	0	0	100	0	3	0	97	0
All Categories	397	84	1	14	1	93	2	3	1	50	40	10	0	42	44	15	0	0	<1	100	0	1	5	94	0	0	0	100	0	2	0	98	0
Coastal Drainage Area (N106)																																	
Industry	7	23	74	2	0	3	91	6	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	1	100	0	0	0	100	0	0	0	0	0	0	0	2	0	98	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	2	98	0	2	0	98	0	2	0	95	0	5	0	92	0	8	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	100	<1	<1	0	96	2	2	0	88	0	12	0	34	0	66	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

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Appendix 4. Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr				Cu				Fe				Pb				Hg				Zn				O&G				PCB			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Coastal Drainage Area (N135)																																	
Industry	8	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	1	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WWTP	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Cape Cod Bay (N130)																																	
Industry	13	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	2	0	0	100	0	<1	0	100	0	50	0	50	0	0	0	100	0	0	0	100	0	0	0	100	0	0	18	82	0	0	0	0	0
WWTP	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	100	0	0	0
All Categories	16	0	0	100	0	<1	0	100	0	9	0	91	0	0	0	100	0	0	0	100	0	0	0	100	0	0	4	96	0	100	0	<1	0
Coastal Drainage Area (N125)																																	
Industry	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	86	0	14	0
All Categories	3	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	86	0	14	0
Massachusetts Bay (N120)																																	
Industry	367	0	0	100	0	2	0	98	0	0	0	100	0	1	0	99	0	0	0	100	0	1	0	99	0	6	0	94	0	0	3	97	0
Power Plants	10	0	0	100	0	3	0	97	0	3	0	97	0	0	0	100	0	0	0	100	0	0	0	100	0	5	0	95	0	0	0	0	0
WWTP	29	17	0	83	0	76	0	24	0	0	0	100	0	43	0	57	0	56	0	44	0	64	0	36	0	40	0	60	0	3	<1	97	0
All Categories	406	15	0	85	0	66	0	34	0	<1	0	100	0	42	0	58	0	51	0	49	0	60	0	40	0	40	0	60	0	3	<1	97	0
Coastal Drainage Area (N115)																																	
Industry	39	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	0	0	100	0	0	0	100	0	0	0	100	0	36	0	64	0	0	0	100	0	0	0	100	0	0	0	100	0	95	0	5	0
All Categories	42	0	0	100	0	0	0	100	0	0	0	100	0	33	0	67	0	0	0	100	0	0	0	100	0	0	0	100	0	92	0	8	0
Merrimack River (N110)																																	
Industry	318	2	0	98	0	5	<1	95	0	0	0	100	0	0	<1	100	0	0	0	100	0	9	0	91	0	4	3	94	0	0	26	74	0
Power Plants	19	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	60	5	0	95	0	14	0	86	0	1	0	99	0	3	0	97	0	0	0	100	0	1	0	99	0	0	<1	100	0	4	8	88	0
All Categories	397	3	0	97	0	10	<1	90	0	1	0	99	0	3	<1	97	0	0	0	100	0	2	0	98	0	<1	<1	100	0	4	8	88	0
Coastal Drainage Area (N106)																																	
Industry	7	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0

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Appendix 4. Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow				Process Flow				BOD				TSS				TN				TP				As				Cd			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Great Bay (N100)																																	
Industry	37	67	12	20	0	26	16	59	0	23	0	77	0	<1	11	89	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	3	100	<1	0	0	63	37	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	19	93	1	0	6	93	1	0	6	71	3	26	0	84	2	14	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	59	99	<1	<1	<1	87	3	4	6	70	3	27	0	79	2	19	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N096)																																	
Industry	9	96	0	4	0	72	0	28	0	4	0	96	0	3	0	97	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	1	0	0	100	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	6	100	0	0	0	100	0	0	0	52	48	0	0	100	0	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	16	99	0	1	0	99	0	1	0	50	46	4	0	93	0	7	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Saco Bay (N090)																																	
Industry	12	98	2	<1	0	97	0	3	0	99	0	1	0	96	0	4	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	6	37	60	3	0	61	32	7	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	6	49	0	0	51	49	0	0	51	80	0	20	0	25	0	75	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	24	87	3	<1	10	50	1	<1	48	80	0	20	0	24	0	76	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Casco Bay (N080)																																	
Industry	37	56	40	4	0	90	3	7	0	89	6	5	0	97	2	1	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	4	99	1	<1	0	46	52	1	0	0	0	0	0	13	73	14	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	11	96	1	<1	3	96	1	<1	3	17	0	83	0	88	7	5	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	52	85	13	1	1	91	4	4	1	49	2	49	0	93	5	2	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Sheepscot Bay (N070)																																	
Industry	68	43	56	1	<1	46	53	2	<1	14	83	3	0	10	88	2	0	0	0	100	0	23	0	77	0	0	0	100	0	0	0	100	0
Power Plants	31	84	15	<1	<1	23	37	10	30	0	0	0	0	0	18	82	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	46	86	3	<1	11	86	3	<1	11	73	8	19	0	76	7	17	0	0	0	100	0	<1	0	100	0	0	0	100	0	0	0	100	0
All Categories	145	68	30	1	1	55	41	1	3	24	70	6	0	16	81	3	0	0	0	100	0	1	0	99	0	0	0	100	0	0	0	100	0
Muscongus Bay (N060)																																	
Industry	25	7	72	21	0	18	21	61	0	<1	0	100	0	<1	34	66	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	53	11	0	36	53	11	0	36	61	39	0	0	61	39	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	28	20	55	15	10	37	16	29	19	49	31	20	0	32	36	32	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N055)																																	
Industry	2	91	0	9	0	91	0	9	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	2	91	0	9	0	91	0	9	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0

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Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr				Cu				Fe				Pb				Hg				Zn				O&G				FCB			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Great Bay (N100)																																	
Industry	37	0	0	100	0	0	5	95	0	0	0	100	0	0	0	100	0	0	0	100	0	0	28	72	0	0	21	79	0	0	0	100	0
Power Plants	3	0	0	100	0	2	0	98	0	29	0	71	0	52	0	48	0	0	0	100	0	0	0	100	0	15	0	85	0	0	0	0	0
WWTP	19	0	0	100	0	1	0	99	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	36	0	64	0	0	0	100	0
All Categories	59	0	0	100	0	1	<1	98	0	1	0	99	0	<1	0	100	0	0	0	100	0	0	1	99	0	34	1	65	0	0	0	100	0
Coastal Drainage Area (N096)																																	
Industry	9	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	6	25	0	75	0	59	0	41	0	0	0	100	0	0	0	100	0	0	0	100	0	5	0	95	0	0	0	100	0	0	0	100	0
All Categories	16	16	0	84	0	35	0	65	0	0	0	100	0	0	0	100	0	0	0	100	0	4	0	96	0	0	0	100	0	0	0	100	0
Saco Bay (N090)																																	
Industry	12	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	6	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	6	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	3	97	0
All Categories	24	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	3	97	0
Casco Bay (N080)																																	
Industry	37	0	0	100	0	0	0	100	0	0	0	100	0	<1	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	4	0	0	100	0	13	0	87	0	0	94	6	0	0	0	100	0	0	0	100	0	0	0	100	0	0	52	48	0	0	0	0	0
WWTP	11	0	0	100	0	42	0	58	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	21	79	0
All Categories	52	0	0	100	0	11	0	89	0	0	13	87	0	<1	0	100	0	0	0	100	0	0	0	100	0	0	4	96	0	0	20	80	0
Sheepscot Bay (N070)																																	
Industry	68	0	0	100	0	<1	0	100	0	0	0	100	0	<1	0	100	0	0	0	100	0	0	0	100	0	1	0	99	0	0	14	86	0
Power Plants	31	0	0	100	0	0	0	100	0	2	21	77	0	0	0	100	0	0	0	100	0	0	6	94	0	0	4	96	0	0	0	0	0
WWTP	46	2	0	98	0	<1	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	<1	0	100	0	0	1	99	0
All Categories	145	<1	0	100	0	<1	0	100	0	<1	1	99	0	<1	0	100	0	0	0	100	0	0	<1	100	0	<1	<1	100	0	0	1	99	0
Muscongus Bay (N060)																																	
Industry	25	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	3	97	0
All Categories	28	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	3	97	0
Coastal Drainage Area (N055)																																	
Industry	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0

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Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow				Process Flow				BOD				TSS				TN				TP				As				Cd			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Coastal Drainage Area (N052)																																	
Industry	1	0	100	0	0	0	100	0	0	0	47	53	0	0	30	70	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	1	0	100	0	0	0	100	0	0	0	47	53	0	0	30	70	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Penobscot Bay (N050)																																	
Industry	58	49	50	1	0	86	12	1	0	44	<1	56	0	77	<1	23	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	7	1	99	<1	0	79	16	5	0	0	0	0	0	2	0	98	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	30	78	16	0	5	78	16	0	5	24	64	12	0	77	16	7	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	95	46	53	<1	1	84	13	1	1	37	24	40	0	77	5	18	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Blue Hill Bay (N040)																																	
Industry	10	75	0	25	0	75	0	25	0	44	0	56	0	24	0	76	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	33	0	0	67	33	0	0	67	13	87	0	0	13	87	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	13	65	0	19	15	65	0	19	15	17	76	7	0	15	73	12	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N036)																																	
Industry	8	13	2	85	0	13	2	85	0	1	1	98	0	3	1	96	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	91	0	3	6	91	0	3	6	95	0	5	0	75	0	25	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	14	56	1	40	3	56	1	40	3	27	1	73	0	27	1	72	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Narraguagus Bay (N030)																																	
Industry	6	5	95	0	0	5	95	0	0	0	1	99	0	<1	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	1	14	0	0	86	14	0	0	86	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	7	6	85	0	9	6	86	0	9	0	1	99	0	<1	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Englishman Bay (N020)																																	
Industry	8	<1	100	<1	0	<1	100	<1	0	3	97	1	0	5	95	1	0	0	0	100	0	0	81	19	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	97	0	0	3	97	0	0	3	96	0	4	0	95	0	5	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	3	96	<1	<1	3	97	<1	<1	25	73	1	0	25	74	2	0	0	0	100	0	0	26	74	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N016)																																	
Industry	1	0	100	0	0	0	100	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	1	0	100	0	0	0	100	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Percentages might not add up to 100 due to rounding. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 4. Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr				Cu				Fe				Pb				Hg				Zn				O&G				FCB			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Coastal Drainage Area (N052)																																	
Industry	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Penobscot Bay (N050)																																	
Industry	58	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	7	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	30	4	0	96	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	<1	100	0
All Categories	95	1	0	99	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	<1	100	0
Blue Hill Bay (N040)																																	
Industry	10	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	13	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N036)																																	
Industry	8	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	80	20	0
All Categories	14	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	77	23	0
Narraguagus Bay (N030)																																	
Industry	6	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	1	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	7	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Englishman Bay (N020)																																	
Industry	8	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Coastal Drainage Area (N016)																																	
Industry	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow				Process Flow				BOD				TSS				TN				TP				As				Cd			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Passamaquoddy Bay (N010)																																	
Industry	14	83	11	7	0	83	11	7	0	89	9	3	0	<1	26	74	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	7	61	0	5	33	61	0	5	33	67	2	31	0	73	1	25	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	21	80	10	7	4	80	9	7	4	88	8	4	0	7	23	70	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Saint Croix River (C120)																																	
Industry	18	0	0	28	72	0	0	28	72	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	35	65	0	0	35	65	0	0	40	60	0	0	21	79	0	0	0	0	100	0	29	71	0	0	0	0	100	0	0	0	100	0
All Categories	20	3	6	26	65	3	6	26	65	13	20	67	0	8	29	63	0	0	0	100	0	22	53	25	0	0	0	100	0	0	0	100	0
Magaguadavic Digdeguash/Maces																																	
Industry	11	96	0	1	3	95	0	2	3	0	0	100	0	0	0	100	0	0	0	100	0	96	0	4	0	0	0	0	0	0	0	0	0
Power Plants	2	100	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Categories	17	96	0	1	3	96	0	1	3	0	0	100	0	1	0	99	0	0	0	100	0	96	0	4	0	0	0	100	0	0	0	100	0
Saint John River (C100)																																	
Industry	51	85	4	1	9	87	2	1	9	2	<1	98	0	74	<1	26	0	0	0	100	0	5	<1	95	0	0	0	100	0	0	0	100	0
Power Plants	4	28	72	<1	0	100	0	<1	0	0	0	0	0	88	0	12	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	69	41	43	<1	16	41	43	<1	16	45	47	7	0	30	47	23	0	0	0	100	0	1	43	55	0	0	0	100	0	0	0	100	0
All Categories	124	72	17	1	10	75	13	1	11	16	15	69	0	65	9	25	0	0	0	100	0	2	40	58	0	0	0	100	0	0	0	100	0
Fundy Shore (C090)																																	
Industry	1	100	0	0	0	100	0	0	0	0	0	100	0	0	0	100	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	1	100	0	0	0	100	0	0	0	0	0	100	0	0	0	100	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0
Shepody Shore (C080)																																	
Industry	1	0	100	0	0	0	100	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	100	0	0	100	0	0	0	0	100	0	0	0	100	0
All Categories	10	0	100	0	0	0	100	0	0	0	100	<1	0	0	100	<1	0	0	0	100	0	0	100	<1	0	0	0	100	0	0	0	100	0
Cumberland Basin (C070)																																	
Industry	33	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	16	0	0	84	16	0	0	84	21	0	79	0	27	0	73	0	0	0	100	0	14	0	86	0	0	0	100	0	0	0	100	0
All Categories	42	4	0	72	23	4	0	72	23	10	0	90	0	11	0	89	0	0	0	100	0	5	0	95	0	0	0	100	0	0	0	100	0

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Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr				Cu				Fe				Pb				Hg				Zn				O&G				FCB			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Passamaquoddy Bay (N010)																																	
Industry	14	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	7	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	<1	100	0
All Categories	21	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	<1	100	0
Saint Croix River (C120)																																	
Industry	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	20	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Magaguadavic Digdeguash/Maces																																	
Industry	11	0	0	100	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	0
Power Plants	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Categories	17	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
Saint John River (C100)																																	
Industry	51	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	71	29	0
Power Plants	4	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	69	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	<1	0	100	0	0	1	99	0
All Categories	124	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	<1	0	100	0	0	2	98	0
Fundy Shore (C090)																																	
Industry	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Categories	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shepody Shore (C080)																																	
Industry	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	10	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Cumberland Basin (C070)																																	
Industry	33	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	9	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	42	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Percentages might not add up to 100 due to rounding. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 4. Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Total Flow				Process Flow				BOD				TSS				TN				TP				As				Cd			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Minas/Cobequid Shore (C060)																																	
Industry	58	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	0	0	0	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	64	0	0	73	27	0	0	73	27	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Shubenacadie River (C050)																																	
Industry	36	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	5	0	0	0	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	41	0	0	80	20	0	0	80	20	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Avon River (C040)																																	
Industry	143	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	13	0	0	0	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	156	0	0	35	65	0	0	35	65	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Annapolis Basin (C030)																																	
Industry	64	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	2	0	0	100	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	12	0	0	0	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	78	0	0	26	74	0	0	26	74	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Saint Mary's Bay (C020)																																	
Industry	54	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	8	0	0	0	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	62	0	0	54	46	0	0	54	46	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Yarmouth (C010)																																	
Industry	34	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	0	0	0	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	37	0	0	10	90	0	0	10	90	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Total																																	
Industry	1,553	57	36	4	2	65	24	7	4	23	39	38	0	34	48	18	0	0	<1	100	0	2	<1	98	0	0	0	100	0	0	0	100	0
Power Plants	93	93	3	4	<1	82	12	3	4	0	0	0	0	12	24	65	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0
WWTP	378	89	5	<1	5	89	5	<1	5	90	7	3	0	88	7	5	0	0	0	100	0	49	5	47	0	9	0	91	0	9	0	91	0
All Categories	2,024	87	8	4	1	81	12	3	5	82	11	8	0	72	19	9	0	0	<1	100	0	46	4	49	0	7	0	93	0	8	0	92	0

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Percentages might not add up to 100 due to rounding. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 4. Percent of Pollutant Discharge Estimate Based on Monitored (M), Permit (P), Typical (T), or Other (O) Data by Major Source Category and Watershed, 1991

Watershed (Code) Point Source Category	No. of facilities (NCPDI)	Cr				Cu				Fe				Pb				Hg				Zn				O&G				FCB			
		M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O	M	P	T	O
Minas/Cobequid Shore (C060)																																	
Industry	58	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	6	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	64	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Shubenacadie River (C050)																																	
Industry	36	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	5	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	41	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Avon River (C040)																																	
Industry	143	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	13	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	156	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Annapolis Basin (C030)																																	
Industry	64	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	2	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0
WWTP	12	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	78	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Saint Mary's Bay (C020)																																	
Industry	54	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	8	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	62	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Yarmouth (C010)																																	
Industry	34	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Power Plants	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWTP	3	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
All Categories	37	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0
Total																																	
Industry	1,553	<1	0	100	0	1	<1	99	0	0	0	100	0	<1	<1	100	0	0	0	100	0	<1	<1	100	0	1	1	98	0	0	7	93	0
Power Plants	93	0	0	100	0	2	0	98	0	3	20	77	0	2	0	98	0	0	0	100	0	0	1	99	0	2	7	91	0	0	0	0	0
WWTP	378	9	0	91	0	59	0	41	0	<1	0	100	0	15	0	85	0	22	0	78	0	29	0	71	0	21	<1	79	0	2	1	98	0
All Categories	2,024	5	0	95	0	43	<1	57	0	<1	<1	100	0	12	<1	88	0	18	0	82	0	17	<1	83	0	20	<1	80	0	2	1	98	0

Abbreviations: BOD, Biochemical Oxygen Demand; TSS, Total Suspended Solids; TN, Total Nitrogen; TP, Total Phosphorus; As, Arsenic; Cd, Cadmium; Cr, Chromium; Cu, Copper; Fe, Iron; Pb, Lead; Hg, Mercury; Zn, Zinc; O&G, Oil and Grease; FCB, Fecal Coliform Bacteria; WWTP, wastewater treatment plant; -, indicates that either there were no estimates for that parameter or there were no facilities in that point source category in the watershed.

Notes: 1) Percentages might not add up to 100 due to rounding. 2) There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 5.
Percent of Pollutant Discharges Estimated by Different Data Sources

Appendix 5a. Percent of Pollutant Discharges Estimated by Different Data Sources - United States

Pollutant	Total Annual Discharges	Monitoring Data			Permit Data			Typical Values			Other			No Estimates
		NP	Load	PD	NP	Load	PD	NP	Load	PD	NP	Load	PD	NP
Total Flow (MG)	2,016,739	551	1,783,500	88.4	237	151,769	7.5	570	69,722	3.5	67	11,748	0.6	634
Process Flow (MG)	398,865	551	335,773	84.2	237	42,854	10.7	570	8,490	2.1	67	11,748	2.9	634
BOD (1,000 lbs)	212,449	188	182,671	86	67	21,778	10.3	1,058	8,000	3.8	-	-	-	746
TSS (1,000 lbs)	162,303	213	122,022	75.2	85	31,581	19.5	1,015	8,701	5.4	-	-	-	746
Nitrogen (1,000 lbs)	50,084	-	-	-	1	<1	<0.1	1,312	50,084	100	-	-	-	746
Phosphorus (1,000 lbs)	8,351	12	4,199	50.3	4	90	1.1	1,297	4,061	48.6	-	-	-	746
Arsenic (10 lbs)	2,012	3	175	8.7	-	-	-	1,310	1,837	91.3	-	-	-	746
Cadmium (10 lbs)	979	3	90	9.2	-	-	-	1,310	889	90.8	-	-	-	746
Chromium (10 lbs)	6,911	10	518	7.5	-	-	-	1,303	6,394	92.5	-	-	-	746
Copper (10 lbs)	14,148	25	6,937	49	2	1	<0.1	1,286	7,210	51	-	-	-	746
Iron (10 lbs)	201,542	6	324	0.2	4	628	0.3	1,303	200,590	99.5	-	-	-	746
Lead (10 lbs)	8,357	9	1,252	15	1	<1	<0.1	1,303	7,105	85	-	-	-	746
Mercury (10 lbs)	108	3	23	21.6	-	-	-	1,310	85	78.4	-	-	-	746
Zinc (10 lbs)	39,686	11	8,364	21.1	2	30	0.1	1,300	31,292	78.8	-	-	-	746
Oil & Grease (1,000 lbs)	24,753	30	5,553	22.4	12	50	0.2	1,271	19,150	77.4	-	-	-	746
FCB (Billion cells)	12,632,286	18	323,048	2.6	26	141,414	1.1	1,269	12167825	96.3	-	-	-	746

Appendix 5b. Percent of Pollutant Discharges Estimated by Different Data Sources - Canada

Pollutant	Total Annual Discharges	Monitoring Data			Permit Data			Typical Values			Other			No Estimates
		NP	Load	PD	NP	Load	PD	NP	Load	PD	NP	Load	PD	NP
Total Flow (MG)	81,193	40	50,754	62.5	20	14,364	17.7	277	4,984	6.1	60	11,091	13.7	290
Process Flow (MG)	77,822	40	48,334	62.1	20	13,413	17.2	277	4,984	6.4	60	11,091	14.3	290
BOD (1,000 lbs)	12,482	16	728	5.8	16	2,610	20.9	365	9,144	73.3	-	-	-	290
TSS (1,000 lbs)	19,225	27	8,936	46.5	17	2,900	15.1	353	7,389	38.4	-	-	-	290
Nitrogen (1,000 lbs)	4,668	-	-	-	-	-	-	397	4,668	100	-	-	-	290
Phosphorus (1,000 lbs)	722	15	11	1.5	17	312	43.1	365	400	55.4	-	-	-	290
Arsenic (10 lbs)	350	-	-	-	-	-	-	397	350	100	-	-	-	290
Cadmium (10 lbs)	202	-	-	-	-	-	-	397	202	100	-	-	-	290
Chromium (10 lbs)	2,566	-	-	-	-	-	-	397	2,566	100	-	-	-	290
Copper (10 lbs)	2,008	-	-	-	-	-	-	397	2,008	100	-	-	-	290
Iron (10 lbs)	16,897	-	-	-	-	-	-	397	16,897	100	-	-	-	290
Lead (10 lbs)	1,684	-	-	-	-	-	-	397	1,684	100	-	-	-	290
Mercury (10 lbs)	19	-	-	-	-	-	-	397	19	100	-	-	-	290
Zinc (10 lbs)	8,593	-	-	-	-	-	-	397	8,593	100	-	-	-	290
Oil & Grease (1,000 lbs)	3,355	-	-	-	-	-	-	397	3,355	100	-	-	-	290
FCB (Billion cells)	6,993,112	-	-	-	-	-	-	397	6,993,112	100	-	-	-	290

Abbreviations: NP, number of pipes; PD, percent of total discharge based on data source; BOD, biochemical oxygen demand; TSS, total suspended solids; FCB, fecal coliform bacteria.
Note: There are 1,398 facilities with 2,059 pipes in the U.S. portion of the study area and 626 facilities with 687 pipes in the Canadian portion of the study area. The number of facilities by pollutant and source of estimate can not be reported because of double counting facilities with multiple pipes.

Appendix 6.
Number of Facilities in Watersheds by Two-Digit SIC Major Group, 1991

Appendix 6. Number of Facilities in Watersheds by Two-Digit SIC Major Group, 1991

SIC Major Group		Watersheds															
		Coastal Drainage Area (N135)		Cape Cod Bay (N130)		Coastal Drainage Area (N125)		Massachusetts Bay (N120)		Coastal Drainage Area (N115)		Merrimack River (N110)		Coastal Drainage Area (N106)		Great Bay (N100)	
Code	Activity	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
01	Agricultural Production-Crops	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
02	Agricultural Production-Livestock	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-
07	Agricultural Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08	Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09	Fishing, Hunting, and Trapping	-	-	-	2	-	-	-	2	-	-	-	5	-	-	-	1
10	Metal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Coal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Oil and Gas Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Nonmetallic Minerals, Except Fuels	-	-	-	-	-	-	-	2	-	-	-	6	-	-	-	1
15	General Building Contractors	-	-	-	-	-	-	-	8	-	-	-	2	-	-	1	-
16	Heavy Construction, ex. Building	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
17	Special Trade Contractors	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-
20	Food and Kindred Products	-	-	-	-	-	-	-	4	-	-	1	6	-	-	-	2
21	Tobacco Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Textile Mill Products	-	-	-	-	-	-	-	2	-	-	-	6	-	-	-	-
23	Apparel & Finished Products Made from Fabrics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	Lumber and Wood Products	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
25	Furniture and Fixtures	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
26	Paper and Allied Products	-	-	-	-	-	-	1	2	-	-	4	5	-	-	-	-
27	Printing, Publishing, and Allied Industries	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
28	Chemicals and Allied Products	-	-	-	-	-	-	2	12	2	1	2	16	2	-	1	-
29	Petroleum and Coal Products	-	-	-	-	-	-	-	4	-	-	-	1	-	-	-	1
30	Rubber and Misc. Plastics Products	-	1	-	-	-	-	1	4	-	-	-	16	-	-	-	1
31	Leather and Leather Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Stone, Clay and Glass Products	-	-	-	-	-	-	-	7	-	-	-	5	-	-	1	1
33	Primary Metals Industries	-	-	-	-	-	-	-	-	-	-	1	5	-	-	-	1
34	Fabricated Metal Products	-	-	-	-	-	-	2	8	-	4	3	9	-	-	-	1
35	Industrial Machinery and Equipment	-	-	-	-	-	-	2	6	-	1	-	12	-	-	-	2
36	Electronic & Other Electrical Equipment	-	-	-	-	-	-	-	12	-	2	8	12	-	-	-	4
37	Transportation Equipment	-	-	-	-	-	-	-	6	-	-	-	4	-	-	1	-
38	Instruments and Related Products	-	-	-	-	-	-	-	2	-	-	-	4	-	-	-	-
39	Miscellaneous Manufacturing Industries	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-
40	Railroad Transportation	-	-	-	-	-	-	-	2	-	1	-	3	-	-	-	1
41	Local, Sub & Interurban Highway Passenger Transportation	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-
42	Trucking and Warehousing	-	-	-	1	-	-	-	3	-	-	-	2	-	-	-	-
43	United States Postal Service	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
44	Water Transportation	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-
45	Transportation by Air	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
46	Pipelines, Except Natural Gas	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
47	Transportation Services	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
48	Communications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	Electrical, Gas, and Sanitary Services	-	3	3	3	1	1	24	42	2	8	38	64	2	1	12	14
50	Wholesale Trade - Durable Goods	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-
51	Wholesale Trade - Nondurable Goods	-	-	-	-	-	-	2	31	-	1	-	5	-	-	-	3
52	Building Materials, Hardware, Garden Supply, and Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	General Merchandise Stores	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
54	Food Stores	-	-	-	1	-	-	-	4	-	-	-	2	-	-	-	-
55	Automotive Dealers & Service Stations	-	-	-	1	-	-	-	26	-	2	-	26	-	-	-	-
56	Apparel and Accessory Store	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	Home Furniture, Furnishings, and Equipment Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	Eating and Drinking Places	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
59	Miscellaneous Retail	-	-	-	-	-	-	-	3	-	-	-	4	-	-	-	-
60	Depository Institutions	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
61	Non-depository Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Security and Commodity Brokers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63	Insurance Carriers	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
64	Insurance Agents, Brokers, and Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	Real Estate	-	1	-	1	-	-	-	36	-	7	-	33	-	-	-	1
67	Holding and Other Investment Offices	-	-	-	-	-	-	-	2	-	1	-	2	-	-	-	-
70	Hotels and Other Lodging Places	-	-	-	-	-	-	-	6	-	1	-	-	-	-	-	-
72	Personal Services	-	1	-	-	-	-	-	1	-	-	-	3	-	-	-	-
73	Business Services	-	-	-	-	-	-	-	1	-	-	-	4	-	1	-	-
75	Auto Repair, Services, and Parking	-	-	-	1	-	-	-	2	-	-	-	1	-	-	-	-
76	Miscellaneous Repair Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
78	Motion Pictures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	Amusement and Recreation Services	-	1	-	-	-	-	-	2	-	1	-	-	-	-	-	-
80	Health Services	-	-	-	-	-	-	-	7	-	-	-	4	-	-	-	-
81	Legal Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	Educational Services	-	-	-	1	-	-	-	7	-	3	-	4	-	-	-	1
83	Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	Museums, Art Galleries, & Botanical & Zoological Gardens	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
86	Membership Organizations	-	-	-	-	-	-	-	3	-	1	-	1	-	-	-	-
87	Engineering, Accounting, Research, and Related Services	-	2	-	2	-	-	-	5	-	1	-	10	-	1	1	-
88	Private Households	-	-	-	-	-	-	-	9	-	-	-	5	-	-	-	1
89	Services, NEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	Executive, Legislative, & General Government (no Finance)	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
92	Justice, Public Order, and Safety	-	-	-	-	-	-	-	1	-	-	-	3	-	-	-	-
93	Public Finance, Taxation, and Monetary Policy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94	Administration of Human Resource Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	Environmental Quality and Housing	-	-	-	-	-	-	-	4	-	-	-	3	-	1	-	-
96	Administration of Economic Programs	-	1	-	-	-	1	-	-	-	2	-	1	-	1	-	-
97	National Security and Intl. Affairs	-	-	-	-	-	-	-	2	-	-	1	5	-	-	1	-
99	Nonclassifiable Establishments	-	-	-	-	-	-	-	53	-	-	-	33	-	-	-	4
	Total	-	10	3	13	1	2	35	371	4	38	58	339	4	6	18	41

Abbreviations: SIC, Standard Industrial Classification; Maj, Major; Min, Minor

Note: There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 6. Number of Facilities in Watersheds by Two-Digit SIC Major Group, 1991

SIC Major Group		Watersheds															
		Coastal Drainage Area (N096)		Saco Bay (N090)		Coastal Drainage Area (N066)		Casco Bay (N080)		Sheepscot Bay (N070)		Muscongus Bay (N060)		Coastal Drainage Area (N055)		Coastal Drainage Area (N052)	
Code	Activity	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
01	Agricultural Production-Crops	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
02	Agricultural Production-Livestock	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
07	Agricultural Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08	Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09	Fishing, Hunting, and Trapping	-	-	-	-	-	-	-	3	-	7	-	1	-	1	-	-
10	Metal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Coal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Oil and Gas Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Nonmetallic Minerals, Except Fuels	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
15	General Building Contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Heavy Construction, ex. Building	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Special Trade Contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Food and Kindred Products	-	-	-	-	-	-	-	4	-	3	-	3	-	-	-	1
21	Tobacco Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Textile Mill Products	-	-	-	-	-	-	-	-	1	7	-	-	-	-	-	-
23	Apparel & Finished Products Made from Fabrics	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
24	Lumber and Wood Products	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-
25	Furniture and Fixtures	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
26	Paper and Allied Products	-	-	-	-	-	-	1	-	7	4	-	-	-	-	-	-
27	Printing, Publishing, and Allied Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	Chemicals and Allied Products	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
29	Petroleum and Coal Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	Rubber and Misc. Plastics Products	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	Leather and Leather Products	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
32	Stone, Clay and Glass Products	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
33	Primary Metals Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	Fabricated Metal Products	-	-	-	2	-	-	1	2	-	-	-	-	-	-	-	-
35	Industrial Machinery and Equipment	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
36	Electronic & Other Electrical Equipment	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
37	Transportation Equipment	-	2	-	-	-	-	-	1	-	2	-	-	-	-	-	-
38	Instruments and Related Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	Miscellaneous Manufacturing Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	Railroad Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	Local, Sub & Interurban Highway Passenger Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	Trucking and Warehousing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	United States Postal Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	Water Transportation	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
45	Transportation by Air	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
46	Pipelines, Except Natural Gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Transportation Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	Communications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	Electrical, Gas, and Sanitary Services	6	1	4	10	-	-	6	10	24	58	1	2	-	-	-	-
50	Wholesale Trade - Durable Goods	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
51	Wholesale Trade - Nondurable Goods	-	-	-	-	-	-	8	5	-	-	-	-	-	-	-	-
52	Building Materials, Hardware, Garden Supply, and Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	General Merchandise Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	Food Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	Automotive Dealers & Service Stations	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-
56	Apparel and Accessory Store	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	Home Furniture, Furnishings, and Equipment Stores	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
58	Eating and Drinking Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
59	Miscellaneous Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	Depository Institutions	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
61	Non-depository Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Security and Commodity Brokers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63	Insurance Carriers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
64	Insurance Agents, Brokers, and Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	Real Estate	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-
67	Holding and Other Investment Offices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	Hotels and Other Lodging Places	-	1	-	-	-	-	-	-	-	3	-	2	-	-	-	-
72	Personal Services	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
73	Business Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	Auto Repair, Services, and Parking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
76	Miscellaneous Repair Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
78	Motion Pictures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	Amusement and Recreation Services	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
80	Health Services	-	-	-	1	-	-	-	1	-	2	-	-	-	-	-	-
81	Legal Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	Educational Services	-	1	-	1	-	-	-	1	-	5	-	1	-	-	-	-
83	Social Services	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
84	Museums, Art Galleries, & Botanical & Zoological Gardens	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
86	Membership Organizations	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
87	Engineering, Accounting, Research, and Related Services	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
88	Private Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	Services, NEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	Executive, Legislative, & General Government (no Finance)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92	Justice, Public Order, and Safety	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
93	Public Finance, Taxation, and Monetary Policy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94	Administration of Human Resource Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	Environmental Quality and Housing	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
96	Administration of Economic Programs	-	3	-	-	-	-	-	1	-	2	-	3	-	1	-	-
97	National Security and Intl. Affairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
99	Nonclassifiable Establishments	-	-	-	1	-	-	-	-	-	2	-	3	-	-	-	-
	Total	6	10	4	20	-	-	16	36	33	112	2	26	-	2	-	1

Abbreviations: SIC, Standard Industrial Classification; Maj, Major; Min, Minor

Note: There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 6. Number of Facilities in Watersheds by Two-Digit SIC Major Group, 1991

SIC Major Group		Watersheds															
		Penobscot Bay (N050)		Coastal Drainage Area (N045)		Blue Hill Bay (N040)		Coastal Drainage Area (N036)		Narraguagus Bay (N030)		Englishman Bay (N020)		Coastal Drainage Area (N016)		Passamaquoddy Bay (N010)	
Code	Activity	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
01	Agricultural Production-Crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02	Agricultural Production-Livestock	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
07	Agricultural Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08	Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09	Fishing, Hunting, and Trapping	-	3	-	-	-	3	-	2	-	-	-	1	-	-	-	1
10	Metal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Coal Mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Oil and Gas Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Nonmetallic Minerals, Except Fuels	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	General Building Contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Heavy Construction, ex. Building	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Special Trade Contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Food and Kindred Products	-	11	-	-	-	1	-	2	-	2	-	2	-	-	-	6
21	Tobacco Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Textile Mill Products	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	Apparel & Finished Products Made from Fabrics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	Lumber and Wood Products	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
25	Furniture and Fixtures	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Paper and Allied Products	5	2	-	-	-	-	-	-	-	-	-	-	-	-	1	-
27	Printing, Publishing, and Allied Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	Chemicals and Allied Products	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1
29	Petroleum and Coal Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	Rubber and Misc. Plastics Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	Leather and Leather Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Stone, Clay and Glass Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	Primary Metals Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	Fabricated Metal Products	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
35	Industrial Machinery and Equipment	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	Electronic & Other Electrical Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	Transportation Equipment	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
38	Instruments and Related Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	Miscellaneous Manufacturing Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	Railroad Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	Local, Sub & Interurban Highway Passenger Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	Trucking and Warehousing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	United States Postal Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	Water Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	Transportation by Air	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	Pipelines, Except Natural Gas	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Transportation Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	Communications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	Electrical, Gas, and Sanitary Services	12	31	-	-	2	1	2	4	-	1	1	1	-	1	2	5
50	Wholesale Trade - Durable Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	Wholesale Trade - Nondurable Goods	-	11	-	-	-	-	-	-	-	-	-	1	-	-	-	-
52	Building Materials, Hardware, Garden Supply, and Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	General Merchandise Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	Food Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	Automotive Dealers & Service Stations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	Apparel and Accessory Store	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	Home Furniture, Furnishings, and Equipment Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	Eating and Drinking Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
59	Miscellaneous Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	Depository Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
61	Non-depository Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Security and Commodity Brokers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63	Insurance Carriers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
64	Insurance Agents, Brokers, and Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	Real Estate	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	2
67	Holding and Other Investment Offices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	Hotels and Other Lodging Places	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-
72	Personal Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73	Business Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	Auto Repair, Services, and Parking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
76	Miscellaneous Repair Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
78	Motion Pictures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	Amusement and Recreation Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80	Health Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81	Legal Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	Educational Services	-	2	-	-	-	1	-	-	-	1	-	-	-	-	-	-
83	Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	Museums, Art Galleries, & Botanical & Zoological Gardens	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
86	Membership Organizations	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
87	Engineering, Accounting, Research, and Related Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88	Private Households	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
89	Services, NEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	Executive, Legislative, & General Government (no Finance)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92	Justice, Public Order, and Safety	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
93	Public Finance, Taxation, and Monetary Policy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94	Administration of Human Resource Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	Environmental Quality and Housing	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
96	Administration of Economic Programs	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	1
97	National Security and Intl. Affairs	-	1	-	-	-	-	-	1	-	-	-	1	-	-	-	-
99	Nonclassifiable Establishments	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1
	Total	18	77	-	-	2	11	2	12	-	7	1	9	-	1	3	18

Abbreviations: SIC, Standard Industrial Classification; Maj, Major; Min, Minor

Note: There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 6. Number of Facilities in Watersheds by Two-Digit SIC Major Group, 1991

SIC Major Group		Watersheds															
		St. Croix River (C120)		Magaguadavic Digdeguash/ Maces Bay (C110)		Saint John River (C100)		Fundy Shore (C090)		Shepody Shore (C080)		Cumberland Basin (C070)		Minas/Cobequid Shore (C060)		Shubenacadie River (C050)	
Code	Activity	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
01	Agricultural Production-Crops	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-
02	Agricultural Production-Livestock	-	-	-	-	-	-	-	-	-	-	-	5	-	3	-	5
07	Agricultural Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
08	Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09	Fishing, Hunting, and Trapping	1	17	3	6	4	6	-	1	-	-	-	-	-	-	-	-
10	Metal Mining	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	5
12	Coal Mining	-	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-
13	Oil and Gas Extraction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
14	Nonmetallic Minerals, Except Fuels	-	-	-	-	1	2	-	-	-	-	1	4	-	4	-	10
15	General Building Contractors	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	2
16	Heavy Construction, ex. Building	-	-	-	-	-	-	-	-	-	-	-	1	-	11	-	3
17	Special Trade Contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Food and Kindred Products	-	-	-	-	8	4	-	-	-	1	-	1	1	-	-	-
21	Tobacco Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Textile Mill Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	Apparel & Finished Products Made from Fabrics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	Lumber and Wood Products	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
25	Furniture and Fixtures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Paper and Allied Products	-	-	1	-	6	-	-	-	-	-	-	-	-	-	-	-
27	Printing, Publishing, and Allied Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	Chemicals and Allied Products	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-
29	Petroleum and Coal Products	-	-	-	-	1	-	-	-	-	-	-	2	1	4	-	1
30	Rubber and Misc. Plastics Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	Leather and Leather Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Stone, Clay and Glass Products	-	-	-	-	-	1	-	-	-	-	-	-	-	4	-	1
33	Primary Metals Industries	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
34	Fabricated Metal Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	Industrial Machinery and Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	Electronic & Other Electrical Equipment	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
37	Transportation Equipment	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1
38	Instruments and Related Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	Miscellaneous Manufacturing Industries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	Railroad Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	Local, Sub & Interurban Highway Passenger Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	Trucking and Warehousing	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
43	United States Postal Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	Water Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	Transportation by Air	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	Pipelines, Except Natural Gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Transportation Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	Communications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	Electrical, Gas, and Sanitary Services	-	2	-	6	15	62	-	-	1	8	-	12	-	7	-	5
50	Wholesale Trade - Durable Goods	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-
51	Wholesale Trade - Nondurable Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
52	Building Materials, Hardware, Garden Supply, and Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	General Merchandise Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	Food Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	Automotive Dealers & Service Stations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	Apparel and Accessory Store	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	Home Furniture, Furnishings, and Equipment Stores	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	Eating and Drinking Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
59	Miscellaneous Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	Depository Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
61	Non-depository Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Security and Commodity Brokers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63	Insurance Carriers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
64	Insurance Agents, Brokers, and Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	Real Estate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
67	Holding and Other Investment Offices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	Hotels and Other Lodging Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
72	Personal Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73	Business Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	Auto Repair, Services, and Parking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
76	Miscellaneous Repair Services	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
78	Motion Pictures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	Amusement and Recreation Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80	Health Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81	Legal Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	Educational Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	Social Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	Museums, Art Galleries, & Botanical & Zoological Gardens	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
86	Membership Organizations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
87	Engineering, Accounting, Research, and Related Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88	Private Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	Services, NEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	Executive, Legislative, & General Government (no Finance)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92	Justice, Public Order, and Safety	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
93	Public Finance, Taxation, and Monetary Policy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94	Administration of Human Resource Programs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	Environmental Quality and Housing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
96	Administration of Economic Programs	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
97	National Security and Intl. Affairs	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
99	Nonclassifiable Establishments	-	-	-	-	-	-	-	-	-	-	-	3	1	17	-	6
	Total	1	19	4	13	36	88	-	1	1	9	2	40	4	60	-	41

Abbreviations: SIC, Standard Industrial Classification; Maj, Major; Min, Minor

Note: There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 6. Number of Facilities in Watersheds by Two-Digit SIC Major Group, 1991

SIC Major Group		Watersheds								Totals			
		Avon River (C040)		Annapolis Basin (C030)		St Mary's Bay (C020)		Yarmouth (C010)		USA		Canadian	
Code	Activity	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
01	Agricultural Production-Crops	-	-	-	-	-	-	-	-	-	3	-	6
02	Agricultural Production-Livestock	-	26	-	20	-	27	-	5	-	6	-	91
07	Agricultural Services	-	-	-	-	-	-	-	-	-	-	-	-
08	Forestry	-	-	-	-	-	-	-	-	-	-	-	-
09	Fishing, Hunting, and Trapping	-	-	-	-	-	-	-	1	-	32	8	31
10	Metal Mining	-	1	-	-	-	-	-	2	-	-	-	10
12	Coal Mining	-	-	-	-	-	-	-	-	-	-	-	8
13	Oil and Gas Extraction	-	2	-	-	-	-	-	-	-	-	-	4
14	Nonmetallic Minerals, Except Fuels	2	9	-	11	-	9	-	3	-	13	4	52
15	General Building Contractors	-	-	-	-	-	1	-	2	1	10	-	8
16	Heavy Construction, ex. Building	-	8	-	3	-	-	-	1	-	4	-	27
17	Special Trade Contractors	-	-	-	-	-	-	-	-	1	2	-	-
20	Food and Kindred Products	1	8	-	3	2	8	1	8	3	48	11	32
21	Tobacco Products	-	-	-	-	-	-	-	-	-	-	-	-
22	Textile Mill Products	-	-	-	-	-	-	-	1	1	16	-	1
23	Apparel & Finished Products Made from Fabrics	-	-	-	-	-	-	-	-	-	1	-	-
24	Lumber and Wood Products	1	1	-	-	-	1	-	1	-	7	2	3
25	Furniture and Fixtures	-	-	-	-	-	-	-	-	-	3	-	-
26	Paper and Allied Products	2	2	-	-	-	-	-	-	20	13	8	2
27	Printing, Publishing, and Allied Industries	-	-	-	-	-	-	-	-	-	2	-	-
28	Chemicals and Allied Products	-	1	-	-	-	-	1	-	10	33	1	6
29	Petroleum and Coal Products	-	3	-	2	-	4	-	2	-	6	2	18
30	Rubber and Misc. Plastics Products	-	-	-	-	-	-	-	-	1	24	-	-
31	Leather and Leather Products	-	-	-	-	-	-	-	-	1	2	-	-
32	Stone, Clay and Glass Products	-	-	-	-	-	-	-	-	1	16	-	5
33	Primary Metals Industries	-	-	-	-	-	-	-	2	1	6	-	3
34	Fabricated Metal Products	-	-	-	-	-	-	-	-	6	27	-	-
35	Industrial Machinery and Equipment	-	-	-	-	-	-	-	-	2	24	-	-
36	Electronic & Other Electrical Equipment	-	-	-	-	-	-	-	-	9	31	-	3
37	Transportation Equipment	-	-	-	-	-	-	-	-	1	16	1	2
38	Instruments and Related Products	-	-	-	-	-	-	-	-	-	6	-	-
39	Miscellaneous Manufacturing Industries	-	-	-	-	-	-	-	-	-	3	-	-
40	Railroad Transportation	-	-	-	-	-	-	-	-	-	7	-	-
41	Local, Sub & Interurban Highway Passenger Transportation	-	-	-	-	-	-	-	-	-	7	-	-
42	Trucking and Warehousing	-	-	-	-	-	-	-	-	-	6	-	1
43	United States Postal Service	-	-	-	-	-	-	-	-	-	2	-	-
44	Water Transportation	-	-	-	-	-	-	-	-	-	7	-	-
45	Transportation by Air	-	-	-	-	-	-	-	-	-	4	-	-
46	Pipelines, Except Natural Gas	-	-	-	-	-	-	-	-	-	2	-	-
47	Transportation Services	-	-	-	-	-	-	-	-	-	1	-	-
48	Communications	-	-	-	-	-	-	-	-	-	-	-	-
49	Electrical, Gas, and Sanitary Services	2	13	-	14	-	8	1	2	148	275	13	125
50	Wholesale Trade - Durable Goods	-	2	-	1	-	-	-	1	-	5	-	6
51	Wholesale Trade - Nondurable Goods	-	-	-	1	-	1	1	1	10	57	1	4
52	Building Materials, Hardware, Garden Supply, and Others	-	-	-	-	-	-	-	-	-	-	-	-
53	General Merchandise Stores	-	-	-	-	-	-	-	-	-	1	-	-
54	Food Stores	-	-	-	-	-	-	-	-	-	7	-	-
55	Automotive Dealers & Service Stations	-	-	-	-	-	-	-	-	-	57	-	-
56	Apparel and Accessory Store	-	-	-	-	-	-	-	-	-	-	-	-
57	Home Furniture, Furnishings, and Equipment Stores	-	-	-	-	-	-	-	-	-	1	-	-
58	Eating and Drinking Places	-	-	-	-	-	-	-	-	-	3	-	-
59	Miscellaneous Retail	-	-	-	-	-	-	-	-	-	7	-	-
60	Depository Institutions	-	-	-	-	-	-	-	-	-	2	-	-
61	Non-depository Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-
62	Security and Commodity Brokers	-	-	-	-	-	-	-	-	-	-	-	-
63	Insurance Carriers	-	-	-	-	-	-	-	-	-	1	-	-
64	Insurance Agents, Brokers, and Service	-	-	-	-	-	-	-	-	-	-	-	-
65	Real Estate	-	-	-	-	-	-	-	-	-	87	-	-
67	Holding and Other Investment Offices	-	-	-	-	-	-	-	-	-	5	-	-
70	Hotels and Other Lodging Places	-	-	-	-	-	-	-	-	-	16	-	-
72	Personal Services	-	1	-	-	-	-	-	-	-	6	-	1
73	Business Services	-	-	-	-	-	-	-	-	-	6	-	-
75	Auto Repair, Services, and Parking	-	-	-	-	-	-	-	1	-	4	-	1
76	Miscellaneous Repair Services	-	-	-	-	-	-	-	-	-	-	-	1
78	Motion Pictures	-	-	-	-	-	-	-	-	-	-	-	-
79	Amusement and Recreation Services	-	-	-	-	-	-	-	-	-	5	-	-
80	Health Services	-	-	-	-	-	-	-	-	-	15	-	-
81	Legal Services	-	-	-	-	-	-	-	-	-	-	-	-
82	Educational Services	-	-	-	-	-	-	-	-	-	29	-	-
83	Social Services	-	-	-	-	-	-	-	-	-	1	-	-
84	Museums, Art Galleries, & Botanical & Zoological Gardens	-	-	-	-	-	-	-	-	-	4	-	-
86	Membership Organizations	-	-	-	-	-	-	-	-	-	8	-	-
87	Engineering, Accounting, Research, and Related Services	-	-	-	-	-	-	-	-	1	23	-	-
88	Private Households	-	-	-	-	-	-	-	-	-	16	-	-
89	Services, NEC	-	-	-	-	-	-	-	-	-	-	-	-
91	Executive, Legislative, & General Government (no Finance)	-	-	-	-	-	-	-	-	-	1	-	-
92	Justice, Public Order, and Safety	-	-	-	-	-	-	-	-	-	7	-	-
93	Public Finance, Taxation, and Monetary Policy	-	-	-	-	-	-	-	-	-	-	-	-
94	Administration of Human Resource Programs	-	-	-	-	-	-	-	-	-	-	-	-
95	Environmental Quality and Housing	-	-	-	-	-	-	-	-	-	10	-	-
96	Administration of Economic Programs	-	-	-	-	-	-	-	-	-	20	-	2
97	National Security and Intl. Affairs	-	-	-	-	-	-	-	-	3	10	-	-
99	Nonclassifiable Establishments	1	70	-	23	-	1	-	-	-	99	2	120
	Total	9	147	-	78	2	68	4	33	228	1,178	53	573

Abbreviations: SIC, Standard Industrial Classification; Maj, Major; Min, Minor

Note: There are 10 major (six WWTPs and four industries) and 16 minor (eight WWTPs and eight industries) point source facilities located in the U.S. portion of the Saint John watershed that discharge to Canadian waters.

Appendix 7.
Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Appendix 7. Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Standard Industrial Classification		Number of Facilities				NCPDI Discharge Category	
Code	Activity	USA		Canada		Code	Name
		Major	Minor	Major	Minor		
0119	Cash grains, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
0134	Irish Potatoes	0	0	0	6	31	FOODS & BEVERAGES
0191	General farms, primarily crop	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
0211	Beef cattle feedlots	0	0	0	1	28	FEEDLOTS
0213	Hogs	0	0	0	76	28	FEEDLOTS
0254	Poultry hatcheries	0	2	0	0	28	FEEDLOTS
0271	Fur-bearing animals & rabbits	0	0	0	2	28	FEEDLOTS
0273	Animal aquaculture	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
0291	General farms, primarily animal	0	0	0	12	28	FEEDLOTS
0912	Finfish	0	0	0	1	47	MISC. INDUSTRIAL COMMERCIAL
0913	Shellfish	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
0919	Miscellaneous marine products	0	0	1	21	47	MISC. INDUSTRIAL COMMERCIAL
0921	Fish hatcheries & preserves	0	29	7	9	29	FISH HATCHERIES
1041	Gold ores	0	0	0	6	54	ORE MINING AND DRESSING
1061	Ferroalloy ores, except vanadium	0	0	0	3	54	ORE MINING AND DRESSING
1099	Metal Ores, nec	0	0	0	1	46	MINERAL MINING
1211	Bituminus Coal and Lignite	0	0	0	7	46	MINERAL MINING
1221	Bituminous coal & lignite - surface	0	0	0	1	47	MISC. INDUSTRIAL COMMERCIAL
1311	Crude petroleum & natural gas	0	0	0	4	47	MISC. INDUSTRIAL COMMERCIAL
1411	Dimension stone	0	1	0	0	46	MINERAL MINING
1422	Crushed & broken limestone	0	2	0	0	46	MINERAL MINING
1429	Crushed & broken stone, nec	0	1	0	42	46	MINERAL MINING
1442	Construction sand & gravel	0	7	0	6	46	MINERAL MINING
1459	Clay & related minerals, nec	0	0	2	1	46	MINERAL MINING
1474	Potash, soda, & borate minerals	0	0	1	1	46	MINERAL MINING
1481	Nonmetallic minerals services	0	0	1	1	46	MINERAL MINING
1499	Miscellaneous nonmettalic minerals	0	2	0	1	46	MINERAL MINING
1521	Single-family housing construction	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
1522	Residential construction, nec	1	0	0	0	47	MISC. INDUSTRIAL COMMERCIAL
1531	Operative builders	0	9	0	0	47	MISC. INDUSTRIAL COMMERCIAL
1541	Industrial buildings and warehouses	0	0	0	3	47	MISC. INDUSTRIAL COMMERCIAL
1542	Nonresidential construction, nec	0	0	0	5	47	MISC. INDUSTRIAL COMMERCIAL
1611	Highway & street construction	0	2	0	17	47	MISC. INDUSTRIAL COMMERCIAL
1622	Bridge, tunnel & elevated highway	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
1629	Heavy construction, nec	0	1	0	10	47	MISC. INDUSTRIAL COMMERCIAL
1795	Wrecking & demolition work	1	0	0	0	47	MISC. INDUSTRIAL COMMERCIAL
1799	Special trade contractors, nec	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
2011	Meat packing plants	0	0	0	7	47	MISC. INDUSTRIAL COMMERCIAL
2015	Poultry slaughtering & processing	0	0	1	2	47	MISC. INDUSTRIAL COMMERCIAL
2016	Poultry slaughtering & processing	0	0	0	1	47	MISC. INDUSTRIAL COMMERCIAL
2026	Fluid milk	0	3	0	1	24	DAIRY PRODUCTS
2033	Canned fruits & vegetables	1	5	0	0	06	CANNED & PRES. FRUITS & VEGS.
2035	Pickles, sauces, & salad dressings	0	1	0	0	06	CANNED & PRES. FRUITS & VEGS.
2037	Frozen fruits & vegetables	1	2	2	0	06	CANNED & PRES. FRUITS & VEGS.
2046	Wet corn milling	1	1	1	0	33	GRAIN PROCESSING
2062	Cane sugar refining	0	2	1	0	69	CANE SUGAR MFG.
2066	Chocolate & cocoa products	0	1	0	0	02	BAKERY PRODUCTS
2077	Animal & marine fats & oils	0	1	1	1	62	RENDERING
2082	Malt beverages	0	1	1	2	4	BEVERAGES
2086	Bottled & canned soft drinks	0	1	0	1	05	SOFT DRINKS
2091	Canned & cured fish and seafoods	0	16	3	16	07	CANNED & PRES. SEAFOOD PRODS.
2092	Fresh or frozen prepared fish	0	11	0	0	07	CANNED & PRES. SEAFOOD PRODS.

Note: NEC, not elsewhere classified

Appendix 7. Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Standard Industrial Classification		Number of Facilities				NCPDI Discharge Category	
Code	Activity	USA		Canada		Code	Name
		Major	Minor	Major	Minor		
2097	Manufactured ice	0	2	0	0	31	FOODS & BEVERAGES
2099	Food preparations, nec	0	1	1	1	31	FOODS & BEVERAGES
2211	Broadwoven fabric mills, cotton	0	1	0	0	73	TEXTILE PROC.(LOW WATER USE)
2221	Broadwoven fabric mills, manmade	0	2	0	0	73	TEXTILE PROC.(LOW WATER USE)
2231	Broadwoven fabric mills, wool	1	4	0	0	72	WOOL FINISHING
2251	Women's hosiery, except socks	0	1	0	0	75	KNIT FABRIC FINISHING
2261	Finishing plants, cotton	0	1	0	0	74	WOVEN FABRIC FINISHING
2295	Coated fabrics, not rubberized	0	3	0	0	73	TEXTILE PROC.(LOW WATER USE)
2297	Nonwoven fabrics	0	1	0	0	78	NONWOVEN MFG.
2299	Textile goods, nec	0	3	0	1	71	WOOL SCOURING
2392	House furnishings, nec	0	1	0	0	70	GENERAL TEXTILE MFG.
2411	Logging	0	3	0	0	80	SAWMILLS
2421	Sawmills and planning mills, general	0	0	0	3	80	SAWMILLS
2491	Wood preserving	0	0	2	0	81	PLYWOOD
2493	Reconstituted wood products	0	4	0	0	81	PLYWOOD
2511	Wood household furniture	0	2	0	0	81	PLYWOOD
2514	Metal household furniture	0	1	0	0	38	METAL FINISHING
2611	Pulp mills	4	3	3	0	61	PULP AND PAPER
2621	Paper mills	15	6	4	2	61	PULP AND PAPER
2652	Set-up paperboard boxes	0	1	0	0	61	PULP AND PAPER
2671	Paper coated & laminated, packaging	1	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
2679	Converted paper products, nec	0	2	1	0	47	MISC. INDUSTRIAL COMMERCIAL
2711	Newspapers	0	1	0	0	60	PRINTING AND PUBLISHING
2732	Book printing	0	1	0	0	60	PRINTING AND PUBLISHING
2812	Alkalies and chlorine	1	0	0	0	12	INORGANIC CHEMICAL PROD.
2813	Industrial gases	0	2	0	0	12	INORGANIC CHEMICAL PROD.
2816	Inorganic pigments	0	1	0	0	12	INORGANIC CHEMICAL PROD.
2819	Industrial inorganic chemicals, nec	1	4	0	5	12	INORGANIC CHEMICAL PROD.
2821	Plastics materials & resins	3	8	0	0	15	ORGANIC CHEMICAL PROD.
2822	Synthetic rubber	1	0	0	0	63	RUBBER PROCESSING
2833	Medicinals & botanicals	0	1	0	0	19	PHARMACEUTICAL MFG
2834	Pharmaceutical preparations	0	1	0	0	19	PHARMACEUTICAL MFG
2841	Soaps & other detergents	0	1	0	0	20	SOAPS AND DETERGENTS
2842	Polishes & sanitation goods	0	3	0	0	20	SOAPS AND DETERGENTS
2843	Surface active agents	0	1	0	0	20	SOAPS AND DETERGENTS
2851	Paints and allied products	0	3	0	0	15	ORGANIC CHEMICAL PROD.
2869	Industrial organic chemicals, nec	1	1	1	1	18	PESTICIDES
2891	Adhesives & sealants	1	4	0	0	16	ADHESIVES AND SEALANTS
2893	Printing ink	0	2	0	0	15	ORGANIC CHEMICAL PROD.
2899	Chemical preparations, nec	2	1	0	0	12	INORGANIC CHEMICAL PROD.
2911	Petroleum refining	0	2	2	5	56	PETROLEUM REFINING
2951	Asphalt paving mixtures and blocks	0	2	0	13	55	PAVING AND ROOFING
2952	Asphalt felts & coatings	0	2	0	0	55	PAVING AND ROOFING
3011	Tire and inner tubes	0	1	0	0	64	TIRE AND INNER TUBE
3053	Gaskets, packing & sealing devices	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3061	Mechanical rubber goods	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3069	Fabricated rubber products, nec	1	1	0	0	63	RUBBER PROCESSING
3081	Unsupported plastic film & sheet	0	16	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3089	Plastics products, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3111	Leather tanning & finishing	1	1	0	0	37	LEATHER TANNING
3149	Footwear, except rubber, nec	0	1	0	0	37	LEATHER TANNING
3241	Cement, hydraulic	0	2	0	1	11	CEMENT

Note: NEC, not elsewhere classified

Appendix 7. Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Standard Industrial Classification		Number of Facilities				NCPDI Discharge Category	
Code	Activity	USA		Canada		Code	Name
		Major	Minor	Major	Minor		
3251	Brick & structural clay tile	1	0	0	0	22	STRUCTURAL CLAY PRODUCTS
3272	Concrete products, nec	0	0	0	4	21	CONCRETE
3273	Ready-mixed concrete	0	6	0	0	21	CONCRETE
3275	Gypsum products	0	2	0	0	23	POTTERY AND RELATED PRODS.
3281	Cut stone and stone products	0	2	0	0	21	CONCRETE
3291	Abrasive products	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3297	Nonclay refractories	0	1	0	0	23	POTTERY AND RELATED PRODS.
3299	Nonmetallic mineral products, nec	0	1	0	0	23	POTTERY AND RELATED PRODS.
3324	Steel investment foundries	1	0	0	0	30	FOUNDRIES
3325	Steel foundries, nec	0	0	0	1	30	FOUNDRIES
3341	Secondary nonferrous metals	0	0	0	2	50	SECONDARY NONFERROUS METALS
3357	Nonferrous wire drawing and insulating	0	5	0	0	51	NONFERROUS METALS FORMING
3369	Nonferrous foundries, nec	0	1	0	0	30	FOUNDRIES
3421	Cutlery	0	1	0	0	38	METAL FINISHING
3423	Hand & edge tools, nec	0	1	0	0	38	METAL FINISHING
3441	Fabricated structural metal	1	2	0	0	38	METAL FINISHING
3443	Fabricated plate work (boiler shops)	0	1	0	0	38	METAL FINISHING
3444	Sheet metal work	0	2	0	0	38	METAL FINISHING
3449	Miscellaneous metal work	0	1	0	0	38	METAL FINISHING
3451	Screw machine products	0	2	0	0	38	METAL FINISHING
3452	Bolts, nuts, rivets, and washers	0	1	0	0	38	METAL FINISHING
3469	Metal stampings, nec	0	4	0	0	59	PORCELAIN ENAMELING
3471	Plating & polishing	4	5	0	0	38	METAL FINISHING
3479	Metal coating & allied services	0	1	0	0	39	COIL COATING
3484	Small arms	0	2	0	0	38	METAL FINISHING
3491	Industrial valves	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3492	Fluid power valves & hose fittings	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3496	Miscellaneous fabricated wire products	1	0	0	0	38	METAL FINISHING
3498	Fabricated pipe and fittings	0	1	0	0	38	METAL FINISHING
3511	Turbines & turbine generator sets	1	1	0	0	42	MACHINERY
3531	Construction machinery	0	1	0	0	42	MACHINERY
3541	Machine tools, metal cutting types	0	1	0	0	42	MACHINERY
3554	Paper industries machinery	0	1	0	0	42	MACHINERY
3556	Food product machinery	0	1	0	0	42	MACHINERY
3559	Special industry machinery, nec	0	3	0	0	42	MACHINERY
3561	Pumps & pumping equipment	0	1	0	0	42	MACHINERY
3562	Ball and roller bearings	0	2	0	0	42	MACHINERY
3563	Air and gas compressors	0	1	0	0	42	MACHINERY
3564	Blowers and fans	0	1	0	0	42	MACHINERY
3565	Packaging machinery	0	5	0	0	42	MACHINERY
3566	Speed changers, drives & gears	1	0	0	0	42	MACHINERY
3567	Industrial furnaces and ovens	0	1	0	0	42	MACHINERY
3577	Computer peripheral equipment, nec	0	1	0	0	42	MACHINERY
3579	Office machines, nec	0	2	0	0	42	MACHINERY
3585	Refrigeration & heating equipment	0	1	0	0	42	MACHINERY
3586	Measuring & dispensing pumps	0	1	0	0	42	MACHINERY
3612	Transformers, except electronic	0	1	0	0	27	POWER TRANSFORMERS
3613	Switchgear & switchboard apparatus	1	0	0	0	38	METAL FINISHING
3621	Motors & generators	1	3	0	0	38	METAL FINISHING
3625	Relays & industrial controls	1	6	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3641	Electric lamps	1	2	0	0	26	ELECTRICAL & ELECTRONIC COMP.
3643	Current-carrying wiring devices	0	4	0	0	38	METAL FINISHING

Note: NEC, not elsewhere classified

Appendix 7. Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Standard Industrial Classification		Number of Facilities				NCPDI Discharge Category	
Code	Activity	USA		Canada		Code	Name
		Major	Minor	Major	Minor		
3644	Noncurrent-carrying wiring devices	0	1	0	0	38	METAL FINISHING
3645	Residential lighting fixtures	0	1	0	0	38	METAL FINISHING
3648	Lighting equipment, nec	1	0	0	0	38	METAL FINISHING
3661	Telephone & telegraph apparatus	1	1	0	0	38	METAL FINISHING
3663	Radio & TV communications equipment	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3669	Communications equipment, nec	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3671	Electron tube	0	2	0	0	26	ELECTRICAL & ELECTRONIC COMP.
3672	Printed circuit boards	1	1	0	0	26	ELECTRICAL & ELECTRONIC COMP.
3673	Electron tubes, transmitting	0	1	0	0	38	METAL FINISHING
3674	Semiconductors & related devices	1	2	0	0	26	ELECTRICAL & ELECTRONIC COMP.
3678	Electronic connectors	0	1	0	0	38	METAL FINISHING
3679	Electronic components, nec	0	1	0	0	26	ELECTRICAL & ELECTRONIC COMP.
3691	Storage batteries	1	0	0	0	03	BATTERY MANUFACTURE
3692	Primary batteries, wet & dry	0	0	0	3	03	BATTERY MANUFACTURE
3711	Motor vehicles & car bodies	0	1	0	0	45	TRANSPORTATION EQUIPMENT
3714	Motor vehicle parts & accessories	0	2	0	0	45	TRANSPORTATION EQUIPMENT
3721	Aircraft	0	1	0	0	45	TRANSPORTATION EQUIPMENT
3724	Aircraft engines & engine parts	1	1	0	1	45	TRANSPORTATION EQUIPMENT
3728	Aircraft parts and equipment, nec	0	0	1	1	45	TRANSPORTATION EQUIPMENT
3731	Ship building & repairing	0	6	0	0	44	SHIPBUILDING
3732	Boat building & repairing	0	2	0	0	44	SHIPBUILDING
3764	Space propulsion units & parts	0	1	0	0	45	TRANSPORTATION EQUIPMENT
3769	Space vehicle equipment, nec	0	2	0	0	45	TRANSPORTATION EQUIPMENT
3822	Environmental controls	0	1	0	0	41	MACHINERY INSTRUMENTS
3823	Process control instruments	0	1	0	0	41	MACHINERY INSTRUMENTS
3825	Instruments to measure electricity	0	2	0	0	41	MACHINERY INSTRUMENTS
3851	Opthalmic goods	0	1	0	0	41	MACHINERY INSTRUMENTS
3873	Watches, clocks, watchcases, and parts	0	1	0	0	41	MACHINERY INSTRUMENTS
3965	Fasteners, buttons, needles, & pins	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
3999	Manufacturing industries, nec	0	1	0	0	43	MISCELLANEOUS MANUFACTURING
4011	Railroads, line-haul operating	0	3	0	0	82	RAILROADS
4013	Switching and terminal services	0	4	0	0	82	RAILROADS
4111	Local & suburban transit	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4119	Local passenger transport, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4131	Intercity highway transport	0	1	0	0	83	TRUCKING
4173	Bus terminal & service facilit	0	3	0	0	83	TRUCKING
4212	Local trucking, w/out storage	0	2	0	0	83	TRUCKING
4213	Trucking, except local	0	0	0	1	83	TRUCKING
4222	Refrigerated warehousing	0	3	0	0	83	TRUCKING
4225	General warehousing & storage	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4311	U.S. Postal service	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4482	Ferries	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4491	Marine cargo handling	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4493	Marinas	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4499	Water transportation services,	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4581	Airports, flying fields, & ser	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4613	Refined petroleum pipelines	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4785	Inspection & fixed facilities	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4911	Electric services	14	73	1	5	65	STEAM ELECTRIC (NON-COOLING)
4922	Natural gas transmission	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4931	Electric & other svcs combined	0	8	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4939	Combination utilities, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL

Note: NEC, not elsewhere classified

Appendix 7. Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Standard Industrial Classification		Number of Facilities				NCPDI Discharge Category	
Code	Activity	USA		Canada		Code	Name
		Major	Minor	Major	Minor		
4941	Water supply	0	55	0	0	98	WATER SUPPLY TREATMENT PLANTS
4952	Sewerage systems	133	119	12	114	99	WASTEWATER TREATMENT PLANTS
4953	Refuse systems	1	14	0	6	47	MISC. INDUSTRIAL COMMERCIAL
4959	Sanitary services, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
4961	Steam supply	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5031	Lumber, plywood & millwork	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5074	Plumbing & hydronic heating	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5082	Construction & mining machin.	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5092	Toys & hobby goods & supplies	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5093	Scrap & waste materials	0	1	0	6	47	MISC. INDUSTRIAL COMMERCIAL
5146	Fish and seafoods	0	1	1	0	31	FOODS AND BEVERAGES
5169	Chemicals & allied products, n	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5171	Petroleum bulk stat. & term.	9	44	0	4	47	MISC. INDUSTRIAL COMMERCIAL
5172	Petroleum products, nec	1	8	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5181	Beer & ale	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5191	Farm supplies	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5192	Books, periodicals, & newspape	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5399	Misc. general merchandise stor	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5411	Grocery stores	0	5	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5421	Meat & fish markets	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5441	Candy, nut & confection. store	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5511	New & used car dealers	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5541	Gasoline service stations	0	55	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5712	Furniture stores	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5812	Eating places	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
5983	Fuel oil dealers	0	7	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6036	Savings institutions, except f	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6361	Title insurance	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6512	Nonresidential building oprtrs	0	51	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6513	Apartment building operators	0	28	0	0	84	RESIDENTIALS
6514	Dwelling oper. exc. apartment	0	2	0	0	84	RESIDENTIALS
6531	Real estate agents & managers	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6552	Subdividers & developers, nec	0	5	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6732	Educat., relig., etc. trusts	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
6798	Real estate investment trusts	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7011	Hotels and motels	0	13	0	0	84	RESIDENTIALS
7032	Sporting & recreational camps	0	2	0	0	84	RESIDENTIALS
7033	Trailer parks and campsites	0	1	0	0	84	RESIDENTIALS
7211	Power laundries, family & com	0	2	0	0	36	LAUNDRIES
7215	Coin operated laundry	0	2	0	0	36	LAUNDRIES
7216	Dry cleaning plants	0	2	0	0	36	LAUNDRIES
7217	Carpet & upholstery cleaning	0	0	0	1	36	LAUNDRIES
7331	Direct mail advertising servic	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7384	Photofinishing laboratories	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7389	Business services, nec	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7538	General automotive repair shop	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7539	Automotive repair shops, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7542	Car washes	0	1	0	1	10	CAR WASHES
7641	Reupholstery & furniture repai	0	0	0	1	47	MISC. INDUSTRIAL COMMERCIAL
7991	Physical fitness facilities	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
7997	Membership sports & recr. club	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8011	Offices of physicians	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL

Note: NEC, not elsewhere classified

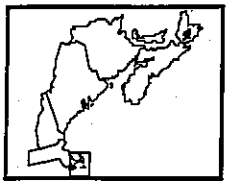
Appendix 7. Distribution of Facilities in the Study Area by Four-Digit SIC Code, 1991

Standard Industrial Classification		Number of Facilities				NCPDI Discharge Category	
Code	Activity	USA		Canada		Code	Name
		Major	Minor	Major	Minor		
8051	Skilled nursing care facil.	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8052	Intermediate care facilities	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8062	Gen. medical/surgical hospita	0	5	0	0	34	HOSPITALS
8063	Psychiatric hospitals	0	1	0	0	34	HOSPITALS
8069	Specialty hospitals, exc. psy	0	1	0	0	34	HOSPITALS
8071	Medical laboratories	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8211	Elementary & secondary school	0	26	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8221	Colleges and universities	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8322	Individual & family services	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8412	Museums & art galleries	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8611	Business associations	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8661	Religious organizations	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8699	Membership organizations, nec	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8711	Engineering services	0	3	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8731	Commercial Physical Research	0	10	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8732	Commercial Nonphysical Res.	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8733	Noncommercial Res.Organization	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8734	Testing Laboratories	1	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8741	Management services	0	2	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8744	Facilities support services	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
8811	Private households	0	16	0	0	84	RESIDENTIAL
9111	Executive offices	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9211	Courts	0	1	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9223	Correctional institutions	0	6	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9511	Air, water, & solid waste mgm	0	6	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9512	Land, mineral, wildlife cons.	0	4	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9621	Regulation admin. of transport	0	20	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9641	Regul. of agricult. marketing	0	0	0	2	47	MISC. INDUSTRIAL COMMERCIAL
9711	National security	3	10	0	0	47	MISC. INDUSTRIAL COMMERCIAL
9999	Nonclassifiable establishments	0	99	2	120	47	MISC. INDUSTRIAL COMMERCIAL
	Total	**220**	**1,178**	**53**	**573**		

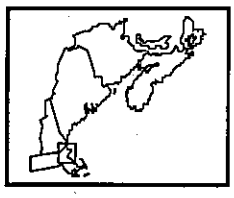
Note: NEC, not elsewhere classified

Appendix 8.
Maps of Major and Significant Minor Point Source Facilities in the Gulf of Maine Study Area

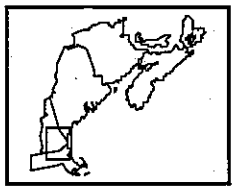
Panel Map Index 1



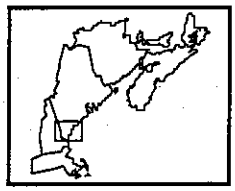
Panel 1. Cape Cod Bay. Page 8-3. There are four major facilities (two wastewater treatment plants and two industries) plotted on this panel map. Plymouth wastewater treatment plant (WWTP), a municipal facility (MA0100587), is located in the city of Plymouth, within Plymouth County, Massachusetts. It is the largest discharger shown on this map with a process flow of 807 million gallons per year.



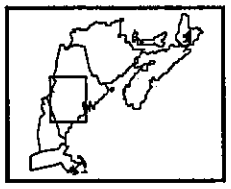
Panel 2. Massachusetts Bay. Page 8-5. There are 40 major facilities (19 wastewater treatment plants and 21 industries) plotted on this panel map. MWRA WWTP- Deer Island and Nut Island (MA102351), a municipal complex of facilities, is located in the city of Boston, within Suffolk County, Massachusetts. It is the largest discharger shown on this map with a process flow of 139,154 million gallons per year.



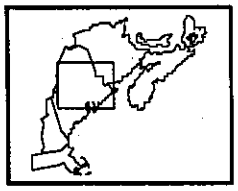
Panel 3. Merrimack River/Great Bay. Page 8-9. There are 86 major facilities (52 wastewater treatment plants and 34 industries) plotted on this panel map. Greater Lawrence S.D. WWTP (MA 0100447) is a municipal facility located in the city of North Andover, within Essex County, Massachusetts. It is the largest discharger shown on this map with a process flow of 13,502 million gallons per year.



Panel 4. Saco Bay/Casco Bay. Page 8-15. There are 20 major facilities (nine wastewater treatment plants and 11 industries) and one significant minor WWTP plotted on this panel map. The S.D. Warren Co. (ME0002321), a paper mill, is located in Westbrook, within Moostook County, Maine. It is the largest discharger shown on this map with a process flow of 678 million gallons per year.

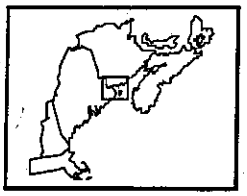


Panel 5. Sheepscot Bay/Muscongus Bay. Page 8-19. There are 35 major facilities (24 wastewater treatment plants and 11 industries) and two significant minors (facilities engaged in operating fish hatcheries or preserves) plotted on this panel map. International Paper Co. (ME0001937), a paper mill facility, is located in the city of Jay, within Franklin County, Maine. It is the largest discharger shown on this map with a process flow of 17,886 million gallons per year.

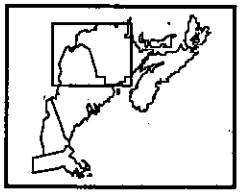


Panel 6. Penobscot Bay/Blue Hill Bay. Page 8-21. There are 22 major facilities (16 wastewater treatment plants and six industries) plotted on this panel map. Great Northern Paper Inc. (ME0000175), a paper mill, is located in the city of East Millinocket, within Penobscot County, Maine. It is the largest discharger shown on this map with a process flow of 7,766 million gallons per year.

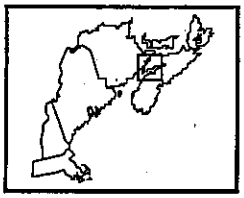
Panel Map Index 2



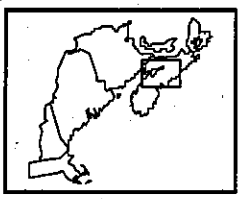
Panel 7. Narraguagus Bay to Magaguadavic Digdeguash/Maces Bay. Page 8-23. There are nine major facilities (three wastewater treatment plants and six industries) and five minor facilities (one wastewater treatment plant and four industries) plotted on this panel map. Sea Farms Canada Inc., (NBI379-90), a facility engaged in operating fish hatcheries or preserves, is located in St. George City, within Charlotte County, New Brunswick. It is the largest discharger shown on this map with a process flow of 7,221 million gallons per year.



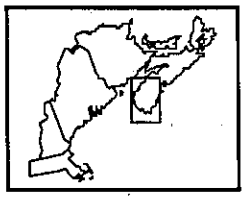
Panel 8. Saint John River. Page 8-25. There are 36 major facilities (14 wastewater treatment plants and 22 industries) and 14 significant minor facilities (10 wastewater treatment plants and four industries) plotted on this panel map. Irving Pulp & Paper Ltd. (NBI-0052), a pulp mill facility, is located in Saint John City, within Saint John County, New Brunswick. It is the largest discharger shown on the map with a process flow of 7,271 million gallons per year.



Panel 9. Fundy Shore to Cumberland Basin. Page 8 - 31. There are three major facilities (one wastewater treatment plant and two industries) and two significant minor facilities (one wastewater treatment plant and one industry) plotted on this panel map. Moncton Sewage Commission WWTP (NBS-12), a municipal facility, is located in the city of Moncton, within Westmoreland County, New Brunswick. It is the largest discharger shown on the map with a process flow of 6,387 million gallons per year.

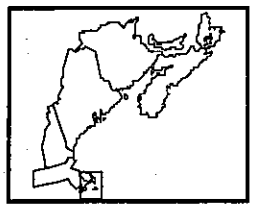


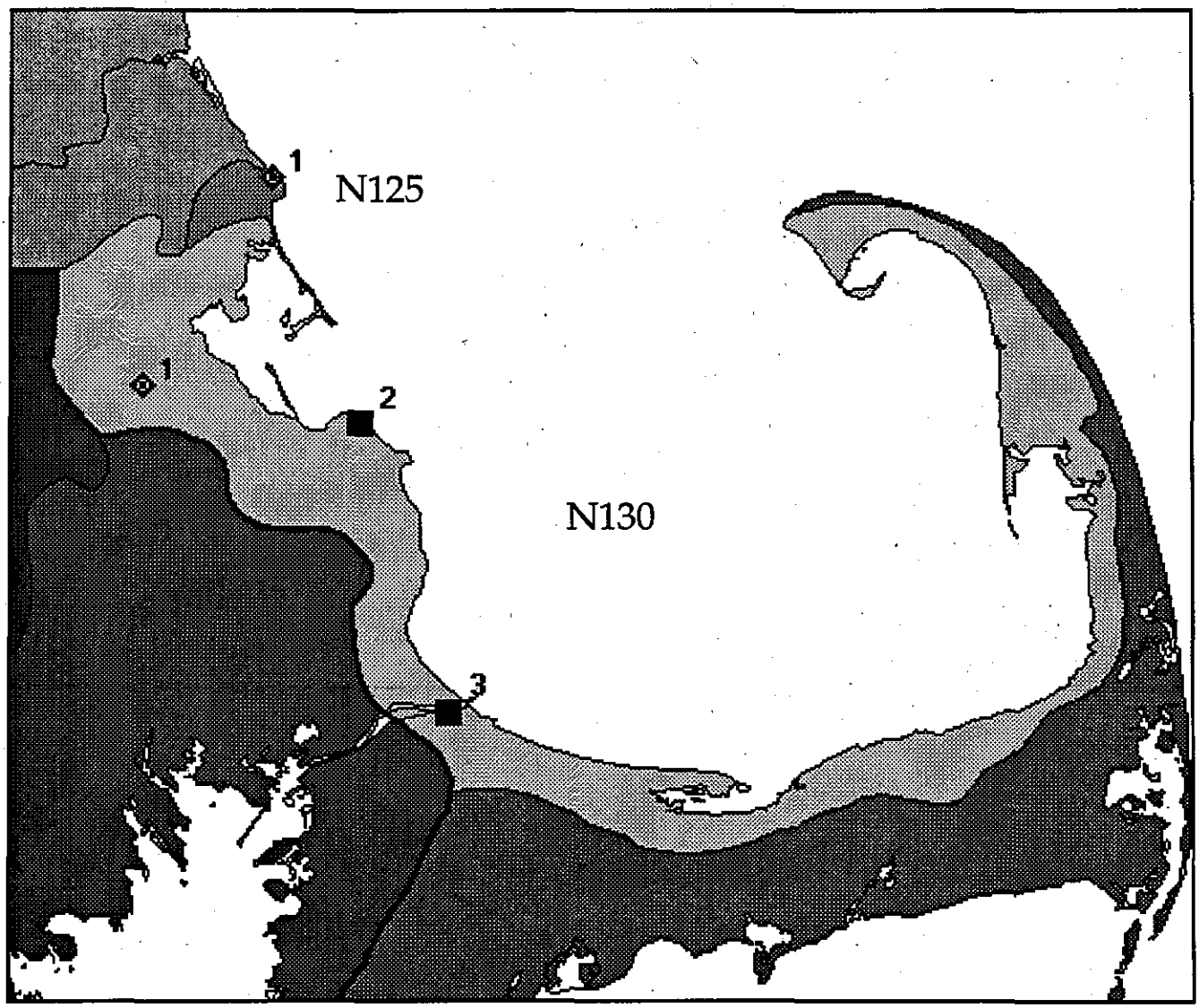
Panel 10. Minas/Cobequid Shore to Avon River. Page 8 - 33. There are 13 major facilities (one wastewater treatment plant and 12 industries) plotted on this panel map. Kings County Regional WWTP (NSWWTP48), a municipal facility, is located in the city of New Minas, within Kings County, Nova Scotia. It is the largest discharger shown on this map with a process flow of 794 million gallons per year.



Panel 11. Annapolis Basin to Yarmouth. Page 8 - 35. There are six major facilities (one wastewater treatment plant and five industries) plotted on this panel map. Yarmouth STP (NSWWTP01), a municipal facility, is located in the city of Yarmouth, within Yarmouth County, Nova Scotia. It is the largest discharger shown on this map with a process flow of 2,117 million gallons per year.

Panel 1 - Cape Cod Bay





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

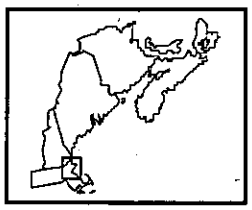
Panel 1 - Cape Cod Bay

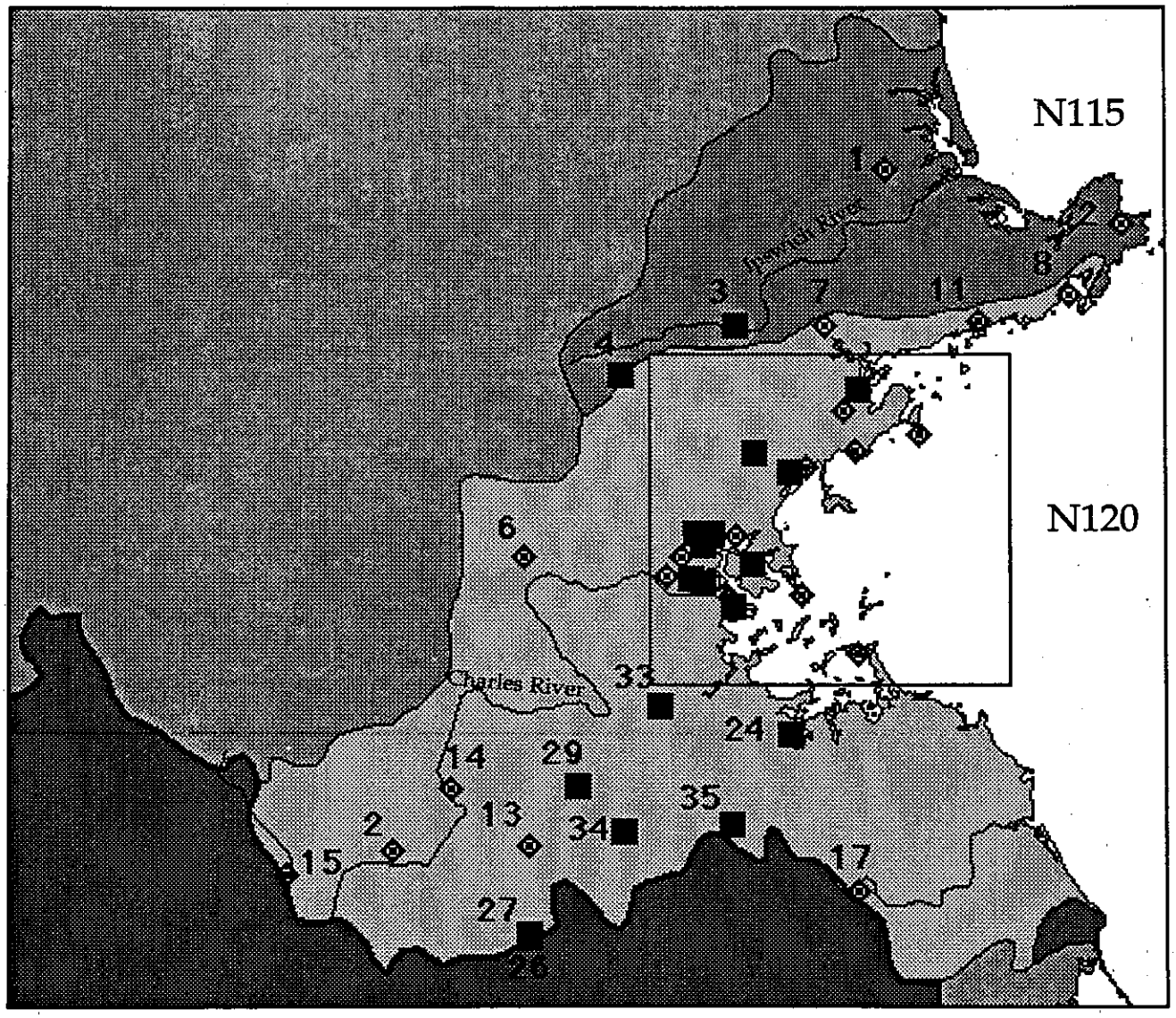
Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
01-N130-001	MA0100587	PLYMOUTH WWTP	M	4952	Sewerage systems	807	M
01-N130-002	MA0003557	BOSTON ED. - #1 PILGRIM PLANT	M	4911	Electric services	4	B
01-N130-003	MA0004928	CANAL ELEC. CO.	M	4911	Electric services	154	M
01-N125-001	MA0101737	MARSHFIELD WWTP	M	4952	Sewerage systems	388	M

Notes: 1) The Map Ref. # refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)]. 2) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 3) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 4) A @ in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 5) Annual process flow: 0 = process flow estimated to be zero for this facility; - = no data available for this facility.

Panel 2 - Massachusetts Bay





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 2 - Massachusetts Bay

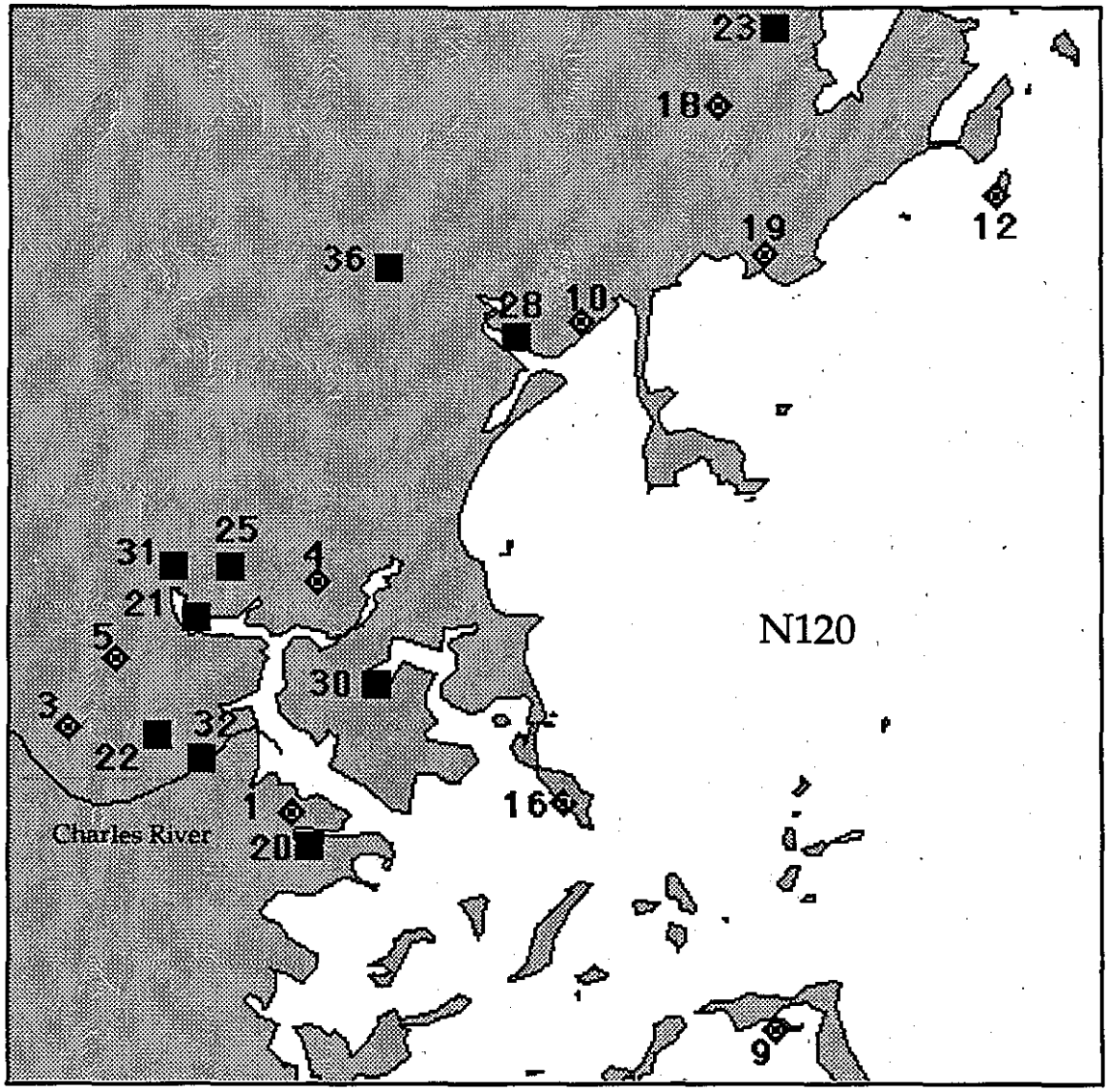
Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
02-N120-001	MA0101192	BOSTON WTR. & SEW. COMM. WWTP	M	4952	Sewerage systems	175	T
02-N120-002	MA0102598	CHARLES RIVER P C D WWTP	M	4952	Sewerage systems	1,258	M
02-N120-003	MA0101974	CITY OF CAMBRIDGE WWTP	M	4952	Sewerage systems	175	T
02-N120-004	MA0101877	CITY OF CHELSEA WWTP	M	4952	Sewerage systems	175	T
02-N120-005	MA0101982	CITY OF SOMERVILLE WWTP	M	4952	Sewerage systems	175	T
02-N120-006	MA0100668	CONCORD WWTP	M	4952	Sewerage systems	438	P
02-N120-007	MA0101672	DANVERS SEW. LIFT STA. WWTP	M	4952	Sewerage systems	175	T
02-N120-008	MA0100625	GLOUCESTER WWTP	M	4952	Sewerage systems	1,214	M
02-N120-009	MA0101231	HULL WWTP	M	4952	Sewerage systems	617	M
02-N120-010	MA0100552	LYNN WWTP	M	4952	Sewerage systems	9,985	M
02-N120-011	MA0100871	MANCHESTER WWTP	M	4952	Sewerage systems	210	M
02-N120-012	MA0100374	MARBLEHEAD WTR. & SEW. COMM. WWTP	M	4952	Sewerage systems	1,460	O
02-N120-013	MA0102253	MCI NORFOLK - WALPOLE DEPT. COR. WWTP	M	4952	Sewerage systems	113	M
02-N120-014	MA0100978	MEDFIELD WWTP	M	4952	Sewerage systems	110	O
02-N120-015	MA0100579	MILFORD WWTP	M	4952	Sewerage systems	442	O
02-N120-016	MA0102351	MWRA WWTP - DEER ISLAND & NUT ISLAND*	M	4952	Sewerage systems	139,154	M
02-N120-017	MA0101923	ROCKLAND WWTP	M	4952	Sewerage systems	523	M
02-N120-018	MA0100501	SOUTH ESSEX S D WWTP	M	4952	Sewerage systems	10,103	M
02-N120-019	MA0101907	SWAMPSCOTT WWTP	M	4952	Sewerage systems	919	M
02-N120-020	MA0004731	BOSTON EDISON CO. - L STREET STA.	M	4911	Electric services	394	M
02-N120-021	MA0004740	BOSTON EDISON CO. - MYSTIC STA.	M	4911	Electric services	152	M
02-N120-022	MA0004898	CAMBRIDGE ELEC. LIGHT CO. KENDAL SQUARE	M	4911	Electric services	0	B
02-N120-023	MA0005096	NEW ENGLAND PWR. CO. SALEM HBR. STA.	M	4911	Electric services	591	M
02-N120-024	MA0031551	CLEAN HARBORS OF BRAINTREE, INC.	M	2899	Chemical preparations, nec	-	-
02-N120-025	MA0000833	EXXON CO. USA EVERETT TERM.	M	5171	Petroleum bulk stat. & term.	4	B
02-N120-026	MA0004111	FOXBORO CO. - COCASSETT PLANT	M	3471	Plating & polishing	0	M
02-N120-027	MA0004120	FOXBORO CO. - NEPONSET PLANT	M	3471	Plating & polishing	0	M
02-N120-028	MA0003905	GENERAL ELEC. CO.	M	3511	Turbines & turbine generator sets	320	B
02-N120-029	MA0029262	GRANT GEAR INC.	M	3566	Speed changers, drives & gears		M
02-N120-030	MA0004006	MOBIL OIL CORP.	M	5171	Petroleum bulk stat. & term.	127	M
02-N120-031	MA0000809	MONSANTO CORP.	M	2819	Industrial inorganic chemicals, nec	35	M
02-N120-032	MA0103128	MWRA - REVERE SUGAR ASBESTOS RMV	M	1795	Wrecking & demolition work	-	-
02-N120-033	MA0033383	PATRIOT PAPER CORP.	M	2621	Paper mills	-	-
02-N120-034	MA0000884	PLYMOUTH RUBBER CO. INC.	M	3069	Fabricated rubber products, nec	0	M
02-N120-035	MA0021415	RANDOLPH - HOLBROOK WSTP	@	4941	Water supply	1,278	O
02-N120-036	MA0028193	RESCO RESOURCE RECOV. FAC.	M	4953	Refuse systems	0	M
02-N115-001	MA0100609	IPSWICH WWTP	M	4952	Sewerage systems	333	M
02-N115-002	MA0100145	ROCKPORT WWTP	M	4952	Sewerage systems	208	M
02-N115-003	MA0001180	BOSTIK DIV. EMHART INDS.	M	2891	Adhesives & sealants	267	M
02-N115-004	MA0005304	OLIN CORP.	M	2869	Industrial organic chemicals, nec	7	P

* The Massachusetts Water Resources Authority (MWRA) is permitted to discharge affluent from the two primary primary treatment plants, Deer Island and Nut Island. The location of the authority is shown on the map as the Deer Island Treatment Plant location. The Nut Island Treatment Plant is not shown on this map.

Notes: 1) The Map Ref. # refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)]. 2) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 3) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 4) A @ in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 5) Annual process flow: 0 = process flow estimated to be zero for this facility; - = no data available for this facility.

Panel 2a - Massachusetts Bay Inset

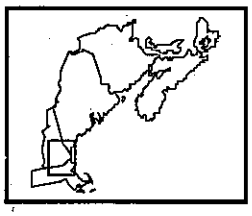


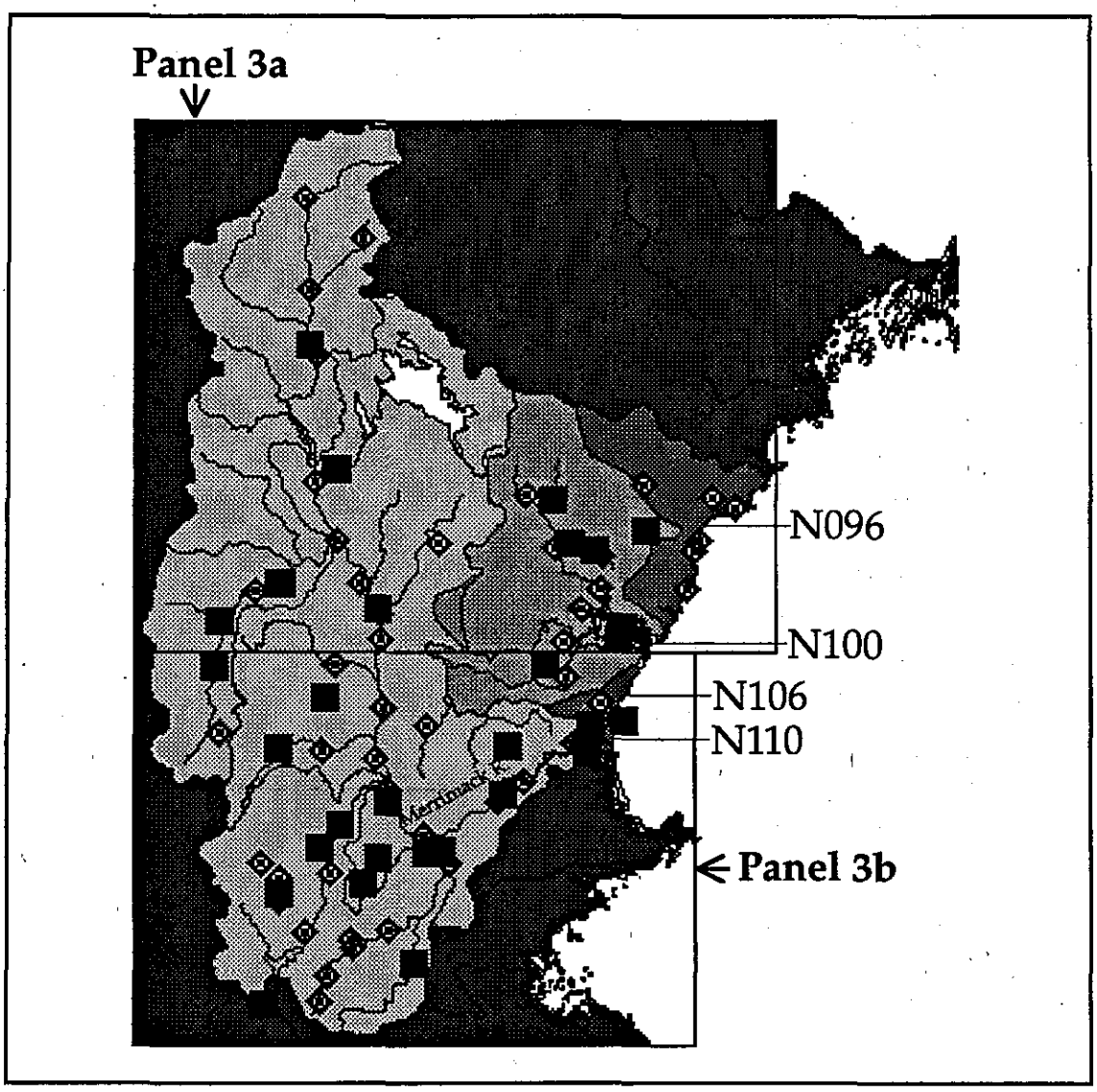
Legend

■ - Industrial facility

◆ - Wastewater treatment plant (WWTP)

Panel 3 - Merrimack River /Great Bay





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 3 - Merrimack River/Great Bay

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
03-N110-001	MA0101745	AMESBURY WTR. POLL ABAT FAC. WWTP	M	4952	Sewerage systems	582	M
03-N110-002	NH0100005	ASHLAND WWTP	M	4952	Sewerage systems	30	M
03-N110-003	MA0100013	AYER WWTP	M	4952	Sewerage systems	499	M
03-N110-004	MA0101711	BILLERICA WWTP	M	4952	Sewerage systems	273	M
03-N110-005	NH0100901	CONCORD - HALL STREET WWTP	M	4952	Sewerage systems	2,701	M
03-N110-006	NH0100331	CONCORD - PENACOOK WWTP	M	4952	Sewerage systems	210	M
03-N110-007	NH0100056	DERRY WWTP	M	4952	Sewerage systems	1,124	M
03-N110-008	MA0100986	EAST FITCHBURG WWTP	M	4952	Sewerage systems	3,011	M
03-N110-009	NH0100960	FRANKLIN REG. WWTP	M	4952	Sewerage systems	1,931	M
03-N110-010	NH0100081	GOFFSTOWN WWTP	M	4952	Sewerage systems	-	-
03-N110-011	MA0100447	GREATER LAWRENCE S D WWTP	M	4952	Sewerage systems	13,502	M
03-N110-012	MA0101621	HAVERHILL WWTP	M	4952	Sewerage systems	4,010	M
03-N110-013	NH0100102	HENNIKER WWTP	M	4952	Sewerage systems	57	M
03-N110-014	NH0100129	HOOKSETT WWTP	M	4952	Sewerage systems	190	M
03-N110-015	MA0101788	HUDSON WWTP	M	4952	Sewerage systems	756	M
03-N110-016	MA0100617	LEOMINSTER DPW WWTP	M	4952	Sewerage systems	2,269	M
03-N110-017	NH0100706	LINCOLN WWTP	M	4952	Sewerage systems	240	M
03-N110-018	MA0100633	LOWELL REG. WTR. & W W UTIL. WWTP	M	4952	Sewerage systems	9,508	M
03-N110-019	NH0100447	MANCHESTER WWTP	M	4952	Sewerage systems	7,303	M
03-N110-020	MA0100498	MARLBOROUGH EASTERLY WWTP	M	4952	Sewerage systems	1,138	M
03-N110-021	MA0100480	MARLBOROUGH WESTERLY WWTP	M	4952	Sewerage systems	582	M
03-N110-022	MA0101001	MAYNARD WWTP	M	4952	Sewerage systems	338	M
03-N110-023	NH0100161	MERRIMACK WWTP	M	4952	Sewerage systems	2,161	M
03-N110-024	NH0100471	MILFORD WWTP	M	4952	Sewerage systems	430	M
03-N110-025	MA0100404	MWRA - CLINTON WWTP	M	4952	Sewerage systems	1,000	M
03-N110-026	NH0100170	NASHUA WWTP	M	4952	Sewerage systems	2,461	M
03-N110-027	MA0101427	NEWBURYPORT WWTP	M	4952	Sewerage systems	952	M
03-N110-028	NH0100650	PETERBOROUGH WWTP	M	4952	Sewerage systems	144	M
03-N110-029	NH0100986	PITTSFIELD WWTP	M	4952	Sewerage systems	36	M
03-N110-030	NH0100242	PLYMOUTH VILLAGE WWTP	M	4952	Sewerage systems	131	M
03-N110-031	MA0102873	SALISBURY WWTP	M	4952	Sewerage systems	151	M
03-N110-032	NH0100714	SUNCOOK WWTP	M	4952	Sewerage systems	261	M
03-N110-033	NH0100781	WATERVILLE VALLEY WWTP	M	4952	Sewerage systems	75	M
03-N110-034	MA0101281	WEST FITCHBURG WWTP	M	4952	Sewerage systems	1,733	M
03-N110-035	MA0100412	WESTBOROUGH WWTP	M	4952	Sewerage systems	478	O
03-N110-036	NH0021652	BIO - ENERGY CORP.	M	4911	Electric services	244	B
03-N110-037	NH0022021	BRIDGEWATER PWR. CO.	M	4911	Electric services	0	M
03-N110-038	NH0001465	P. S. OF NH - MERRIMACK STA.	M	4911	Electric services	390	M
03-N110-039	MA0001261	A T & T CO.	M	3661	Telephone & telegraph apparatus	71	B
03-N110-040	MA0000281	GOULD INC.	M	3613	Switchgear & switchboard apparatus	5	M
03-N110-041	NH0001325	GTE SYLVANIA INC. PRODS. CORP.	M	3641	Electric lamps	0	M
03-N110-042	NH0001376	HITCHINER MFG. CO. INC.	M	3324	Steel investment foundries	79	M
03-N110-043	MA0004561	HOLLINGSWORTH & VOSE CO.	M	2621	Paper mills	694	M
03-N110-044	MA0005185	JAMES RIVER PAPER CO. - PEPPEREL DIV.	M	2621	Paper mills	465	T
03-N110-045	NH0000230	MONADNOCK PAPER MILLS, INC.	M	2621	Paper mills	239	M
03-N110-046	MA0005088	NEW ENGLAND PLATING CO.	M	3471	Plating & polishing	50	M
03-N110-047	MA0000442	NOVACOR CHEMICALS INC.	M	2821	Plastics materials & resins	1	M

continued on next page

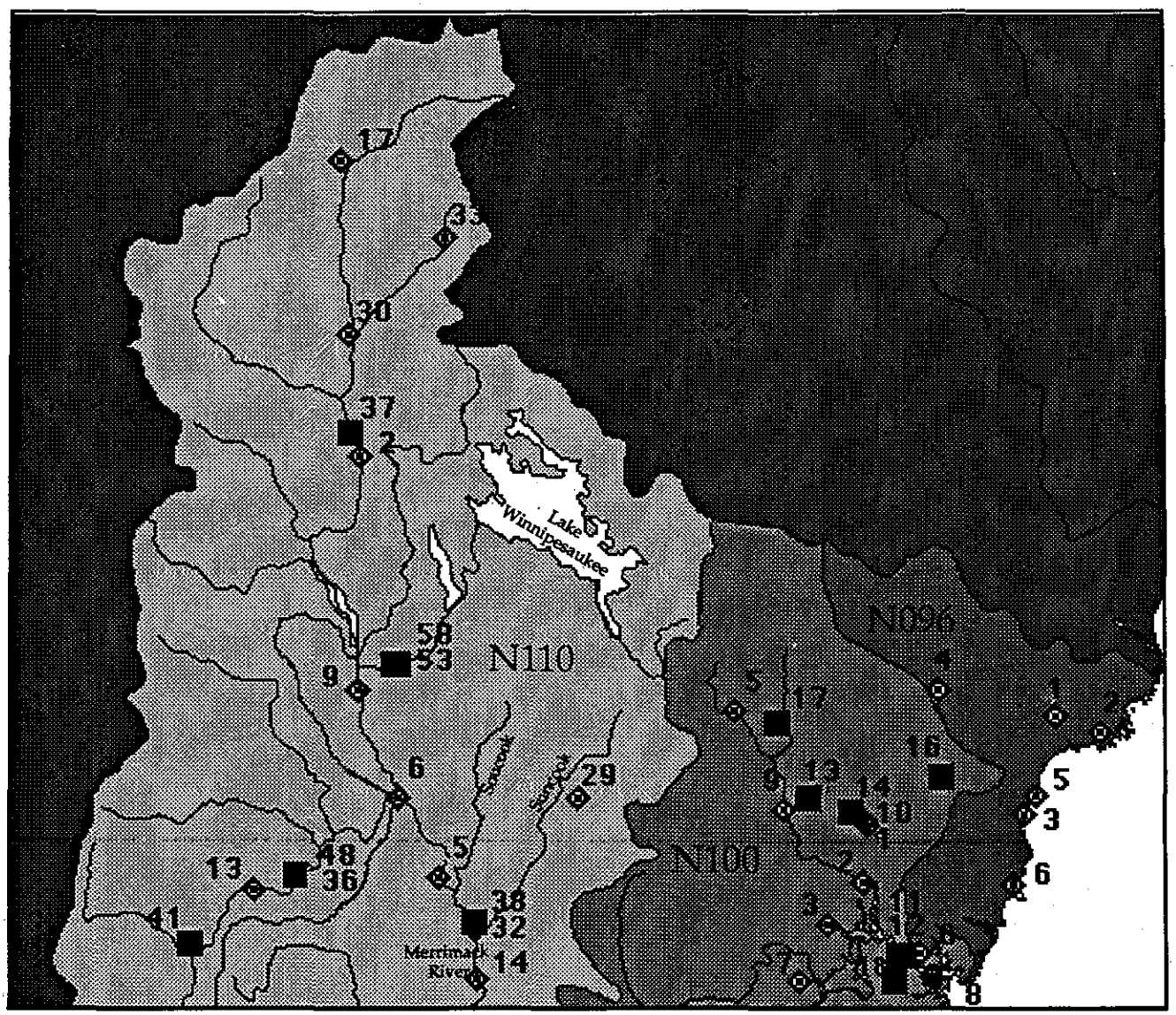
Panel 3 - Merrimack River/Great Bay

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
03-N110-048	NH0001511	PAPERTECH CORP.	M	2611	Pulp mills	25	M
03-N110-049	NH0020788	PROCESS ENGR. INC.	M	3441	Fabricated structural metal	0	M
03-N110-050	MA0001511	RAYTHEON CO. (WAYLAND)	M	3625	Relays & industrial controls	38	M
03-N110-051	MA0001414	RAYTHEON CORP.	M	3672	Printed circuit boards	25	M
03-N110-052	MA0025241	SILICON TRANSISTOR CORP.	M	3674	Semiconductors & related devices	0	M
03-N110-053	NH0001015	SURRETTE AMERICA. DIV. OF ATL. BATTERY	M	3691	Storage batteries	0	M
03-N110-054	NH0090077	U. S. A. F. NEW BOSTON A. F. S.	M	9711	National security	4	B
03-N110-055	MA0004936	VERYFINE PRODS. INC.	M	2033	Canned fruits & vegetables	57	M
03-N110-056	NH0000591	W. R. GRACE & CO. GTE	M	2899	Chemical preparations, nec	122	M
03-N110-057	MA0024414	WESTFORD ANODIZING CORP.	M	3471	Plating & polishing	4	M
03-N110-058	NH0001023	WYMAN - GORDON INVESTMENT CASTING CO.	M	3621	Motors & generators	6	M
03-N106-001	NH0100625	HAMPTON WWTP	M	4952	Sewerage systems	774	M
03-N106-002	NH0020338	P. S. OF NH - SEABROOK STA.	M	4911	Electric services	358	M
03-N106-003	NH0001091	K. J. QUINN & CO. INC.	M	2821	Plastics materials & resins	1	M
03-N106-004	NH0022306	MORTON INTERNAT. INC.	M	2821	Plastics materials & resins	29	B
03-N100-001	ME0101397	BERWICK SEW. DIST. WWTP	M	4952	Sewerage systems	69	M
03-N100-002	NH0101311	DOVER - HUCKLEBERRY HILL WWTP	M	4952	Sewerage systems	419	M
03-N100-003	NH0100455	DURHAM WWTP	M	4952	Sewerage systems	708	M
03-N100-004	NH0100871	EXETER WWTP	M	4952	Sewerage systems	756	M
03-N100-005	NH0100854	FARMINGTON WWTP	M	4952	Sewerage systems	79	M
03-N100-006	ME0100285	KITTERY WWTP	M	4952	Sewerage systems	453	M
03-N100-007	NH0100196	NEWMARKET WWTP	M	4952	Sewerage systems	199	M
03-N100-008	NH0100234	PORTSMOUTH - PIERCE ISLAND WWTP	M	4952	Sewerage systems	1,011	M
03-N100-009	NH0100668	ROCHESTER WWTP	M	4952	Sewerage systems	1,507	M
03-N100-010	NH0100277	SOMERSWORTH WWTP	M	4952	Sewerage systems	400	M
03-N100-011	NH0001601	P. S. OF NH - NEWINGTON STA.	M	4911	Electric services	24	M
03-N100-012	NH0001473	P. S. OF NH - SCHILLER STA.	M	4911	Electric services	90	B
03-N100-013	NH0021512	KANE GONIC BRICK CORP.	M	3251	Brick & structural clay tile	0	B
03-N100-014	NH0021521	KANE GONIC BRICK CORP.	M	1522	Residential construction, nec	42	T
03-N100-015	NH0022055	MILLIPORE OF NEW HAMPSHIRE, INC.	M	8734	Testing Laboratories	0	B
03-N100-016	ME0022861	PRATT & WHITNEY	M	3724	Aircraft engines & engine parts	50	P
03-N100-017	NH0000469	TILOTSON RUBBER CO. INC.	M	2822	Synthetic rubber	0	M
03-N100-018	NH0090000	U. S. A. F. PEASE A. F. B.	M	9711	National security	123	M
03-N096-001	ME0100935	KENNEBUNK SEW. DIST. WWTP	M	4952	Sewerage systems	331	M
03-N096-002	ME0101184	KENNEBUNKPORT WWTP	M	4952	Sewerage systems	94	M
03-N096-003	ME0100986	OGUNQUIT SEW. DIST. WWTP	M	4952	Sewerage systems	52	M
03-N096-004	ME0100617	SANFORD SEW. DIST. WWTP	M	4952	Sewerage systems	1,090	M
03-N096-005	ME0100790	WELLS SAN. DIST. WWTP	M	4952	Sewerage systems	216	M
03-N096-006	ME0101222	YORK SEW. DIST. WWTP	M	4952	Sewerage systems	414	M

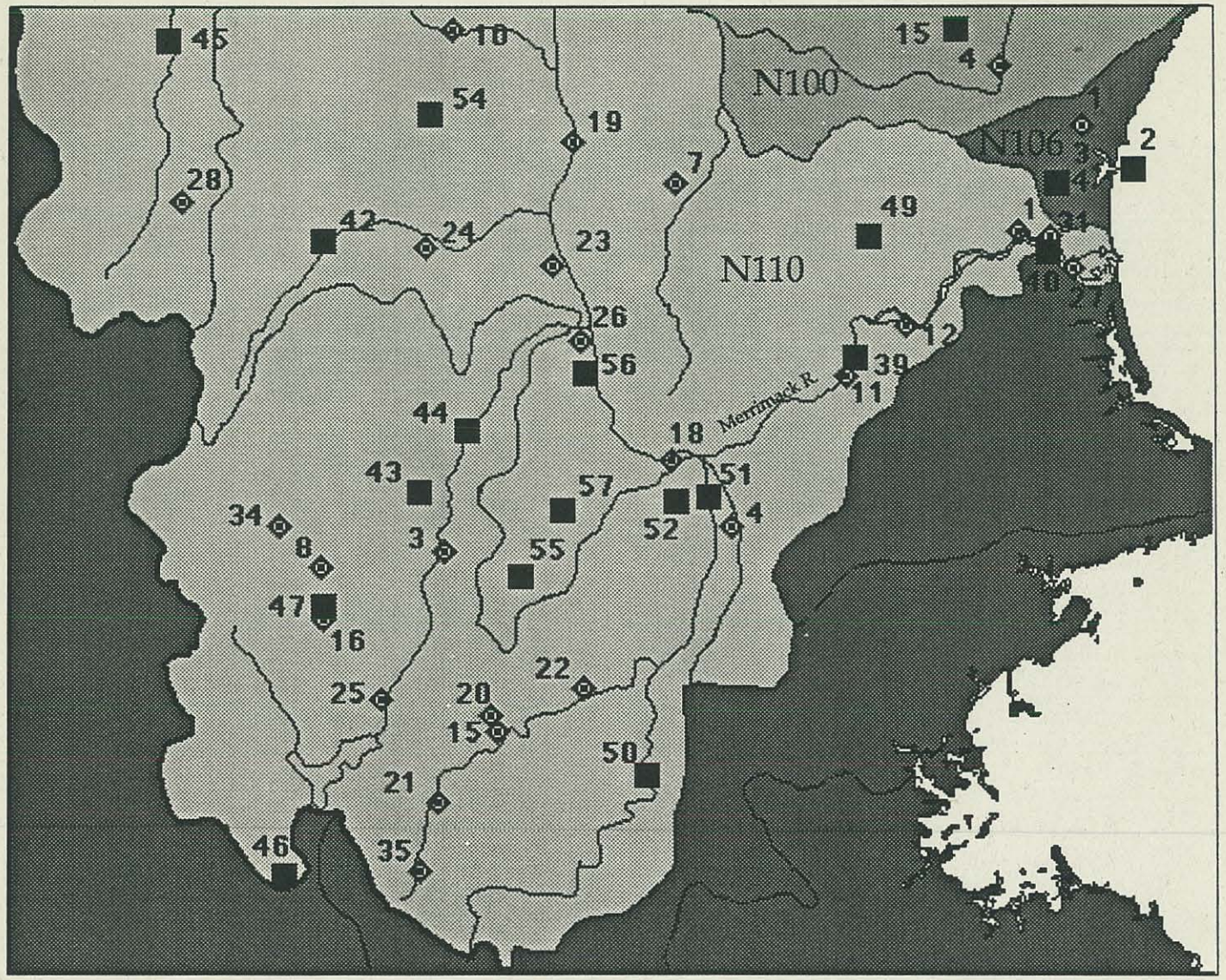
Notes: 1) The Map Ref. # refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)]. 2) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 3) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 4) A @ in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 5) Annual process flow: 0 = process flow estimated to be zero for this facility; - = no data available for this facility.

Panel 3a - Merrimack River/Great Bay Inset



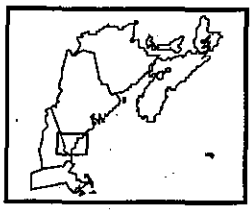
Legend
■ - Industrial facility
◆ - Wastewater treatment plant (WWTP)

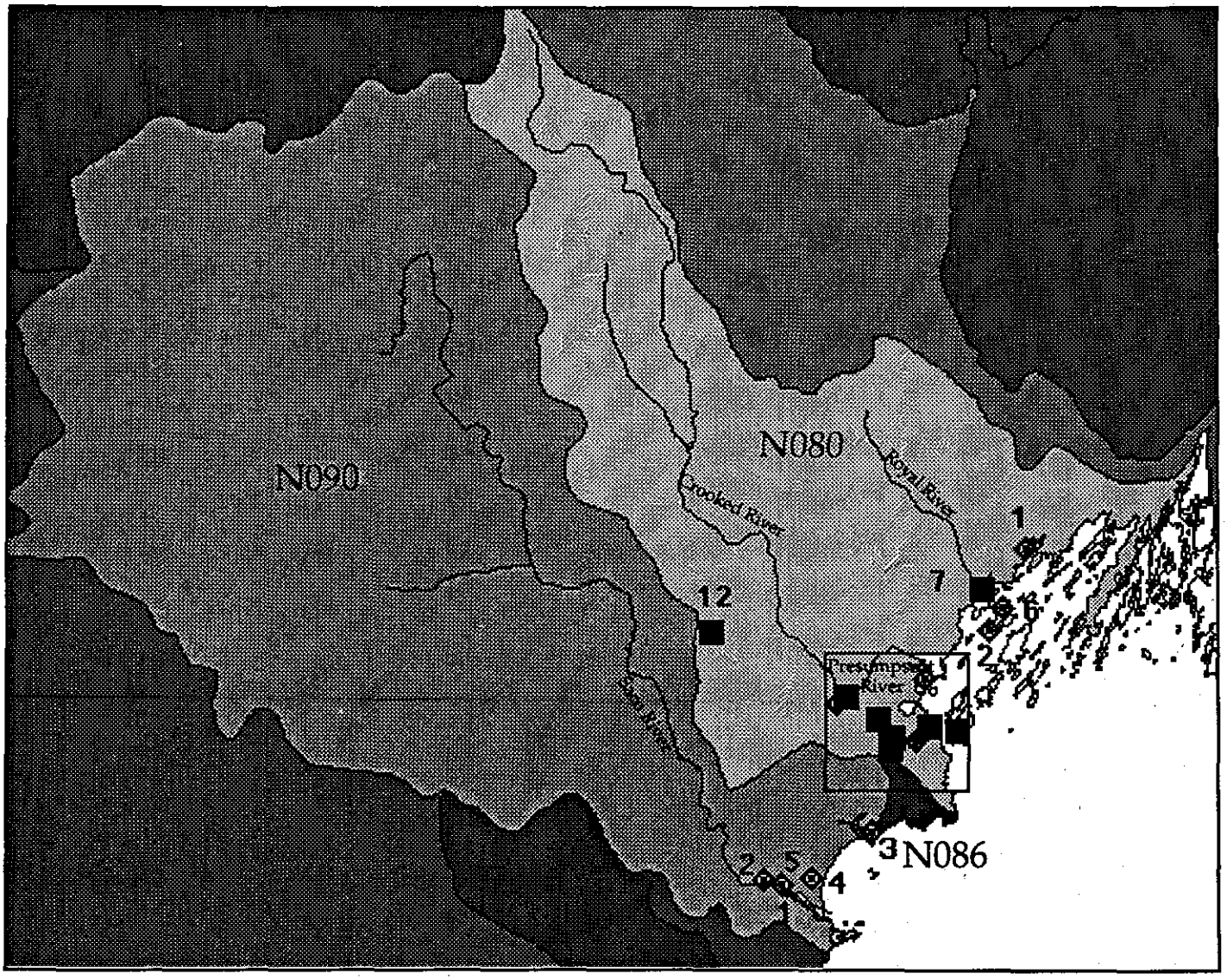
Panel 3b - Merrimack River/Great Bay Inset



Legend
■ - Industrial facility
◆ - Wastewater treatment plant (WWTP)

Panel 4 - Saco Bay/Casco Bay





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 4 - Casco Bay/Saco Bay

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
04-N090-001	ME0100048	BIDDEFORD WWTP	M	4952	Sewerage systems	105	M
04-N090-002	ME0101117	SACO WWTP	M	4952	Sewerage systems	691	M
04-N090-003	ME0102059	SCARBOROUGH SAN. DIST. WWTP	M	4952	Sewerage systems	402	M
04-N090-004	ME0101524	TOWN OF OLD ORCHARD BEACH WWTP	M	4952	Sewerage systems	1,095	O
04-N080-001	ME0101036	FREEPORT SEW. DIST. WWTP	M	4952	Sewerage systems	190	M
04-N080-002	ME0102075	PORTLAND WTR. DIST. WWTP	M	4952	Sewerage systems	3,428	M
04-N080-003	ME0100633	SOUTH PORTLAND WWTP	M	4952	Sewerage systems	2,172	M
04-N080-004	ME0100218	TOWN OF FALMOUTH WWTP	M	4952	Sewerage systems	142	O
04-N080-005	ME0100846	WESTBROOK WWTP	@	4952	Sewerage systems	952	M
04-N080-006	ME0100765	YARMOUTH WWTP	M	4952	Sewerage systems	55	O
04-N080-007	ME0000272	CENTRAL ME PWR. - WYMAN STA.	M	4911	Electric services	482	B
04-N080-008	ME0001821	B P OIL CO. INC.	M	5171	Petroleum bulk stat. & term.	0	P
04-N080-009	ME0021571	CLEAN HARBORS - WILLIAMS TERM.	M	5171	Petroleum bulk stat. & term.	0	T
04-N080-010	ME0022314	CUMBERLAND FARMS, INC.	M	5171	Petroleum bulk stat. & term.	0	P
04-N080-011	ME0021016	GETTY TERMS. CORP.	M	5171	Petroleum bulk stat. & term.	0	P
04-N080-012	ME0002399	GTE PRODS. CORP.	M	3496	Miscellaneous fabricated wire products	11	B
04-N080-013	ME0002372	KOCH FUELS INC.	M	5171	Petroleum bulk stat. & term.	0	P
04-N080-014	ME0000485	MOBIL PORTLAND TERM.	M	5172	Petroleum products, nec	0	P
04-N080-015	ME0001775	NORTHEAST PETROLEUM	M	5171	Petroleum bulk stat. & term.	0	T
04-N080-016	ME0002321	S. D. WARREN CO.	M	2621	Paper mills	6,781	B
04-N080-017	ME0002291	STAR ENTERPRISE	M	5171	Petroleum bulk stat. & term.	0	P

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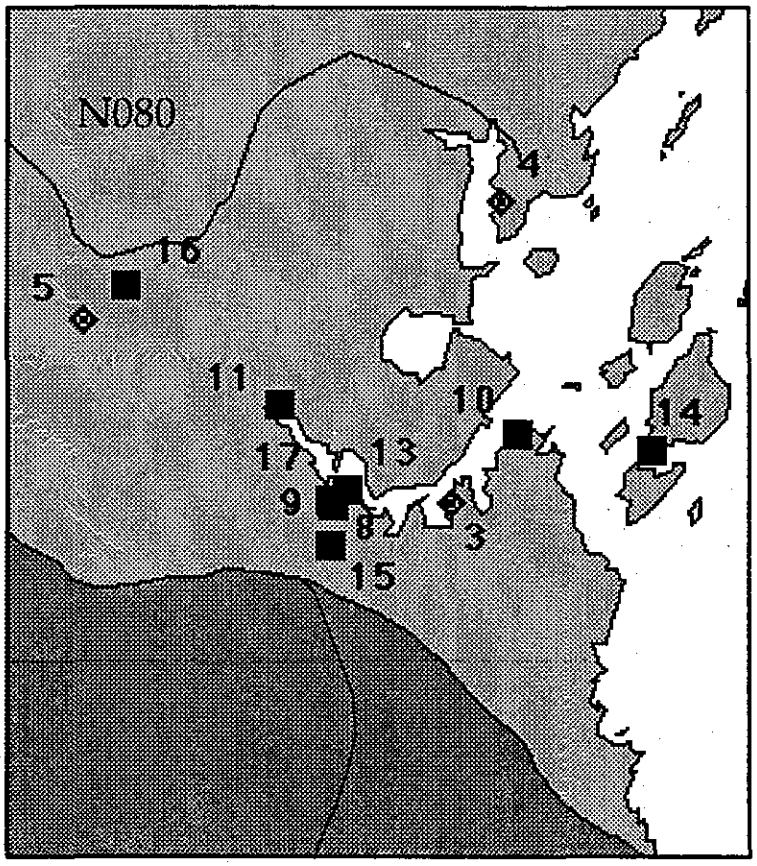
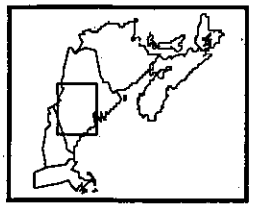
Panel 4a - Casco Bay Inset

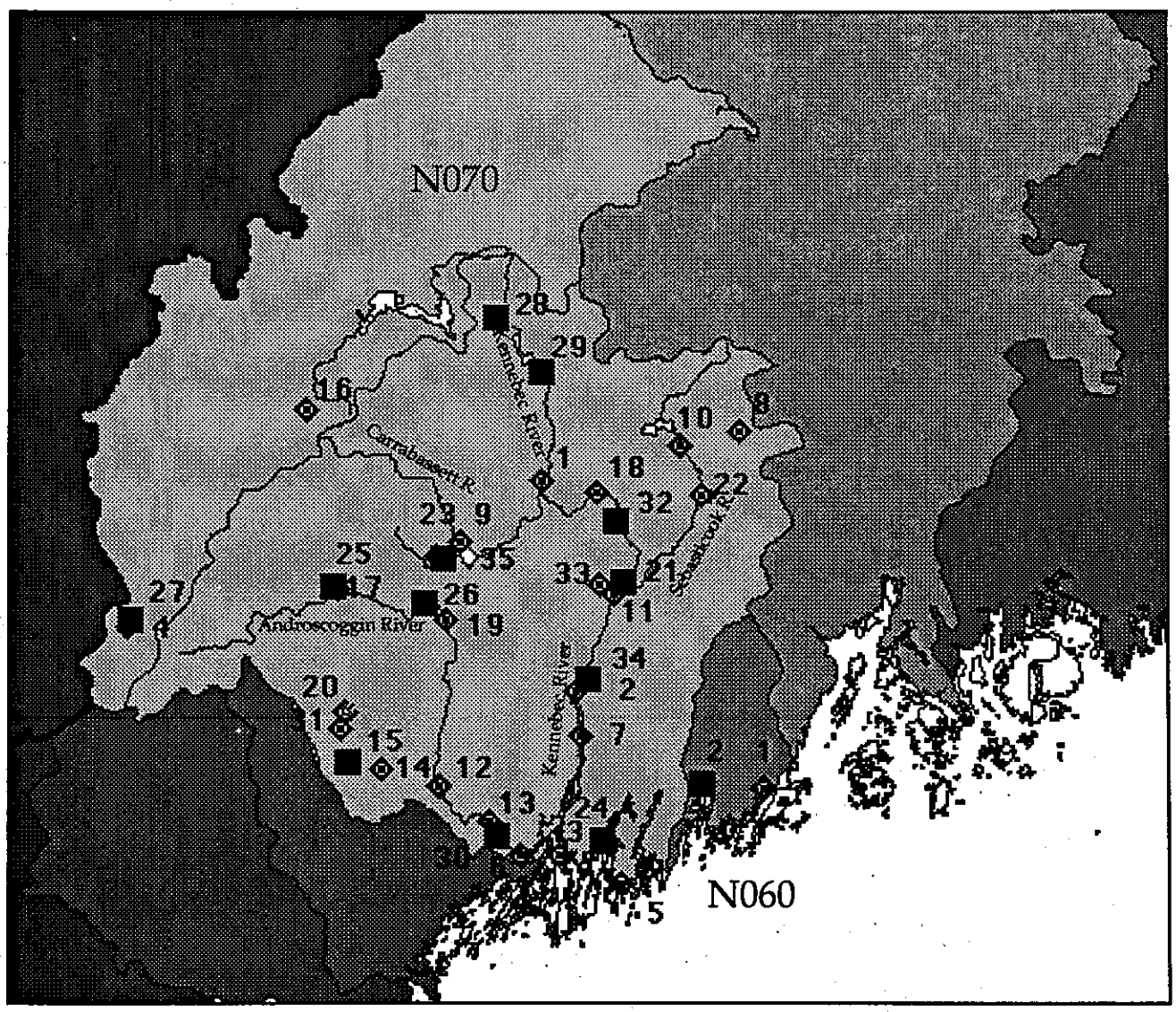


Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 5 - Sheepscot Bay/ Muscongus Bay





Legend
■ - Industrial facility
◆ - Wastewater treatment plant (WWTP)

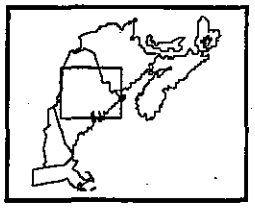
Panel 5 - Sheepscot Bay/Muscongus Bay

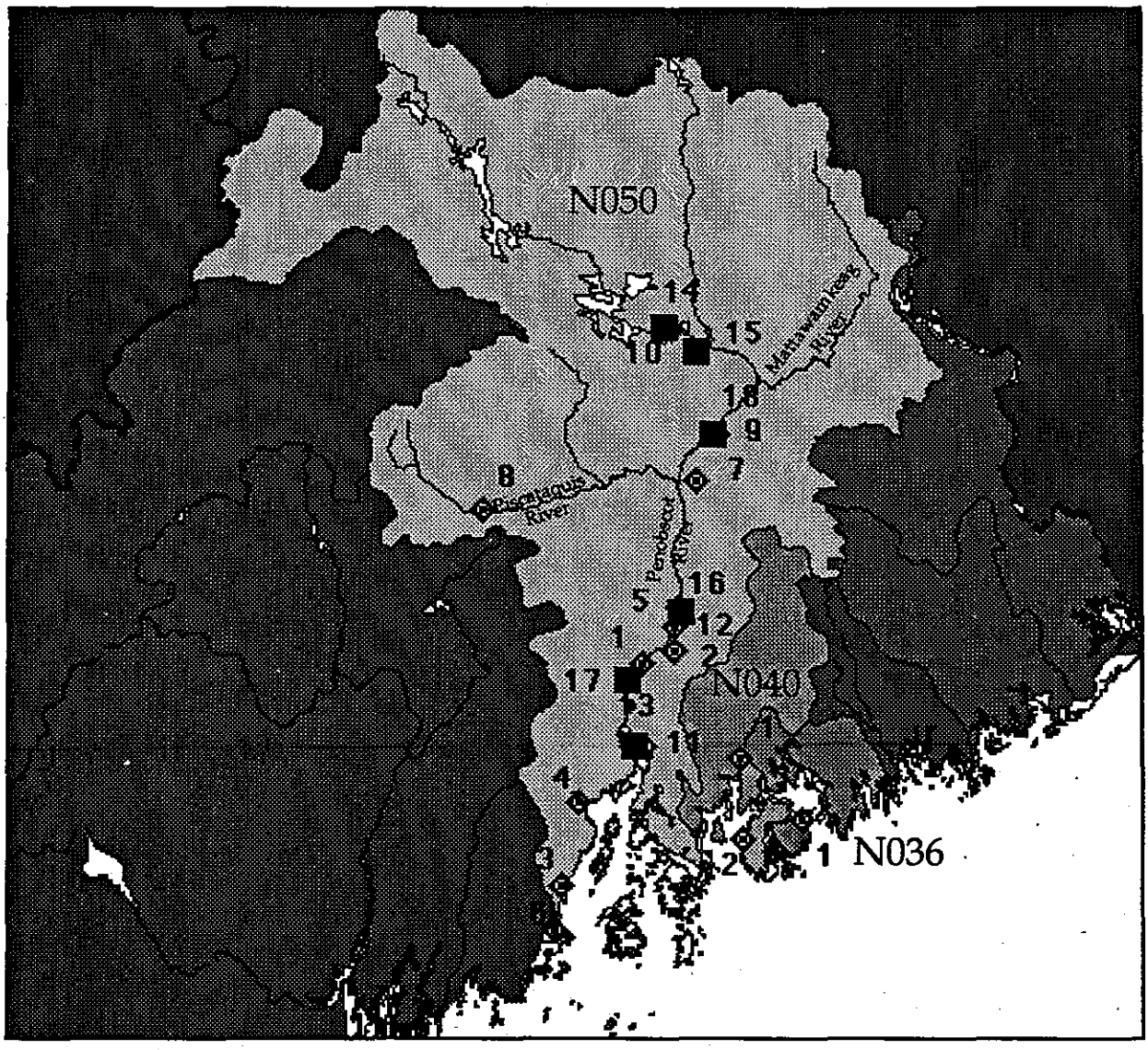
Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
05-N070-001	ME0101389	ANSON - MADISON SAN. DIST. WWTP	M	4952	Sewerage systems	560	M
05-N070-002	ME0100013	AUGUSTA WWTP	M	4952	Sewerage systems	1,535	M
05-N070-003	ME0100021	BATH WWTP	M	4952	Sewerage systems	796	M
05-N070-004	NH0100013	BERLIN WWTP	M	4952	Sewerage systems	776	M
05-N070-005	ME0100064	BOOTHBAY HARBOR SEW. DIST. WWTP	M	4952	Sewerage systems	175	O
05-N070-006	ME0100102	BRUNSWICK SEW. DIST. WWTP	M	4952	Sewerage systems	970	M
05-N070-007	ME0101702	CITY OF GARDINER WWTP	M	4952	Sewerage systems	434	M
05-N070-008	ME0100153	CORINNA SEW. DIST. WWTP	M	4952	Sewerage systems	58	M
05-N070-009	ME0101249	FARMINGTON WWTP	M	4952	Sewerage systems	167	M
05-N070-010	ME0101443	HARTLAND WWTP	M	4952	Sewerage systems	416	O
05-N070-011	ME0100854	KENNEBEC SAN. DIST. WWTP	M	4952	Sewerage systems	3,954	M
05-N070-012	ME0101478	LEWISTON AUBURN WWTP	M	4952	Sewerage systems	3,947	M
05-N070-013	ME0100307	LISBON WWTP	M	4952	Sewerage systems	296	M
05-N070-014	ME0100391	MECHANIC FALLS WWTP	M	4952	Sewerage systems	179	P
05-N070-015	ME0100951	PARIS UTIL. DIST. WWTP	M	4952	Sewerage systems	329	O
05-N070-016	ME0100579	RANGELEY WWTP	M	4952	Sewerage systems	32	M
05-N070-017	ME0100552	RUMFORD - MEXICO WWTP	M	4952	Sewerage systems	465	M
05-N070-018	ME0100625	SKOWHEGAN WWTP	M	4952	Sewerage systems	230	O
05-N070-019	ME0100315	TOWN OF LIVERMORE FALLS WWTP	M	4952	Sewerage systems	478	O
05-N070-020	ME0100455	TOWN OF NORWAY WWTP	M	4952	Sewerage systems	128	M
05-N070-021	ME0100463	TOWN OF OAKLAND WWTP	M	4952	Sewerage systems	166	M
05-N070-022	ME0100528	TOWN OF PITTSFIELD WWTP	M	4952	Sewerage systems	364	M
05-N070-023	ME0101915	TOWN OF WILTON WWTP	M	4952	Sewerage systems	68	M
05-N070-024	ME0002569	MAINE YANKEE ATOMIC PWR. CO.	M	4911	Electric services	99	B
05-N070-025	ME0002054	BOISE CASCADE CORP.	M	2621	Paper mills	11,924	P
05-N070-026	ME0001937	INTERNAT. PAPER CO.	M	2621	Paper mills	17,886	P
05-N070-027	NH0000655	JAMES RIVER - BERLIN	M	2611	Pulp mills	9,447	M
05-N070-028	ME0110132	KENNEBEC AQUACULTURE	@	0921	Fish hatcheries & preserves	1,260	M
05-N070-029	ME0110159	MARICULTURE PROD. LTD. - BINGHAM HATCH	@	0921	Fish hatcheries & preserves	2,338	M
05-N070-030	ME0002071	PEJEPSCOT INDUSTRIAL PARK	M	2611	Pulp mills	12	M
05-N070-031	ME0002526	ROBINSON MFG. OXFORD	M	2231	Broadwoven fabric mills, wool	64	M
05-N070-032	ME0021521	S.D. WARREN CO.	M	2621	Paper mills	8,878	M
05-N070-033	ME0002178	SCOTT PAPER CO.	M	2621	Paper mills	2,568	B
05-N070-034	ME0002224	STATLER IND. INC.	M	2621	Paper mills	1,790	M
05-N070-035	ME0000752	WILTON TANNING CO.	M	3111	Leather tanning & finishing	18	M
05-N060-001	ME0100668	THOMASTON WWTP	M	4952	Sewerage systems	179	M
05-N060-002	ME0002381	GTE SYLVANIA - WALDOBORO	M	3648	Lighting equipment, nec	4	B

Notes: 1) The Map Ref. # refers to the Panel Map Number, Watershed, and Facility [eg. Panel Map # (02), Watershed (N035), Facility (001)]. 2) Basis of loading estimate codes: M = monitoring data; P= permit data; T = data derived from typical pollutant concentrations; O = other data; B = value from both monitoring and typical pollutant concentration, permit data, or other data. 3) An asterisk in the Major/Minor Code flags a significant minor identified by the New Brunswick Department of Environment. 4) A @ in the Major/Minor Code flags a significant minor identified based on process flow greater than or equal to 2 MGD. 5) Annual process flow: 0 = process flow estimated to be zero for this facility; - = no data available for this facility.

Panel 6 - Penobscot Bay/Blue Hill Bay





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 6 - Penobscot Bay/Blue Hill Bay

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
06-N050-001	ME0100781	BANGOR WWTP	M	4952	Sewerage systems	2,777	M
06-N050-002	ME0100072	BREWER WWTP	M	4952	Sewerage systems	1,089	M
06-N050-003	ME0100137	CAMDEN WWTP	M	4952	Sewerage systems	274	M
06-N050-004	ME0101532	CITY OF BELFAST WWTP	M	4952	Sewerage systems	207	M
06-N050-005	ME0100471	CITY OF OLD TOWN WWTP	M	4952	Sewerage systems	402	M
06-N050-006	ME0100595	CITY OF ROCKLAND WWTP	M	4952	Sewerage systems	846	M
06-N050-007	ME0100234	FORT KENT UTIL. DIST. WWTP	M	4952	Sewerage systems	46	M
06-N050-008	ME0102032	GUILFORD - SANGERVILLE WWTP	M	4952	Sewerage systems	45	M
06-N050-009	ME0101796	LINCOLN SAN. DIST. WWTP	M	4952	Sewerage systems	244	M
06-N050-010	ME0100803	MILLINOCKET WWTP	M	4952	Sewerage systems	567	P
06-N050-011	ME0100111	TOWN OF BUCKSPORT WWTP	M	4952	Sewerage systems	233	B
06-N050-012	ME0100498	TOWN OF ORONO WWTP	M	4952	Sewerage systems	672	P
06-N050-013	ME0002160	CHAMPION INTERNAT.	M	2671	Paper coated & laminated, packaging	4,712	M
06-N050-014	ME0000167	GREAT NORTHERN PAPER, INC.	M	2621	Paper mills	3,240	P
06-N050-015	ME0000175	GREAT NORTHERN PAPER, INC.	M	2621	Paper mills	7,766	M
06-N050-016	ME0002020	JAMES RIVER CORP.	M	2621	Paper mills	5,830	M
06-N050-017	ME0000639	LCP CHEMICALS - MAINE	M	2812	Alkalies and chlorine	32	M
06-N050-018	ME0002003	LINCOLN PULP & PAPER CO.	M	2611	Pulp mills	4,010	M
06-N040-001	ME0100889	ELLSWORTH WWTP	M	4952	Sewerage systems	153	O
06-N040-002	ME0100641	SOUTHWEST HARBOR WWTP	M	4952	Sewerage systems	63	M
06-N036-001	ME0101214	BAR HARBOR WWTP	M	4952	Sewerage systems	369	M
06-N036-002	ME0101346	TOWN OF MOUNT DESERT WWTP	M	4952	Sewerage systems	52	M

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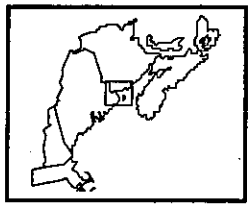
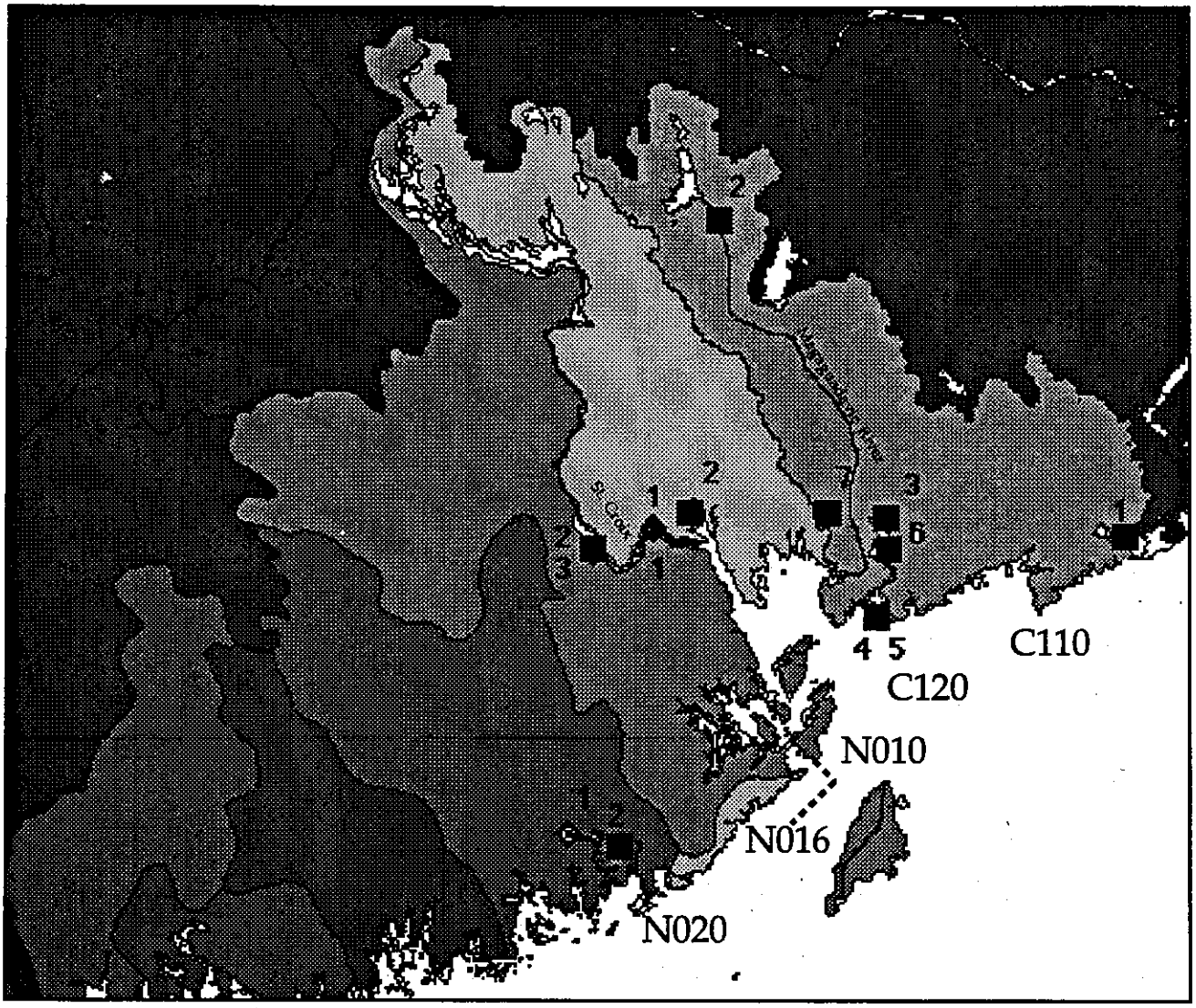
Panel 7 - Narraguagus Bay to Magaguadavic Digdeguash/Maces Bay





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 7 - Narraguagus Bay to Magaguadavic Digdeguash/Maces Bay

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
07-N020-001	ME0100323	MACHIAS WWTP	M	4952	Sewerage systems	116	M
07-N020-002	ME0110086	CONNORS AQUACULTURE E. MACHIAS	@	0921	Fish hatcheries & preserves	3,676	P
07-N010-001	ME0100129	CITY OF CALAIS WWTP	M	4952	Sewerage systems	170	M
07-N010-002	ME0101320	TOWN OF BAILEYVILLE WWTP	M	4952	Sewerage systems	37	O
07-N010-003	ME0001872	GEORGIA - PACIFIC CORP.	M	2621	Paper mills	2,164	M
07-C120-001	NBS-110	ST STEPHEN WWTP	*	4952	Sewerage systems	67	B
07-C120-002	NBI-0096	OAK BAY HATCH. LTD.	M	0921	Fish hatcheries & preserves	423	O
07-C110-001	NBI-0156	NB PWR. CORP. - COLESON COVE THERMA	*	4911	Electric services	181	M
07-C110-002	NBI-0100	AQUACULTURE COMPONENTS PLANT	*	0921	Fish hatcheries & preserves	174	T
07-C110-003	NBI378-90	CONNORS BROS., LTD. - LK. UTOPIA	M	0921	Fish hatcheries & preserves	3,306	M
07-C110-004	NBI451-90	CONNORS BROS., LTD. PLANT 10	M	0919	Miscellaneous marine products	348	O
07-C110-005	NBI-0191	CONNORS BROS. LTD.	*	0919	Miscellaneous marine products		
07-C110-006	NBI-0044	LAKE UTOPIA PAPER LTD.	M	2621	Paper mills	383	M
07-C110-007	NBI379-90	SEA FARMS CANADA INC. - DIGDEGUASH	M	0921	Fish hatcheries & preserves	7,221	M

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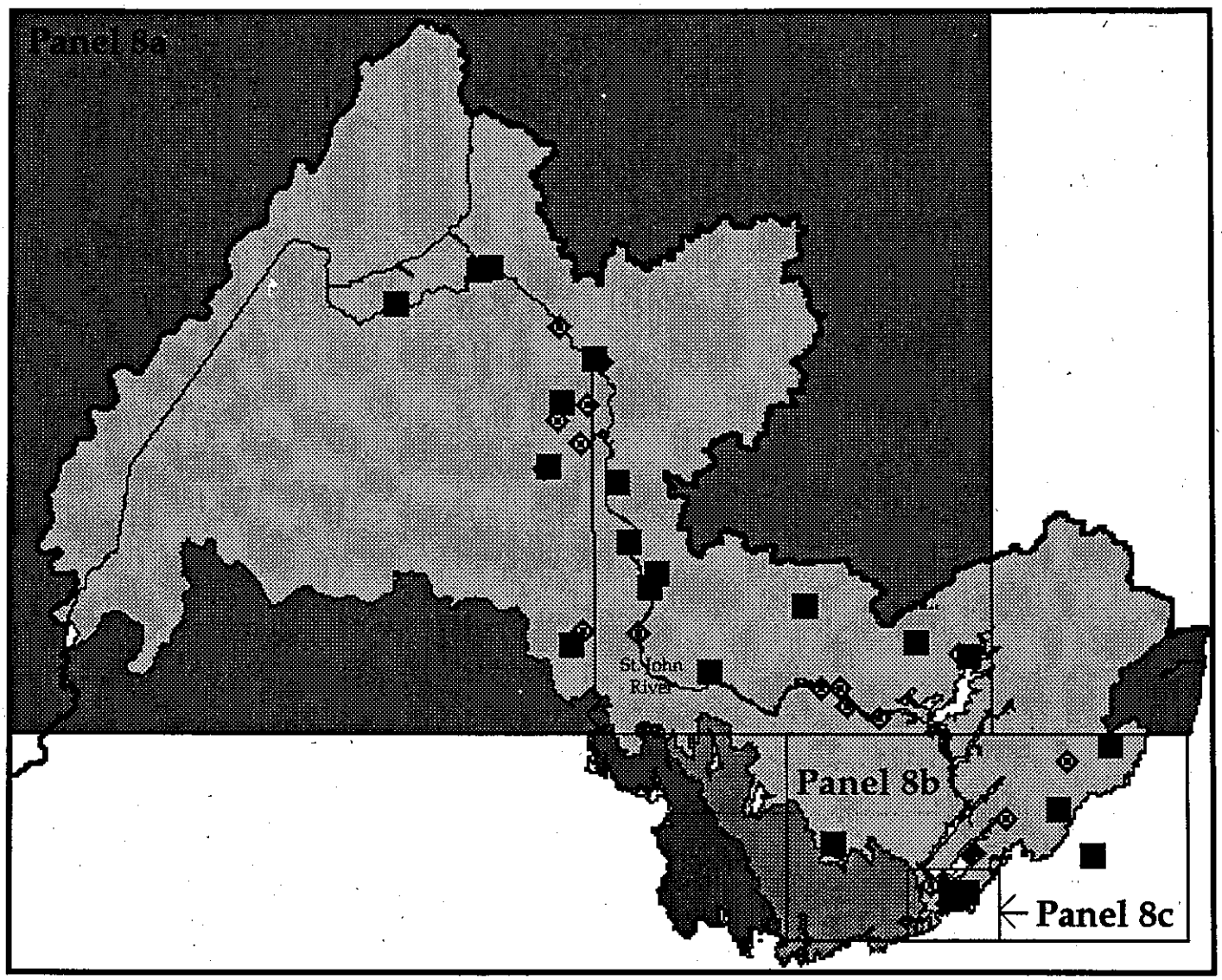
Panel 8 - Saint John River



Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 8 - Saint John River

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
08-C100-001	NBS-9	BARKERS POINT WWTP	M	4952	Sewerage systems	2,957	B
08-C100-002	ME0100145	CARIBOU UTIL. DIST. WWTP	M	4952	Sewerage systems	420	M
08-C100-003	NBS-59	CFB GAGETOWN	M	4952	Sewerage systems	438	P
08-C100-004	NBS-51	EDMUNDSTON #2, COTE LANE	M	4952	Sewerage systems	62	B
08-C100-005	NBS-53	FAIRVALE WWTP	*	4952	Sewerage systems	99	B
08-C100-006	ME0100226	FORT FAIRFIELD U. D. WWTP	M	4952	Sewerage systems	48	M
08-C100-007	NBS-55	GARDEN CREEK WWTP	M	4952	Sewerage systems	44	T
08-C100-008	NBS-61	GRAND BAY WWTP	*	4952	Sewerage systems	157	B
08-C100-009	NBS-10	GRAND FALLS NORTH WWTP	*	4952	Sewerage systems	53	B
08-C100-010	NBS-11	GRAND FALLS SOUTH WWTP	*	4952	Sewerage systems	37	B
08-C100-011	NBS-62	HAMPTON SOUTH WWTP	*	4952	Sewerage systems	7	M
08-C100-012	NBS-13	HAZEN CREEK WWTP	M	4952	Sewerage systems	1,095	B
08-C100-013	ME0101290	HOULTON WTR. CO. WWTP	M	4952	Sewerage systems	437	M
08-C100-014	NBS-105	LANCASTER WWTP	M	4952	Sewerage systems	1,309	B
08-C100-015	ME0101095	LIMESTONE WWTP	M	4952	Sewerage systems	37	O
08-C100-016	NBS-56	LINCOLN WWTP	*	4952	Sewerage systems	20	B
08-C100-017	NBS-14	MARSH CREEK WWTP	M	4952	Sewerage systems	2,190	B
08-C100-018	NBS-16	MILLIDGEVILLE WWTP	M	4952	Sewerage systems	2,099	B
08-C100-019	NBS-18	MINTO WWTP	*	4952	Sewerage systems	1	T
08-C100-020	ME0100561	PRESQUE ISLE WWTP	M	4952	Sewerage systems	1,814	O
08-C100-021	NBS-82	QUISPAMSIS WWTP	*	4952	Sewerage systems	142	B
08-C100-022	NBS-117	SUSSEX WWTP	*	4952	Sewerage systems	93	B
08-C100-023	ME0100684	TOWN OF VAN BUREN WWTP	M	4952	Sewerage systems	161	M
08-C100-024	NBS-23	WOODSTOCK WWTP	*	4952	Sewerage systems	17	T
08-C100-025	NBI-0136	NB PWR. CORP. - GRAND LAKE THERMAL	M	4911	Electric services	773	M
08-C100-026	ME0002216	A E STALEY MFG. CO.	M	2046	Wet corn milling	11	M
08-C100-027	NBI-0376	CHAR - TEC LTD.	*	0921	Fish hatcheries & preserves	174	T
08-C100-028	NBI485-90	FRASER INC.	M	2611	Pulp mills	5,596	M
08-C100-029	ME0000159	FRASER PAPER LTD.	M	2621	Paper mills	4,531	M
08-C100-030	NBI-0417	HUMPTY - DUMPTY FOODS LTD.	M	2099	Food Preparations, nec	10	M
08-C100-031	NBI-0302	IRVING OIL LTD. REFINING DIV.	M	2911	Petroleum refining	412	M
08-C100-032	NBI-0083	IRVING PAPER LTD.	M	2621	Paper mills	3,054	M
08-C100-033	NBI-0052	IRVING PULP & PAPER LTD.	M	2611	Pulp mills	7,271	M
08-C100-034	NBI-0219	IRVING TISSUE CO. LTD.	M	2621	Paper mills	999	M
08-C100-035	NBI525-90	LANTIC SUGAR LTD.	M	2062	Cane sugar refining	4	M
08-C100-036	NBI-0105	LANTIC SUGAR LTD. PIPE#1	M	2046	Wet corn milling	10	M
08-C100-037	NBI-314	MCCAIN FOODS LTD. - FLORENCEVILLE	M	2037	Frozen fruits & vegetables	522	M
08-C100-038	NBI-000	MCCAIN FOODS LTD. - GRAND FALLS	M	2037	Frozen fruits & vegetables	219	M
08-C100-039	ME0000566	MCCAIN FOODS, INC.	M	2037	Frozen fruits & vegetables	35	M
08-C100-040	NBI-001	MOOSEHEAD BREWERIES LTD.	M	2082	Malt beverages	10	T
08-C100-041	NBI-266	N.B. COAL LTD. - FIRE RD.	@	1211	Bituminoos Coal and Lignite	951	P
08-C100-042	NBI-0154	NADEAU POULTRY FARMS LTD.	*	2015	Poultry slaughtering & processing	53	M
08-C100-043	NBI-0076	POTACAN MINING CO.	M	1474	Potash, soda, & borate minerals	209	M
08-C100-044	ME0090174	SAC LORING AFB WWTP	M	9711	National security	525	M
08-C100-045	NBI381-90	SEA FARMS CANADA INC. - SOUTH OROM	M	0921	Fish hatcheries & preserves	4,957	M
08-C100-046	NBI433-90	SEA FARMS CANADA INC. - SPRINGDALE	M	0921	Fish hatcheries & preserves	1,338	O
08-C100-047	NBI-0086	ST. ANNE - NACKAWIC PULP CO.	M	2611	Pulp mills	6,180	M
08-C100-048	NBI380-90	TAY FALLS FARMS LTD.	M	0921	Fish hatcheries & preserves	1,459	O
08-C100-049	NBI469-90	WOLVERTON - MUNIAC STREAM	M	0921	Fish hatcheries & preserves	1,050	O
08-C100-050	NBI512-90	WOLVERTON'S FISH HATCH. - COLDSTREAM	@	0921	Fish hatcheries & preserves	973	M

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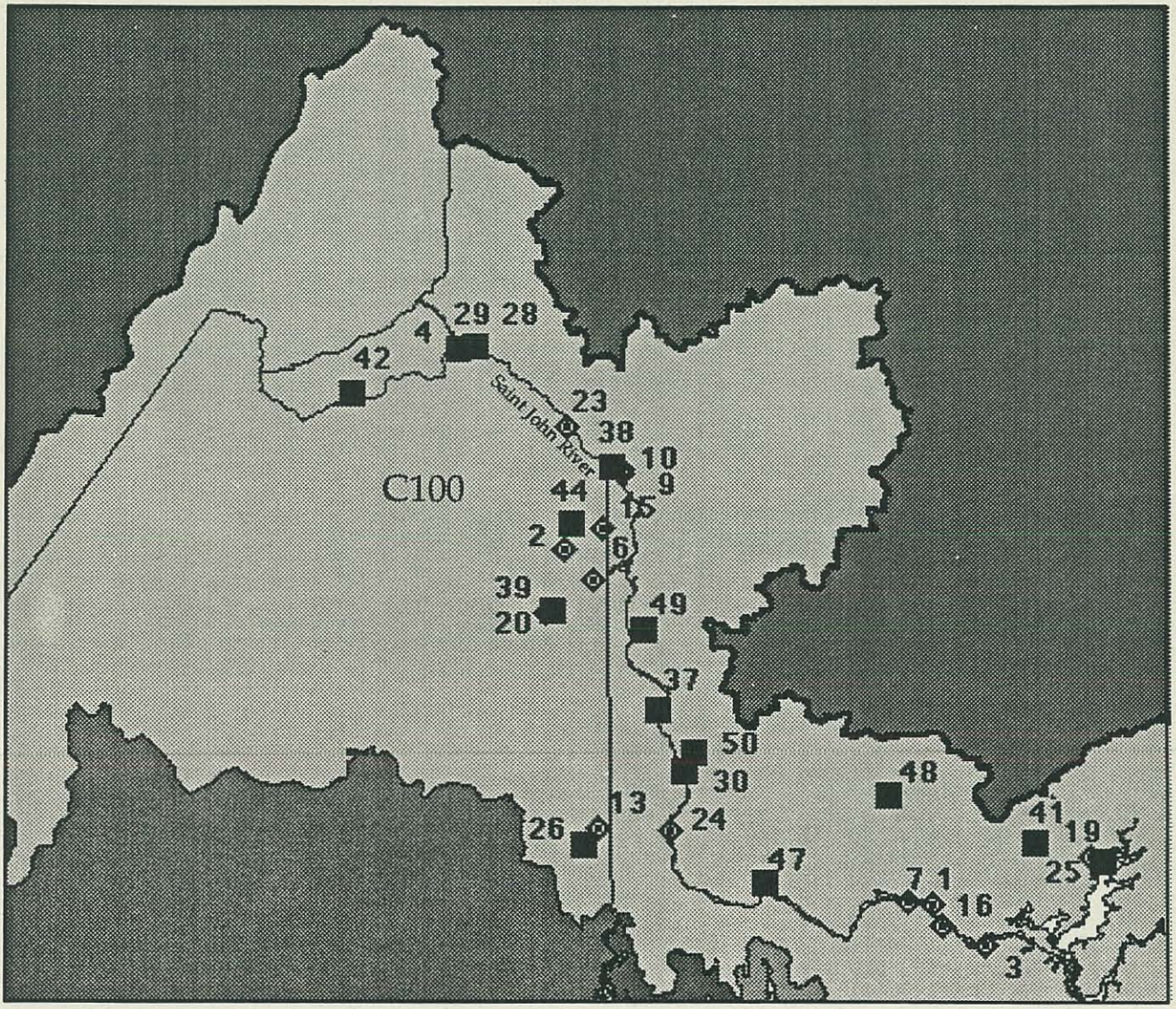
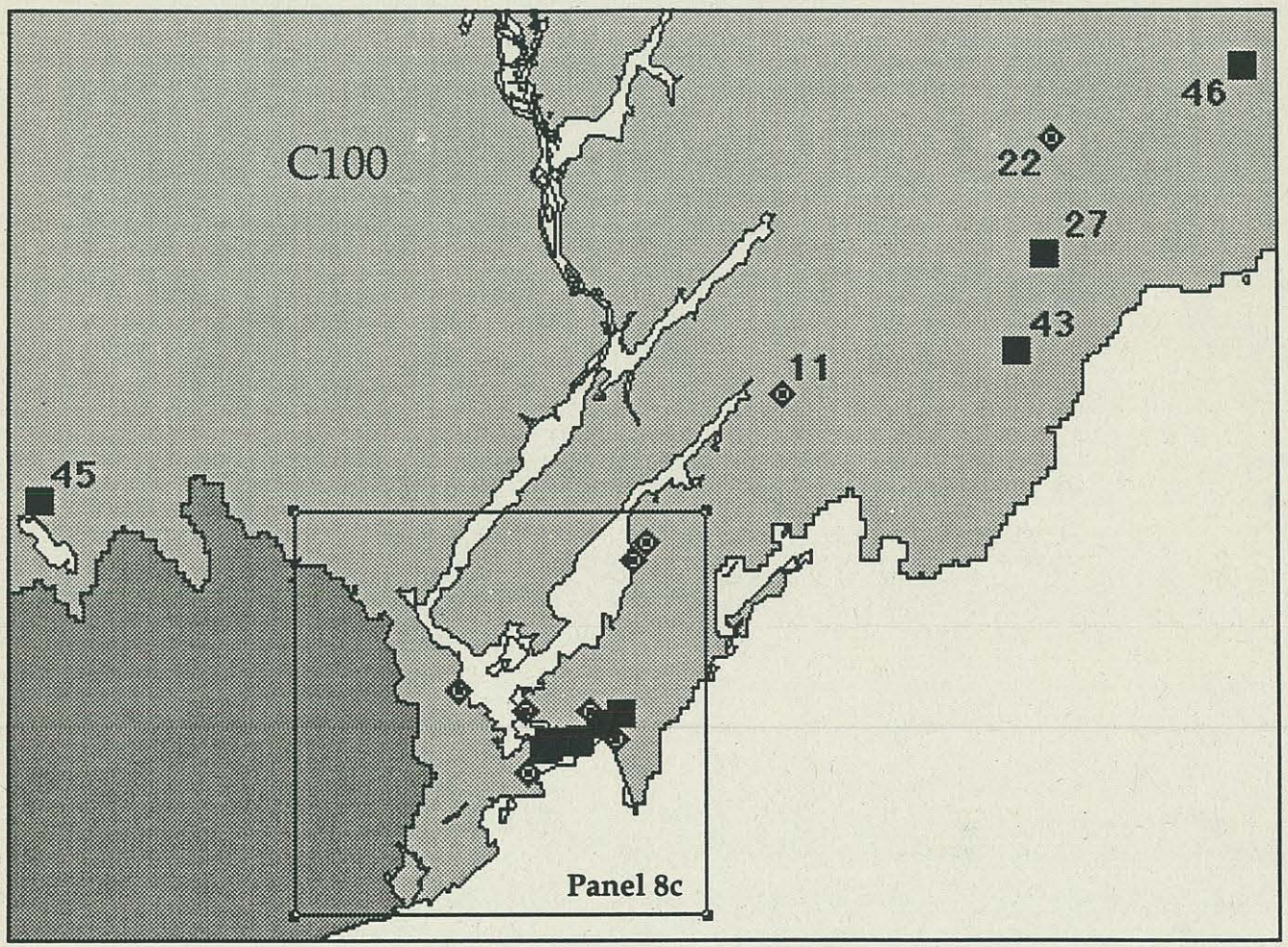
Panel 8a - Saint John River Inset



Legend
■ - Industrial facility
◆ - Wastewater treatment plant (WWTP)

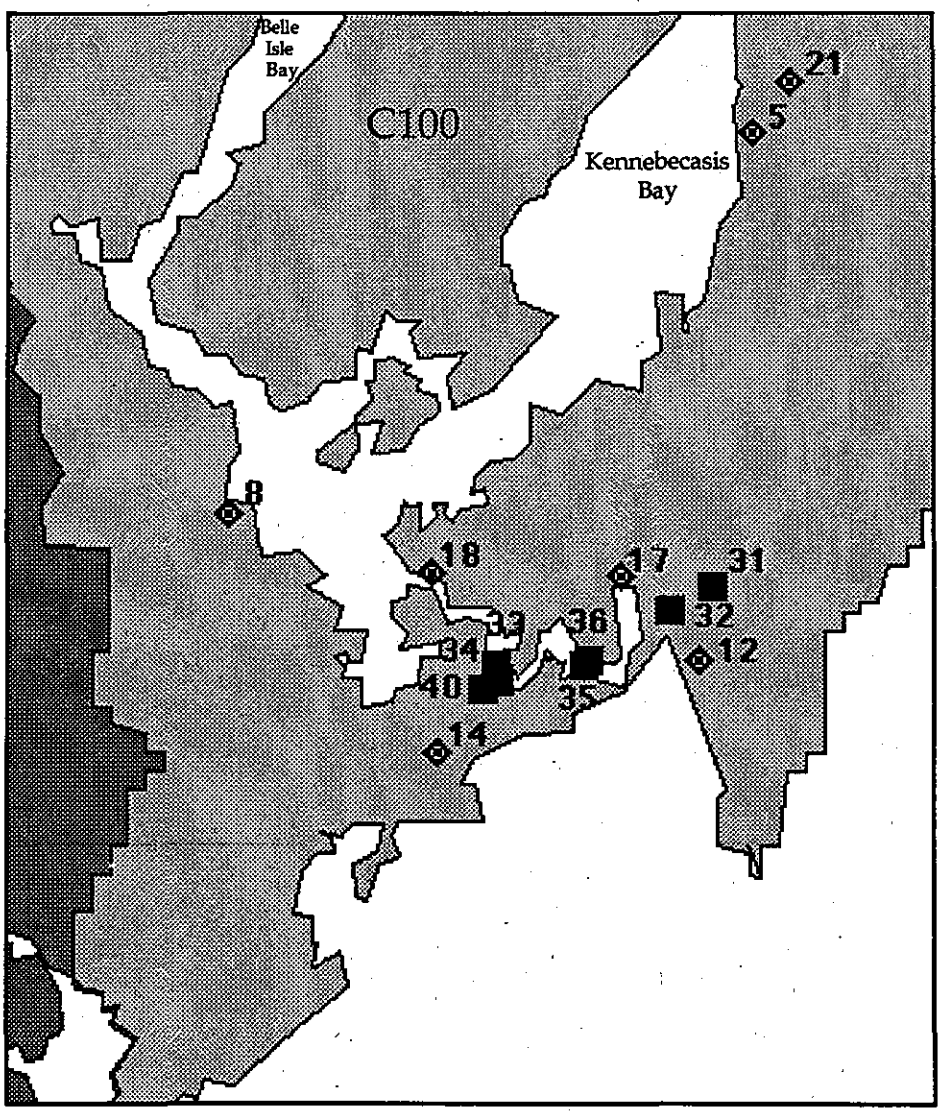
Panel 8b - Saint John River Inset



Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

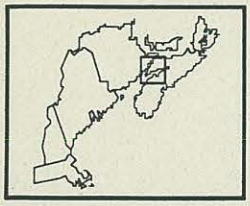
Panel 8c - Saint John River Inset

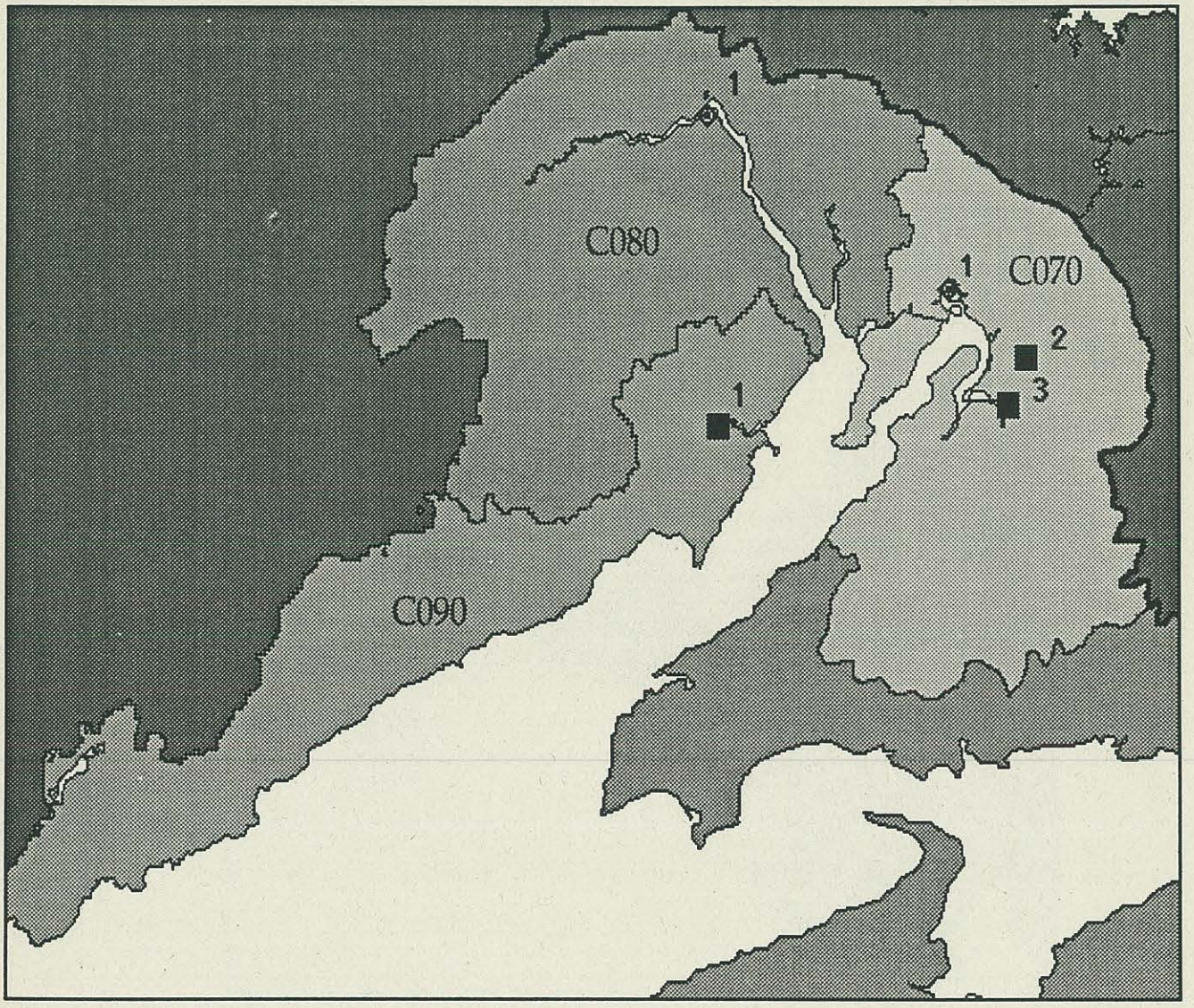


Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 9 - Fundy Shore to Cumberland Basin





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 9 - Fundy Shore to Cumberland Basin

Facility Listing

Map Ref.#	NPDES#	Facility Name	Major/ Minor Code.	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
09-C090-001	NBI521-90	CROOKED CK. HATCH. LTD.	@	0921	Fish hatcheries & preserves	1,289	M
09-C080-001	NBS-12	MONCTON SEWERAGE COMMISSION	M	4952	Sewerage systems	6,388	P
09-C070-001	NBS-89	SACKVILLE WWTP	*	4952	Sewerage systems	23	M
09-C070-002	NS92-010	IMP AEROSPACE COMPONENTS LTD.	M	3728	Aircraft parts and equipment, nec	61	T
09-C070-003	NS90-024	SIFTO SALT DIVISION	M	1481	Nonmetallic minerals services	-	-

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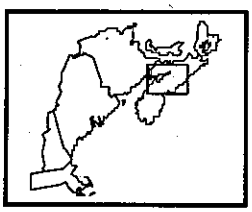
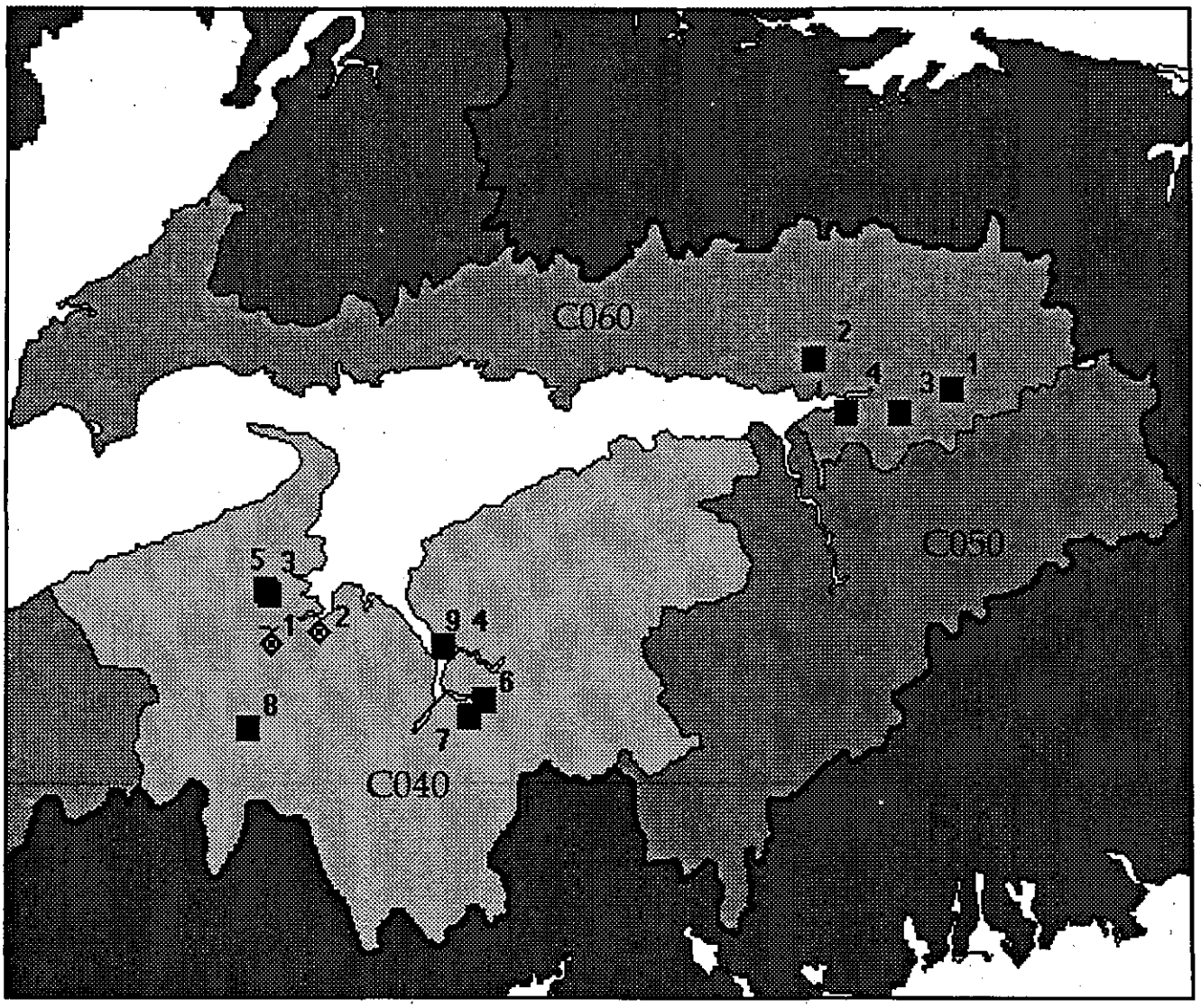
Panel 10 - Minas/Cobequid Shore to Avon River





Legend
■ - Industrial facility
◆ - Wastewater treatment plant (WWTP)

Panel 10 - Minas/Cobequid Shore to Avon River

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
10-C060-001	NS88-089	DOMTAR INC.	M	2491	Wood preserving	2	T
10-C060-002	NS91-061	E-Z-EM CANADA INC.	M	9999	Nonclassifiable establishments	3	T
10-C060-003	NS89-084	INLAND RE-REFINING CO. LTD.	M	2911	Petroleum refining	486	T
10-C060-004	NS1190003	ROTHESAY RENDERING PLANT	M	2077	Animal & marine fats & oils	219	T
10-C040-001	NSWWTP48	KINGS COUNTY REGIONAL STP	M	4952	Sewerage systems	794	O
10-C040-002	NSWWTP51	WOLFVILLE STP	M	4952	Sewerage systems	365	O
10-C040-003	NS76-107	CANADA PACKERS LTD.	M	2015	Poultry slaughtering & processing	-	-
10-C040-004	NS76-051	CANADIAN KEYS FIBRES CO. LTD.	M	2679	Converted paper products, nec	-	-
10-C040-005	NS79-231	ELLS BROS. LTD.	M	9999	Nonclassifiable establishments	3	T
10-C040-006	NS91-039	FUNDY GYPSUM CO. LTD.	M	1459	Clay & related minerals, nec	-	-
10-C040-007	NS91-041	FUNDY GYPSUM CO. LTD.	M	1459	Clay & related minerals, nec	-	-
10-C040-008	NS85-183	GOODFELLOW LUMBER INC.	M	2491	Wood preserving	2	T
10-C040-009	NS87-065	MINAS BASIN PULP & PAPER LTD.	M	2621	Paper mills	465	T

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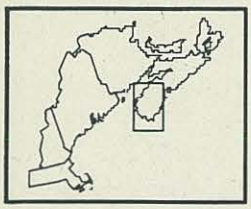
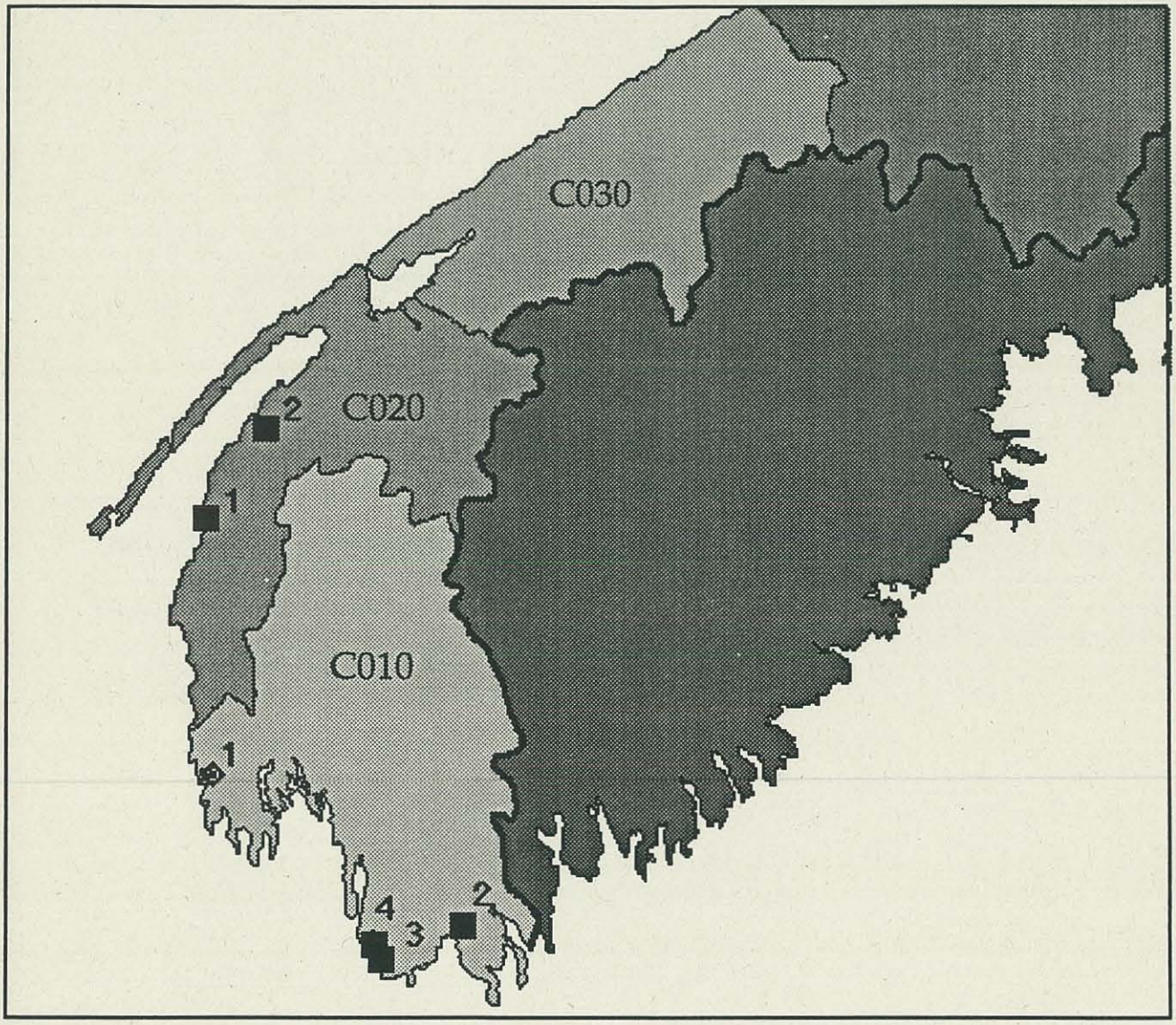
Panel 11 - Annapolis Basin to Yarmouth





Legend

- Industrial facility
- Wastewater treatment plant (WWTP)

Panel 11 - Annapolis Basin to Yarmouth

Facility Listing

Map Ref. #	NPDES#	Facility Name	Major/ Minor Code	SIC	Activity	Annual Process Flow (million gallons)	Basis Code
11-C020-001	NS89-106	COMEAU'S SEA FOODS LTD.	M	2091	Canned & cured fish and seafoods	8	T
11-C020-002	NS80-119	WEYMOUTH SEA PRODUCTS LTD.	M	2091	Canned & cured fish and seafoods	8	T
11-C010-001	NSWWTP01	YARMOUTH STP	M	4952	Sewerage systems	2,117	O
11-C010-002	NS75-230	FISH REDUCTION LTD.	M	2091	Canned & cured fish and seafoods	8	T
11-C010-003	NSINDU01	LAWRENCE SWEENY FISHERIES LTD.	M	5146	Fish and seafoods	-	-
11-C010-004	NS91-028	PROTAN SCOTIA MARINE CANADA LTD.	M	2869	Industrial organic chemicals, nec	60	T

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Appendix 9.
Watersheds in the Gulf of Maine Study Area

$$\begin{array}{r} 424 + \\ 29 \\ \hline 453 \end{array}$$

Appendix 9. Watersheds in the Gulf of Maine Study Area

Watershed/CDA Name	Watershed/ CDA Code
United States	
Coastal Drainage Area	N135
Cape Cod Bay	N130
Coastal Drainage Area	N125
Massachusetts Bay	N120
Coastal Drainage Area	N115
Merrimack River	N110
Coastal Drainage Area	N106
Great Bay	N100
Coastal Drainage Area	N096
Saco Bay	N090
Coastal Drainage Area	N086
Casco Bay	N080
Sheepscot Bay	N070
Muscongus Bay	N060
Coastal Drainage Area	N055
Coastal Drainage Area	N052
Penobscot Bay	N050
Coastal Drainage Area	N045
Blue Hill Bay	N040
Coastal Drainage Area	N036
Narraguagus Bay	N030
Englishman Bay	N020
Coastal Drainage Area	N016
Passamaquoddy Bay	N010
Canada	
St. Croix River	C120
Magaguadavic Digdeguash/Maces Bay	C110
Saint John River	C100
Fundy Shore	C090
Shepody Shore	C080
Cumberland Basin	C070
Minas/Cobequid Shore	C060
Shubenacadie River	C050
Avon River	C040
Annapolis Basin	C030
St. Mary's Bay	C020
Yarmouth	C010

Appendix 10.
Hydrologic Cataloging Units in the Gulf of Maine Study Area

Appendix 10. Hydrologic Cataloging Units in the Gulf of Maine Study Area

Cataloging Unit	Hydrologic Cataloging Unit Name*	Cataloging Unit Area (sq. mi.)
United States		
01010001	UPPER ST. JOHN. ME	2,120
01010002	ALLAGASH. ME	1,250
01010003	FISH.ME	908
01010004	AROOSTOOK.ME	2,420
01010005	MEDUXNEKEAG. ME	634
01020001	WEST BRANCH PENOBSCOT. ME	2,150
01020002	EAST BRANCH PENOBSCOT. ME	1,130
01020003	MATTAWAMKEAG. ME	1,510
01020004	PISCATAQUIS. ME	1,460
01030001	UPPER KENNEBEC. ME	1,570
01030002	DEAD. ME	878
01040001	UPPER ANDROSCOGGIN. ME, NH	1,470
01070001	PEMIGWASSET. NH	1,000
01070003	CONTOOCOOK. NH	757
01070004	NASHUA. ME, NH	525
01070005	CONCORD. MA	401
01020005	LOWER PENOBSCOT. ME	2,360
01030003	LOWER KENNEBEC. ME	3,450
01040002	LOWER ANDROSCOGGIN. ME, NH	2,060
01050001	ST. CROIX. ME	999
01050002	ME COASTAL. ME	4,800
01050003	ST. GEORGE-SHEEPSCOT. ME	1,250
01060001	PRESUMPSCOT. ME	1,240
01060002	SACO. ME, NH	1,690
01060003	PISCATAQUA-SALMON FALLS. ME, NH, MA	1,400
01070002	MERRIMACK. MA, NH	2,300
01090001	CHARLES. MA	1,130
01090002	CAPE COD. MA, RI	2,220
Canada		
1AD	SAINT JOHN-EDMUNSTON. NB	343
1AF	SAINT JOHN - GRAND FALLS. NB	1,362
1AH	TOBIGUE. NB	1,638
1AJ	MONQUART/MEDUXNEKEAG. NB	891
1AK	NACKAWIC STREAM. NB	1,391
1AL	NASHWAAKSIS STREAM. NB	659

Appendix 10. Hydrologic Cataloging Units in the Gulf of Maine Study Area

Cataloging Unit	Hydrologic Cataloging Unit Name*	Cataloging Unit Area (sq. mi.)
Canada (continued)		
1AM	OROMOCTO. NB	819
1AN	SALMON. NB	899
1AO	FRENCH LAKE. NB	866
1AP	CANAAN/KENNEBECASIS. NB	2,264
1AQ	MUSQUASH-LAKE UTOPIA. NB	1,275
1AR	ST. CROIX- SPEDNIC LAKE. NB	1,035
1BT	KINNEAR RIVER HAUTE-ABOUJAGNE. NB	543
1BU	PETITCODIAC RIVER. NB	961
1BV	UPPER SALMON-BIG SALMON RIVER. NB	866
1DA	METEGHAN. NS	244
1DB	SISSIBOO/BEAR. NS	531
1DC	ANNAPOLIS- ALLAIN. NS	765
1DD	CORNWALLIS-GASPEREAU. NS	443
1DE	ST. CROIX. NS	492
1DF	KENNETCOOK. NS	397
1DG	SHUBENACADIE. NS	978
1DH	SALMON - CHRISTIE BROOK. NS	509
1DJ	GREAT VILLAGE - FIVE ISLANDS. NS	366
1DK	APPLE- NEW SALEM. NS	346
1DL	KELLY/ MACCAN. NS	493
1DM	TIDNISH/NORTHPORT. NS	143
1EA	TUSKET. NS	818
1EB	LOWER WEST PUBNICO. NS	598

* The names of the New Brunswick and Nova Scotia hydrologic units were given the names of the major waterbodies in those areas

Appendix 11. Counties in the Gulf of Maine Study Area

Appendix 11. Counties in the Gulf of Maine Study Area

State/Province	FIPS	County	Population 1990	Area (sq. mi)	Percent in Study Area
United States					
Maine					
	23001	Androscoggin	105,259	477	100
	23003	Aroostook	86,936	6,721	100
	23005	Cumberland	243,135	876	100
	23007	Franklin	29,008	1,699	100
	23009	Hancock	46,948	1,537	100
	23011	Kennebec	115,904	876	100
	23013	Knox	36,310	370	100
	23015	Lincoln	30,357	458	100
	23017	Oxford	52,602	2,053	100
	23019	Penobscot	146,601	3,430	100
	23021	Piscataquis	18,653	3,986	100
	23023	Sagadahoc	33,535	257	100
	23025	Somerset	49,767	3,930	100
	23027	Waldo	33,018	730	100
	23029	Washington	35,308	2,586	100
	23031	York	164,587	1,008	100
16		**Total**	**1,227,928**	**30,994**	
New Hampshire					
	33001	Belknap	49,216	404	100
	33003	Carroll	35,410	933	100
	33005	Cheshire	70,121	711	15
	33007	Coos	34,828	1,804	38
	33009	Grafton	74,929	1,719	50
	33011	Hillsborough	336,073	876	99
	33013	Merrimack	120,005	936	96
	33015	Rockingham	245,845	699	100
	33017	Strafford	104,233	370	100
10	33019	Sullivan	38,592	540	5
		Total	**1,109,252**	**8,992**	

Appendix 11. Counties in the Gulf of Maine Study Area

State/Province	FIPS	County	Population 1990	Area (sq. mi)	Percent in Study Area
Massachusetts					
	25001	Barnstable	186,605	400	100
	25005	Bristol	506,325	557	30
	25007	Dukes	11,639	102	100
	25009	Essex	670,080	495	100
	25017	Middlesex	1,398,468	822	99
	25019	Nantucket	6,012	47	100
	25021	Norfolk	616,087	400	83
	25023	Plymouth	435,276	655	55
	25025	Suffolk	663,906	57	100
	25027	Worcester	709,705	1,513	27
10		**Total**	**5,204,103**	**5,048**	
Canada					
New Brunswick					
		Albert	25,640	691	100
		Carleton	26,026	1,262	72
		Charlotte	26,607	1,297	100
		Kent	31,694	1,744	25
		Kings	62,122	1,376	2
		Madawaska	36,554	1,321	80
		Northumberlan	52,983	4,721	5
		Queens	12,519	1,421	100
		Restigouche	38,760	3,255	5
		St. John	81,462	602	100
		Sunbury	23,575	1,069	100
		Victoria	20,786	2,114	90
		Westmorland	114,745	1,436	65
		York	82,326	3,522	80
		Total	**635,799**	**25,830**	

Appendix 11. Counties in the Gulf of Maine Study Area

State/Province	FIPS	County	Population 1990	Area (sq. mi)	Percent in Study Area
Nova Scotia					
		Annapolis	23,641	1,237	55
		Colchester	47,683	1,399	85
		Cumberland	34,284	1,656	55
		Digby	21,250	955	85
		Halifax	330,846	2,146	12
		Hants	37,843	1,179	85
		Kings	56,317	843	80
		Lunenburg	47,634	1,112	5
		Pictou	49,651	1,071	5
		Shelburne	17,343	910	30
		Yarmouth	27,891	800	95
		Total	**694,383**	**13,306**	

Appendix 12.
County and Hydrologic Cataloging Unit Cross Reference Table for the Gulf of Maine Watersheds

Appendix 12. County and Hydrologic Cataloging Unit Cross Reference Table for the Gulf of Maine Watersheds

Watershed Name (Code) Counties	**Watershed Name (Code)** Hydrologic Units
Cape Cod Bay (N130)	**Cape Cod Bay (N130)**
Barnstable, MA*	01090002*
Norfolk, MA*	
Plymouth, MA*	
Massachusetts Bay (N120)	**Massachusetts Bay (N120)**
Essex, MA*	01090001*
Middlesex, MA*	01090002*
Norfolk, MA*	
Plymouth, MA*	
Suffolk, MA	
Worcester, MA*	
Merrimack River (N110)	**Merrimack River (N110)**
Essex, MA*	01070001
Middlesex, MA*	01070002
Worcester, MA*	01070003
Belknap, NH	01070004
Carroll, NH*	01070005
Cheshire, NH*	
Grafton, NH*	
Hillsborough, NH*	
Merrimack, NH*	
Rockingham, NH*	
Strafford, NH*	
Sullivan, NH*	
Great Bay (N100)	**Great Bay (N100)**
York, ME*	01060003*
Carroll, NH*	
Rockingham, NH*	
Strafford, NH*	
Saco Bay (N090)	**Saco Bay (N090)**
Cumberland, ME*	01060001*
Oxford, ME*	01060002
York, ME*	
Carroll, NH*	
Coos, NH*	
Grafton, NH*	
Casco Bay (N080)	**Casco Bay (N080)**
Androscoggin, ME*	01060001*
Cumberland, ME*	
Oxford, ME*	
Sagadahoc, ME*	

Appendix 12. County and Hydrologic Cataloging Unit Cross Reference Table for the Gulf of Maine Watersheds

Watershed Name (Code) Counties	**Watershed Name (Code)** Hydrologic Units
York, ME*	
Sheepscot Bay (N070)	**Sheepscot Bay (N070)**
Androscoggin, ME*	01030001
Cumberland, ME	01030002
Franklin, ME	01030003
Kennebec, ME*	01040001
Knox, ME*	01040002
Lincoln, ME*	01050003*
Oxford, ME*	
Penobscot, ME*	
Piscataquis, ME*	
Sagadahoc, ME*	
Somerset, ME*	
Waldo, ME*	
Carroll, NH*	
Coos, NH*	
Muscongus Bay (N060)	**Muscongus Bay (N060)**
Knox, ME*	01050002*
Lincoln, ME*	01050003*
Waldo, ME*	
Penobscot Bay (N050)	**Penobscot Bay (N050)**
Aroostook, ME*	01020001
Hancock, ME*	01020002
Knox, ME*	01020003
Penobscot, ME*	01020004
Piscataquis, ME*	01020005
Waldo, ME*	01050002*
Blue Hill Bay (N040)	**Blue Hill Bay (N040)**
Hancock, ME*	01050002*
Penobscot, ME*	
Narraguagus Bay (N030)	**Narraguagus Bay (N030)**
Hancock, ME*	01050002*
Washington, ME*	
Englishman Bay (N020)	**Englishman Bay (N020)**
Hancock, ME*	01050002*
Washington, ME*	
Passamaquoddy Bay (N010)	**Passamaquoddy Bay (N010)**
Aroostook, ME*	01050001
Hancock, ME*	01050002*

Appendix 12. County and Hydrologic Cataloging Unit Cross Reference Table for the Gulf of Maine Watersheds

Watershed Name (Code) Counties	**Watershed Name (Code)** Hydrologic Units
Penobscot, ME*	
Washington, ME*	
St Croix River (C120)	**St Croix River (C120)**
Carleton, NB*	1AR
Charlotte, NB*	
York, NB*	
Magaguadavic Digdeguash/Maces Bay (C110)	**Magaguadavic Digdeguash/Maces Bay (C110)**
Charlotte, NB*	1AQ
Kings, NB*	
Queens, NB*	
St. John NB*	
Sunbury, NB*	
York, NB*	
Saint John River (C100)	**Saint John River (C100)**
Aroostook, ME*	01010001
Penobscot, ME*	01010002
Piscataquis, ME*	01010003
Somerset, ME*	01010004
Carleton, NB*	01010005
Charlotte, NB*	1AD
Kent, NB*	1AF
Kings, NB*	1AG
Madawaska, NB*	1AH
Northumberland, NB*	1AJ
Queens, NB*	1AK
Restigouche, NB*	1AL
St. John, NB*	1AM
Sunbury, NB*	1AN
Victoria, NB*	1AO
York, NB*	1AP
Bellechasse, QC*	
Dorchester, QC*	
Kamouraska, QC*	
L'Islet, QC*	
Montmagny, QC*	
Rimouski-Neigette, QC*	
Riviere-du-Loup, QC*	
Temiscouata, QC*	
Fundy Shore (C090)	**Fundy Shore (C090)**
Albert, NB*	1BV
Kings, NB*	
Saint John, NB*	

Appendix 12. County and Hydrologic Cataloging Unit Cross Reference Table for the Gulf of Maine Watersheds

Watershed Name (Code) Counties	**Watershed Name (Code)** Hydrologic Units
Shepody Shore (C080)	**Shepody Shore (C080)**
Albert, NB*	1BU
Kings, NB*	
Westmorland, NB*	
Cumberland Basin (C070)	**Cumberland Basin (C070)**
Westmorland, NB*	1BT*
Cumberland, NS*	1DL
	1DM*
Minas/Cobequid Shore (C060)	**Minas/Cobequid Shore (C060)**
Colchester, NS*	1DH
Cumberland, NS*	1DJ
	DK
Shubenacadie River (C050)	**Shubenacadie River (C050)**
Colchester, NS*	
Halifax, NS*	1DG
Hants, NS*	
Pictou, NS*	
Avon River (C040)	**Avon River (C040)**
Halifax, NS*	1DD
Hants, NS*	1DE
Kings, NS*	1DF
Lunenburg, NS*	
Annapolis Basin (C030)	**Annapolis Basin (C030)**
Annapolis, NS*	1DC
Kings, NS*	
St. Mary's Bay (C020)	**St. Mary's Bay (C020)**
Annapolis, NS*	1DA
Digby, NS*	1DB
Yarmouth, NS*	
Yarmouth (C010)	**Yarmouth (C010)**
Digby, NS*	1EA
Shelburne, NS*	1EB
Yarmouth, NS*	

Note: * means that less than 100 percent of county or hydrologic unit is contained in the watershed.

Appendix 13.
Differences Between Canadian and U.S. Data Variables in the Gulf of Maine Point Source Inventory

Appendix 13. Differences Between Canadian and U.S. Data Variables in the Gulf of Maine Point Source Inventory

This appendix provides a description of several variables in the 3 basic files (facility, monitoring and permit) of the inventory which are defined differently for Canadian facilities. The appendix also lists the variables that do not have any data for Canadian point source dischargers. When appropriate, New Brunswick and Nova Scotia variables are discussed separately. For a detailed description of the variables listed here and the other variables in the data base, please refer to the NCPDI Point Source Methods Document (NOAA, 1993).

FILE 1 - Facility File

NPID - National Pollutant Discharge Elimination System (NPDES) Number
New Brunswick: A unique identification number is assigned for the NPID, with the two first characters (NB) identifying the province name and the third identifying the facility as an industrial or municipal plant (i.e. I for industry and S for municipal). The permit number is used for industrial and municipal point sources as identified by the New Brunswick Department of the Environment.

Nova Scotia: A unique identification number is assigned for the NPID, with the two first characters (NS) identifying the province name. The identification number as defined by the Nova Scotia Department of the Environments is used for industrial point sources. A unique sequential identification number following the characters "WWTP" is assigned to the municipal point sources.

MADI - Major Discharge Indicator
New Brunswick: Municipal point sources are classified as major facilities if the population of the service area is above 10,000. Industrial point sources are classified as major facilities if the BOD or TSS discharge is above 300 pounds per day. This report includes only those significant minors as defined by NOAA in the body of the report. The New Brunswick Department of the Environment identified 12 municipals and 5 industries as significant minors.

Nova Scotia: Municipal point sources are designated as major facilities if the wastewater discharge is 1 MGD or greater. Industrial point sources were classified as major facilities by Dan Hiltz from the Nova Scotia Department of the Environment.

STTE - State Code
An abbreviation of the Province's name is used as an identifier for the state code (i.e., NB for New Brunswick and NS for Nova Scotia).

STATE - State FIPS Code
A value of 90 was assigned to New Brunswick and 91 for Nova Scotia by the PSC Branch to designate the state code.

CNTY - County Code
New Brunswick: A three digit code assigned by the New Brunswick Department of the Environment designates the county.

Nova Scotia: The first three first characters of the county name was assigned by the PSC Branch as the county code.

Appendix 13. Differences Between Canadian and U.S. Data Variables in the Gulf of Maine Point Source Inventory

FCU - Facility U.S.G.S. Hydrologic Cataloging Unit Code
New Brunswick: The 8 characters of the Hydrologic Watershed Unit Number assigned by the New Brunswick Department of the Environment designates the FCU.

Nova Scotia: The 3 characters of the Hydrologic Watershed Unit Number as it appears in the Hydrometric Map Supplement, Atlantic Provinces, published by the Water Resources Branch, Water Survey of Canada, Environment Canada, 1986 designates the FCU.

EDACODE - Estuarine/Coastal Drainage Area Code
New Brunswick and Nova Scotia: The assignment of this code represents the major Canadian watershed as defined by the Gulf of Maine Council on the Marine Environment and by Environment Canada. The names of the watersheds are designated by the Gulf of Maine Council on the Marine Environment. The watershed boundaries are defined by the Hydrometric Map Supplement , Atlantic Provinces, published by the Water Resources Branch, Water Survey of Canada, Environment Canada, 1986.

SIC - Standard Industrial Classification Code (1987 Facility Description)
New Brunswick: The industrial classification code assigned by the New Brunswick Department of the Environment is used as the SIC code and the U.S. Industrial Classification Code.

Nova Scotia: The industrial classification code is assigned by the facility name and facility description derived by the PSC Branch at NOAA.

FLAT, FLON - Facility Latitude and Longitude (Degrees, minutes, seconds)
New Brunswick: The latitude and longitude of all point sources are provided by the New Brunswick Department of the Environment. Coordinates for all point sources, except for power plants, are determined to within ±5 meter accuracy in the field using a Geographical Positioning System. Coordinates for power plants are determined from 1:50,000 topographic map sheets.

Nova Scotia: The latitude and longitude of all point sources are assigned by the PSC Branch at NOAA based on city coordinates of the point source location.

NOTE: THE FOLLOWING ARE VARIABLES THAT DO NOT CONTAIN ANY DATA FOR THE CANADIAN POINT SOURCE DISCHARGERS

For the New Brunswick and Nova Scotia point sources inventory: MRAT, CITY, KEYPTNUM, EDACLASS, FLLCODE1 FLLCODE2 FLLCODE3, REAC, FFID, GPCT, IACC, IADT, PRET, INCL, STBA, AREACODE, STUDY0, STUDY1, STUDY2, STUDY3, STUDY4, STUDY5, REGION, FACILQC.

For the Nova Scotia point sources inventory: BAS6, RWAT, EPST, EXMY, TYPA, TYPO.

FILE 2 - Monthly Discharge Monitoring Report (DMR) File

New Brunswick: These variables do not contain any information in the DMR File: MDML, NODI, LCUC, and LQUC

Nova Scotia: All variables, except NPID, DSCH and MLOC do not contain any information in the DMR File

Appendix 13. Differences Between Canadian and U.S. Data Variables in the Gulf of Maine Point Source Inventory

FILE 3 - Permit Requirements and Loading (PRL) File

New Brunswick: The variable PIPE does not contain any information: in the PRL File.

Nova Scotia: All variables, except NPID, DSCH, PDSG, PIPE, WAST, and PIAC do not contain any information in the PRL File. All pipes for all facilities are assumed by the PSC Branch at NOAA to be active pipes and to discharge process wastewater.

Appendix 14.
Glossary

Appendix 14. Glossary

This section is an alphabetical listing of technical terms used in this document which may not be familiar to the reader. Terms with an asterisk have different definitions in Canada. Refer to Appendix 13 for further explanations of these differences. For a description of the variable names, please refer to Appendix 1a and Appendix 1b of the NCPDI Point Source Methods Document (NOAA, 1993).

Biochemical Oxygen Demand (BOD). The quantity of dissolved oxygen used in the biochemical oxidation of organic matter in a specific time, at a specified temperature, and under specified conditions. BOD values provide a somewhat standard measure of how much oxygen will be required to degrade a waste, and therefore reflect the effect waste may have on fish or other aquatic organisms that require oxygen to live.

*** Coastal Drainage Area (CDA).** A relatively small watershed not draining to a major estuary in the in the region. The CDA is defined by hydrologic units identified by the U. S. Geological Survey or by Environment Canada.

Direct and Indirect Dischargers. A direct discharger is a facility that discharges its effluent directly into a receiving water, such as a stream, river, estuary, or ocean. An indirect discharger is a facility that discharges its effluent into a sewer system for treatment by a wastewater treatment plant.

Discharge Category Code. The coding scheme used in the NCPDI that links categories of industrial dischargers to their respective typical pollutant concentration values. A discharge category is comprised of a group of industrial or municipal facilities that engage in similar manufacturing or waste-producing processes, and thus are assumed to have similar types and levels of pollutant discharge. Facilities are assigned to one of 89 discharge categories based on the facility's Standard Industrial Classification code.

Discharge Monitoring Report (DMR). The form used to report to a regulatory agency the results of a discharger's effluent monitoring. DMRs are submitted on a regular basis (usually monthly for major facilities and most minor facilities; quarterly for small dischargers), as required under the discharger's National Pollutant Discharge Elimination System permit.

Estimated Discharge Load. An amount of a pollutant discharged over a specific period of time that has been computed using either monitoring or typical flow volumes and typical pollutant concentration values. Because of the assumptions involved in using typical pollutant concentration values, these load estimates are considered less accurate than those based entirely on monitoring data.

***Fecal Coliform Bacteria (FCB).** A measure of the fecal coliform bacteria found in a sample of water. FCB are the bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the presence of human pathogenic organisms carried in sanitary sewage. Their concentrations are expressed as number of cells per 100 milliliters of sample.

Heavy Metals. These include Arsenic (As), Cadmium (Cd), Chromium (Cr), Copper (Cu), Iron (Fe), Lead (Pb), Mercury (Hg) and Zinc (Zn). For the purpose of this report they are measures of the individual constituents listed above as a total of all their different forms. For example, Chromium is a measure of all forms rather than just the hexavalent form of Chromium.

Appendix 14. Glossary

*** Hydrologic Cataloging Unit.** A geographic area defined by the U. S. Geological Survey (USGS) representing all or part of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature. The cataloging unit is the smallest of the four hydrologic units used by the USGS to define the boundaries of drainage basins throughout the country.

Industrial Discharger. A facility that, as a result of manufacturing products from raw materials, discharges a contaminated effluent to the environment. The second of the three major categories of point source dischargers in the NCPDI. Industrial dischargers are the most complex category for which to make loading estimates because of the variation in facility size, production levels and waste-streams within a single discharge category.

*** Major or Minor Facility.** The terms used to classify dischargers according to their relative importance as pollutant sources. The criteria used to make major and minor assignments were developed by the EPA's Office of Water Enforcement and Permits. Different guidelines are used for wastewater treatment plants and industrial dischargers. Major wastewater treatment plants are those that discharge over one million gallons per day on average, or serve a population greater than 10,000 people, or discharge to surface waters that have severe water quality problems. Industrial dischargers are classified using a numerical rating system that takes into account discharge volume, effluent toxicity, level of conventional pollutant discharge, potential human health impacts, and water quality factors. Because major facilities contribute the largest share of pollutant discharges, they are the main focus of the data collection effort in the NCPDI.

Major Watershed. One of the 25 watersheds in the Gulf of Maine study area which drains to a major estuary in the study area. The watershed is defined by hydrologic units identified by the U. S. Geologic Survey or by Environment Canada.

Monitoring Discharge Load. An amount of a pollutant discharged over a specific period of time computed using monitoring flow volumes and pollutant concentrations based on monitoring data. Estimates based on reported monitoring data are considered the most accurate values in the Inventory.

National Estuarine Inventory (NEI). The NEI is a series of interrelated projects and activities initiated by NOAA to develop a national estuarine data base and assessment capability. The NEI identifies 90 estuaries, which account for approximately 90 percent of the estuarine surface water of the three coasts of the contiguous U.S. The NEI acts as a framework for the integration of information gathered on an estuary-by-estuary basis by NOAA's Strategic Assessment Branch.

*** National Pollutant Discharge Elimination System (NPDES) discharge permit.** The permit that sets limits on the amounts or concentrations of pollutants that a municipal, industrial, or commercial facility is allowed to discharge into surface waters. The permit is written by either the state regulatory agency or the EPA and revised every five years. It specifies which pollutants are regulated (e.g., wastewater, phosphorus, mercury), and how frequently the permit holder must monitor its effluent for the pollutants listed on the permit. If the permit holder violates the terms of the permit, it is liable for penalties under the Water Quality Act of 1987.

Needs Survey Data Base. A data base initiated in 1973 by the EPA to comply with the Federal Water Pollution Control Act Amendments and has been updated every two years so that EPA may report their findings to Congress. This data base is the major source of data for all existing or proposed wastewater treatment plants and includes information characterizing facility

location, flow capacity, influent and effluent characteristics, treatment processes, population served by each WWTP, construction cost estimates, and projection for future treatment needs. There are approximately 24,000 facility records in the 1986 Needs Survey data base.
Nutrients. Chemical elements or substances, such as nitrogen and phosphorus, that are essential for plant and animal growth.

Oil and Grease (O&G). All forms of oil and grease that are measured from petroleum derived sources. Included are light aromatics as well as tars. Oil and grease from animal fats, vegetable oils, or rendering operations can also be measured in the test.

Operating Days. The number of days in a calendar year that an industry or wastewater treatment plant was either known or assumed to have operated and released an effluent. In the NCPDI load estimation methodology, operating days are used to adjust daily load estimates to annual estimates.

Once-through Cooling Water. Water typically drawn from a surface water source that is passed only once through heat exchange equipment and then is discharged back into the receiving water.

Permit Compliance System (PCS) Data Base. This is a computerized EPA data management information system for tracking permit compliance and enforcement status data for the NPDES. The 1987 data base consists of more than 5 million records on over 75,000 active discharge permits issued nationally by the EPA.

Point Source Category. One of the three major point source categories classified in the NCPDI inventory. WWTPs, Industry, and Power Plants.

Power Plants. A facility that generates electricity by either the burning of fossil fuels, or nuclear fission. The third of the three major categories of point source dischargers in the NCPDI. Although power plants usually do not release large quantities of pollutants, if they use once through cooling water to remove heat from the condenser units, they release tremendous volumes of wastewater. They are carried as a separate point source category in the NCPDI because the high value of wastewater discharged would tend to distort their relative importance as pollutant sources.

Process Wastewater. Wastewater which contains by-products of manufacturing, commercial, or domestic activities that is released to either a wastewater treatment plant or, after treatment, to a receiving water. Sources of process wastewater include: process water, septic tank waste, demineralizer backwash, salt water brine, industrial waste chemicals, ship ballast water, sump drain water, wash water which is an integral part of production, heating water, metal cleaning wastewater, and low volume wastewater. Once-through and recycled cooling water are <u>not</u> considered polluted wastewater.

*** Receiving Water.** The name of a river, stream, tributary, lake or other body of water into which the facility effluent is discharged.

Seasonality Factor. A coefficient used in computing estimates of seasonal loads of pollutants discharged by the facilities. Seasonality factor is computed from the seasonal discharge days for a pipe or assumed, based on the facility's discharge category code. Many classifications of

industries, such as seafood processes and fruit and vegetable processors, only operate when the material they process is harvested. This coefficient accounts for the seasonal fluctuation in effluent production by these industries.

*** Standard Industrial Classification (SIC) code system.** A coding system developed by the Office of Management and Budget to classify establishments according to the type of activity in which they are engaged. The SIC is intended to cover the entire field of economic activities: agriculture, forestry, fishing, hunting, and trapping, mining, construction, manufacturing, transportation, communications, electric, gas, and sanitary services, etc.

Total Nitrogen. The sum of all forms of nitrogen.

Total Phosphorus. The sum of all forms of phosphorus.

Total Suspended Solids (TSS). Total amount of solid matter in a representative water sample that is retained on a membrane filter. It includes all sediment and other constituents which is suspended in a fluid.

Typical Pollutant Concentration (TPC). The concentration of a pollutant that is assumed to be present in a discharger's effluent when actual monitoring or permit data are not available. There is a TPC for each of the 15 pollutants and the 88 discharge categories in the NCPDI. TPC values are drawn primarily from the EPA's Development Documents for Effluent Limitations Guidelines and Standards.

A new set of TPCs for wastewater treatment plants (WWTPs) was used for this project. The source of the TPCs was primarily from Managing *Wastewater in Coastal Urban Areas* (1993) published by the National Academy Press of the National Research Council. The other source of information used in developing the new TPCs for WWTPs was the Environmental Protection Agency's 1990 Needs Survey. The TPCs used to develop estimates for WWTPs when no monitoring or permit data were available is shown below.

	Treatment Level					
Pollutant Parameter†	Untreated	Primary	Advanced Primary	Secondary	Advanced Secondary	Tertiary
BOD	250	69	39.3	25	10.9	5
TSS	250	63	50	30	12	8.5
TN	35	23	19	19	11	3
TP	8	8	4.2	2.8	1	1
FCB	5E7	2E5	2E4	2E3	1.53E3	1E3
As	0.0155	0.0155	0.0155	0.014	0.00825	0.0025
Cd	0.0144	0.01265	0.01265	0.0065	0.00392	0.00135
Cr	0.240	0.223	0.206	0.006	0.0036	0.0011
Cu	0.217	0.174	0.122	0.04	0.0228	0.0055
Fe	1.1	1.1	0.55	0.55	0.2875	0.025
Pb	0.125	0.0875	0.065	0.05	0.051	0.002
Hg	1.375	1.1	1.1	0.55	0.4125	0.275
Zn	0.325	0.2925	0.2925	0.13	0.0738	0.0175
OG	50.7	27.6	19.4	11.2	8.4	5.6

Pollutant Parameter†	Treatment Level: Untreated	Primary	Advanced Primary	Secondary	Advanced Secondary	Tertiary
PCB	19	11.9	2.075	1.9	1.05	0.2
CHP	0.8	0.8	0.7	0.6	0.5	0.3

Abbreviations: BOD, biochemical oxygen demand; TSS, total suspended solids; TN total nitrogen; TP, total phosphorus; FCB, fecal coliform bacteria; As, arsenic; Cd, cadmium; Cr, chromium; Cu, copper; Fe, iron; Pb, lead; Hg, mercury; Zn, zinc; OG, oil and grease; PCB, polychlorinated biphenyl; CHP, chlorinated hydrocarbon pesticide.

†Concentrations for BOD, TSS, TP, TN, As, Cd, Cr, Cu, Fe, Pb, and Zn are in mg/l. Concentrations of Hg, PCB, and CHP are in ug/l. Concentrations of FCB is in cells per liter.

Wastewater Treatment Plant (WWTP). A facility that receives wastewaters (and sometimes runoff) from domestic and/or industrial sources, and by a combination of physical, chemical, and biological processes reduces (treats) the wastewater to less harmful byproducts. The first of the three categories of point source dischargers in the NCPDI. WWTPs are an important source of pollutant loadings. The loadings estimated for WWTPs are considered more accurate than those for industries or power plants. Definitions of the various levels of treatment follows.
Untreated - no treatment; pollutant effluent concentrations estimated to be the same as influent concentrations.
Primary Treatment - A physical process that involves gravity separation of settleable and floatable solids from the influent waste stream. Other physical separation processes such as fine screens and filters can be included in this treatment step. Primary treatment results in the removal of about 30 percent of carbonaceous biochemical oxygen demand from domestic sewage.
Advanced Primary Treatment - A low-dose, chemically enhanced primary treatment process defined as the addition of a metal salt or other primary coagulant in concentrations between 5 mg/l and 100 mg/l with or without the application of a polymer, prior to primary clarification.
Secondary Treatment - Conventional biological treatment system, often classified as either suspended (e.g., activated sludge) or attached growth system (e.g., trickling filters) with a diverse culture of microorganisms to break down organic matter in the wastewater, oxidizing a portion and converting the remainder to biological solids. Some soluble constituents (i.e., heavy metals) are removed by adsorption to the biomass. Some nutrient removal occurs through incorporation into the generated biomass.
Advanced Secondary Treatment - Innovative secondary treatment processes that provide higher BOD/TSS removal than conventional secondary treatment processes. With advanced secondary treatment , there is typically an enhanced removal of phosphorous and increased sludge production. Advanced secondary treatment systems in particular can be configured to remove nitrogen and/or phosphorus.
Tertiary Treatment - Advanced cleaning of wastewater that goes beyond secondary or biological treatments. Tertiary treatment typically removes nutrients such as nitrogen and phosphorus, as well as most BOD and TSS. Nutrient removal is accomplished with high lime and granular activated carbon, or high lime, granular activated carbon and reverse osmosis.

NOAA's SEA Division

NOAA's Strategic Environmental Assessments (SEA) Division mission is to conduct comprehensive, interdisciplinary assessments of multiple resource uses for the Nation's coastal and oceanic waters, including the Exclusive Economic Zone. Assessments are made in the areas of pollution sources, human activities, physical environments, and biogeography and are intended to help identify strategies to enable decision-makers to balance conservation and development. To accomplish this objective, the SEA Division conducts environmental assessments, synthesizes data into information systems, and organizes this material into regional and national environmental reports and data bases.

PSC Branch

The Pollution Sources Characterization Branch of NOAA's SEA Division conducts assessments of coastal pollution sources and discharges. The cornerstone of the program is the *National Coastal Pollutant Discharge Inventory* (NCPDI). The NCPDI is a comprehensive data base and computational framework that contains seasonal and annual pollutant loading estimates for 15 pollutant parameters for all major categories of point, nonpoint, and riverine sources located in the Nation's coastal watersheds. These estimates can be aggregated by county, USGS hydrologic cataloging unit, or estuarine watershed. Pollutant estimates in the Inventory are for a base year of 1991.

For more information contact:

Daniel R.G. Farrow, Chief
Pollution Sources Characterization Branch
Strategic Environmental Assessments Division
Office of Ocean Resources Conservation and Assessment
National Oceanic and Atmospheric Administration
1305 East-West Highway, SSMC4
Silver Spring, MD 20910
(301) 713-3000, ext. 156

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DIVISION
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