Boston Water and Sewer Commission

980 Harrison Avenue Boston, MA 02119-2540 617-989-7000



January 12, 2023

Sent Via Email:

Massdep.sewagenotification@mass.gov

Ms. Susannah King Susanna.king@mass.gov
MassDEP Northeast Regional Office
150 Presidential Way
Woburn, MA 01801

RE: 314 CMR 16.00 – Final CSO Public Notification Plan Submittal

Dear Ms. King:

The Boston Water and Sewer Commission (the "Commission") is pleased to submit the attached Final CSO Public Notification Plan, which is required pursuant to 314 CMR 16.00. As demonstrated by the plan, the Commission's Public Notification System is operational at this time, and it complies with the mandatory requirements of 414 CMR 16.00. The Commission is committed to continually upgrading and improving its CSO Public Notification System as technology evolves, to optimize its performance and maintain compliance with 314 CMR 16.00.

In addition, the following is included with this submittal:

- 1. A request for a waiver of the metering/monitoring and public notification requirements for CSO outfalls BOS005, BOS006, BOS007, BOS049, BOS072 and BOS083, and confirmation that a waiver of 16.05(3) signage at public access points for five South Boston outfalls: BOS081, BOS082, BOS084, BOS085 and BOS086, is approved by DEP for the Commission.
- 2. A summary of discharge events for which CSO public notifications were provided between July 6, 2022, and December 31, 2022.

MassDEP is advised that the Commission has established a common email address from which public advisory notices are reported to the MassDEP Data Portal. The Commission's Public Advisory Data Portal email address is csonotification@bwsc.org. Anyone at the Commission authorized to submit CSO public notification reports to the MassDEP Data Portal can use this address to submit the reports. Currently, two individuals are responsible for submitting incident reports to the MassDEP Data Portal. They are Charlie Jewell, Director of Planning and Sustainability, and Amy Schofield, Project Manager. Others will be added as needed going forward.



If you have questions, comments or require additional information regarding the Commission's system or plan, you may contact me at 617-989-7444, or Amy Schofield at 617-989-7432. We look forward to working with you on this very important initiative.

John P. Sullivan, Jr. P.E.

Chief Engineer

Attachment

Cc: A. Schofield, BWSC

C. Jewell, BWSC

I. McSweeney, BWSC

J. Teixeira, BWSC

W. Leo, MWRA

Boston Water and Sewer Commission

980 Harrison Avenue Boston, MA 02119-2540 617-989-7000



January 12, 2023

Sent Via Email:

massdep.sewagenotification@mass.gov

Commissioner Martin Suuberg Massachusetts Department of Environmental Protection One Winter Street Boston, MA 02108

RE: 314 CMR 16.00 – Request for Waiver of Metering, Notification and Sign Postings for Specific CSO Outfalls

Dear Commissioner Suuberg:

As provided in 314 CMR 16.08, the Boston Water and Sewer Commission (the "Commission") hereby resubmits its request for a waiver from metering/monitoring and public notification requirements for six CSO outfalls listed on the Commission's NPDES CSO Permit. They are: BOS005, BOS006, BOS007, BOS049, BOS072 and BOS083. The waiver is requested because, although these outfalls are still listed in the Commission's NPDES CSO Permit, overflows from these CSO outfalls have been fully eliminated due to sewer separation in the upstream tributary areas.

With its submittal of the Preliminary CSO Public Notification Plan in April 2022, the Commission also requested a waiver of 16.05(3) – signage at public access points – for five South Boston outfalls: BOS081, BOS082, BOS084, BOS085 and BOS086. These outfalls are permitted to the Commission. However, since 2011 the combined sewer flows in the areas tributary to these outfalls have been directed to the MWRA's South Boston CSO Storage Tunnel. The South Boston CSO Storage Tunnel provides a 25-year level of control for combined sewer overflows, which essentially eliminates CSO discharges from these outfalls. According to MWRA, no CSOs have occurred from these outfalls since the operation of the tunnel began in May 2011 – even during hurricanes and tropical storms.

On behalf of the Commission, the MWRA has agreed to take responsibility for issuing public notifications for any discharges from the South Boston CSO outfalls in the rare event that they occur. Following through on that commitment, with its Preliminary CSO Public Notification Plan, the MWRA submitted to DEP a request for a waiver to 16.05(3) – signage at public access points – for the five South Boston CSO outfalls. In its request the MWRA noted that waiving the signage requirements for the South Boston CSO outfalls would not pose a threat to public health or the environment because the beaches are routinely tested by DCR for safety and posted if monitoring results indicate a risk to bathers. The MWRA has committed to notifying the DCR



in the event that discharges from the South Boston CSO outfalls and the Storage Tunnel do occur, and the DCR would be responsible for posting the South Boston beaches under its beach management authority as warranted.

DEP approved the MWRA's request for a waiver to posting permanent signs in South Boston for the South Boston CSO outfalls on July 1, 2022. Please confirm that the MWRA waiver for signage at the South Boston CSO outfalls extends to the Commission.

If you have questions, comments or would like to discuss this request further you may contact me at 617-989-7444, or Amy Schofield at 617-989-7432, We look forward to working with you on this very important initiative.

Yours truly,

John P. Sullivan, Jr. P.E.

Chief Engineer

Cc: S. King, MassDEP

A. Schofield, BWSC

C. Jewell, BWSC

I. McSweeney, BWSC

J. Teixeira, BWSC

W. Leo, MWRA

Boston Water and Sewer Commission Verified CSO Incidents for which Public Notifications Were Issued July 6, 2022-December 31, 2022

												Rainfall Data (at			
Report	Incident	Incident				PermitteeC	Outfall	ReportingT			Volume	Logan			Submitted
Number	Date	Time	Am/Pm	ReportClass	EventType	lass	ld	уре	Location	Water Body	Of Event	Airport)	Hours	Minutes	Date
22000156-1	08/05/2022	3:40	PM	Verified Data Report	CSO – UnTreated	CSO	BOS070		CORNER OF W 4TH ST AND FRONTAGE RD	FORT POINT CHANNEL	420000	0.54	0	15	09/14/2022
22000211-1	08/09/2022	1:50	PM	Verified Data Report	CSO – UnTreated	CSO	BOS009		CORNER OF SUMMER & NEW ST	BOSTON INNER HARBOR	2600	0.14	0	15	09/14/2022
22000210-1	08/09/2022	1:55	PM	Verified Data Report	CSO – UnTreated	CSO	BOS003	Ceased	SW CORNER OF LOGAN NW OF 90	BOSTON INNER HARBOR	21000	0.14	0	30	09/14/2022
22000519-1	08/22/2022	12:25	PM	Verified Data Report	CSO – UnTreated	CSO	BOS070		CORNER OF W 4TH ST AND FRONTAGE RD	FORT POINT CHANNEL	160000	0.44	0	10	09/14/2022
22000521-1	08/26/2022	4:40	PM	Verified Data Report	CSO – UnTreated	CSO	BOS070		CORNER OF W 4TH ST AND FRONTAGE RD	FORT POINT CHANNEL	160000	0.41	0	5	09/14/2022
22000523-1	08/26/2022	5:00	PM	Verified Data Report	CSO – UnTreated	CSO	BOS065		WEST BANK OF FORT POINT CHANNEL	FORT POINT CHANNEL	9000	0.41	0	15	09/14/2022
22000554-1	09/19/2022	9:35	PM	Verified Data Report	CSO – UnTreated	CSO	BOS019		JUST NW OF TOBIN BRIDGE AND 16TH ST	LITTLE MYSTIC CHANNEL	7500	0.43	0	10	10/13/2022
22001369	10/13/2022	9:20	PM	Verified Data Report	CSO – UnTreated	CSO	BOS003		SW CORNER OF LOGAN NW OF 90	BOSTON INNER HARBOR	32000	1.17	1	15	11/14/2022
22001373	10/13/2022	9:15	PM	Verified Data Report	CSO – UnTreated	CSO	BOS009		CORNER OF SUMMER & NEW ST	BOSTON INNER HARBOR	6000	0.82	0	30	11/14/2022
22001376	10/14/2022	9:50	AM	Verified Data Report	CSO – UnTreated	CSO	BOS003		SW CORNER OF LOGAN NW OF 90	BOSTON INNER HARBOR	190000	0.82	1	0	11/14/2022
22001378	10/14/2022	9:35	AM	Verified Data Report	CSO – UnTreated	CSO	BOS070		CORNER OF W 4TH ST AND FRONTAGE RD	FORT POINT CHANNEL	253000	0.82	0	35	11/14/2022
22001377	10/14/2022	9:15	AM	Verified Data Report	CSO – UnTreated	CSO	BOS009		CORNER OF SUMMER & NEW ST	BOSTON INNER HARBOR	14000	0.82	0	50	11/14/2022
22001664	11/30/2022	19:30		Verified Data Report	CSO – UnTreated	CSO	BOS003		SW CORNER OF LOGAN NW OF 90	BOSTON INNER HARBOR	17000	0.66	0	30	12/12/2022
22001665	11/30/2022	19:05		Verified Data Report	CSO – UnTreated	CSO	BOS009		CORNER OF SUMMER & NEW ST	BOSTON INNER HARBOR	5000	0.66	0	45	12/12/2022
23001989	12/23/2022	14:00		Verified Data Report	CSO – UnTreated	CSO	BOS019		JUST NW OF TOBIN BRIDGE AND 16TH ST	LITTLE MYSTIC CHANNEL	64000	0.55	1	10	01/12/2023

Massachusetts Department of Environmental Protection Bureau of Water Resources – Wastewater Management Program

Combined Sewer Overflow Final Public Notification Plan

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





1.	Facility Information		
	Boston Water and Sewer Commission		
	Name of Permittee (Facility or System)		0.470007444
	John P. Sullivan, Jr., Chief Engineer	SullivanJP@bwsc.org	6179897444
	Permittee Contact Name	Email Address	Phone number
	980 Harrison Avenue, Boston, MA, 021	19	
	Permittee Mailing Address		
	MA0101192 NPDES Permit #		
	System contains (check all that apply):	
	■ Collection system □ Pu	mp station(s) above 1MGD Was	tewater treatment plant
	Location of WWTP discharge, if applicable:		
	information as needed.	charges and affected waterbodies. Inclu	ude other supporting
2.	ldentification of Environr	nental Justice Populations	
		Letters that would natantially be	■ Yes □ No
	Are there Environmental Justice (EJ) affected by your wastewater treatment sewer overflow? See the Instructions	nt plant discharge(s) or a combined	les live
	If there are EJ populations that would more of households lack English-lang the population self-identify as "do not Instructions file for more detail.	juage proficiency, and at least 5% of	Yes No
	Provide a list of all languages that no		
	Spanish, French Creole (Haitian), Chine	ese, Vietnamese, Portuguese, Russian, Ara	bic and Somali.
	Attach a description of how translation regulations will be provided to EJ populations.	ons of public advisory notification and sig oulations in the languages listed above. I	nage required by these nclude:
	A description of the third par	y or internal resource used to produce th	ne translations
	recipient	slation will be accessed by a public advis	
	CSO outfalls and public acc	slation will be accessed by someone rea ess points	uning the signage at
3.	Discharges, Overflows, a	nd Public Notification Conf	tent
	When public notification is require		
	notification.	s covered under 314 CMR 16.03(1)(a-e)	require a public
	Required content of public notification	ation: (check box to affirm)	
	Permittee is aware of all required	I information for public notifications under	r 314 CMR 16.04(10)

Massachusetts Department of Environmental Protection Bureau of Water Resources – Wastewater Management Program Combined Sewer Overflow Final Public Notification Plan

Attach a description of how the permittee will meet the requirements under 31 including the following:	4 CMR 16.0	4(10),
How the permittee will determine or discover that an event has oc	curred	
How the permittee will estimate the volume of discharges or overf	lows	
How the permittee will estimate the commencement times, cessal of discharges or overflows	ion times, an	ıd duration
A list of the waters and land areas affected by the permittee's disc	harges or ov	rerflows
Permittee can meet all requirements of 314 CMR 16.04(10)	Yes	☐ No
If no, please describe in detail which components the permittee is not able to needed to comply. Include a schedule for compliance.	neet and the	measures
Components that cannot be met		
Schedule for compliance		
Discovery and Required Timeline for Notification For Discharge or Overflow	llowing	
Requesting approval of an alternative method:		
Is the permittee requesting approval to use a method other than metering to detect a discharge? (Requires approval of MassDEP Commissioner)	☐ Yes	■ No
\square If yes, <u>attach</u> additional information on the method to detect a dis	charge	
☐ If yes, <u>attach</u> a letter to the Commissioner with the approval requ	est	
Discovery of a Discharge or Overflow:		
Attach a description of the steps the permittee will take to determine or di or overflow from its outfall or sewer system is occurring	scover that a	ı discharge
Can the permittee discover an event under 314 CMR 16.04(5)(a), (b) & (c) within the required timeline?	■ Yes	☐ No
If no, <u>attach</u> a description specifying the limitations to meeting the potential remedies. Include and a schedule for implementing potential	ese requirem al remedies.	nents and
Issuance of Public Notification:		
Permittee can meet the notification requirements in 314 CMR 16.04(4) to notify as soon as possible, but no later than two hours after discovery. If no, <u>attach</u> a description specifying the limitations, potential renfor implementing potential remedies. If no, <u>attach</u> a letter to the Commissioner requesting approval for notification.		

Massachusetts Department of Environmental Protection Bureau of Water Resources – Wastewater Management Program

Combined Sewer Overflow Final Public Notification Plan

	Continuation of Public Notification:							
	Permittee can meet the notification requirements in 314 CMR 16.04(7) to issue an update 8 hours after the public advisory notification, if the initial Yes No notification does not indicate that the event has ceased. If no, attach a description of which requirement cannot be met, what measures are needed for compliance, and a schedule for compliance.							
	Cessation of Public Notification:							
	Permittee can meet the notification requirements in 314 CMR 16.04(8) to continue issuing 8 hour updates for ongoing events, and notify within 2 Yes No hours of when the event ceases or is projected to cease. If no, <u>attach</u> a description of which requirement cannot be met, what measures are needed for compliance, and a schedule for compliance.							
	Retraction of Public Notification:							
	Permittee can meet the notification requirements in 314 CMR 16.04(9) to issue a retraction if the permittee becomes aware within 48 hours of issuing the public advisory notification that no discharge or overflow actually occurred.							
	If no, <u>attach</u> a description of which requirement cannot be met, what measures are needed for compliance, and a schedule for compliance.							
5.	CSO Permittee Website							
	Does the permittee/sewer authority have an existing website or web page where relevant information is posted?							
	If yes, provide the URL:							
	https://www.bwsc.org/environment-education/water-sewer-and-stormwater/cso-public-notification							
	Describe the subscriber-based system where the public can sign up to receive your notifications. See Attachment A							
	Permittee's website is able to meet the requirements under 314 CMR Yes No 16.04(3)							
	Permittee's website is able to meet the requirements under 314 CMR 16.05(1)(a-e) Yes No							
	If any website requirements can not be met, specify limitations to meeting these requirements, potential remedies, and a schedule for compliance:							
	■ <u>Attach</u> a description of how the Permittee will update the website with requirements under 314 CMR 16.04(3) and 314 CMR 16.05(1)(a-e)							
6.	Signage							
	Permittee has consulted with the Board of Health/Health Departments in municipalities affected by their discharges for public access sign location points as required by 314 CMR 16.05(3)?							
	Attach a list of locations where signs will be installed and dates when signs will be installed.							

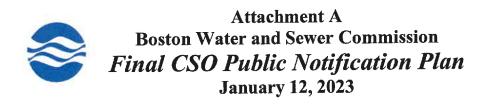
Massachusetts Department of Environmental Protection Bureau of Water Resources – Wastewater Management Program Combined Sewer Overflow Final Public Notification Plan

	Permittee is able to meet the signage requirements under 314 CMR 16.05(2)?		Yes	☐ No
	If no, specify limitations to meeting these requirements, potential re for compliance:	medies,	and a	schedule
	Permittee is able to meet the signage requirements under 314 CMR 16.05(3)?		Yes	☐ No
	If no, specify limitations to meeting these requirements, potential re for compliance:	medies,	and a	schedule
7.	Public Notification Recipients			
	Media Outlets			
	List the two media outlets serving the area near the discharge or outfall that to provide a public notification. Include name of organization, name of contact address or fax number.			
	The Boston Globe (newtip@bostonglobe.com)			
	Name of media outlet #1			
	Boston Herald (citydesk@bostonherald.com) Name of media outlet #2			
	If permittee has determined that an EJ population could potentially be affected overflow, which of these media outlets serves the EJ population? If neither done additional news organization that primarily serves the EJ population(s) with municipalities. (Include name of organization, name of contact, and contact's number.)	loes, the vithin the	n prov e impa	ide at least cted
	See Attachment A			
	Name of additional media outlet serving EJ population if neither media outlet above serves EJ p	opulation		
	Attach a description explaining how the identified media outlets serve populations.	•		
	See Instructions for list of Required Public Notification Recipients (314 (CMR 16.	.04(4)(a)).
	Attach a list of your required contacts.	0= ote		
8.	Detection method maintenance			
	If metering is used, will the Permittee perform the requirements in 314 CMR	16.06(2)	(b) be	low?
	Calibrate metering equipment on an annual basis, at minimum		Yes	☐ No
	Properly maintain metering equipment		Yes	☐ No

Massachusetts Department of Environmental Protection Bureau of Water Resources – Wastewater Management Program

Combined Sewer Overflow Final Public Notification Plan

-	If models are used and approved, will the Permittee perform the follo 16.06(2)(d) below?	wing require	ments	s in 3°	14 CMR
	Review and update the model input data as needed		☐ Y	es	☐ No
	Maintain any data collection equipment providing critical input to model	o the	□ Y	es	☐ No
	Assess model predictions annually, at a minimum		☐ Y	es	☐ No
	Provide a description of actions taken in writing on or before Ma of each year	arch 1 st	☐ Y	es ——	□ No
9.	. Public Notice				
	Submit a public notice to the Environmental Monitor at the same time MassDEP. Indicate below that the permittee will submit the public notice to MEPA@mass.gov at the same MassDEP Include in the body of the email, "Please publish the attack.	otice as follo e time the pla	ws: an is s	ubmit	tted to
	Combined Sewer Overflow (CSO) Final Public Notification	Plan."			
	Attach the public notice to the email as a PDF				
	Permittee will place a public notice in at least one media outlet the municipalities impacted by the discharge. Indicate media outlet (El Mundo, El Planeta, Sampan, Brazilian Times, Thang Long and Dorchester Reporter (for Haitian Creole); will	s) below:			
	Include the following in the Public Notice, required under 314 CMR and A statement that a CSO Public Notification Plan has been Department		and si	ubmitt	ed to the
	A link to a website where an interested party can review	the plan			
	 A statement that written comments on the plan can be spermittee for a period of 30 days after the date of publication media outlet, whichever date is later. Explicitly list the end comments Translations of the Public Notice in languages most apposite impacted municipalities that are identified as environment. 	on in the Env date for sub- propriate for r	ironme missio neighb	ental on of poorhoo	Monitor or public ods within
	lacking English language proficiency				
C	ertification				
	I attest that I have examined and am familiar with the information co any and all documents accompanying this certifying statement. The submittal is, to the best of my knowledge, true, accurate, and complete this attestation on behalf of the facility. John P. Sulivan J. P.E. Chief Engineer Title	information (contai	ned ir	i this
/	Signature Date				
	/ Signature Date				



Section 1: Permittee/System Information

The Boston Water and Sewer Commission (the "Commission") owns and maintains 33 permitted CSO outfalls within the City of Boston. Overflows from six of the Commission's permitted CSO outfalls have been eliminated by separating the combined sewers in the areas tributary to the outfalls. These are: BOS006, BOS007, BOS049, BOS072, BOS083, and the recently separated BOS005. The Commission has requested a waiver from the monitoring and sign posting requirements for these outfalls since they no longer convey combined sewer overflows. Table 1 lists the Commission's permitted CSO outfalls and receiving water bodies affected by the Commission's discharges or overflows. Figure 1 displays the locations of the active CSO outfalls and affected receiving water bodies. Figure 1 also displays the locations of active CSO outfalls owned by the Massachusetts Water Resources Authority (MWRA).

Since 2011, flows from areas upstream of five of the Commission's permitted CSO outfalls in South Boston – BOS081, BOS082, BOS084, BOS085 and BOS086 – have been discharging to the MWRA's South Boston CSO Storage Tunnel. The MWRA operates the South Boston CSO Storage Tunnel and has agreed to provide public notifications in the unlikely event the tunnel becomes full and overflows. The South Boston CSO Storage Tunnel provides a 25-year level of control for the combined sewer overflows, which essentially eliminates CSO discharges from those outfalls. According to MWRA, no CSOs have occurred from these outfalls since the operation of the tunnel began in May 2011. For these reasons, the MWRA and the Commission, along with their Preliminary CSO Public Notification Plans submitted to MassDEP, requested a waiver to the requirements of section 314 CMR 16.05 (3) for signage for the South Boston CSO's and Storage Tunnel. The MWRA's request was approved by MassDEP on July 1, 2022. It is presumed that the waiver granted to the MWRA for signage at the South Boston outfalls extends to the Commission.

The MWRA's Union Park CSO Treatment Facility is co-permitted with the Commission and operated by Woodard & Curran (W&C). Activations at Union Park are reported to MWRA by W&C staff; however, because this facility discharges through an outfall (BOS070) permitted to the Commission, notifications, signage, and follow-up reporting for activations of Union Park impacting Fort Point Channel will be handled by the Commission.

Section 2: Identification of Environmental Justice Populations

Table 1 lists the Commission's permitted CSO outfalls and identifies receiving waters impacted by each CSO. The Commission's CSO outfalls discharge to Boston Harbor, the Mystic River and Chelsea Creek. No Commission owned CSO outfalls discharge directly to the Charles or Neponset Rivers. However, when the gates in the Commission's Back Bay Fens Gate House #1 on the Fenway are closed, as they normally are, the Commission's Stony Brook Conduit conveys

flows to the MWRA's Charlesgate Gate House, where it discharges to the Charles River through outfall MWR023. Under dry weather conditions and during most storm events, flows in the Stony Brook consist only of groundwater, culverted stream flow, and residual stormwater flows.

If the gates at the Back Bay Fens Gate House #1 are open, as they sometimes are when a hurricane or tropical storm is anticipated or routine maintenance is needed, the Stony Brook Conduit discharges to the Muddy River through outfall BOS046. During very large storm events CSO overflows in the Stony Brook Conduit may activate, thus impacting water quality on the Muddy River.

Outfall 29JCSO017 discharges to the Mystic River and outfalls 29MCSO013 and 29MCSO014 discharge to the Chelsea River. The Mystic and Chelsea Rivers are industrialized shipping channels subject to high volumes of traffic by very large petroleum tankers and bulk container carriers. Given the heavy shipping traffic and large volume flows in the rivers themselves, it is unlikely that discharges from the Commission's CSO's in Charlestown or East Boston migrate across river centerlines/mid-channel points to Everett or Chelsea shores. Swimming, boating, and fishing in Chelsea River are not encouraged. Therefore, it was concluded that only Boston and potentially Cambridge populations are impacted by the Commission's CSO overflows.

Boston and Cambridge are listed as environmental justice communities since more than 25 percent of their populations lack English language proficiency. Languages spoken by at least 5% of the population in Boston and Cambridge that self-identify as "do not speak English very well" are as follows:

Spanish, Haitian Creole, Chinese, Vietnamese, Portuguese, Russian, Arabic and African Languages (Somali)¹

Public Advisory Notification Translation

The Commission's public advisory notifications include language and a link that direct recipients to the Commission's CSO Public Notification website for translations. The Commission uses Google Translate to translate content on its website at the push of button. Translations are available on the Commission's website in the languages listed above and website users can select the language of their choice.

Signage Translation

The Commission will install and maintain permanent signs at public access points to waters affected by overflows and discharges. The Commission expects to utilize the template(s) developed by MassDEP as the basis for its signage although some modifications may be made to tailor the signs to Boston.

For discharges directly affecting neighborhoods identified as environmental justice populations due to lacking English language proficiency, signage posted at public access points will include a

¹ Staff discussed what would constitute "African languages", since no specifics are included on the Environmental Justice website. The Commission's Director of Communications noted that the Boston Public Schools Department translates its materials into Somali which is considered an African language. Therefore, for consistency, the Commission's CSO public advisory notifications, website and signs will include translations into Somali.

link and a QR code that directs readers to the Commission's CSO Public Notification website for translations. The website provides translations in the languages listed above. Universal symbols will be included on the signage as appropriate.

Section 3: Discharges, Overflows and Public Notification

Discovery of a Discharge or Overflow:

CSO Discharges:

The Commission has established a CSO Public Notification System which is continuously upgraded and improved to take advantage of evolving technologies, optimize performance, and maintain compliance with MassDEP's CSO Public Notification Requirements 314 CMR 16.04. Upon receiving a signal from an activated regulator sensor(s), the Commission's CSO Public Notification System is configured to issue an automated signal to the Commission's CSO Public Notification website for graphic representation. The signal, containing basic information including event start time, ending time, outfall number and affected receiving waters, is also automatically sent via text or email to the system administrator. The administrator then manually emails a CSO notification with additional required information to the required recipients every time CSO discharges occur. The Commission is currently upgrading the system so that emailed notifications are automatically issued to the required recipients without human involvement.

The Commission's CSO monitoring system consists of the following:

- 81 Regulators
- 31 Level Only Meters
- 57 Area Velocity Flow Meters (7 locations require multiple meters)
- 16 Inclinometers on Tide Gates

The Commission's CSO Public Notification System is designed to issue a text or email notification to the system administrator within minutes of receiving a signal triggered from an activated regulator sensor. Therefore, the Commission presumes that an overflow or discharge is in fact occurring any time a sensor on an outfall regulator is triggered, unless conflicting or contrary information is received. An example of conflicting or contrary information might be that the notification system indicates that a dry weather overflow or discharge is occurring but there has been no precipitation in the last 3 days. In such cases the Commission employs additional measures to confirm whether an overflow or discharge occurred, such as reviewing monitoring data and checking equipment for malfunctions, site inspection or other approved methods.

SSO Discharge or Overflow

The Commission has an effective SSO Emergency Response Plan and Program already in place. The following elements are included in the SSOERP:

- Description of the types of sewers and discharges addressed by the SSOERP.
- An outline of the Commission's collection system inventory and staff, equipment and hardware/software for responding to SSOs.

- Procedures for receiving notifications of a possible SSO, and protocols for internal notifications about confirmed SSOs with the Commission's collection system and initial notifications to MassDEP, EPA and other authorities such as the MWRA.
- Procedures for responding to SSOs.
- Procedures for documenting and reporting SSOs.
- Descriptions of the means of notifying the public affected by an SSO.
- Description of the activities to be taken after an SSO has been remedied.
- Objectives and methods for training and preparing staff regarding the SSOERP.

It is not possible to know where or when an SSO might occur unless someone, such as an employee, contractor, or the public, reports it. It is also very difficult to assess SSO impacts since causes and occurrences are so variable. According to the Commission's SSO Emergency Response staff SSO discharges that reach receiving waters are not typical. In most cases the discharges are contained on the surface, in a catch basin or in a downstream pipe where they can be removed by a jet or vactor truck, and the structure disinfected. Since there are so many unknowns it is difficult to establish a timeline for the discovery of an SSO, but it is the Commission's goal to confirm the occurrence of SSO's within four hours of being informed of the discharges. When and if the SSO is confirmed, the Commission will issue a public advisory notification within two additional hours. Issuance of public advisory notifications for SSOs will be performed manually by Commission staff.

If the Commission is unable to confirm that a SSO discharge or overflow truly occurred within the timeframe established in 314 CMR 16.04, it shall presume that a discharge or overflow has been discovered and will follow-up with public advisory notifications and other requirements in accordance with the CSO Public Notification requirements.

The process for issuing SSO public advisory notifications is still being worked out by the Commission. The Standard Operating Procedures (SOPs) in the Commission existing SSO Response Plan will be reviewed and modified to incorporate the requirements of MassDEP's CSO Public Notification Regulations as they apply. The details for SSO public advisory notifications and revised SOPs will be completed and implemented by July 6, 2023.

Calculation of Discharge Volume

For the volume of CSO discharge required in the public advisory notifications the Commission will provide the median volumes taken from data reported to MassDEP and EPA in annual CSO monitoring reports for the prior three calendar years. This median will be updated annually. For the monthly verified CSO data reports submitted to MassDEP the volumes of CSO overflow that discharged is calculated from the available meter data which can be simple like a weir equation, or more complex using depth, velocity and tide gate position. When data is not available due to equipment or other issues, volumes are estimated using the historical volume as a function of rain curve as a guide.

For SSO's staff use a variety of methods for estimating the volume of overflow, including a visual "eyeball" estimate, calculating area and depth of the overflow, calculating duration and flow rate of the overflow or a calculation of volume. The selection of the method is decided by the person preparing the estimate based on the information available.

Continuation of Public Notification:

The Commission's CSO Public Notification System is programmed to issue public advisory notification updates every eight hours following the initial public advisory notification as necessary, for as long as the initial discharge or overflow continues.

Cessation of Public Notification:

The Commission's automated CSO Public Notification System is designed to issue a public advisory notification within two hours after the discharge or overflow ceases to all parties required to receive notifications under 314 CMR 16.04(4). The notice of cessation indicates the approximate time of cessation.

Retraction of Public Notification:

Within 48 hours of issuing a public advisory notification, if the Commission becomes aware that no discharge or overflow truly occurred, the Commission's Notification System is designed to issue a retraction of the public advisory notification to all parties required to receive notifications under 314 CMR 16.04(4).

Determination of Affected Areas

Table 1 lists the Commission's permitted CSO outfalls and receiving water bodies affected by the Commission's discharges or overflows. Figure 1 displays the CSO outfall locations and affected receiving water bodies.

As stated in Section 2, due to the high volume of flow in the Mystic and Chelsea Rivers it is unlikely that discharges from the Commission's CSO's in Charlestown or East Boston will migrate across river centerlines/midpoints to Everett or Chelsea shores. However, discharges from MWRA023 and the Stony Brook Conduit could impact Cambridge in addition to Boston. The remainder of the Commission's overflows and discharges impact only Boston.

The affected areas were determine based on best professional judgement using site visits, assessments of outfall vicinities relative to publicly accessible areas, and discussions with MWRA, Cambridge and Chelsea representatives.

Section 4: Discovery and the Required Timeline for Notification Following Discovery of a Discharge or Overflow

See Section 3 for a description of the steps BWSC takes to determine or discover that a discharge or overflow is occurring.

Section 5: CSO Permittee Website

The Commission has established and maintains a public website to post CSO overflow information and to receive requests from the public to subscribe to the Commission's CSO Public Notification System email messaging. The Commission's CSO Public Notification website is updated on a continuous basis as needed.

The website can be found here:

https://www.bwsc.org/environment-education/water-sewer-and-stormwater/cso-public-notification

The Commission's website currently includes the following information:

- A map showing the locations of the Commission's CSO outfalls including the
 corresponding outfall numbers from the Commission's NPDES CSO discharge permit.
 When an overflow occurs map users can click on the outfall on the map to view overflow
 start time and end time.
- Instructions on how an interested person can subscribe to receive public advisory notifications.
- A summary and links to the MWRA's Long-term CSO Control Plan, and status of implementation.
- Links to CSO Reports required to be developed by the Commission pursuant to its NPDES CSO discharge permit for at least the preceding three calendar years, as available.
- A link to MassDEP's CSO Activation Data Portal where the Commission reports all its CSO activations, including compilation of discharge data for each public advisory notification event. The verified data for each month is posted within 15 days of the last day of the month. Data posted includes updated information on the estimated duration, frequency and volume of the discharge, rainfall data, and treatment provided for any CSO discharges.

CSO discharges that affect shellfish growing areas and bathing beaches have been eliminated/virtually eliminated by the Commission and the MWRA's Long-Term CSO Control Program. Because the Charles River Watershed Association and the Mystic River Watershed Association have "flagging" programs that indicate when there may be a risk to boaters, the Commission has added links to these watershed association websites to its own. Charles River Watershed Association has already subscribed to the Commission's CSO Notification System.

The Commission also maintains a website for SSO's and a map of reported SSO's. They can be found here:

https://www.bwsc.org/projects/preventative-maintenance/sanitary-sewer-overflows-ssos

https://www.bwsc.org/environment-education/maproom/sanitary-sewer-overflow-map

Section 6: Signage

The Commission previously installed signs at its CSO outfalls as required by its NPDES CSO discharge permit. In accordance with the CSO Public Notification Regulations the Commission will install permanent signage at public access points to waters affected by potential discharges from the Commission's CSO outfalls.

The Commission consulted with the Boston Public Health Commission in determining where permanent signs should be posted. The Commission and BPHC will continue to coordinate as needed in the long-term regarding the signs. The Commission also coordinated with the MWRA, and the other CSO communities- Cambridge, Somerville, and Chelsea. Table 2 provides a list of locations for permanent signage as discussed with the Boston Public Health Commission, MWRA and the other CSO municipalities. Publicly owned properties near or downstream of CSO outfalls where the public can come in direct physical contact with the receiving waters were given priority in selecting locations for signs. Most of the CSO impacted waterfront in Boston is privately owned, industrialized, fenced, blocked off, or otherwise restricted to public contact or access. Actual installation of the signs in Boston signs is contingent upon obtaining the property owner's permission to do so.

As stated previously, the MWRA and the Commission, along with their Preliminary CSO Public Notification Plans submitted to MassDEP, requested a waiver to the requirements of section 314 CMR 16.05 (3) for signage for the South Boston CSO's BOS081, BOS082, BOS084, BOS085 and BOS086 and the MWRA's South Boston Storage Tunnel. The MWRA's request was approved by MassDEP on July 1, 2022, and it is presumed that the waiver extends to the Commission.

The Commission expects to utilize the template(s) developed by MassDEP as a base for its signage, although some modifications may be made to tailor the signs to apply to Boston.

For discharges directly affecting neighborhoods identified as environmental justice populations due to lacking English language proficiency, signage posted at public access points will include a link and/or QR code that directs readers to the Commission's CSO Public Notification website for translations. Translations will be available in the languages listed in Section 2, and universal symbols will be included on the signage as appropriate. The Commission will proceed with the fabrication and installation of the required signs once the Final CSO Public Notification Plan is approved by MassDEP. The Commission's current plan is to have the signs installed by May 26, 2023 (before Memorial Day weekend).

Section 7: Public Notification Recipients

Media Outlets

Whenever a public advisory notification is issued by the Commission, the advisory is also issued to the following news organizations via email:

- The Boston Globe, Daily, newstip@boston.com 617-929-7400
- The Boston Herald, Daily, <u>citydesk@bostonherald.com</u> 617-619-6493
- El Mundo (Spanish), Weekly, info@elmundoboston.com
- El Planeta (Spanish), Daily M-F, editor@elplaneta.com 617-379-0210
- Sampan (Chinese), Bi-weekly editor@sampan.org 617-426-9492 x.206
- Dorchester Reporter (Haitian), Weekly, newseditor@dotnews.com
- Brazilian Times (Portuguese), news@braziliantimes.com 617-684-0069
- Thang Long Newspaper (Vietnamese), nvietnam04@yahoo.com

The Boston Haitian Reporter is no longer published. However, the former editor informed Commission staff that the Dorchester Reporter is the next best alternative for Haitian Creole, since it is circulated heavily in the Haitian community in Mattapan and Dorchester.

The Commission was unable to identify any local media outlets for Russian, Somali or Arabic communities.

Electronic Submittal Required Contacts

When a public advisory notification is issued by the Commission, the following will also be notified:

- MassDEP; massdep.sewagenotification@mass.gov
- the U.S. Environmental Protection Agency; R1.EPANotifications@epa.gov
- the Massachusetts Department of Public Health; <u>DPHToxicology@mass.gov</u>
- Boston Public Health Commission; environment@BPHC.org
- Cambridge Board of Health; slipson@challiance.org
- Everett Board of Health; Sabrina Firicano: sabrina.firican@ci.everett.ma.us
- Chelsea Board of Health; Flor Amaya: famayua@chelseama.gov
- Massachusetts Department of Conservation and Recreation when its water recreation properties may be affected; MEMA.StateControl@mass.gov
- Massachusetts Division of Fisheries and Wildlife when its boat ramps and fishing piers may be affected; jeff.kennedy@mass.gov
- Operators of any potentially affected bathing beaches, as defined in 105 CMR 445.00: Minimum Standards for Bathing Beaches (State Sanitary Code: Chapter VII)
- any person who subscribed to receive such public advisory notifications by email

Table 1. BWSC NPDES Permitted Combined Sewer Overflow Outfalls and Receiving Waters January 12, 2023

CSO PERMIT				
OUTFALL				
NUMBER	STREET LOCATION	NEIGHBORHOOD	RECEIVING WATERS	NOTES
BOS003	Harborside Drive near Hyatt	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	
BOS004	Maverick Street	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	
BOS005	Sumner Street/Porzio Park	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	Eliminated by sewer separation
BOS006	Marginal Street	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	Eliminated by sewer separation
BOS007	Piers Park Lane	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	Eliminated by sewer separation
BOS009	Sumner St at New St	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	
BOS010	141 Border St	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	
BOS012	Border St at Middle School	EAST BOSTON	BOSTON HARBOR/INNER HARBOR	
BOS013	Under Meridian St Bridge	EAST BOSTON	CHELSEA CREEK	
BOS014	Chelsea St. at East Eagle	EAST BOSTON	CHELSEA CREEK	
BOS017	545 Medford St	CHARLESTOWN	MYSTIC RIVER	
BOS019	Chelsea St at 16th St	CHARLESTOWN	BOSTON HARBOR/INNER HARBOR	
BOS049	Nashua Street	BOSTON PROPER	CHARLES RIVER	Eliminated by sewer separation
BOS046	The Fenway	FENWAY	CHARLES/MUDDY RIVER	
BOS057	Eastern Ave	BOSTON PROPER	BOSTON HARBOR/INNER HARBOR	
BOS060	Long Wharf/Aquarium	BOSTON PROPER	BOSTON HARBOR/INNER HARBOR	
BOS062	Under Seaport Blvd Bridge	BOSTON PROPER	BOSTON HARBOR/FORT POINT CHANNEL	
BOS064	245 Summer St	BOSTON PROPER	BOSTON HARBOR/FORT POINT CHANNEL	
BOS065	25 Dorchester Ave	BOSTON PROPER	BOSTON HARBOR/FORT POINT CHANNEL	
BOS068	Fort Point Channel North of Broadway Bridge	BOSTON PROPER	BOSTON HARBOR/FORT POINT CHANNEL	
BOS070	West 4th Street	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL	
BOS072	Dorchester Avenue	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL	Eliminated by sewer separation
BOS073	1 Gillette Pk	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL	
BOS076	Pappas Way	SOUTH BOSTON	BOSTON HARBOR/RESERVED CHANNEL	
BOS078	East First Street	SOUTH BOSTON	BOSTON HARBOR/RESERVED CHANNEL	
BOS079	Summer St	SOUTH BOSTON	BOSTON HARBOR/RESERVED CHANNEL	
BOS080	Conley Marine Terminal	EAST BOSTON	BOSTON HARBOR/RESERVED CHANNEL	
BOS081	Day Blvd @ Farragut Rd	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY	Conveys Flows to MWRA's South Boston Storage Tunnel
BOS082	Day Blvd @ N St	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY	Conveys Flows to MWRA's South Boston Storage Tunnel
BOS083	Day BLVD @ N St	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY	Discharges to Outfall were Eliminated
BOS084	Day Blvd @ H St	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY	Conveys Flows to MWRA's South Boston Storage Tunnel
BOS085	Day Blvd @ Babe Ruth Park Dr	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY	Conveys Flows to MWRA's South Boston Storage Tunnel
BOS086	Day Blvd @ Carson Beach Bath House	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY	Conveys Flows to MWRA's South Boston Storage Tunnel

Table 2. BWSC Proposed CSO Public Notification Sign Locations 1/12/2023

Affected Reciving Waters	Installed by	Date By Which Sign Will be Installed	Proposed Public Access Locations for Signage	Sign Number on Figure 1	Landowner	Comments and considerations in selections	Coordinates
Mystic River	BWSC	5/26/2023	Harborwalk Floating Dock (Charlestown) Little Mystic Access Area boat launch (Charlestown)	1, 2	Schrafft Center LLC Boston Planning and Development Agency		42.38586, -71.06953; 42.38157, -71.05663
Chelsea Creek	BWSC	5/26/2023	Condor Street Urban Wilds (East Boston)	3	City of Boston		42.38352, -71.02904
Boston Inner Harbor	BWSC	5/26/2023	Langone Park (North End) Courageous Sailing Center (Charlestown) LoPresti Park (East Boston) Piers Park (East Boston)	4, 5, 6, 7	City of Boston; Boston Planning and Development Agency; Massport		42.368916, -71.055822; 42.372935, -71.051868; 42.369781, -71.044186; 42.364384, -71.036286
Reserved Channel	BWSC	5/26/2023	The Fishing Pier" (End of Black Falcon Pier) Summer Street Bridge (South Boston)	8, 9	City of Boston, Massport		42.343610, -71.021991; 42.343100, -71.037247;
Fort Point Channel	BWSC	5/26/2023	Fort Point Pier Atlantic Wharf Docks (near Congress Street Bridge) Harborwalk Floating Dock at Independence Wharf (near Atlantic Avenue Bridge)	10, 11, 12	Gillette Properties, Atlantic Wharf, Independence Wharf		42.34942, -71.05207; 42.35259, -71.05218; 42.35389, -71.05103
Lower Charles River between Massachusetts Avenue Bridge and Boston Harbor	MWRA	5/26/2023	Boston Public Dock on the Esplanade (Back Bay) Union Boat House (Back Bay) Community Boating (Back Bay) Nashua Street Park (Boston Proper)	13, 14, 15, 16	DCR	River. MWR201 is owned by MWRA and is a treated discharge; MWRA has obtained a waiver from DEP for posting signage at MWR010 which	42.35681, -71.07581; 42.35748, -71.07292; 42.36002, -71.07325; 42.36753, -71.06737

