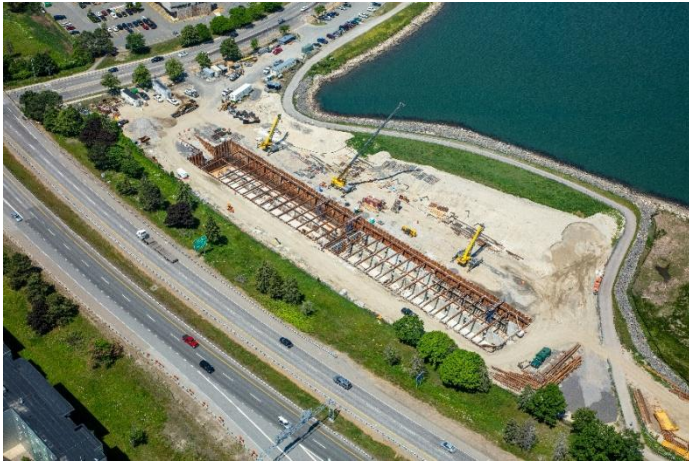


Maine Combined Sewer Overflow 2025 Status Report

June 2026



City of Portland's
Back Cove South
Storage Facility

A Dual-Purpose Public
Infrastructure Success Story



Contact: Michael S. Riley, P.E.
CSO Abatement Coordinator
Bureau of Water Quality
Phone: (207) 719-0809

Document No.: DEPLQ0972N-2026



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 State House Station | Augusta, Maine 04330-0017
www.maine.gov/dep



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

June 30, 2026

To: Combined Sewer Overflow (CSO) Permittees

Subject: 2025 Annual CSO Status Report for the State of Maine

Attached is a copy of the Maine Combined Sewer Overflow 2025 Status Report. This report is being distributed to CSO Permittee contacts, municipal officials, consulting engineers, and other interested people. The report documents the efforts and progress that have been made by each CSO Permittee to eliminate or abate combined sewer overflows within their system.

The level of CSO activity in 2025 was heavily impacted by drought conditions experienced in Maine. For context, annual precipitation in Maine has averaged 46.8 inches in the period from 1989 to 2024. Precipitation in 2025 averaged 38.74 inches, a 17% drop compared to the historical average.

The dry conditions led to record breaking results. The total statewide CSO volume for 2025 was **152.8** million gallons, which is the lowest volume on record. The next lowest was **294.5** million gallons in 2017.

One hundred forty-three (143) CSO discharge events took place in 2025. This is the lowest number of events for any year on record. For comparison, the next lowest number of CSO events was 252 in 2024.

Granted, the historic nature of these results is largely driven by the reduced precipitation in 2025. However, when we account for the variability in annual precipitation by focusing on the metric which measures gallons of CSO discharge per inch of precipitation, the data suggests continued progress in CSO abatement. For example, the combination of dry conditions in 2025 and continued progress on CSO abatement led to the lowest CSO discharge per inch of precipitation on record at 3.9 million gallons per inch of rainfall. The next lowest discharge was in 2022 at 6.7 million gallons of CSO discharge per inch of rainfall. This shows that investments made toward CSO abatement, including \$55.5 million dollars of abatement work in 2025, have continued to pay off.

Even in a dry year, the storms continue to be intense when they do arrive. For several CSO permittees, one intense storm accounted for over 90% of their discharge for the year. As mentioned in our 2024 report, the timing of storms plays a huge role in annual results. In 2025, storms in March proved particularly damaging because they combined frozen ground, intense rainfall and snowmelt.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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When the ground is frozen any rainfall runs overland into catch basins and the combined sewer. The frozen ground acts like a force multiplier for CSO discharge, with the same size storm producing much higher CSO discharge if the storm occurs when the ground is frozen. So, it's not only how large the rain event is, but when it occurs that determines overall discharge.

The Department's [CSO website](#) has a downloadable version of both the current report and last year's report. The website also contains links to other State and Federal documents that may be of interest.

The report is meant to be a snapshot of the CSO program status in Maine. We welcome any comments that you might have to improve the report. Thanks to all of you who have contributed data for this report, and most importantly thank you for your continued efforts to eliminate the public health hazard created by CSOs.

Mike Riley, P.E.
CSO Abatement Coordinator
Division of Water Quality Management

CSO Group members who contributed to this report include:
Jonathan Rice, P.E.
Camden Clark, P.E.
Cody Russell, P.E.

Enc.: Maine Combined Sewer Overflow 2025 Status Report

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Introduction

The purpose of this annual report is to inform the Combined Sewer Overflow (CSO) Permittees and the general public on the status of CSO abatement efforts in the State of Maine. The drive to reduce CSO discharge began in the early 1990s with the development of CSO Master Plans by 47 Maine CSO Permittees, with DEP approvals of the Master Plans starting in 1993. As such, the overall CSO abatement effort has been waged for 36 years in Maine. Over those three decades, fifteen CSO Permittees have completed their CSO abatement plan, conducted post construction monitoring, closed their CSO locations, and exited the CSO program. At this point, the remaining 32 CSO Permittees have completed the less difficult CSO abatement projects, with the majority of the remaining projects being of a more complex and more expensive nature.

The CSO program compiles information from various documents and reports submitted to the Maine Department of Environmental Protection (Department) by the CSO Permittees (City/Town/District/Authority) or their consultants on their behalf. Most of the information comes from the CSO Master Plans (a.k.a. Long-Term Control Plans), Sewer System Evaluation Studies, Inflow/Infiltration Reports, Annual CSO Progress Reports, Annual CSO Activity and Volume Reports, and general correspondence.

At the start of each CSO Permittee's abatement program, initial flow data was collected to estimate the discharge volumes and frequencies, define the scale of the problem, and establish a corrective course of action. Since then, CSO flow monitoring plans have continued to improve, Permittees have a better understanding of their collection system's response to wet weather, and overall data reliability has increased.

The CSO program works because it provides an exchange of value between the permittee and the regulatory agency. The permittee receives legal protection for what would otherwise be prohibited discharges, and in return agrees to keep working on implementing their CSO abatement Master Plan with the goal of eliminating CSO activity.

What is a CSS and What are CSOs?

- Combined Sewer Systems (CSS) are defined as collection systems which carry a combination of sanitary wastewater and storm water within the same pipes. They are typically older collection systems designed and installed prior to the advent of wastewater treatment facilities. Newer collection systems are no longer being designed in this manner and no new CSO locations are being licensed.
- Combined Sewer Overflows (CSO) are discharges of untreated wastewater from a municipal CSS. CSOs can be considered hydraulic relief points in a CSS which discharge to a receiving water during wet weather to protect property and prevent sewer backups into people's basements. CSOs typically consist of two components; a CSO Regulator where the untreated wastewater exits the sewer system, and a CSO outfall where the wastewater is discharged to the receiving water. Maine Pollution Discharge Elimination System (MePDES) permits issued by the State license the CSO outfalls, not the CSO regulators. Although uncommon, there can be more than one regulator discharging to a given CSO outfall.

- Difference between a CSO Outfall and a CSO Regulator:
 - CSO Outfall – a licensed pipe or structure that discharges untreated combined wastewater from an overwhelmed collection system to the receiving water during wet weather events in compliance with requirements of the MePDES permit and waste discharge license.
 - CSO Regulator – this is where combined wastewater exits the sewer collection system, prior to reaching the wastewater treatment facility (WWTF). Think of it as leakage on the way to the WWTF. This happens when flows are high enough to exceed a regulator weir elevation thereby diverting that portion of the flow to a CSO outfall. CSO regulators are not permitted structures, CSO outfalls are. There can be more than one CSO regulator per CSO outfall. For example, Portland/PWD currently have 26 CSO regulators for 23 CSO outfalls.
- Large volumes of water entering the CSS through catch basins, old and leaky pipes, roof drains, cellar drains, sump pumps, and other sources can cause the capacity of the system to be exceeded, resulting in discharges. Most Permittees distinguish between inflow and infiltration (I&I) from public sources (catch basins and pipe located within the public right of way) and private sources (roof drains, perimeter drains, sump pumps, and service pipes located on private property). Abatement of private sources of I&I are generally tackled last due to the expensive, difficult, and time-consuming nature of the work.
- CSO discharges occur mostly during and after rain events and/or snowmelt. Depending on the amount of inflow (catch basins, sump pumps, roof drains) and infiltration (high groundwater leaking into sewer via cracks, loose joints) entering a CSS, flows during wet weather events can be as high as fifty (50) times the normal dry weather flows. This ratio of wet weather flow to dry weather flow is referred to as the **peaking factor**. For CSO Permittees in Maine, wet weather peaking factors range from about three, for Permittees that have implemented an effective sewer separation program, to over ten, for Permittees whose separation efforts have been less effective. Peaking factors are an indication of the sensitivity of a CSS to precipitation and also a good indicator of how combined the CSS still is.
- CSOs were originally added as hydraulic relief points within the CSS to allow the excess flows to be discharged in a controlled manner. These relief points are generally at topographic low points, near pump stations and river crossings.
- A CSO discharge is considered a legally allowable discharge under the MePDES permit program subject to the following two conditions:
 - The CSO Permittee must be pursuing a DEP approved CSO abatement plan.
 - The abatement plan must be on schedule.

If either condition is not met, the legal protection for CSO discharge goes away. Subsequent discharges are treated as illicit sanitary sewer overflows until the two conditions are once again met.

- Sewer separation projects are designed to separate out the stormwater collection system from the wastewater collection system so that the sewers only carry

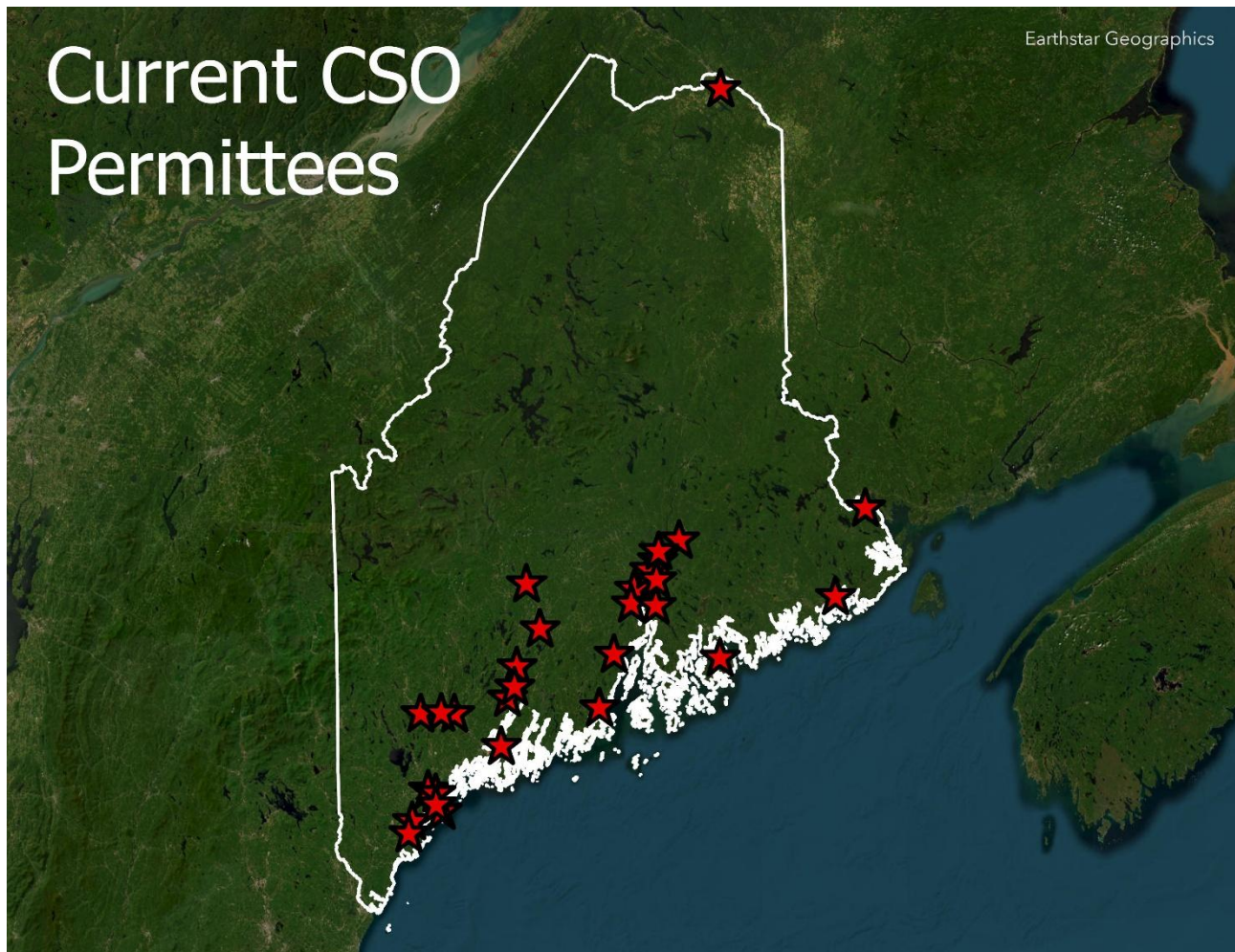
wastewater and all stormwater is handled separately. If enough separation work is completed, CSO locations are no longer needed and can be permanently closed.

- For CSO permittees who have reached the end of the construction phase for CSO abatement and are entering the 5-year post construction monitoring phase (PCMP), the DEP will often engage in discussions on converting the last active CSO, which is typically located closest to the WWTF, to an Emergency Overflow (EO) to prevent flooding at the treatment plant and to protect nearby residences if a 25+ year storm rolls through. The EO has to be electronically monitored on a continuous basis with any discharge being treated as an illicit discharge and reported as a sanitary sewer overflow (SSO), subject to enforcement and fines. In this manner, the sewer collection system will still have one hydraulic circuit breaker to prevent flooding when storms are of a 25-year return frequency and above.
- For those not familiar with Sanitary Sewer Overflows (SSO), they are defined as illegal discharges subject to DEP fines and enforcement. SSOs can occur for a variety of reasons, including pipe blockages, maintenance issues, mechanical failures, and wet weather, and can occur at any point in the collection system.

What are the Impacts of CSOs?

- At the end of 2025, there were 32 Maine CSO Permittees (Towns, Cities, Utility Districts, Authorities) located in 29 Maine communities. At the end of 2025, these Permittees collectively had 106 individual CSO discharge points (reduced from the original 340) and 112 active CSO regulators. Statewide, two CSO locations were permanently closed in 2025, with the City of Old Town closing CSO #003 and CSO #004.
- The frequency of discharges varies greatly amongst Permittees, ranging from seldom, all the way to discharging in response to the smallest rainstorms. Dry weather CSO discharges are prohibited, as are CSO discharges due to mechanical failure, or inadequate operation and maintenance. In addition, no discharges should occur at flow rates below the design capacity of the collection system.
- In large communities, tens of millions of gallons per year of untreated combined sanitary sewage and storm water may be discharged. In the past five years statewide, total annual CSO discharges have ranged from approximately 153 to 745 million gallons. For comparison, the estimated volume from 1989, when most CSO abatement programs were just starting, was 6.2 billion gallons.
- CSOs discharge untreated combined sewage into ten major watersheds in Maine. The watersheds include seven (7) rivers and their tributaries (Androscoggin, Kennebec, Machias, Penobscot, St. Croix, St. John, and Saco) and three (3) bays (Casco Bay, Frenchman Bay, and Penobscot Bay). The receiving waters vary in size from the Atlantic Ocean all the way down to a handful of small streams. The latter are the focus of DEP's effort to eliminate CSO discharge to sensitive receiving waters. Sensitive receiving waters tend to be smaller streams, brooks, or tidal estuaries with low dilution factors.
- CSOs have wide variability of impacts depending on discharge volume, frequency, and the size and sensitivity of the receiving water. Water quality can be impaired by the addition of floatable solids, bacteria, and sometimes industrial pollutants that may be present in CSO discharges.

- Potential public health impacts from CSO discharges include the closure of beaches and shell fishing areas due to bacterial contamination, and the potential for drinking water supplies to be threatened/contaminated.
- Why is CSO abatement important? During wet weather, flows in a CSS can hydraulically overload the capacity of the collection system leading to CSOs, SSOs, street flooding, back-ups into basements, and treatment facility upsets.



Map Showing the Location of Current CSO Permittees

What is a CSO Permittee?

- CSO Permittee – a Town, City, Sewer District, or regional Wastewater Treatment Authority that has active CSO locations in their collection system which must be licensed.
- CSO Permittees are authorized to discharge untreated combined sanitary and storm waters subject to the conditions and requirements included in the Maine Pollutant Discharge Elimination System (MePDES) permit. In simple terms, a CSO Permittee receives legal protection for CSO discharges while they work to implement an approved CSO Master Plan to abate and eliminate said discharges.
- The Department issues CSO Permittees a wastewater discharge license that requires them to implement the Environmental Protection Agency's (EPA) Nine Minimum Control Best Management Practices (BMP) for CSOs and develop,

maintain, and implement a CSO Master Plan (aka the Long-Term Control Plan (LTCP)) to eliminate or abate their overflows. These actions are intended to bring them into compliance with EPA's April 19, 1994, CSO Control Policy, the Clean Water Act, and State law (Maine DEP Chapter 570).

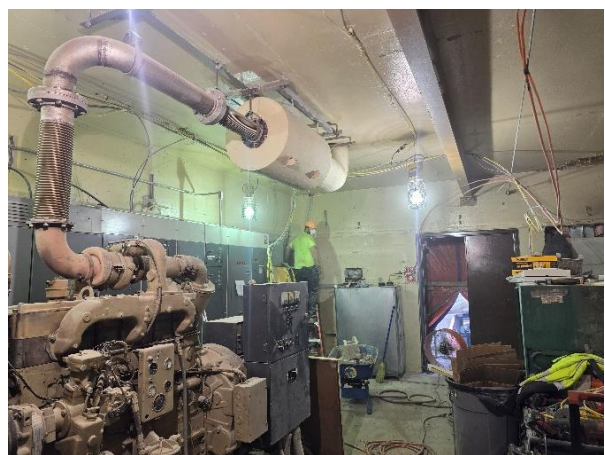
- Special Conditions in a MePDES permit/Waste Discharge License require all CSO Permittees to submit an Annual CSO Progress Report to the Department, by March 1st of each year for the previous calendar year.
- The Annual CSO Progress Report documents each Permittee's efforts to implement CSO abatement each year and collects pertinent fiscal and logistical information about their CSO abatement program. This information is used to track their CSO abatement progress and gather state-wide information on the CSO program and fiscal needs.

Where Did We Start?

- The CSO abatement movement began in 1989 with the publication of the National CSO Control Strategy by the EPA.
- At that time, the State of Maine had about 50 CSO Permittees that discharged an estimated 6.2 billion gallons of untreated wastewater and storm water into the surface waters of the State, primarily during wet weather events.
- At the start of the program in the late 1980s, CSO Permittees reported that over 1,700 individual CSO discharge events were occurring each year, through approximately 340 CSO outfall locations (an average of 5 discharge events per CSO location per year).
- On April 19, 1994, EPA issued a national policy statement entitled "Combined Sewer Overflow (CSO) Control Policy." This policy provided guidance to State permitting authorities and CSO Permittees on coordinating the planning, selection, and implementation of CSO controls that, once implemented, would allow CSO Permittees to achieve compliance with the requirements of the Clean Water Act (CWA).
- In February 2000, the Maine Department of Environmental Protection Chapter 570 Rules, entitled "Combined Sewer Overflow Abatement," took effect. This chapter established procedures for CSO evaluation, preparation of an abatement plan, and set forth minimum controls to reduce CSOs while long-term plans are completed. The main difference between Chapter 570 and EPA's CSO Control Policy is that Chapter 570 requires Maine CSO permittees to include total elimination/closure of the CSO outfall as one of the options that must be evaluated in the Alternatives Analysis. If outright closure is technically feasible and not cost prohibitive then DEP supports this pathway. Chapter 570 also discussed the conditions under which new sources of wastewater could be added to a CSS with active CSOs.
- In December 2000, as part of the Consolidated Appropriations Act for Fiscal Year 2001 (P.L. 106-554), Congress amended the Clean Water Act (CWA) by adding Section 402(q), commonly referred to as the Wet Weather Water Quality Act of 2000. Section 402(q) requires that each permit, order, or decree issued pursuant to the CWA for a discharge from a municipal combined sewer system shall conform to the 1994 EPA CSO Control Policy.

What is Being Done to Eliminate/Abate CSO Discharges?

- All of Maine's CSO Permittees have completed or are currently working on implementing their CSO Master Plan, often referred to as a Long-Term Control Plan. These documents define the magnitude of the CSO discharges, their impacts on the environment, evaluate a range of abatement control alternatives and their financial impacts, and recommend a set of CSO controls that will eliminate/abate the CSO discharges.
- CSO abatement projects have reduced the discharge of untreated, combined sewage to receiving waters for all the CSO Permittees. Fifteen Permittees have eliminated their CSO discharges entirely, have left the CSO program, and are no longer licensed to discharge untreated combined sewage during wet weather.
- Statewide, **currently licensed** CSO Permittees have reported investing approximately \$926.7 million in CSO abatement since the program started. Of the total invested to date, the Maine Clean Water State Revolving Fund (CWSRF) has contributed approximately \$388.4 million (41.9% of total expenditure on CSO abatement by current CSO Permittees).
- Anticipated infrastructure needs of current CSO Permittees over the next five years are estimated to be approximately \$366.6 million.



Construction taking place at the Chaffee Brook Pump Station site in Winslow at CSO #003

Where are We Now?

2025 Status

- 1) In 2025, the 32 currently licensed CSO Permittees reduced the total number of CSO discharge locations by two, from 108 to 106, (a complete listing of Maine's CSO Permittees, the number of CSO locations, and the corresponding receiving waters are listed on page 17). Two CSOs were closed in the community of Old Town. With the addition of 2025 data, the chart on page 23, **Maine – Statewide Number of Combined Sewer Overflow Outfalls**, shows a 68.6% reduction in the overall number of CSO locations in Maine since the start of Maine's CSO Abatement Program.
- 2) In 2025, the CSO Permittees reported a total of 143 overflow events, which is the lowest annual total on record for the State, in response to below average annual

rainfall. An overflow event is any calendar day on which one or more CSO locations within a community experience a discharge. The table on page 19, **Maine CSO Permittee Annual Number of CSO Discharge Events**, contains a historic listing of the annual number of CSO discharge events for each CSO Permittee.

- 3) The maximum number of overflow events reported in 2025 from a single CSO Permittee was thirty-eight (38). The average (mean) number of discharge events per year for all Permittees was just under five events (4.8) and the median was two (2) events. Additional information can be found in the table on page 19, **Maine CSO Permittee Annual Number of CSO Discharge Events**.
- 4) Since 1989, the statewide flow-weighted average annual precipitation for CSO Permittees in Maine has been 46.80 inches. In 2025, the annual precipitation measured by CSO Permittees varied significantly from 27.39 inches in Washington County to 51.27 inches in Penobscot County, with a statewide flow weighted average of 38.74 inches. Comparatively speaking, 2025 was below average for precipitation in Maine.
- 5) The **Maine – Yearly CSO Volumes and Precipitation** chart on page 25 compares annual CSO discharge volume to annual precipitation. The chart illustrates that CSO discharge volumes tend to mirror the annual upward and downward trends in precipitation totals but also shows that the peaks have become less pronounced as the CSO abatement effort has progressed. The chart also shows a progressive widening of the gap between the annual precipitation trend line and the annual CSO discharge volume trend line. This widening gap illustrates that as CSO abatement projects continue to be implemented, collection systems are becoming **less sensitive to precipitation events**.
- 6) The CSO volume discharged statewide in 2025 was reported to be approximately 152.8 million gallons (MG). That level of discharge is the least on record and not quite half as much as 2017, but was in response to 38.74 inches of rainfall, whereas 2017 had 40.35 inches of rainfall. This indicates that progress continues to be made.
- 7) The table on page 18, **Maine CSO Permittee Flow Data**, contains a historic listing of the annual overflows from each CSO Permittee. The **Maine 2025 CSO Flow Comparison** pie chart on page 26 and the **Maine 2025 CSO Flow Comparison by Permittee** bar chart on page 27 show graphical comparisons of these overflow volumes between the CSO Permittees.
- 8) In 2025 the top five (5) CSO Permittees, ranked by discharge volume, accounted for approximately 92.0% of the total CSO volume discharged in the State. The top ten (10) CSO Permittees accounted for approximately 97.1% of the total CSO discharge volume. The remaining CSO Permittees accounted for 2.9% of the total CSO discharge volume. See the **Maine 2025 CSO Flow Comparison** pie chart on page 26 for a graphical comparison of CSO dischargers.



Construction of the City of Portland's Back Cove South Storage Tank Project at CSOs #017, 018, and 019 (photo credit to Maine Imaging for left side photo and Bulldog Aerials for right side photo)

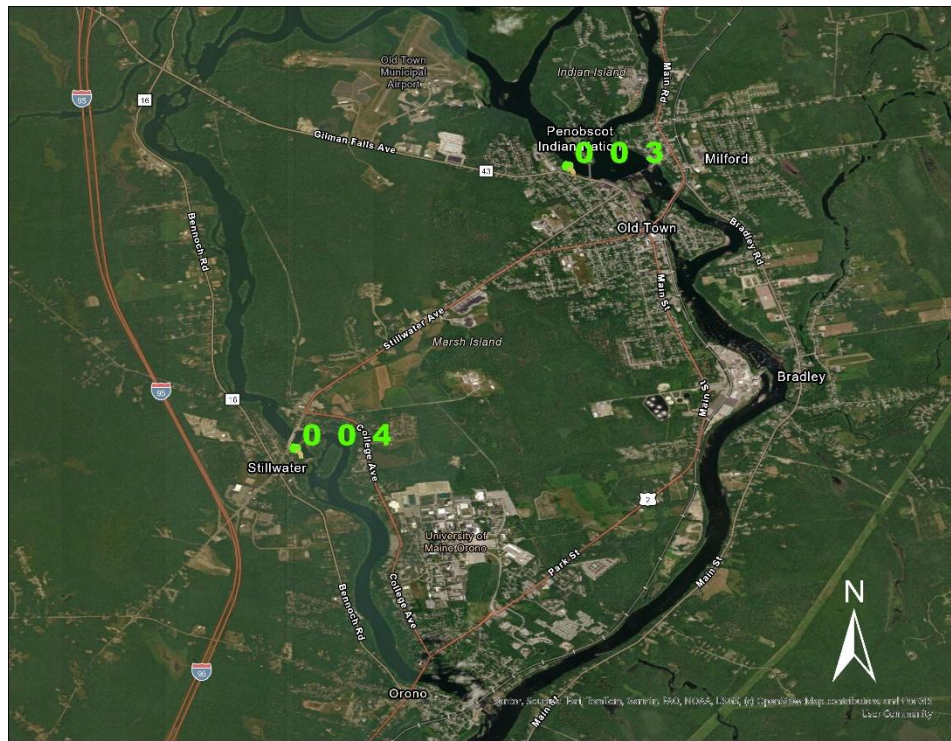
- 9) CSO discharges by the City of Portland and the Portland Water District totaled 115.3 MG and accounted for approximately 75.5% of Maine's total CSO discharge volume in 2025; see the **Maine 2025 CSO Flow Comparison** pie chart on page 26. We're happy to report that the Back Cove West Storage Conduit, which officially went on line in the spring of 2023, has reduced CSO discharge into Back Cove by over 37 million gallons. The Back Cove South Storage Facility officially went into service in late August of 2025 and reduced discharges to Back Cove by approximately 9.4 MG in 2025. Due to an issue with the check valve at CSO #017 only one storm was captured for CSO #017, but it is estimated that an additional 6.4 MG would have been captured if this were not the case.
- 10) In recent years, the State of Maine has seen an intensification towards more high intensity rain events which can overwhelm any combined sewer collection system.¹ This trend of high intensity storms has worked against the progress made by Maine CSO communities. 2025 was an outlier due to drought conditions affecting groundwater levels and precipitation totals throughout the state.
- 11) The pie chart on page 28 – **Maine 2025 CSO Volume Discharged by Watershed**, is a graphical representation of the CSO volumes discharged by major watershed. In 2025, Casco Bay received approximately 76.4% of the statewide CSO volume discharged, followed by the Penobscot River at 7.4%, the Androscoggin River at 6.6%, the Kennebec River at 4.1%, the Saco River at 3.0%, and Frenchman Bay at 1.2%. Discharges to the Machias River and St. Croix River account for the remaining ~1.3% of combined sewer overflow volumes. The St. John River and Penobscot Bay did not receive any direct CSO discharge in 2025.
- 12) The table on page 29 – **Maine Annual CSO Volume Discharged by Watershed**, shows the reported CSO discharge volumes for each CSO Permittee grouped by the receiving watersheds, both for 2025 and the previous five years.

¹ Fernandez, I., S. Birkel, C. Schmitt, J. Simonson, B. Lyon, A. Pershing, E. Stancioff, G. Jacobson, and P. Mayewski. 2020. Maine's Climate Future 2020 Update. Orono, ME: University of Maine. climatechange.umaine.edu/climate-matters/maines-climate-future/



Construction of New Process Building at the City of Saco's Water Resource Recovery Facility (WRRF)

- 13) CSO discharges are well-documented contributors to beach and shellfish closures. Stating with certainty that specific CSO events are **solely** responsible for specific closures is more difficult and is beyond the scope of this report. In some areas of the State, there may be other factors that contribute to a beach or shell fishing area closure. These may include but are not necessarily limited to: urban storm water runoff, malfunctioning septic systems, domestic and non-domestic animal waste, agricultural runoff, and bathers. This Annual Report attempts to identify which beaches and shell fishing areas **may have** been impacted by CSO discharges in 2025.
- 14) In 2025, there were no beach closures due to CSO discharge. There were potential impacts on thirteen (13) beach areas from CSO discharges. They were: Bar Harbor (Town Beach off Town Pier & Hulls Cove); Biddeford/Saco (Hills Beach, Biddeford Pool, Middle Beach, Fortunes Rock Beach & Camp Ellis); Cape Elizabeth (Cliff House Beach, Casino Beach & Fort Williams Park); Portland (East End Beach); South Portland (Willard Beach); and Calais (Red Beach – though not considered a swimming beach).
- 15) In 2025 two (2) CSO Permittees reported that shell fishing areas were impacted by their CSO discharges (Machias and Portland). Both reported shell fishing area closures, including three in Machias, which were attributed to CSO activity. The upgrades to the river crossing and construction of the pump station in Machias were completed in early 2025, with pump station startup occurring in late March/early April. Machias had no additional CSO events at the siphon outfall in 2025 after startup of the pump station.



Map of Old Town Showing Locations of Outfalls Closed in 2025

Overall Trends and Considerations

- 1) The volume and frequency of CSO discharges vary from one wet weather event to the next based on existing groundwater levels, frozen or thawed ground, snowmelt, saturated soil conditions, and rainfall volume, duration, and intensity.
- 2) To evaluate CSO abatement progress it is best to look for a historical trend in reductions, rather than totals from year to year. The chart on page 21, **Maine – Statewide Combined Sewer Overflow Volume Discharged**, illustrates the continuing overall downward trend in the CSO volume discharged annually. Since the start of the CSO Abatement Program the cumulative reduction in CSO volume discharged annually has decreased by approximately 97.5% statewide. Recent progress has slowed as Permittees tackle the more difficult abatement projects and the frequency of larger and more intense storms has increased.²
- 3) Similarly, the chart on page 22, **Maine – Statewide Combined Sewer Overflow Annual Number of Discharge Events**, shows an overall downward trend in the number of overflow events per year. Since the start of the CSO Abatement Program, the cumulative number of overflow events experienced per year has decreased by approximately 91.8% statewide from 1,753 events in 1989 to 143 events in 2025.
- 4) CSO abatement progress should not be measured solely by comparing the volumes discharged from one year to the next, because the volume discharged is influenced by variations in precipitation amounts, intensity and timing, the total area drained by

² MCC STS. 2020. Scientific Assessment of Climate Change and Its Effects in Maine. A Report by the Scientific and Technical Subcommittee (STS) of the Maine Climate Council (MCC). Augusta, Maine. 370 pp.

the collection system, the rate of snowmelt, frozen or thawed ground, and existing groundwater levels. Even given the same annual precipitation, it is highly unlikely that any two years would result in the same volume of CSO discharges because of the complex relationship between these variables.

- 5) Trying to compare CSO abatement progress from year to year is difficult due to the varying conditions that influence the volume and frequency of overflows, not the least of which is annual precipitation patterns. To partially compensate for the fluctuation in annual precipitation patterns, the total volume of untreated combined sewage discharged can be unitized by taking into consideration the average annual precipitation received by each CSO Permittee. Just divide CSO volume by annual precipitation reported in inches to obtain a volume discharged per inch of precipitation. The chart on page 24, **Maine Combined Sewer Overflows Annual Volume Discharged per Inch of Precipitation**, illustrates the unitized CSO discharge volume per year. This chart shows a continuing downward trend in the volume of combined sewage discharged per inch of annual precipitation, despite upticks in 2023 and 2024. Since the start of the CSO Abatement Program, overflow volumes have decreased from approximately **128** million gallons per inch of precipitation to **3.9** million gallons per inch of precipitation, a reduction of 97%. The reduction in CSO discharge per inch of rain mirrors the overall reduction in annual CSO discharge volume achieved statewide since the CSO Abatement Program started (97.5%). This analysis is useful as a general indicator of the CSO abatement progress that is being accomplished.
- 6) Precipitation and the CSO volume discharged does not have a simple linear relationship. Still, generally, as precipitation levels increase, the volume of combined sewage being discharged per inch of precipitation would increase, because of the sewers' finite capacity to capture more storm water. Once the capacity of the combined sewer system is reached, any additional rainfall or snowmelt would overflow the already inundated system.



CSO regulator weir modifications at CSO #002 In Mechanic Falls (left) & CSO #002 In Winslow (right). Both weirs were raised to increase in-system storage and reduce CSO discharges

- 7) The susceptibility of a CSO Permittee's sewer collection system to excessive inflow and infiltration (I&I) is dependent on many factors including age and condition of pipe, degree of separation, quality of the original installation, how well the system has been maintained, etc. Therefore, wet weather conditions and precipitation patterns affect individual CSO Permittees differently. Systems with a large number of catch basins or roof drains still connected, or with a high percentage of impermeable surfaces, may be influenced to a greater degree by the inflow generated by intense summer storms. In communities where the sanitary and storm systems are largely separated and inflow is not the main challenge, the cause of wet weather discharges might be more infiltration based. In these systems a high ground water table, often occurring in the spring, can promote infiltration into the collection system via leaky pipes and manholes. Therefore, direct comparisons between Permittees regarding their CSO abatement progress could be misleading.
- 8) Starting in 2018, the Annual Maine Combined Sewer Overflow Status Report has included a new section which summarizes the level of treatment provided by each of the thirty-two (32) Maine CSO Permittees. The **Maine CSO Permittee Level of Treatment** summary included on page 30 provides the total annual volume of wastewater collected by each of CSO communities, the percentage which receives secondary treatment, the percentage which receives only primary treatment (the bypass volume, for communities that have a permitted bypass of secondary treatment), and the percentage which receives no treatment (CSO volume). The summary is a good indication of which CSO Permittees are maximizing the percentage of flows which receive secondary treatment, and whether certain systems are overly reliant on their bypass of secondary treatment.
- 9) In addition to the CSO storage facilities mentioned previously, Lewiston/Auburn are currently constructing 2.1 MG of off-line storage at their LACWA treatment plant. The project will also increase the peak flow capacity of LACWA from 32 to 38 MGD. The storage tank at LACWA is scheduled to be on line by the end of 2026.

Pathway to Exit from the CSO Program

Once a permittee has completed the construction phase of their CSO abatement effort, they enter a 3-to-5-year post construction monitoring phase (PCMP) to assess whether they have an adequate level of control to safely leave the program or whether they need to do additional CSO abatement projects to increase their level of control further.

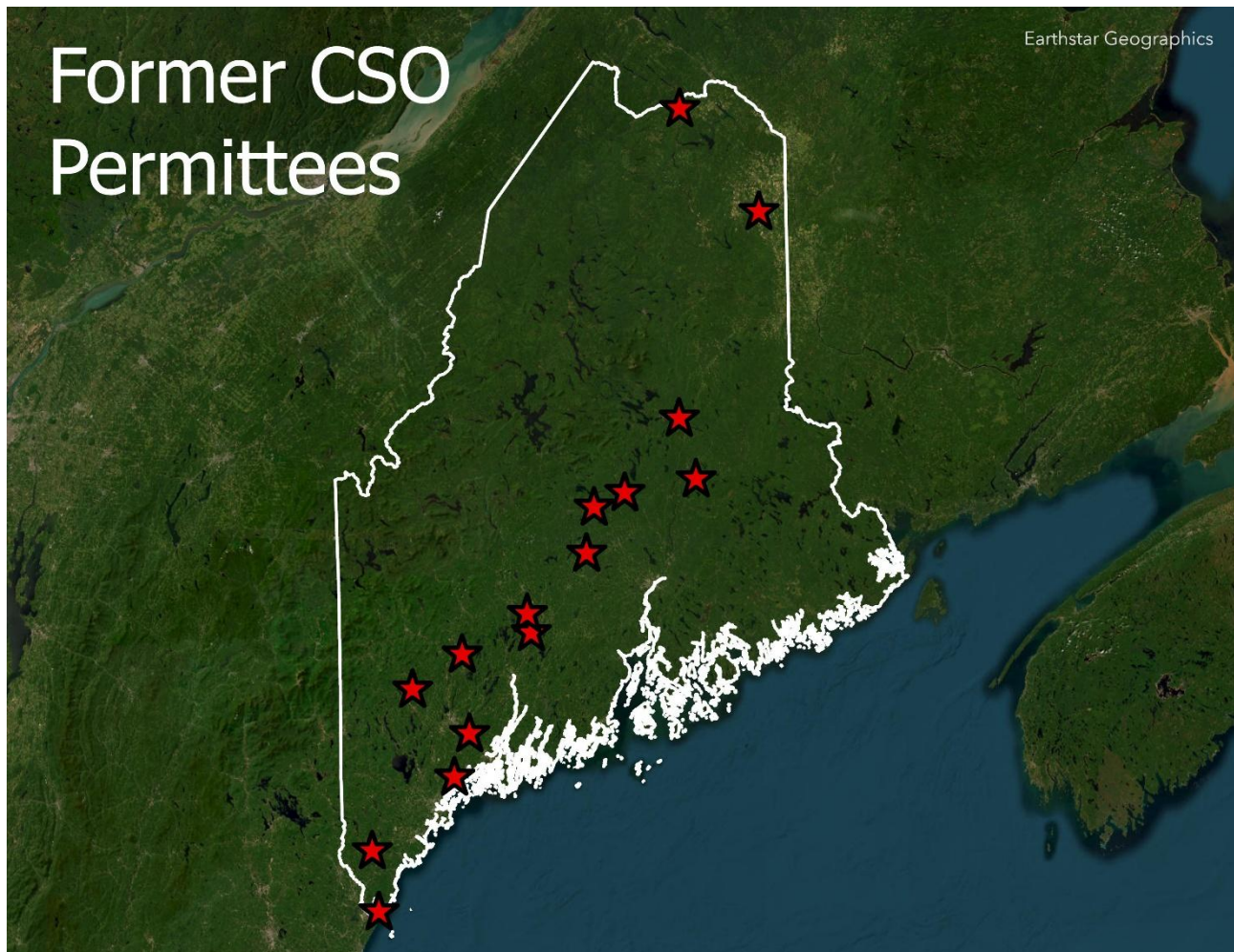
From experience, the CSO Group has concluded that an 8-to-10-year period with no CSO activity, which equates to controlling a 24-hour storm with an 8-to-10-year return interval, is the practical threshold that a permittee should be able to meet to leave the CSO program without causing themselves a regulatory burden.

CSO permittees with only one remaining CSO often transition the CSO to an Emergency Overflow (EO) once they've obtained an 8-to-10-year level of control. Obtaining this level of control before being eligible to transition to an EO is not a statutory requirement, but rather a practical consideration to prevent the former CSO permittee from getting into regulatory trouble by leaving the CSO Program prematurely without a sufficient level of control.

Why are EOs desirable?

The DEP believes in maintaining at least one hydraulic relief point for a collection system of any size as a safeguard in case a large storm rolls through. The EO performs this function by protecting critical infrastructure, preventing street flooding, and preventing basements from being filled.

In return for providing permanent hydraulic relief from big storms, the EO must be monitored electronically 24/7 year-round with any discharge treated as a prohibited discharge (SSO) subject to 24-hour reporting rules, fines, and enforcement action.



Map Showing the Location of Former CSO Permittees

Recognitions

There were many bright spots in 2025:

- 1) The following eleven (11) CSO permittees had zero CSO events and thus zero CSO discharge: Auburn Sewerage District, City of Belfast, Town of Bucksport, City of Gardiner, Town of Hampden, Town of Madawaska, City of Old Town, Town of Randolph, City of Rockland, Town of Winslow, and Winterport Water District. This is the first time on record for Auburn Sewerage District and the City of Gardiner. Congratulations on joining this high performing group.

- 2) In 2025, Auburn Sewerage District (0), the City of Bangor (8), the City of Biddeford (8), the City of Calais (1), the City of Gardiner (0), the City of Lewiston (12), Mechanic Falls Sanitary District (3), and the City of Westbrook/Portland Water District (1) had their lowest number of CSO events on record. The City of South Portland (2) tied their lowest number of CSO events on record.
- 3) In 2025, CSO permittees who had their lowest CSO volume on record included Auburn Sewerage District, the City of Bangor, the City of Biddeford, the City of Gardiner, the City of Lewiston, Lewiston-Auburn Clean Water Authority (LACWA), Mechanic Falls Sanitary District, the City of Portland/Portland Water District, and the City of South Portland.

4) Significant CSO Milestone Reached – City of Calais

This recognition goes to the City of Calais, who finished their final scheduled CSO abatement project in 2025 and entered the Post-Construction Monitoring Period. The City of Calais has been working on their CSO abatement program for approximately twenty years since August of 2006.

Over the past seven years, the City of Calais has converted two of their original five CSO outfalls to Emergency Overflows and has completed several major CSO abatement projects along Palmer Street, Main Street, and North Street.

Over the same seven-year period from 2019 to 2025, the City of Calais has reduced the number of CSO events from six in 2019 to one in 2025.

Congratulations to the City of Calais on reaching this significant milestone in their CSO abatement program!



Calais downtown sign and work on the North Street CSO Abatement Project in the City of Calais

- 5) CSO permittees that are currently in the Post Construction Monitoring Phase (PCMP) of their CSO abatement program include: Auburn Sewerage District, Town of Bucksport, City of Calais, and Lewiston-Auburn Clean Water Authority.
- 6) CSO Permittees nearing the completion of their construction phase of CSO abatement, and the start of post construction monitoring, include: City of Belfast.
- 7) We'd also like to recognize those CSO Permittees that treated more than 99% of their total flow volume to secondary treatment standards. They include: Bar Harbor, Belfast, Biddeford, Brewer, Gardiner & Randolph, Greater Augusta Utility District, Winslow, Auburn, Lewiston, & the Lewiston-Auburn Clean Water Authority,

Madawaska, Mechanic Falls, Old Town & Milford, Orono, Saco, Skowhegan, South Portland & Cape Elizabeth, and PWD/Westbrook. Congratulations on this achievement!

- 8) CSO permittees separated an additional 41 catch basins from their sewer collection systems in 2025 with the City of Biddeford leading the way with 22, followed by Lewiston with 8, Portland and South Portland each with 4, and Greater Augusta Utility District with 3. Congratulations to the Biddeford Wastewater Department!
- 9) Cleaning sewers reestablishes lost capacity and allows for a detailed condition assessment of the pipe and manholes. CSO communities cleaned over 279 miles of sewer mains in 2025 led by Bangor (55.2 miles), Lewiston (34.6 miles) and Hampden (31.4 miles).



Construction of Winterport Water District's New Secondary Treatment Facility

- 10) Closed circuit TV inspection (CCTV) of sewer mains is one of the best tools available to determine pipe condition. In 2025, CSO communities CCTVed 137.4 miles of sewer mains with Bangor (29.1 miles), Lewiston (26.4 miles), Portland (26.3 miles), and GAUD (13.1 miles) leading the charge. I/I investigations were conducted on a total of 29.7 miles of sewers in 2025 with the City of Bangor leading the charge with 25.9 miles.
- 11) CSO permittees pursuing significant sewer relining efforts include the City of Portland/PWD, Greater Augusta Utility District, the City of Westbrook and the City of South Portland.
- 12) The City of Portland placed the Back Cove South Storage Facility online in 2025. The 3.5-million-gallon tank will reduce CSO discharge into Back Cove substantially.
- 13) Auburn Sewerage District staff discovered and removed a cross connection between the stormwater collection system and the sewer collection system on Mechanics Row which was delivering 11,111 GPM (15.9 MGD) to the sewer system contributing to a huge wet weather peaking factor and impacting their percentage of the Lewiston/Auburn flow allocation. Great work by ASD staff!
- 14) The City of Lewiston has completed inspections using NASSCO's Pipeline Assessment Certification Program (PACP) and their Manhole Assessment Certification Program (MACP) on 100% of the sewer collection system improving

their knowledge of this asset's condition. This should be the goal for all sewer collection systems.

- 15) 2025 appears to be the first year on record where all thirty-two (32) CSO permittees reported zero dry weather CSO discharges.
- 16) The dry conditions in 2025 also led to the lowest usage of bypasses of secondary treatment on record. Wet weather flows which bypassed secondary treatment and received primary clarification and disinfection averaged 1.54% of forward flow for all CSO permittees. This compares with 2.45% on average for the prior four years.
- 17) Perhaps the single biggest sign of progress for CSO abatement in Maine, the evidence that proves CSO abatement projects are having an impact, is the comparison between the last two “truly dry” years shown below. In the last fifteen (15) years only two years have had annual precipitation of less than 40 inches, 2015 and 2025. To make the comparison more apt we need to remove the impact of the storm on September 30, 2015, which bordered on a 100-year return frequency and contributed 44% of the annual statewide discharge total. Even after we remove the impact of the 100-year storm, there is still a significant drop in CSO discharge between the modified 2015 total of 289 MG shown in bold and 2025 for almost identical precipitation. This is good news.

Year	Annual Precipitation (in/yr)	Statewide CSO Discharge (MG)
2015	39.07	516.0 (289.0)*
2025	38.74	152.8
	% Reduction in CSO Volume:	47%

*Statewide Discharge Without 9/30/2015 storm impact shown in bold

Maine Combined Sewer Overflow (CSO) Permittee List

(As of December 31, 2025)



COMMUNITY/PERMITTEE	Outfalls	Regulators	Number of CSO Outfalls & Receiving Water
AUBURN SEWERAGE DISTRICT	1	1	1-Androscoggin River
BANGOR	8	10	5-Kenduskeag Stream, 3-Penobscot River
BAR HARBOR (Hulls Cove)	1	1	1-Frenchman Bay
BAR HARBOR (Main Plant)	3	3	2-Frenchman Bay, 1-Eddie Brook
BATH	4	4	4-Kennebec River
BELFAST	2	2	2-Passagassawakeag River/Belfast Harbor
BIDDEFORD	7	7	7-Saco River
BREWER	4	4	3-Penobscot River, 1-Sedgeunkendunk Stream
BUCKSPORT	0	0	SWIRL to Penobscot River
CALAIS	3	3	2-St. Croix River, 1-Landing Brook
CAPE ELIZABETH – Ottawa Road Pump Station (Co-Permittees: South Portland, PWD, & Cape Elizabeth)	1	1	1-Atlantic Ocean
GARDINER	1	1	1-Kennebec River
GREATER AUGUSTA UTILITY DISTRICT (GAUD)	9	9	9-Kennebec River
HAMPDEN	1	1	1-Souadabscook Stream
LEWISTON	8	9	3-Androscoggin River, 1-Goff Brook/Hart Brook, 4-Jepson Brook
LEWISTON-AUBURN Clean Water Authority (LACWA)	1	1	1-Androscoggin River
MACHIAS	2	2	2-Machias River
MADAWASKA	2	2	2-St. John River
MECHANIC FALLS SANITARY DISTRICT	2	2	2-Little Androscoggin River
MILFORD	1	1	1-Penobscot River
OLD TOWN	1	1	1-Penobscot River
ORONO	1	1	1-Penobscot River
PORTLAND – CITY	7	10	3-Back Cove, 1-Capisc Brook, 2-Portland Harbor, 1-Nason Brook to Fore River (marsh)
PORTLAND – PORTLAND WATER DISTRICT (PWD)	16	16	5-Back Cove, 3-Casco Bay, 4-Fore River, 4-Portland Harbor
RANDOLPH	1	1	1-Kennebec River
ROCKLAND	1	1	1-Rockland Harbor
SACO	1	1	1-Saco River
SKOWHEGAN	5	5	5-Kennebec River
SOUTH PORTLAND	4	4	1-Barberry Creek, 1-Fore River, 1-Calvary Pond, 1-Portland Harbor
WESTBROOK	5	5	5-Presumpscot River
WINSLOW	2	2	1-Sebastcook River, 1-Kennebec River
WINTERPORT WATER DISTRICT	1	1	1-Penobscot River
TOTAL CSOs	106	112	

32 CSO Permits, permitting 29 CSO Towns/Cities/Districts/Authorities

Two or more permits in one CSO Town/City

Permittee has entered post-construction monitoring period prior to exiting the CSO program

CSO Outfall – where wastewater is discharged to the receiving water

CSO Regulator – where wastewater exits the sanitary sewer system

Bold = 9 Permittees with sewer system only. Sewers discharge to a POTW controlled by another entity.

Maine CSO Permittee Flow Data

Permittee	NPDES Permit No.	1987	1988	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Auburn S.D.	ME0100005	99,720,000	99,720,000	19,234,856	12,404,500	3,717,000	1,286,000	2,928,519	814,738	1,117,809	1,656,736	997,100	219,600	439,796	286,954	967,864	348,684	0
Bangor	ME0100781	635,000,000	635,000,000	146,000,000	69,940,000	32,140,000	87,748,000	40,109,000	48,586,000	13,310,000	50,547,000	96,009,000	58,745,000	77,720,893	52,468,359	62,551,149	73,011,955	9,226,984
Bar Harbor	ME0101214 & ME0102466	32,000,000	32,000,000	2,563,669	3,776,092	407,010	1,561,139	2,335,692	277,000	225,200	562,221	2,757,979	971,376	3,816,271	3,141,462	7,478,224	3,179,664	1,899,328
Bath	ME0100021	600,000,000	600,000,000	10,067,181	12,199,904	3,297,259	4,990,910	2,727,901	1,608,037	1,697,081	3,753,899	2,800,232	2,874,579	1,806,487	1,583,361	3,522,034	2,645,771	1,672,367
Belfast	ME0101532	736,000	736,000	490,495	0	0	0	0	0	0	305,071	330,905	96,444	264,774	444,090	504,877	207,301	0
Biddeford	ME0100048	400,000,000	400,000,000	113,907,851	141,198,828	90,581,675	194,302,147	95,830,208	99,492,656	49,504,091	70,814,300	69,451,000	34,644,000	26,649,500	14,543,300	30,003,000	20,631,322	3,669,880
Brewer	ME0100072	750,000,000	750,000,000	140,065,515	435,548	58,310	139,280	465,000	87,374	0	366,687	868,060	76,188	4,235,000	783,656	3,557,124	1,979,681	280,292
Bucksport	ME0100111	53,000,000	53,000,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calais	ME0100129	42,000,000	42,000,000	16,860,000	18,210,000	18,311,206	20,775,288	5,292,778	4,624,354	4,512,300	10,000,030	2,403,000	1,839,927	587,400	3,848,188	2,937,000	1,975,800	881,100
Cape Elizabeth	ME0102806	5,400,000	5,400,000	1,072,000	2,735,000	41,000	1,440,000	277,000	251,000	277,000	375,000	432,000	2,000	230,000	3,300	254,900	492,425	99,000
Gardiner	ME0101702	44,000,000	44,000,000	4,655,000	4,455,400	1,287,000	1,950,000	2,299,300	665,000	2,877,000	6,100,000	6,336,000	9,932,000	1,993,000	61,000	18,240,000	2,200,000	0
Greater Augusta U.D.	ME0100013	72,904,000	72,904,000	31,589,000	38,408,000	26,901,000	17,646,000	21,680,000	7,120,000	3,680,000	3,771,000	3,482,000	6,074,000	3,082,000	1,989,200	2,509,450	10,679,193	3,624,263
Hampden	ME0102512	1,201,000	39,600	500,000	0	0	0	24,105	151,055	0	1,250,000	1,933,080	244,200	319,902	205,128	117,216	158,730	0
Lewiston	ME0100994	208,900,000	208,900,000	78,521,909	90,103,658	32,772,894	21,355,331	30,574,217	25,477,213	12,808,039	18,552,725	21,743,196	22,923,950	8,480,003	20,781,523	83,310,342	33,696,254	1,269,778
Lewiston- Auburn C.W.A.	ME0101478	480,000,000	480,000,000	108,278,048	113,380,000	63,567,000	68,569,000	27,838,000	18,694,000	21,856,000	25,735,000	28,518,000	33,659,000	14,531,000	31,190,000	112,566,000	57,861,000	8,797,000
Machias	ME0100323	7,000,000	7,000,000	1,180,678	938,330	1,857,988	2,202,444	1,067,647	910,259	203,815	603,687	145,425	100,035	122,833	418,811	291,295	220,129	1,073,653
Madawaska	ME 0101681	3,200,000	3,200,000	1,490,000	377,488	349,400	1,830,563	0	0	1,562,430	3,988,640	8,205,821	10,242	422,838	616,123	423,493	789,394	0
Mechanic Falls S.D.	ME0100391	18,000,000	18,000,000	5,033,002	9,638,035	3,663,997	1,385,675	1,013,807	927,473	603,528	194,728	616,537	379,608	63,330	131,488	232,081	711,433	9,930
Milford	ME0102695	220,000	220,000	407,151	26,970	0	10,000	25,000	20,000	0	0	29,781	8,638	0	43,153	86,791	46,267	4,674
Old Town	ME0100471	6,300,000	6,300,000	0	0	0	0	30,000	10,000	0	270,801	61,508	20,698	12,128	7,608	79,695	93,715	0
Orono	ME0100498	31,000,000	31,000,000	1,260,837	0	0	0	1,320,000	1,461,000	0	1,460,000	698,817	1,192,467	905,504	1,102,236	3,981,896	5,386,128	1,770,882
Portland & PWD	City-ME0101435 / PWD-ME0102075	1,800,000,000	1,800,000,000	496,288,000	704,319,257	179,403,901	414,421,500	254,663,330	318,359,691	175,675,000	283,612,831	184,453,600	178,744,981	194,468,501	163,964,790	368,662,200	290,214,400	115,308,100
Randolph	ME0102423	10,000,000	10,000,000	223,934	988,434	50,054	101,183	0	515,240	0	105,695	3,500	67,300	1,400	8,900	25,700	50,000	0
Rockland	ME0100595	47,000,000	47,000,000						0	0	0	0	0	0	0	0	0	0
Saco	ME 0101117	176,000,000	176,000,000	1,372,128	2,964,929	1,100,985	1,739,425	1,057,000	599,000	304,000	2,139,000	2,675,000	978,000	2,487,000	242,000	1,860,000	4,027,000	971,000
Skowhegan	ME0100625	48,000,000	48,000,000	4,757,994	4,238,875	4,746,538	3,861,193	6,786,698	4,168,672	738,844	4,379,019	1,711,809	1,073,711	252,870	1,742,309	7,928,889	2,448,510	910,000
South Portland	ME0100633	500,000,000	500,000,000	14,906,594	37,134,882	1,858,579	15,531,600	11,161,602	6,240,350	2,033,229	3,533,710	8,651,990	859,095	2,511,052	1,561,258	1,191,467	4,242,992	791,675
Westbrook	ME0100846	50,000,000	50,000,000	12,202,000	18,903,485	6,222,000	11,932,000	4,423,000	7,447,100	1,285,000	1,631,000	9,816,000	3,227,000	1,038,000	926,156	4,906,800	7,843,700	525,000
Winslow	ME0102628	1,300,000	1,300,000	63,354	1,327,119	7,070	0	164,549	70,144	237,400	601,045	3,654,519	876,296	193,076	3,196,000	26,473,369	7,361,250	0
Winterport W.D.	ME0100749	680,000	680,000	0	0	0	60,000	90,000	0	0	138,000	0	0	108,000	54,000	96,000	48,000	0
Former CSO Permittees	Not Applicable	79,880,000	79,880,000	0	1,155,444	0	0	1,797,554	0	0	324,228	0	0	0	0	442,000	0	0
Total Annual Discharge Volume (Gallons)		6,203,441,000	6,202,279,600	1,212,991,196	1,289,260,178	472,341,866	874,838,678	515,981,907	548,577,356	294,507,766	496,772,053	458,785,859	359,840,335	346,742,558	305,344,353	745,200,856	532,538,722	152,784,096
Total Annual Discharge Volume (Billion Gallons)		6.20	6.20	1.21	1.29	0.47	0.87	0.52	0.55	0.29	0.50	0.46	0.36	0.35	0.31	0.75	0.53	0.15
State-Wide Flow Weighted Precipitation (Inches)		41.66	42.80	50.02	47.89	42.52	50.62	39.07	41.94	40.35	46.26	45.52	40.88	44.19	45.24	57.33	48.54	38.74

Notes: For legibility, discharge volume data for years 1989-2010 are not shown. [Numbers in blue are estimated from LTCP/MP or subsequent high flow.](#) Biddeford CSO volumes 2005-2016 have been adjusted due to under-estimation of flows. The gallons discharged for Bangor for 2024 & 2025 were updated to reflect how block trip events had been treated in prior years.



Maine CSO Permittee Annual Number of CSO Discharge Events

Permittee	NPDES Permit No.	1987	1988	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Auburn S.D.	ME0100005	80	80	11	8	5	5	2	8	2	2	5	4	3	2	5	2	0
Bangor	ME0100781	53	53	54	29	27	34	20	28	21	23	34	16	16	28	18	16	8
Bar Harbor	ME0101214 & ME0102466	155	155	6	13	6	17	5	2	3	7	14	5	8	11	9	8	13
Bath	ME0100021	64	64	12	23	18	18	8	14	10	14	15	17	14	20	17	11	10
Belfast	ME0101532	7	7	3	0	0	0	1	0	0	2	3	2	3	5	4	1	0
Biddeford	ME0100048	180	180	100	146	77	88	48	57	55	41	45	43	43	40	21	13	8
Brewer	ME0100072	95	95	45	5	3	3	1	2	0	4	4	2	8	7	6	9	1
Bucksport	ME0100111	53	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calais	ME0100129	15	15	6	14	8	14	6	7	9	15	6	2	2	10	7	4	1
Cape Elizabeth	ME0102806	5	5	6	11	2	12	2	6	2	4	2	1	2	4	6	7	2
Gardiner	ME0101702	40	40	6	6	3	3	2	2	5	5	5	5	3	1	2	1	0
Greater Augusta U.D.	ME0100013	94	94	37	29	22	29	17	17	29	35	26	24	11	14	18	5	6
Hampden	ME0102512	1	3	1	0	0	0	1	1	0	1	2	1	2	2	2	3	0
Lewiston	ME0100994	80	80	45	38	27	23	37	35	28	24	27	15	14	14	18	17	12
Lewiston-Auburn C.W.A.	ME0101478	80	80	37	22	32	26	17	17	10	20	19	23	14	22	19	27	16
Machias	ME0100323	15	15	7	9	6	13	7	8	7	11	7	5	1	8	11	5	3
Madawaska	ME 0101681	16	16	10	8	3	7	0	0	3	3	2	4	5	9	6	2	0
Mechanic Falls S.D.	ME0100391	42	42	39	28	17	30	17	25	12	12	16	12	6	11	11	18	3
Milford	ME0102695	8	8	2	1	0	1	1	1	0	0	1	2	0	2	2	2	2
Old Town	ME0100471	25	25	0	0	0	0	1	1	0	2	2	3	2	2	3	5	0
Orono	ME0100498	30	30	2	0	0	0	2	4	0	1	2	3	3	3	4	6	4
Portland & PWD	City-ME0101435 / PWD-ME0102075	100	100	88	70	63	75	58	56	38	49	46	41	61	52	37	48	38
Randolph	ME0102423	23	23	2	2	1	2	0	2	0	2	1	1	1	1	3	2	0
Rockland	ME0100595	23	23						0	0	0	0	0	0	0	0	0	0
Saco	ME 0101117	44	44	4	21	15	19	13	12	7	15	6	17	15	9	23	14	6
Skowhegan	ME0100625	160	160	21	25	36	28	20	23	23	21	23	21	16	4	7	6	7
South Portland	ME0100633	23	23	13	12	7	9	2	3	2	4	3	3	2	6	5	5	2
Westbrook (PWD)	ME0100846	50	50	16	13	60	70	49	38	2	6	4	3	2	2	4	5	1
Winslow	ME0102628	20	20	3	9	1	0	1	3	1	1	2	3	2	4	5	8	0
Winterport W.D.	ME0100749	8	8	0	0	0	1	2	0	0	1	0	0	3	2	2	2	0
Former CSO Permittees	Not Applicable	159	159	0	5	0	0	1	0	0	1	0	0	0	0	1	0	0
Total Number of CSO Discharge Events		1748	1750	576	547	439	527	341	372	269	326	322	278	262	295	276	252	143

Note: For legibility, discharge event data for years 1989-2010 are not shown. Numbers in blue are estimated from LTCP/MP or other source. The number of discharge events for 2024 for Bangor was adjusted to remove 2 dry weather overflows that were erroneously included in the total in last year's report.



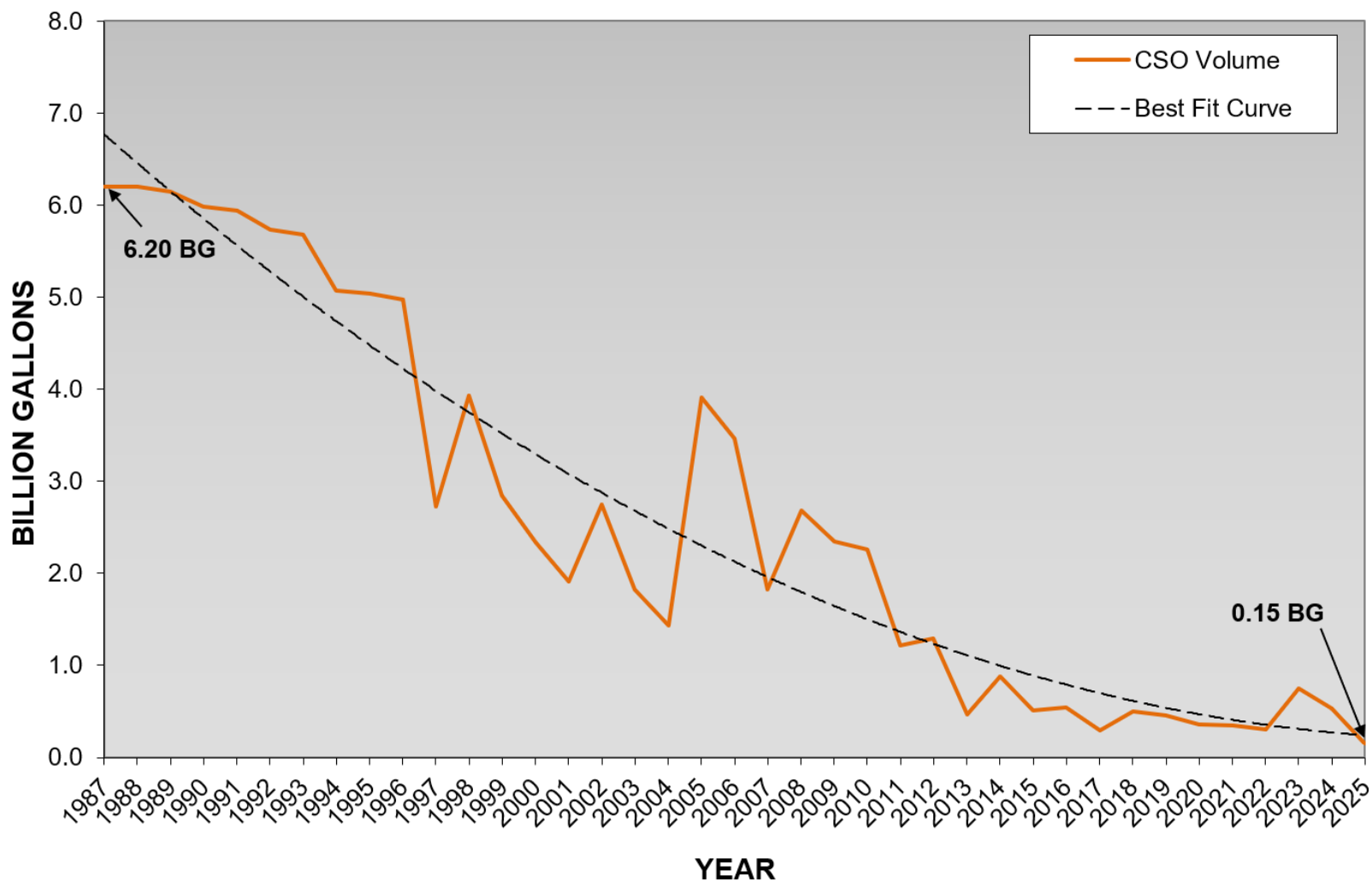
Maine CSO Permittee Annual Number of CSO Outfalls

Permittee	NPDES Permit No.	Year Unknown	1987	1988	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Auburn S.D.	ME0100005	11	11	11	2	3	2	2	1	2	2	2	2	2	1	1	1	1	1
Bangor	ME0100781	22	22	22	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8
Bar Harbor	ME0101214 & ME0102466	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Bath	ME0100021	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Belfast	ME0101532	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Biddeford	ME0100048	16	16	16	10	10	8	8	8	8	7	7	7	7	7	7	7	7	7
Brewer	ME0100072	10	10	10	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Bucksport	ME0100111	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Calais	ME0100129	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3
Cape Elizabeth	ME0102806	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gardiner	ME0101702	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Greater Augusta U.D.	ME0100013	32	32	32	22	19	18	18	18	18	18	18	18	18	16	13	10	9	9
Hampden	ME0102512	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lewiston	ME0100994	32	32	32	18	18	16	11	10	8	8	8	8	8	8	8	8	8	8
Lewiston-Auburn C.W.A.	ME0101478	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Machias	ME0100323	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Madawaska	ME 0101681	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mechanic Falls S.D.	ME0100391	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2
Milford	ME0102695	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Old Town	ME0100471	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1
Orono	ME0100498	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Portland & PWD	City-ME0101435 / PWD-ME0102075	42	42	42	32	31	31	31	31	30	30	30	30	29	28	24	23	23	23
Randolph	ME0102423	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rockland	ME0100595	8	8	8						1	1	1	1	1	1	1	1	1	1
Saco	ME 0101117	9	9	9	4	4	4	4	4	4	4	2	2	2	2	1	1	1	1
Skowhegan	ME0100625	10	10	10	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5
South Portland	ME0100633	35	28	28	6	6	6	6	6	6	6	4	4	4	4	4	4	4	4
Westbrook (PWD)	ME0100846	7	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Winslow	ME0102628	2	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2
Winterport W.D.	ME0100749	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Former CSO Permittees	Not Applicable	64	64	64	7	7	4	5	5	4	4	4	3	3	2	2	2	0	0
Total Annual CSO Discharge Outfalls		350	338	338	163	159	149	145	143	142	140	133	131	130	123	115	111	108	106

Note: For legibility, outfall data for years 1989-2010 are not shown. Numbers in blue are estimated from LTCP/MP or other source.

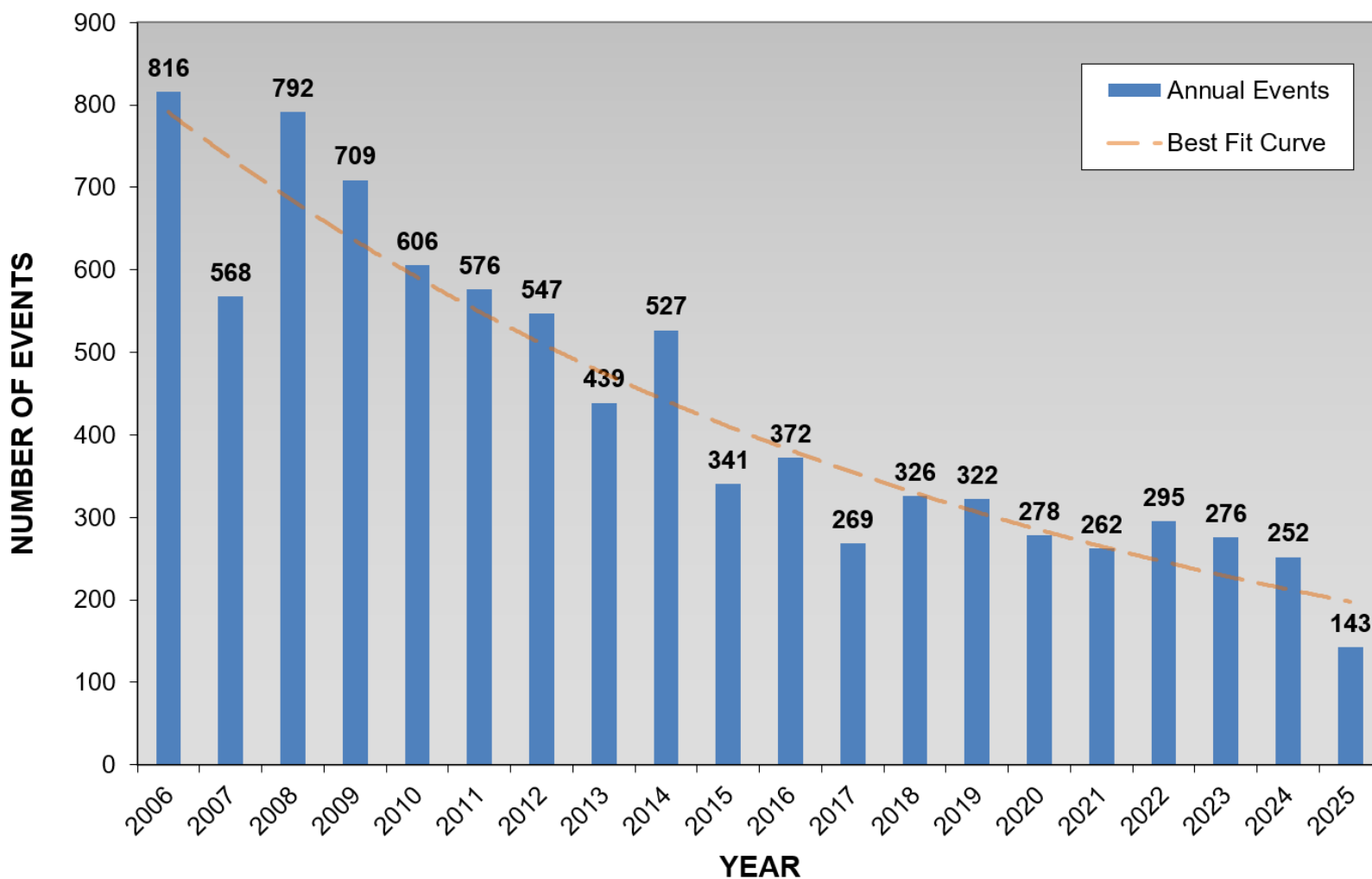


MAINE - STATEWIDE COMBINED SEWER OVERFLOW (CSO) VOLUME DISCHARGED

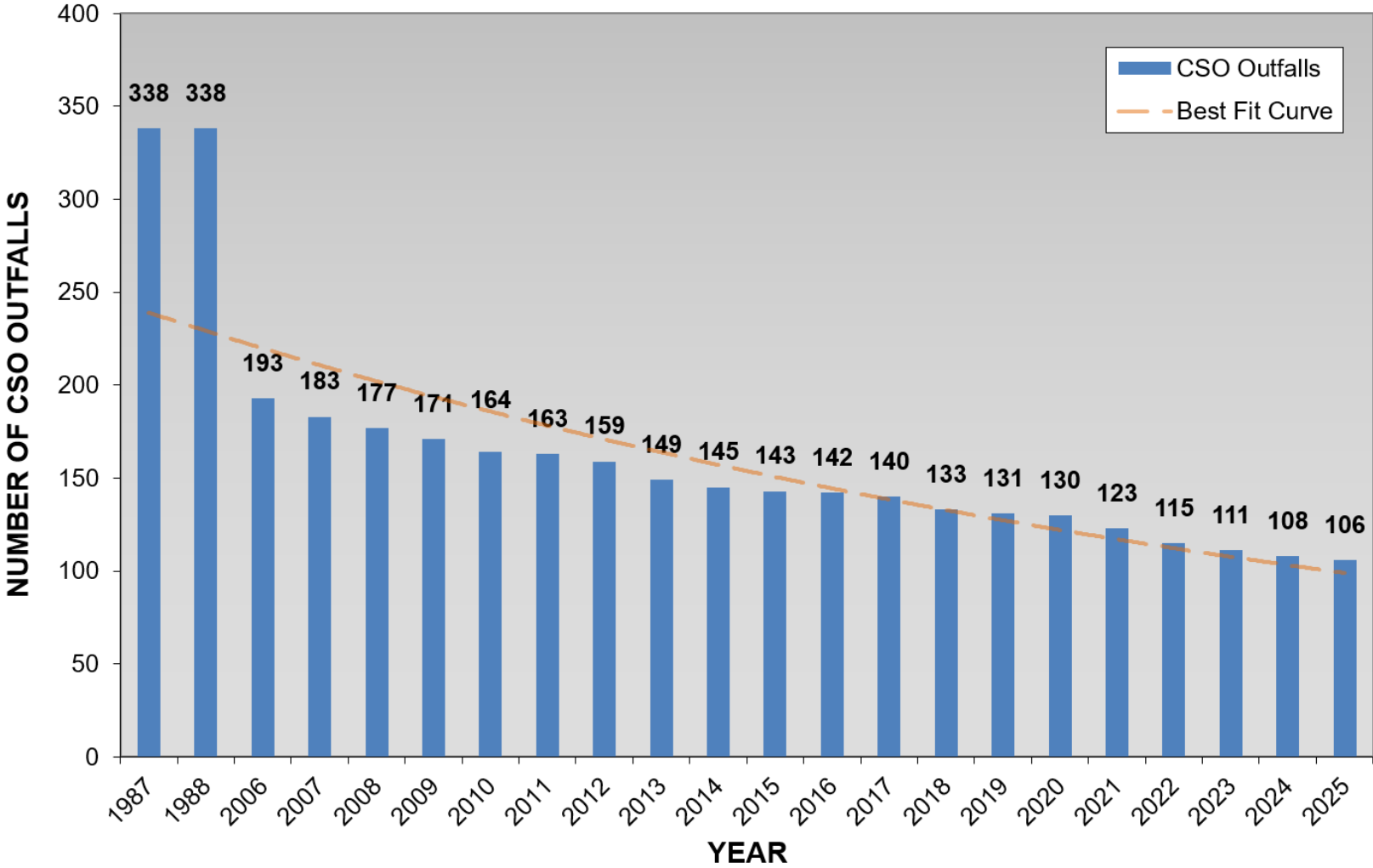




MAINE - STATEWIDE COMBINED SEWER OVERFLOW (CSO) ANNUAL NUMBER OF DISCHARGE EVENTS

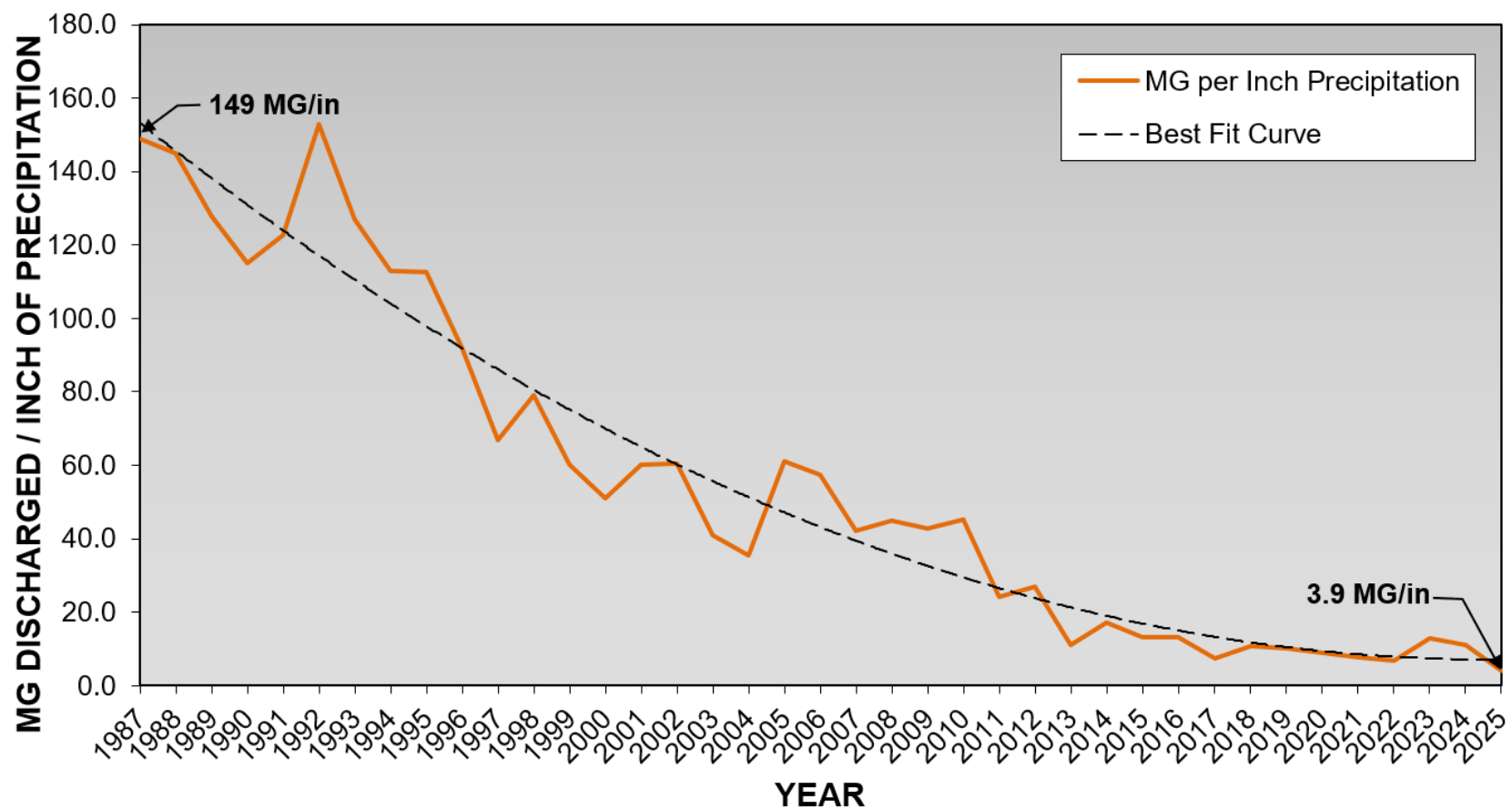


MAINE - STATEWIDE COMBINED SEWER OVERFLOW (CSO) OUTFALLS



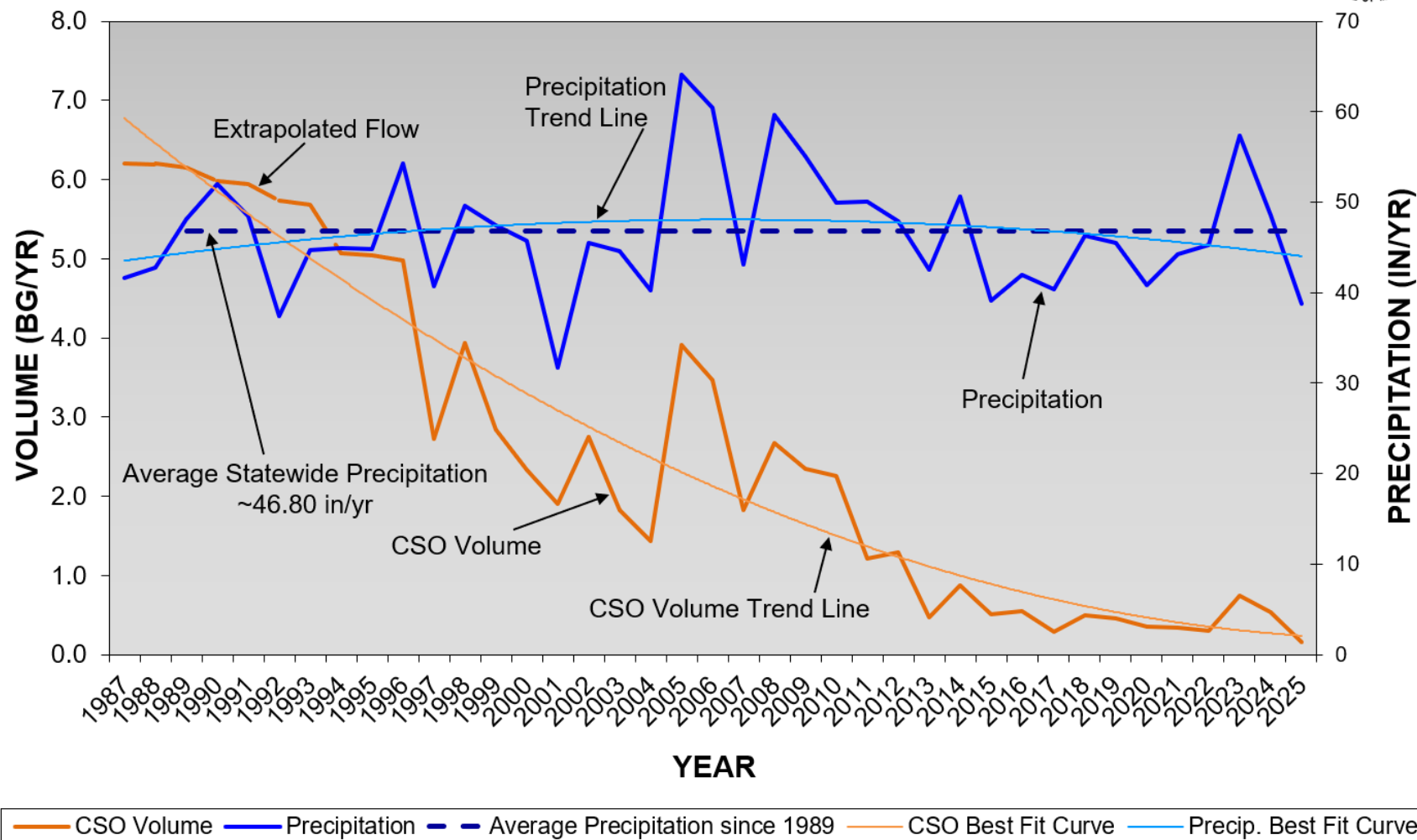


MAINE - COMBINED SEWER OVERFLOWS ANNUAL VOLUME DISCHARGED PER INCH OF PRECIPITATION

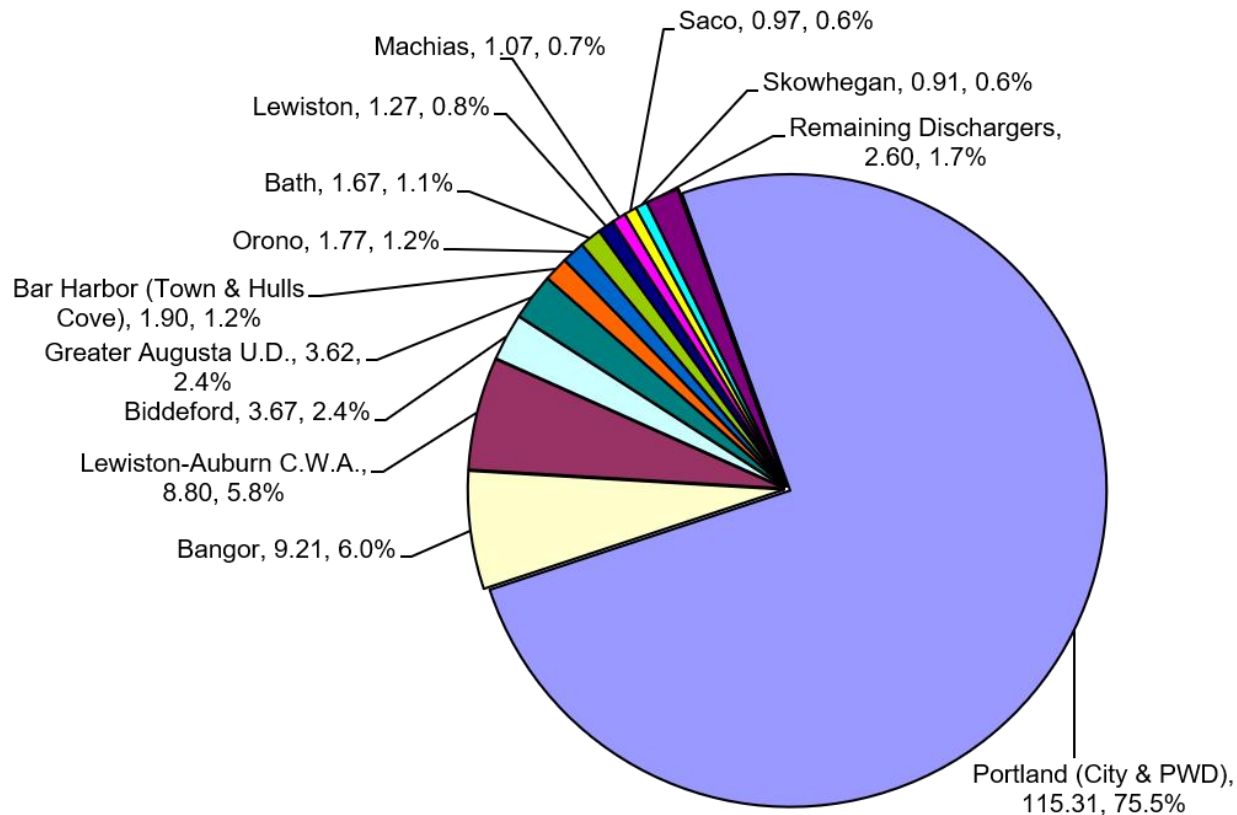




MAINE - YEARLY CSO VOLUMES AND PRECIPITATION



MAINE 2025 CSO FLOW COMPARISON 32 CSO PERMITTEES 30 DISCHARGERS - 0.15 BILLION GALLONS



Eleven Permittees without CSO Discharge in 2025:

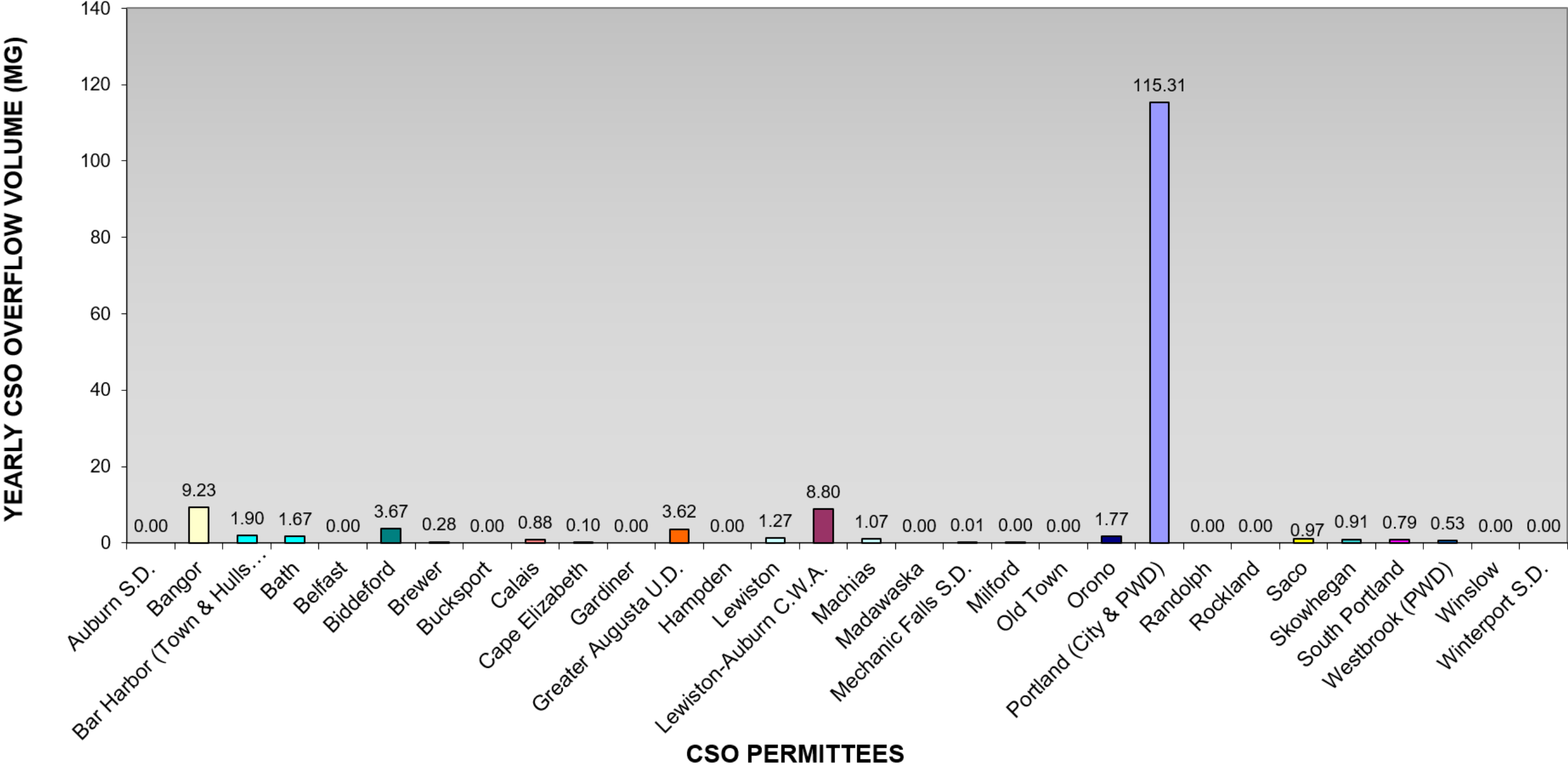
Auburn S.D.
Belfast
Bucksport
Gardiner
Hampden
Madawaska
Old Town
Randolph
Rockland
Winslow
Winterport S.D.

Remaining 7 Dischargers (Million Gallons, Rank, Percent of Total):

Calais: 0.88, 13, 0.58%
South Portland: 0.79, 14, 0.52%
Westbrook (PWD): 0.53, 15, 0.34%
Brewer: 0.29, 16, 0.19%
Cape Elizabeth: 0.10, 17, 0.07%
Mechanic Falls S.D.: 0.01, 18, 0.01%
Milford: 0.005, 19, 0.003%

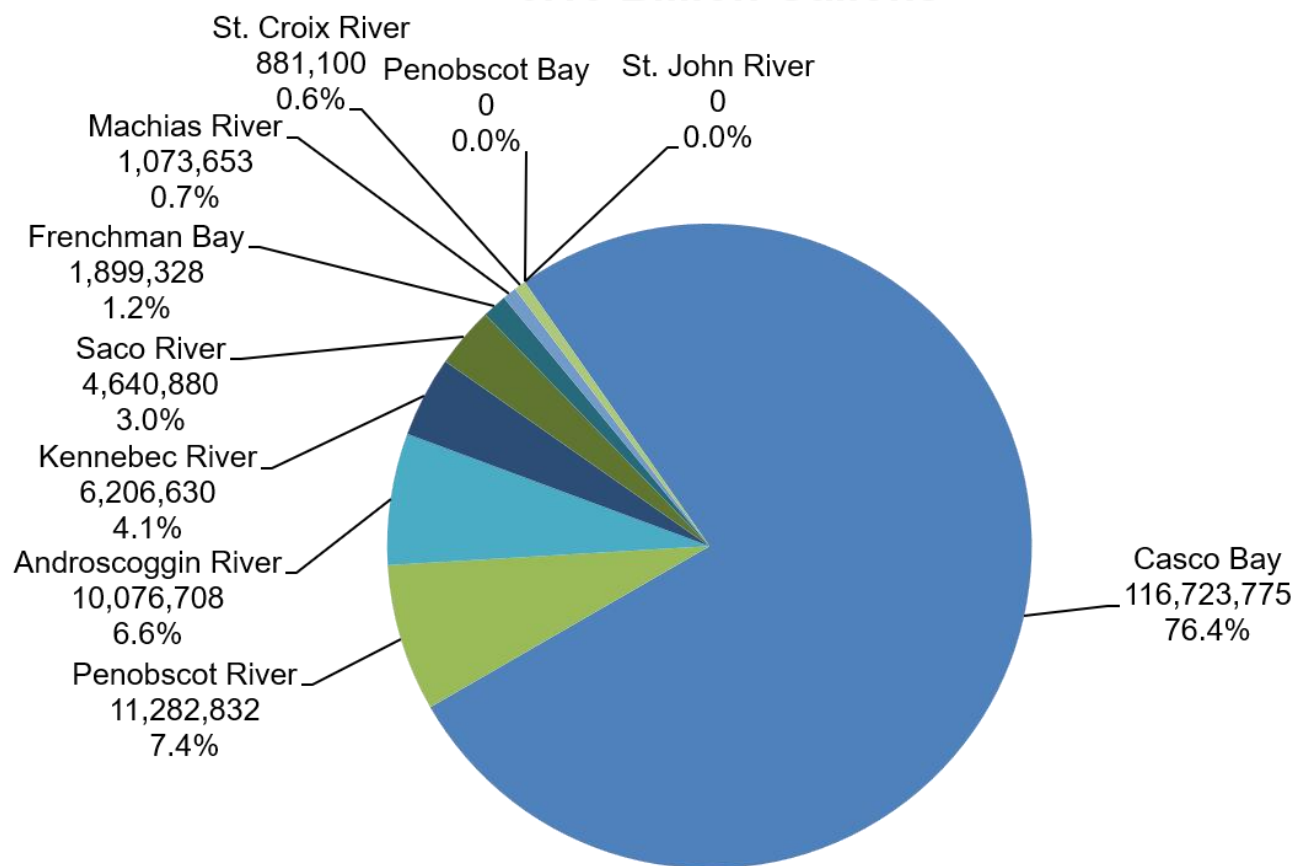
Discharger, Overflow in Million Gallons (MG), Percent of Total

Maine 2025 CSO Flow Comparison by Permittee
0.15 Billion Gallons





Maine 2025 CSO Volume Discharged by Watershed 0.15 Billion Gallons



Receiving Waterbody, Overflow in **Million Gallons (MG)**, Percent of Total

Maine Annual CSO Volume Discharged by Watershed

		Annual Discharge Volume (Gallons)					
	Community	2020	2021	2022	2023	2024	2025
Androscoggin River	Auburn SD	219,600	439,796	286,954	967,864	348,684	0
	Lewiston-Auburn CWA	33,659,000	14,531,000	31,190,000	112,566,000	57,861,000	8,797,000
	Lewiston	22,923,950	8,480,003	20,781,523	83,310,342	33,696,254	1,269,778
	Mechanic Falls SD	379,608	63,330	131,488	232,081	711,433	9,930
	Paris UD	0	0	0	442,000	0	0
	Sub Total	57,182,158	23,514,129	52,389,965	197,518,287	92,617,371	10,076,708
Casco Bay	Cape Elizabeth	2,000	230,000	3,300	254,900	492,425	99,000
	Portland-City & PWD	178,744,981	194,468,501	163,964,790	368,662,200	290,214,400	115,308,100
	South Portland	859,095	2,511,052	1,561,258	1,191,467	4,242,992	791,675
	Westbrook	3,227,000	1,038,000	926,156	4,906,800	7,843,700	525,000
	Sub Total	182,833,076	198,247,553	166,455,504	375,015,367	302,793,517	116,723,775
Frenchman Bay	Bar Harbor	971,376	3,816,271	3,141,462	7,478,224	3,179,664	1,899,328
	Sub Total	971,376	3,816,271	3,141,462	7,478,224	3,179,664	1,899,328
Kennebec River	Bath	2,874,579	1,806,487	1,583,361	3,522,034	2,645,771	1,672,367
	Gardiner	9,932,000	1,993,000	61,000	18,240,000	2,200,000	0
	Greater Augusta UD	6,074,000	3,082,000	1,989,200	2,509,450	10,679,193	3,624,263
	Kennebec STD	0	0	0	0	0	0
	Randolph	67,300	1,400	8,900	25,700	50,000	0
	Skowhegan	1,073,711	252,870	1,742,309	7,928,889	2,448,510	910,000
	Winslow	876,296	193,076	3,196,000	26,473,369	7,361,250	0
	Sub Total	20,897,886	7,328,833	8,580,770	58,699,442	25,384,724	6,206,630
Machias River	Machias	100,035	122,833	418,811	291,295	220,129	1,073,653
	Sub Total	100,035	122,833	418,811	291,295	220,129	1,073,653
Penobscot Bay	Belfast	96,444	264,774	444,090	504,877	207,301	0
	Rockland	0	0	0	0	0	0
	Sub Total	96,444	264,774	444,090	504,877	207,301	0
Penobscot River	Bangor	58,745,000	77,720,893	52,468,359	62,551,149	73,011,955	9,226,984
	Brewer	76,188	4,235,000	783,656	3,557,124	1,979,681	280,292
	Bucksport	0	0	0	0	0	0
	Hampden	244,200	319,902	205,128	117,216	158,730	0
	Milford	8,638	0	43,153	86,791	46,267	4,674
	Old Town	20,698	12,128	7,608	79,695	93,715	0
	Orono	1,192,467	905,504	1,102,236	3,981,896	5,386,128	1,770,882
	Winterport SD	0	108,000	54,000	96,000	48,000	0
	Sub Total	60,287,191	83,301,427	54,664,140	70,469,871	80,724,476	11,282,832
Saco River	Biddeford	34,644,000	26,649,500	14,543,300	30,003,000	20,631,322	3,669,880
	Saco	978,000	2,487,000	242,000	1,860,000	4,027,000	971,000
	Sub Total	35,622,000	29,136,500	14,785,300	31,863,000	24,658,322	4,640,880
St. Croix River	Calais	1,839,927	587,400	3,848,188	2,937,000	1,975,800	881,100
	Sub Total	1,839,927	587,400	3,848,188	2,937,000	1,975,800	881,100
St. John River	Madawaska	10,242	422,838	616,123	423,493	789,394	0
	Sub Total	10,242	422,838	616,123	423,493	789,394	0
	Total Annual Volume	359,840,335	346,742,558	305,344,353	745,200,856	532,550,698	152,784,906

Maine CSO Permittee Level of Treatment

CSO Communities	2021				2022				2023				2024				2025			
	Average Annual Rainfall (Inches): 44.19				Average Annual Rainfall (Inches): 45.24				Average Annual Rainfall (Inches): 57.33				Average Annual Rainfall (Inches): 48.54				Average Annual Rainfall (Inches): 38.74			
	Total Volume ^{1,2} (MG)	Secondary Treatment	Primary Treatment	CSO	Total Volume ^{1,2} (MG)	Secondary Treatment	Primary Treatment	CSO	Total Volume ^{1,2} (MG)	Secondary Treatment	Primary Treatment	CSO	Total Volume ^{1,2} (MG)	Secondary Treatment	Primary Treatment	CSO	Total Volume ^{1,2} (MG)	Secondary Treatment	Primary Treatment	CSO
Bangor & Hampden	2,932.3	96.25%	1.09%	2.66%	3,319.0	96.87%	1.54%	1.59%	3513.0	97.26%	0.95%	1.78%	2926.9	95.86%	1.64%	2.50%	2822.7	98.83%	0.84%	0.33%
Bar Harbor	380.3	99.00%		1.00%	415.9	99.24%		0.76%	429.5	98.26%		1.74%	367.5	99.13%		0.87%	372.3	99.49%		0.51%
Bath	711.4	92.36%	7.39%	0.25%	711.4	95.69%	4.08%	0.22%	818.4	94.02%	5.55%	0.43%	692.3	93.36%	6.25%	0.38%	604.6	95.53%	4.19%	0.28%
Belfast	231.4	99.89%		0.11%	227.0	99.80%		0.20%	289.7	99.83%		0.17%	238.8	99.91%		0.09%	222.8	100.00%		0.00%
Biddeford	869.1	96.93%		3.07%	849.6	98.29%		1.71%	1084.3	97.23%		2.77%	891.4	97.69%		2.31%	732.0	99.50%		0.50%
Brewer	724.7	99.42%	0.00%	0.58%	854.9	99.91%	0.00%	0.09%	845.2	99.58%	0.00%	0.42%	649.5	98.32%	1.37%	0.30%	583.4	99.95%	0.00%	0.05%
Bucksport	120.5	96.52%	3.48%	0.00%	125.8	96.09%	3.91%	0.00%	137.0	97.75%	2.25%	0.00%	121.3	97.40%	2.60%	0.00%	120.4	98.14%	1.86%	0.00%
Calais	190.0	96.91%	2.78%	0.31%	235.4	94.98%	3.38%	1.63%	269.6	94.98%	3.93%	1.09%	221.9	95.97%	3.14%	0.89%	204.6	97.48%	2.09%	0.43%
Gardiner & Randolph	349.5	98.98%	0.45%	0.57%	399.4	99.37%	0.61%	0.02%	552.0	95.32%	1.37%	3.31%	432.8	98.97%	0.51%	0.52%	368.2	99.62%	0.38%	0.00%
GAUD & Hallowell	1,311.0	99.22%	0.54%	0.24%	2,213.8	99.26%	0.65%	0.09%	2099.5	98.60%	1.28%	0.12%	1821.6	97.14%	2.28%	0.59%	1631.5	99.05%	0.72%	0.22%
KSTD ³ & Winslow	2,074.0	99.99%		0.01%	2,262.3	99.86%		0.14%	2623.0	98.99%		1.01%	2256.8	99.67%		0.33%	2217.1	100.00%		0.00%
LACWA, Lewiston & Auburn	3,196.0	96.26%	3.01%	0.73%	3,419.2	98.41%	0.06%	1.53%	4256.7	94.81%	0.56%	4.62%	3530.4	97.31%	0.09%	2.60%	2944.7	99.65%	0.01%	0.34%
Machias	65.2	99.81%		0.19%	84.3	99.50%		0.50%	92.1	99.68%		0.32%	78.0	99.72%		0.28%	74.2	98.55%		1.45%
Madawaska	105.8	99.60%		0.40%	145.4	99.58%		0.42%	140.4	99.70%		0.30%	112.0	99.30%		0.70%	131.3	100.00%		0.00%
Mechanic Falls	64.0	99.90%		0.10%	70.4	99.81%		0.19%	108.9	99.79%		0.21%	82.3	99.14%		0.86%	55.8	99.98%		0.02%
Old Town & Milford	471.8	99.05%	0.95%	0.00%	537.4	99.20%	0.79%	0.01%	579.2	98.61%	1.36%	0.03%	453.7	97.13%	2.83%	0.03%	453.2	99.84%	0.15%	0.00%
Orono	419.9	99.78%		0.22%	455.5	99.76%		0.24%	507.4	99.22%		0.78%	452.8	98.81%		1.19%	448.1	99.60%		0.40%
Paris UD	96.3	100.00%		0.00%	108.2	100.00%		0.00%	134.2	99.67%		0.33%								
Portland & PWD	5,384.9	92.70%	3.69%	3.61%	5,218.8	92.22%	4.64%	3.14%	6360.0	89.19%	5.02%	5.80%	5155.8	88.86%	5.51%	5.63%	4647.9	94.28%	3.24%	2.48%
Rockland	868.0	87.31%	12.69%	0.00%	816.1	91.81%	8.19%	0.00%	1059.5	93.54%	6.46%	0.00%	940.4	90.66%	9.34%	0.00%	773.6	93.91%	6.09%	0.00%
Saco	800.9	99.18%	0.51%	0.31%	762.3	99.69%	0.28%	0.03%	975.8	98.72%	1.09%	0.19%	819.6	98.25%	1.26%	0.49%	745.1	99.37%	0.50%	0.13%
Skowhegan	223.6	99.47%	0.37%	0.16%	247.0	98.39%	0.91%	0.71%	316.4	96.45%	1.05%	2.51%	281.5	97.93%	1.20%	0.87%	293.3	99.05%	0.64%	0.31%
South Portland & Cape Elizabeth	1,909.5	99.48%	0.37%	0.14%	1,967.4	99.87%	0.05%	0.08%	2277.7	99.57%	0.36%	0.06%	2051.5	98.13%	1.64%	0.23%	1776.9	99.06%	0.89%	0.05%
Westbrook & PWD	1,081.8	99.90%		0.10%	1,122.7	99.92%		0.08%	1308.1	99.62%		0.38%	1192.7	99.34%		0.66%	1108.2	99.95%		0.05%
SUM	24,752.2				26,783.5				30,989.1				25,954.0				23,496.9			
MEAN	990.1	97.91%	2.49%	0.62%	1,071.3	98.21%	2.09%	0.56%	1,239.6	97.52%	2.24%	1.18%	1,081.4	97.21%	2.97%	0.97%	979.0	98.75%	1.49%	0.33%
MEDIAN	471.8	99.22%	0.95%	0.23%	537.4	99.26%	0.91%	0.19%	579.2	98.60%	1.36%	0.40%	551.6	98.03%	2.28%	0.59%	518.3	99.43%	0.73%	0.13%

Note: ¹Volume data was obtained from monthly Discharge Monitoring Reports entered and submitted through NetDMR by each Facility

²Total Volume: Total Volume Taken on by System = Secondary Treatment Volume + Primary Treatment Volume + CSO Volume + SSO Volume (SSO Volumes too small to effect Percentages, therefore not displayed)

³Although KSTD is no longer in the CSO program as of 2024, it is shown on this chart since Winslow remains a CSO community and treats all of Winslow's non-CSO flow. All CSO flow in 2024 was in Winslow.

⁴As of 2024 Paris UD is no longer in the CSO program and is no longer being included in the annual totals

⁵Updates were made to treatment volumes and percentages for 2021 for Portland & PWD

⁶A calculation error for South Portland & Cape Elizabeth's 2022 data was corrected. The Sum, Mean, and Median data for 2022 was also corrected.



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