



Maine Department of Environmental Protection

NON-COMPLIANCE/DISCHARGE INCIDENT REPORT

Facility: State St Collections System Municipality: City of Biddeford

Date of Incident/Exceedence: 6/30/21

DEP Notification Date: 7/12/21 To Whom: Stuart Rose - phone call

Marine Resources Notification Date: N/A To Whom: N/A

Person Making Notification: Alex Buechner Phone #: 207-282-1350

Parameter/Pollutant Quantity and Concentration of Release/Exceedence (include test results):

On 6/30/21 a backup occurred at 24 State Street resulting in the flooding of the first floor of a large apartment building. Sewerage was contained to the building, but sump pumps are connected to the storm system.

Specific Location and Duration of Release/Exceedence:

Location: 24 State St. Approximate volume: 17,476 ft2 building, 10 in of water reported in basement. = 108,933 gal of sewer and storm water. Assumed that most was pumped into storm system via sump pumps.

Observed Environmental Effects:

Lower half of building was evacuated, but no noticeable impact on receiving water.

Describe specifically what happened, when, and why (include all details, and use additional pages if needed, including maps, diagrams as necessary):

On 6/30/21 we received 1.2 in of rain. The peak rainfall rate was measured at 5.9 in/h. This is the highest rate that we have on record going back to 2012. The storm lasted less than one hour with the majority of the rain coming down in less than 10 minutes. When the crew got the call for the backup on State St, they were already in dealing with high level pump station issues and street flooding issues taking place all over the city due to the extreme rainfall. When the crew arrived on site, the manholes from in front of 24 State down to Cutts st were full. By this time it had stopped raining. The crew witnessed the high levels quickly drop while on site, prior to cleaning. It was difficult to determine if the drop in level was due to the rain letting up, or removal of a blockage from head pressure in the pipe. After subsiding, the line was cleaned with the ret rodder. Large amounts of flushable wipes, grease, and other items that cause sewer issues were removed from the system. (see attached pictures) This building had a smaller backup on 3/31/21 that resulted in just a few inches of water on the basement level in three units. The line was cleaned on this date and similar items were found in the sewers. It is assumed that all non-flushable material that was removed on 6/30 had built up in 3 months. It is noteworthy that during this small backup, it was strongly suggested by the Public Works director that a backflow device be installed to help to prevent further backups.

The crew also found a piece of fiberglass that had fallen off of the invert in one of the State St structures. It was approximately 8"-10" in size and was covered in rags. (see attached picture) This was removed and we peeled up and removed any loose pieces from the structure that could fall off in the future.

On 7/8/21 we smoke tested the upstream sewers coming from Briarwood Drive and confirmed that there are no catch basins in the sewers coming into the line that runs through 24 State. We also inspected the State St sewer line and all nearby sewers and confirmed that there were no significant blockages from non-flushables after it had been cleaned on 6/30.

On 7/9/21 we received another heavy rain event. This one produced a total of 2.28 inches. However it was spread out through the course of the day with a peak intensity of 1.3 in/h. We were at 24 State for the duration of the storm to monitor levels in the sewers. While the level in the sewer did not exceed the point of backing up into the building during this rain event, we did witness the levels rise in all related structures on State St. Following this up the hill towards South St, we discovered that while South St and State St are separated systems, there is one remaining street that contributes to South/State that is still combined with 7 catch basins (Bradbury Extention). While it was raining we were able to change the level of the State St sewer by blocking off some of these basins. It appears as though it is common for the level in the sewer to rise on State St. And while the system can handle most storms, it cannot handle 5.9 in/h. The large amounts of debris and the piece of fiberglass that was in the pipe may have made the problem even worse.