

**CITY OF PORTSMOUTH  
DEPARTMENT OF PUBLIC WORKS  
INTEROFFICE MEMORANDUM**

**To:** Brian Goetz  
**CC:** Terry Desmarais *[Signature]*  
**From:** Mike Merrill  
**Date:** March 06 , 2017  
**RE:** CSO 10A and CSO 10B and CSO Deer Street – February 2017 Results

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See attached CSO flow monitoring and rainfall results for February 2017 to be attached to the DMR report for the Peirce Island WWTF. Note the rainfall related CSO events for:

\* **CSO 10A**  
2/03/2017; Q = 0.002 MG Rain .0 Inches  
**TOTAL Q = 0.002 MG TOTAL RAIN 1.420 Inches**

**CSO 10B**  
There were no overflows during this time period

**DEER STREET OVERFLOW**  
There were no overflows during this time period

\* CSO on 2/13/17 due to force main break during Peirce Island Wastewater Treatment Facility Upgrade construction. See attached 5 day follow-up letter.

Overflow Summary for Portsmouth, NH  
Site 10A

Time Stamp	Total (mg)	Rain Gauge City Hall (inches)
2/1/2017 0:00	0.000	0.070
2/2/2017 0:00	0.000	0.000
2/3/2017 0:00	0.002	0.000
2/4/2017 0:00	0.000	0.000
2/5/2017 0:00	0.000	0.000
2/6/2017 0:00	0.000	0.000
2/7/2017 0:00	0.000	0.160
2/8/2017 0:00	0.000	0.110
2/9/2017 0:00	0.000	0.000
2/10/2017 0:00	0.000	0.000
2/11/2017 0:00	0.000	0.060
2/12/2017 0:00	0.000	0.220
2/13/2017 0:00	0.000	0.170
2/14/2017 0:00	0.000	0.000
2/15/2017 0:00	0.000	0.330
2/16/2017 0:00	0.000	0.060
2/17/2017 0:00	0.000	0.000
2/18/2017 0:00	0.000	0.000
2/19/2017 0:00	0.000	0.000
2/20/2017 0:00	0.000	0.000
2/21/2017 0:00	0.000	0.000
2/22/2017 0:00	0.000	0.000
2/23/2017 0:00	0.000	0.000
2/24/2017 0:00	0.000	0.170
2/25/2017 0:00	0.000	0.060
2/26/2017 0:00	0.000	0.010
2/27/2017 0:00	0.000	0.000
2/28/2017 0:00	0.000	0.000
	0.002 mg	1.420 Inches

Overflow Summary for Portsmouth, NH  
Site 10B

Time Stamp	Total (mg)	Rain Gauge City Hall (inches)
2/1/2017 0:00	0.000	0.070
2/2/2017 0:00	0.000	0.000
2/3/2017 0:00	0.000	0.000
2/4/2017 0:00	0.000	0.000
2/5/2017 0:00	0.000	0.000
2/6/2017 0:00	0.000	0.000
2/7/2017 0:00	0.000	0.160
2/8/2017 0:00	0.000	0.110
2/9/2017 0:00	0.000	0.000
2/10/2017 0:00	0.000	0.000
2/11/2017 0:00	0.000	0.060
2/12/2017 0:00	0.000	0.220
2/13/2017 0:00	0.000	0.170
2/14/2017 0:00	0.000	0.000
2/15/2017 0:00	0.000	0.330
2/16/2017 0:00	0.000	0.060
2/17/2017 0:00	0.000	0.000
2/18/2017 0:00	0.000	0.000
2/19/2017 0:00	0.000	0.000
2/20/2017 0:00	0.000	0.000
2/21/2017 0:00	0.000	0.000
2/22/2017 0:00	0.000	0.000
2/23/2017 0:00	0.000	0.000
2/24/2017 0:00	0.000	0.170
2/25/2017 0:00	0.000	0.060
2/26/2017 0:00	0.000	0.010
2/27/2017 0:00	0.000	0.000
2/28/2017 0:00	0.000	0.000
	0 mg	1.420 inches

Overflow Summary for Portsmouth, NH  
Site Deer Street

Time Stamp	Total (mg)	Rain Gauge City Hall (inches)
2/1/2017 0:00	0.000	0.070
2/2/2017 0:00	0.000	0.000
2/3/2017 0:00	0.000	0.000
2/4/2017 0:00	0.000	0.000
2/5/2017 0:00	0.000	0.000
2/6/2017 0:00	0.000	0.000
2/7/2017 0:00	0.000	0.160
2/8/2017 0:00	0.000	0.110
2/9/2017 0:00	0.000	0.000
2/10/2017 0:00	0.000	0.000
2/11/2017 0:00	0.000	0.060
2/12/2017 0:00	0.000	0.220
2/13/2017 0:00	0.000	0.170
2/14/2017 0:00	0.000	0.000
2/15/2017 0:00	0.000	0.330
2/16/2017 0:00	0.000	0.060
2/17/2017 0:00	0.000	0.000
2/18/2017 0:00	0.000	0.000
2/19/2017 0:00	0.000	0.000
2/20/2017 0:00	0.000	0.000
2/21/2017 0:00	0.000	0.000
2/22/2017 0:00	0.000	0.000
2/23/2017 0:00	0.000	0.000
2/24/2017 0:00	0.000	0.170
2/25/2017 0:00	0.000	0.060
2/26/2017 0:00	0.000	0.010
2/27/2017 0:00	0.000	0.000
2/28/2017 0:00	0.000	0.000
	0.0000 mg	1.420 Inches



# PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH

680 Peverly Hill Road

Portsmouth N.H. 03801

(603) 427-1530 FAX (603) 427-1539

February 9, 2017

Stephanie Larson (VIA EMAIL)

NHDES

P.O. Box 95 - 29 Hazen Drive

Concord, NH 03301-0095

Re: SSO at Peirce Island Force Main Break  
CSO at 10A (South Mill Pond), Parrott Avenue on 2-3-2017  
Peirce Island, Portsmouth, New Hampshire

Dear Ms. Larson:

This letter is formal notification of discharges resulting from a sewer force main break on Peirce Island in Portsmouth NH. As part of construction activities for the upgrade of the Peirce Island Wastewater Treatment Facility (WWTF), a contractor hit the force main while digging with an excavator to extend a new utility through the site. The force main is a 24" ductile pipe that conveys wastewater from the City's Mechanic Street Pumping Station to the Peirce Island WWTF. The break occurred on Friday, February 3, 2017 at 9:30 AM.

City staff responded to the break and immediately shut off the pumps at the Mechanic Street Pump Station in order to stop flow in the line. Septage trucks were employed to transfer incoming wastewater from the pump station tank to the Peirce Island treatment facility. In order to remove water from the trench to repair the sewer break, wastewater was pumped out of the trench onto the grass. Wastewater flowed through a silt fence for erosion control prior to discharging to the Piscataqua River. The break was repaired at approximate 3:00 PM.

The total volume of discharge from this incident is estimated to be 30,000 to 50,000 gallons. The discharge was to the Piscataqua River as shown on Attachments A and B.

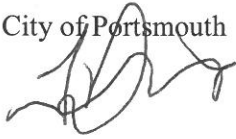
In addition, because the pumps at Mechanic Street were shut off to repair the break, sewerage backed up in the collection system, which resulted in discharge from CSO 10A into the South Mill Pond at Parrott Avenue. The discharge began at 3:20 PM and ended at 3:35 PM. Please find Attachment C, which is the Daily Flow Report for CSO 10A. The total volume of CSO discharged was 2,000 gallons.

The City is investigating the cause of the break, and discussing further measures with the Contractor and Engineer for the Peirce Island Wastewater Treatment Facility Upgrade to prevent such incidents in the future.

If you have any questions or require additional information please call me at 603-766-1421.

Sincerely,

City of Portsmouth

A handwritten signature in black ink, appearing to read 'Terry Desmarais, Jr.', written over the text 'City of Portsmouth'.

Terry Desmarais, Jr., P.E.  
City Engineer

cc: Peter Rice, Director of Public Works  
Brian Goetz, Deputy Director of Public Works  
Joy Hilton, EPA  
Chris Nash, NHDES

# ATTACHMENT A. LOCATION OF SEWER MAIN BREAK AND SEWER OVERFLOW



## ATTACHMENT B. TRENCH AT MAIN BREAK



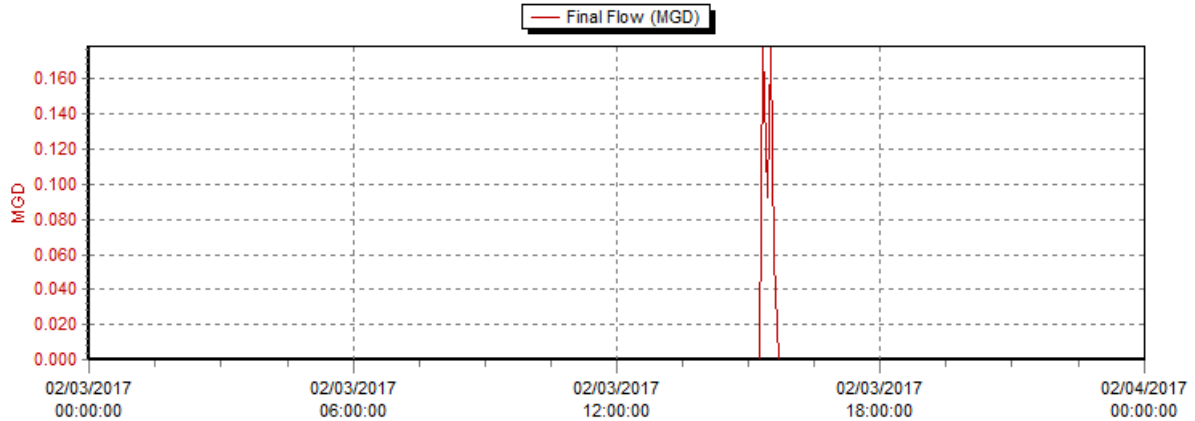
RISER PIPE MARKS THE LOCATION OF THE BREAK.



# ATTACHMENT C. DAILY DISCHARGE MONITORING REPORT

## CSO 010A (South Mill Pond), Parrott Avenue on 2-3-2017

10A (02/03/2017 00:00:00 to 02/04/2017 00:00:00)



Time Stamp	Final Flow (MGD)
02/03/2017 00:00:00	0.000
02/03/2017 00:05:00	0.000
02/03/2017 00:10:00	0.000
02/03/2017 00:15:00	0.000
02/03/2017 00:20:00	0.000
02/03/2017 00:25:00	0.000
02/03/2017 00:30:00	0.000
02/03/2017 00:35:00	0.000
02/03/2017 00:40:00	0.000
02/03/2017 00:45:00	0.000
02/03/2017 00:50:00	0.000
02/03/2017 00:55:00	0.000
02/03/2017 01:00:00	0.000
02/03/2017 01:05:00	0.000
02/03/2017 01:10:00	0.000
02/03/2017 01:15:00	0.000
02/03/2017 01:20:00	0.000
02/03/2017 01:25:00	0.000
02/03/2017 01:30:00	0.000
02/03/2017 01:35:00	0.000
02/03/2017 01:40:00	0.000
02/03/2017 01:45:00	0.000
02/03/2017 01:50:00	0.000
02/03/2017 01:55:00	0.000
02/03/2017 02:00:00	0.000
02/03/2017 02:05:00	0.000
02/03/2017 02:10:00	0.000
02/03/2017 02:15:00	0.000
02/03/2017 02:20:00	0.000
02/03/2017 02:25:00	0.000
02/03/2017 02:30:00	0.000
02/03/2017 02:35:00	0.000
02/03/2017 02:40:00	0.000
02/03/2017 02:45:00	0.000
02/03/2017 02:50:00	0.000
02/03/2017 02:55:00	0.000
02/03/2017 03:00:00	0.000

Time Stamp	Final Flow (MGD)
02/03/2017 03:05:00	0.000
02/03/2017 03:10:00	0.000
02/03/2017 03:15:00	0.000
02/03/2017 03:20:00	0.000
02/03/2017 03:25:00	0.000
02/03/2017 03:30:00	0.000
02/03/2017 03:35:00	0.000
02/03/2017 03:40:00	0.000
02/03/2017 03:45:00	0.000
02/03/2017 03:50:00	0.000
02/03/2017 03:55:00	0.000
02/03/2017 04:00:00	0.000
02/03/2017 04:05:00	0.000
02/03/2017 04:10:00	0.000
02/03/2017 04:15:00	0.000
02/03/2017 04:20:00	0.000
02/03/2017 04:25:00	0.000
02/03/2017 04:30:00	0.000
02/03/2017 04:35:00	0.000
02/03/2017 04:40:00	0.000
02/03/2017 04:45:00	0.000
02/03/2017 04:50:00	0.000
02/03/2017 04:55:00	0.000
02/03/2017 05:00:00	0.000
02/03/2017 05:05:00	0.000
02/03/2017 05:10:00	0.000
02/03/2017 05:15:00	0.000
02/03/2017 05:20:00	0.000
02/03/2017 05:25:00	0.000
02/03/2017 05:30:00	0.000
02/03/2017 05:35:00	0.000
02/03/2017 05:40:00	0.000
02/03/2017 05:45:00	0.000
02/03/2017 05:50:00	0.000
02/03/2017 05:55:00	0.000
02/03/2017 06:00:00	0.000
02/03/2017 06:05:00	0.000
02/03/2017 06:10:00	0.000
02/03/2017 06:15:00	0.000
02/03/2017 06:20:00	0.000
02/03/2017 06:25:00	0.000
02/03/2017 06:30:00	0.000
02/03/2017 06:35:00	0.000
02/03/2017 06:40:00	0.000
02/03/2017 06:45:00	0.000
02/03/2017 06:50:00	0.000
02/03/2017 06:55:00	0.000
02/03/2017 07:00:00	0.000
02/03/2017 07:05:00	0.000
02/03/2017 07:10:00	0.000
02/03/2017 07:15:00	0.000
02/03/2017 07:20:00	0.000
02/03/2017 07:25:00	0.000
02/03/2017 07:30:00	0.000

Time Stamp	Final Flow (MGD)
02/03/2017 07:35:00	0.000
02/03/2017 07:40:00	0.000
02/03/2017 07:45:00	0.000
02/03/2017 07:50:00	0.000
02/03/2017 07:55:00	0.000
02/03/2017 08:00:00	0.000
02/03/2017 08:05:00	0.000
02/03/2017 08:10:00	0.000
02/03/2017 08:15:00	0.000
02/03/2017 08:20:00	0.000
02/03/2017 08:25:00	0.000
02/03/2017 08:30:00	0.000
02/03/2017 08:35:00	0.000
02/03/2017 08:40:00	0.000
02/03/2017 08:45:00	0.000
02/03/2017 08:50:00	0.000
02/03/2017 08:55:00	0.000
02/03/2017 09:00:00	0.000
02/03/2017 09:05:00	0.000
02/03/2017 09:10:00	0.000
02/03/2017 09:15:00	0.000
02/03/2017 09:20:00	0.000
02/03/2017 09:25:00	0.000
02/03/2017 09:30:00	0.000
02/03/2017 09:35:00	0.000
02/03/2017 09:40:00	0.000
02/03/2017 09:45:00	0.000
02/03/2017 09:50:00	0.000
02/03/2017 09:55:00	0.000
02/03/2017 10:00:00	0.000
02/03/2017 10:05:00	0.000
02/03/2017 10:10:00	0.000
02/03/2017 10:15:00	0.000
02/03/2017 10:20:00	0.000
02/03/2017 10:25:00	0.000
02/03/2017 10:30:00	0.000
02/03/2017 10:35:00	0.000
02/03/2017 10:40:00	0.000
02/03/2017 10:45:00	0.000
02/03/2017 10:50:00	0.000
02/03/2017 10:55:00	0.000
02/03/2017 11:00:00	0.000
02/03/2017 11:05:00	0.000
02/03/2017 11:10:00	0.000
02/03/2017 11:15:00	0.000
02/03/2017 11:20:00	0.000
02/03/2017 11:25:00	0.000
02/03/2017 11:30:00	0.000
02/03/2017 11:35:00	0.000
02/03/2017 11:40:00	0.000
02/03/2017 11:45:00	0.000
02/03/2017 11:50:00	0.000
02/03/2017 11:55:00	0.000
02/03/2017 12:00:00	0.000

Time Stamp	Final Flow (MGD)
02/03/2017 12:05:00	0.000
02/03/2017 12:10:00	0.000
02/03/2017 12:15:00	0.000
02/03/2017 12:20:00	0.000
02/03/2017 12:25:00	0.000
02/03/2017 12:30:00	0.000
02/03/2017 12:35:00	0.000
02/03/2017 12:40:00	0.000
02/03/2017 12:45:00	0.000
02/03/2017 12:50:00	0.000
02/03/2017 12:55:00	0.000
02/03/2017 13:00:00	0.000
02/03/2017 13:05:00	0.000
02/03/2017 13:10:00	0.000
02/03/2017 13:15:00	0.000
02/03/2017 13:20:00	0.000
02/03/2017 13:25:00	0.000
02/03/2017 13:30:00	0.000
02/03/2017 13:35:00	0.000
02/03/2017 13:40:00	0.000
02/03/2017 13:45:00	0.000
02/03/2017 13:50:00	0.000
02/03/2017 13:55:00	0.000
02/03/2017 14:00:00	0.000
02/03/2017 14:05:00	0.000
02/03/2017 14:10:00	0.000
02/03/2017 14:15:00	0.000
02/03/2017 14:20:00	0.000
02/03/2017 14:25:00	0.000
02/03/2017 14:30:00	0.000
02/03/2017 14:35:00	0.000
02/03/2017 14:40:00	0.000
02/03/2017 14:45:00	0.000
02/03/2017 14:50:00	0.000
02/03/2017 14:55:00	0.000
02/03/2017 15:00:00	0.000
02/03/2017 15:05:00	0.000
02/03/2017 15:10:00	0.000
02/03/2017 15:15:00	0.000
02/03/2017 15:20:00	0.178
02/03/2017 15:25:00	0.093
02/03/2017 15:30:00	0.179
02/03/2017 15:35:00	0.058
02/03/2017 15:40:00	0.000
02/03/2017 15:45:00	0.000
02/03/2017 15:50:00	0.000
02/03/2017 15:55:00	0.000
02/03/2017 16:00:00	0.000
02/03/2017 16:05:00	0.000
02/03/2017 16:10:00	0.000
02/03/2017 16:15:00	0.000
02/03/2017 16:20:00	0.000
02/03/2017 16:25:00	0.000
02/03/2017 16:30:00	0.000

Time Stamp	Final Flow (MGD)
02/03/2017 16:35:00	0.000
02/03/2017 16:40:00	0.000
02/03/2017 16:45:00	0.000
02/03/2017 16:50:00	0.000
02/03/2017 16:55:00	0.000
02/03/2017 17:00:00	0.000
02/03/2017 17:05:00	0.000
02/03/2017 17:10:00	0.000
02/03/2017 17:15:00	0.000
02/03/2017 17:20:00	0.000
02/03/2017 17:25:00	0.000
02/03/2017 17:30:00	0.000
02/03/2017 17:35:00	0.000
02/03/2017 17:40:00	0.000
02/03/2017 17:45:00	0.000
02/03/2017 17:50:00	0.000
02/03/2017 17:55:00	0.000
02/03/2017 18:00:00	0.000
02/03/2017 18:05:00	0.000
02/03/2017 18:10:00	0.000
02/03/2017 18:15:00	0.000
02/03/2017 18:20:00	0.000
02/03/2017 18:25:00	0.000
02/03/2017 18:30:00	0.000
02/03/2017 18:35:00	0.000
02/03/2017 18:40:00	0.000
02/03/2017 18:45:00	0.000
02/03/2017 18:50:00	0.000
02/03/2017 18:55:00	0.000
02/03/2017 19:00:00	0.000
02/03/2017 19:05:00	0.000
02/03/2017 19:10:00	0.000
02/03/2017 19:15:00	0.000
02/03/2017 19:20:00	0.000
02/03/2017 19:25:00	0.000
02/03/2017 19:30:00	0.000
02/03/2017 19:35:00	0.000
02/03/2017 19:40:00	0.000
02/03/2017 19:45:00	0.000
02/03/2017 19:50:00	0.000
02/03/2017 19:55:00	0.000
02/03/2017 20:00:00	0.000
02/03/2017 20:05:00	0.000
02/03/2017 20:10:00	0.000
02/03/2017 20:15:00	0.000
02/03/2017 20:20:00	0.000
02/03/2017 20:25:00	0.000
02/03/2017 20:30:00	0.000
02/03/2017 20:35:00	0.000
02/03/2017 20:40:00	0.000
02/03/2017 20:45:00	0.000
02/03/2017 20:50:00	0.000
02/03/2017 20:55:00	0.000
02/03/2017 21:00:00	0.000

Time Stamp	Final Flow (MGD)
02/03/2017 21:05:00	0.000
02/03/2017 21:10:00	0.000
02/03/2017 21:15:00	0.000
02/03/2017 21:20:00	0.000
02/03/2017 21:25:00	0.000
02/03/2017 21:30:00	0.000
02/03/2017 21:35:00	0.000
02/03/2017 21:40:00	0.000
02/03/2017 21:45:00	0.000
02/03/2017 21:50:00	0.000
02/03/2017 21:55:00	0.000
02/03/2017 22:00:00	0.000
02/03/2017 22:05:00	0.000
02/03/2017 22:10:00	0.000
02/03/2017 22:15:00	0.000
02/03/2017 22:20:00	0.000
02/03/2017 22:25:00	0.000
02/03/2017 22:30:00	0.000
02/03/2017 22:35:00	0.000
02/03/2017 22:40:00	0.000
02/03/2017 22:45:00	0.000
02/03/2017 22:50:00	0.000
02/03/2017 22:55:00	0.000
02/03/2017 23:00:00	0.000
02/03/2017 23:05:00	0.000
02/03/2017 23:10:00	0.000
02/03/2017 23:15:00	0.000
02/03/2017 23:20:00	0.000
02/03/2017 23:25:00	0.000
02/03/2017 23:30:00	0.000
02/03/2017 23:35:00	0.000
02/03/2017 23:40:00	0.000
02/03/2017 23:45:00	0.000
02/03/2017 23:50:00	0.000
02/03/2017 23:55:00	0.000
Minimum	0.000
Average	0.002
Maximum	0.179
Total	0.002 (mg)
Time of Min	02/03/2017 00:00:00
Time of Max	02/03/2017 15:30:00