MSD
Metropolitan Sewer District

700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
ww.msdlouky.org

April 25, 2014

Chief, Water Programs Enforcement Branch
Water Management Program
US EPA Region 4
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, GA 30303

Chief, Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
Post Office Box 7611
Washington DC 20044-7611

Jeff Cummins, Acting Director
Division of Enforcement
Department of Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

Subject: Quarterly Report 34
Civil Action No. 3:08-cv-00608-CRS

Attention Chief:

Please find attached our Quarterly Report, prepared in accordance with Paragraph 29 of our Amended Consent Decree. This report is for the period January 1, 2014 – March 31, 2014, pertaining to Consent Decree compliance activities. Included are sections on Project WIN activities related to: NMC, SORP, Discharge Abatement Plans, Public Outreach, Education, Notification and Participation, CMOM and Performance Overview.

I certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have questions or need additional information, please contact me at (502) 649-3850.

Sincerely,

Angela Akridge, PE.
Regulatory Services Director

cc: Greg Heitzman, PE Paula Purifoy Steve Emly

Louisville and Jefferson County Wet Weather Consent Decree Quarterly Report #34

Reporting Period:

January 1, 2014 through March 31, 2014

Submitted To:

Kentucky Department of Environmental Protection

United States Environmental Protection Agency

United States Department of Justice

Submitted By:

Louisville and Jefferson County Metropolitan Sewer District
700 W. Liberty Street
Louisville, Kentucky 40203-1911

Submittal Date:

April 30, 2014

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INTRODUCTION

The Louisville and Jefferson County Metropolitan Sewer District (MSD) has entered into an Amended Consent Decree with the Kentucky Department of Environmental Protection (KDEP) and the United States Environmental Protection Agency (EPA). The Amended Consent Decree was signed by United States District Judge Simpson on April 10, 2009, and filed in United States District Court, Western Division of Kentucky, Louisville Division, on April 15, 2009.

This is the thirty-second Quarterly Report submitted in accordance with Paragraph 29 of the Amended Consent Decree. This report covers the time period from January 1, 2014, through March 31, 2014. **The structure for this report is outlined as follows:**

Section 1: Program Activities for Nine Minimum Controls (NMC) - This section describes the data collected for NMC 2 – Maximization of Storage in the Collection System, and NMC 4 – Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC) that were active during the reporting period (January 1, 2014, through March 31, 2014).

Section 2: Program Activities for Sewer Overflow Response Protocol (SORP) - This section describes the training attendance records, overflow data, and overflow reconnaissance inspection routes related to SORP that were active during the reporting period (January 1, 2014, through March 31, 2014).

Section 3: Program Activities for Discharge Abatement Plans (DAP) - This section describes the schedule and status for projects related to the DAP by means of an updated Gantt chart for active DAP projects during the reporting period, and the anticipated projects and activities that are scheduled for continued compliance with the Amended Consent Decree.

Section 4: Program Activities for Public Outreach, Education, Notification and Participation - This section describes the activities related to public outreach that were active during the reporting period (January 1, 2014, through March 31, 2014).

Section 5: Capacity Management, Operations and Maintenance Report - The CMOM program activities and programmatic activities for WQTCs generating capital projects will be reported in a Gantt chart for the reporting period (January 1, 2014, through March 31, 2014), and include the schedule for activities planned for the next two reporting periods (April 1, 2014, through September 30, 2014), are included in this section for continued compliance with the Amended Consent Decree.

Section 6: Performance Overview - This section provides an accounting of unauthorized discharge occurrences from the separate sanitary sewer and combined sewer system and the estimated volumes of each. A discussion of the probable reductions in both unauthorized discharge points and the discharges from MSD's Combined Sewer Overflow (CSO) locations, identified in the Morris Forman Water Quality Treatment Center (WQTC) Kentucky Pollutant Discharge Elimination System (KPDES) permit, that are expected to result from MSD's projects and activities during the reporting period are also contained in this section. Performance information on Jeffersontown WQTC blending events, bypasses at WQTCs, DMR information, and phosphorus monitoring at WQTCs is included in this section.

SECTION 1: Program Activities for Nine Minimum Controls

1.1 Nine Minimum Controls Program Background

Per Paragraph 24.a. of the Amended Consent Decree, the Nine Minimum Controls (NMC) Compliance Report was initially submitted to EPA and KDEP on February 10, 2006. MSD received an approval letter, dated February 22, 2007, for the NMC Compliance Report. The approved NMC Compliance document can be viewed on the MSD Project WIN website http://www.msdprojectwin.org. Highlights of the NMC program implementation over this reporting period are outlined below.

1.2 NMC 2: Maximization of Storage in the Collection System

Continued operation of Phase 1 and Phase 2 of the Real Time Control system. During this reporting period, approximately 190 MG were stored in the system during rain events and routed to the Morris Forman WQTC once the system was able to handle the flow. See the figure at the end of this section for a detailed report.

The gates at SWOR2 have been placed in manual control due to what was diagnosed as a failure of the gate level sensors that are integral to the integration of this site in the RTC schema. The sensors were replaced in the last reporting period, but the problem was not resolved due to the gate-closed proximity switches also being diagnosed as defective. Planning and design of corrective actions has begun. Staff has determined the electronics keep failing do to their current location inside the pipe and their constant exposure to moisture.

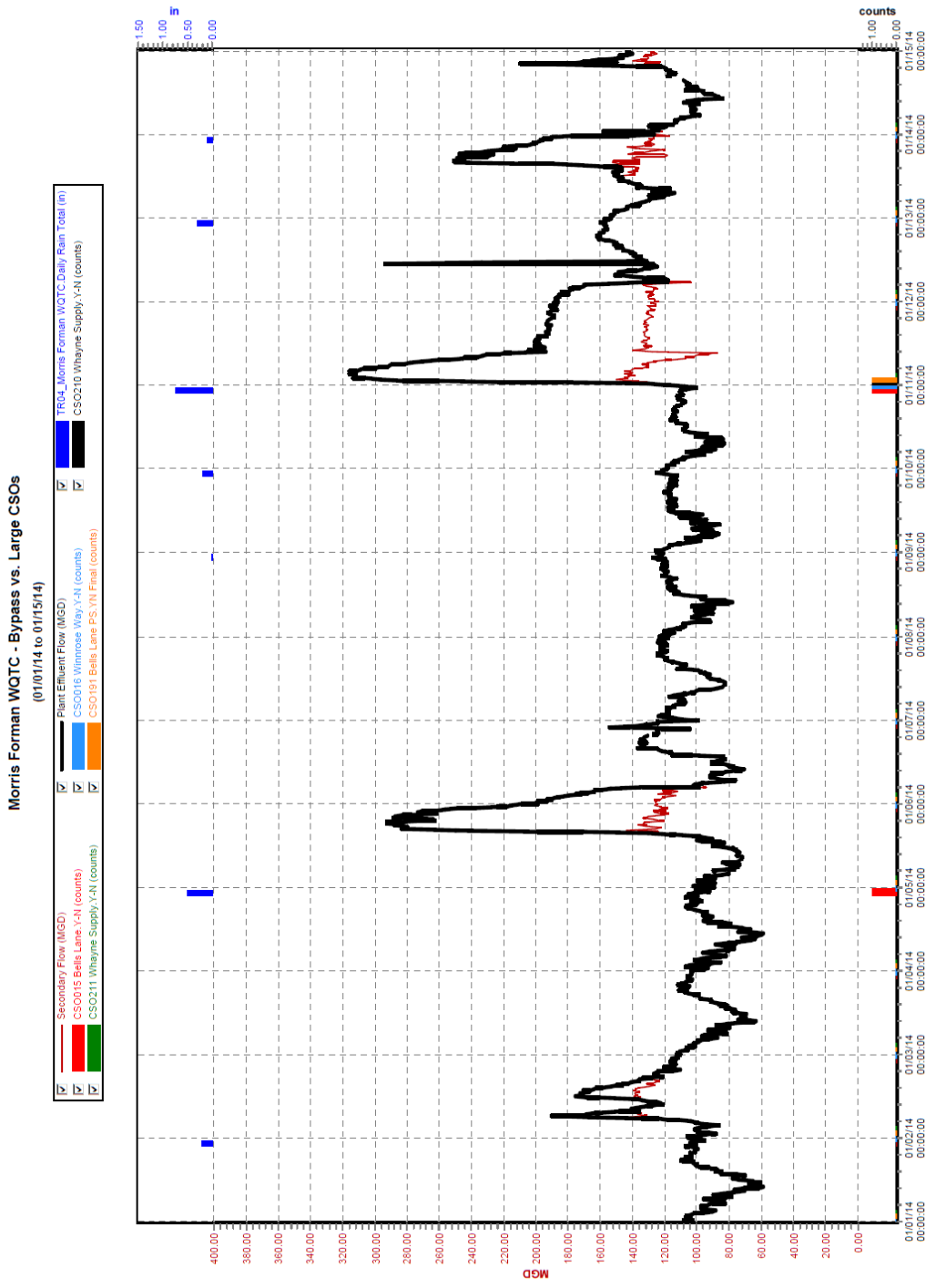
1.3 NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC)

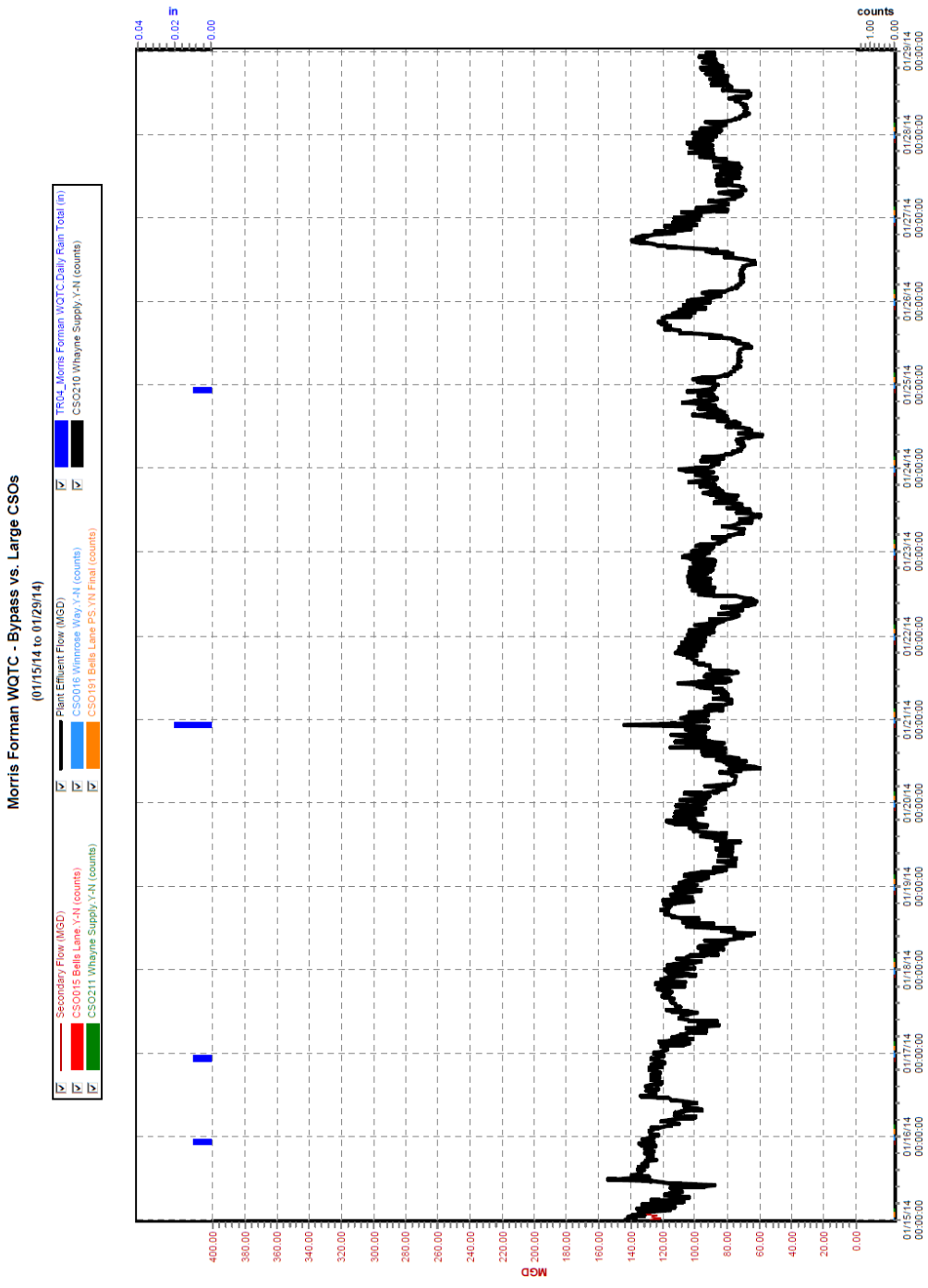
The following charts illustrate performance in maximizing flow to the Morris Forman WQTC. The top of the chart shows rainfall inches per day. The middle part of the chart shows Morris Forman WQTC effluent flow and secondary treatment flow. The difference between these is the secondary bypass flow. The bottom of the chart shows days with a CSO activation at the five CSOs in the vicinity of the Morris Forman WQTC (CSOs 015, 016, 191, 210, and 211). Note that the flow meter downstream from CSO 211 is known to be affected by backwater effects of the Ohio River and the ultrasonic signal is sometimes blocked by mist and condensation when air and sewage temperatures are significantly different, so CSO activations at CSO 211 are keyed to water levels upstream and downstream of the inflatable dam in the Main Diversion Structure. The other CSO activations are tied to flow measurement downstream of the respective CSOs. There are occasions in which a communications failure with telemetry has led to short-term gaps in the data. In addition, indications of rainfall and CSO activations are shown on the day they happened, but are not aligned with the exact time, so the effluent flow graph (which is tied to actual time) may show peaks that are offset from the indicated rain or CSO events by as much as 24 hours.

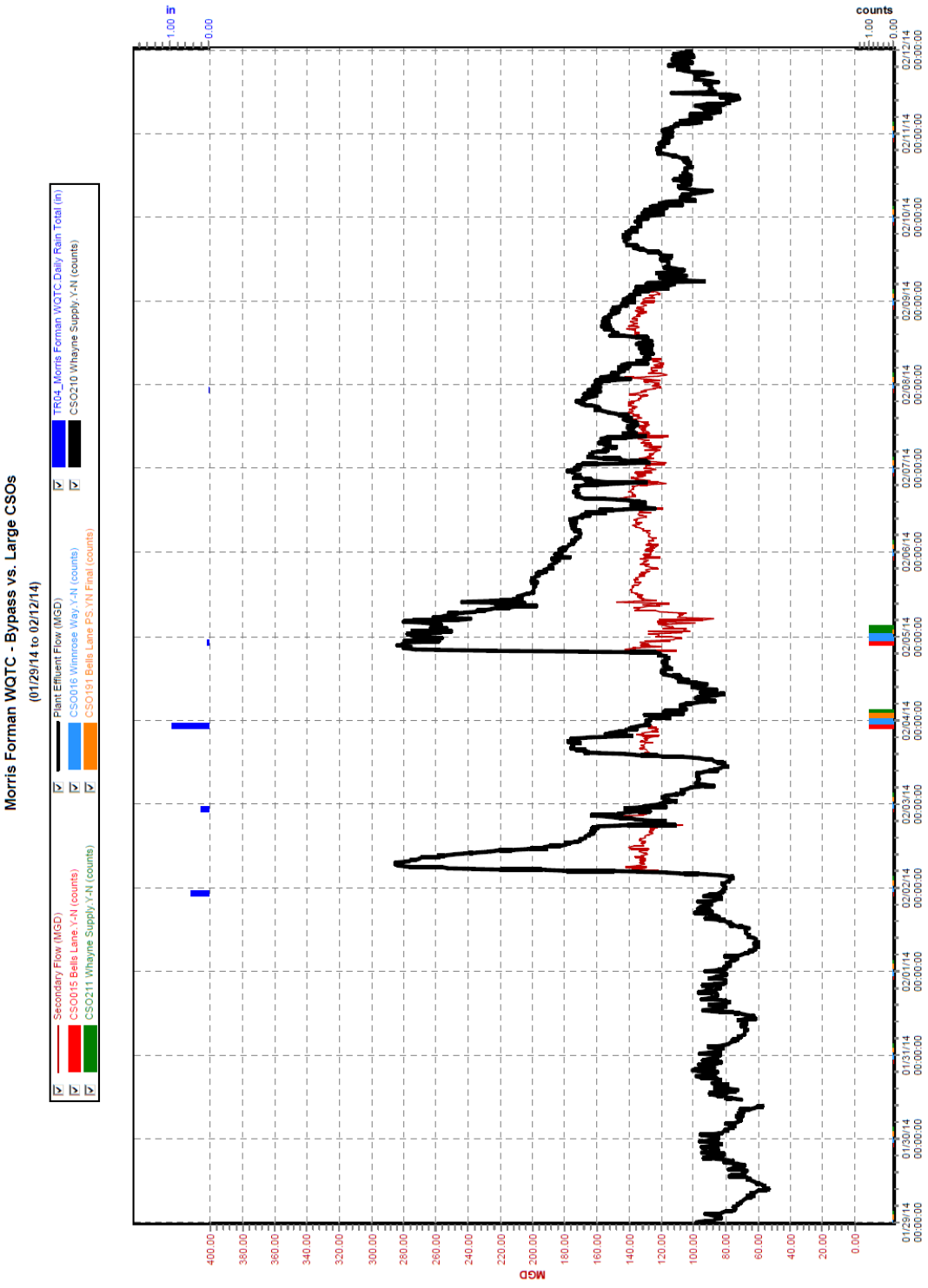
There were no extended outages in the Headworks or primary sedimentation basins that impacted plant capacity during this quarter. Some overflows experienced at CSO 015 and CSO 191 were the result of Southwest Pump Station capacity limitations rather than plant

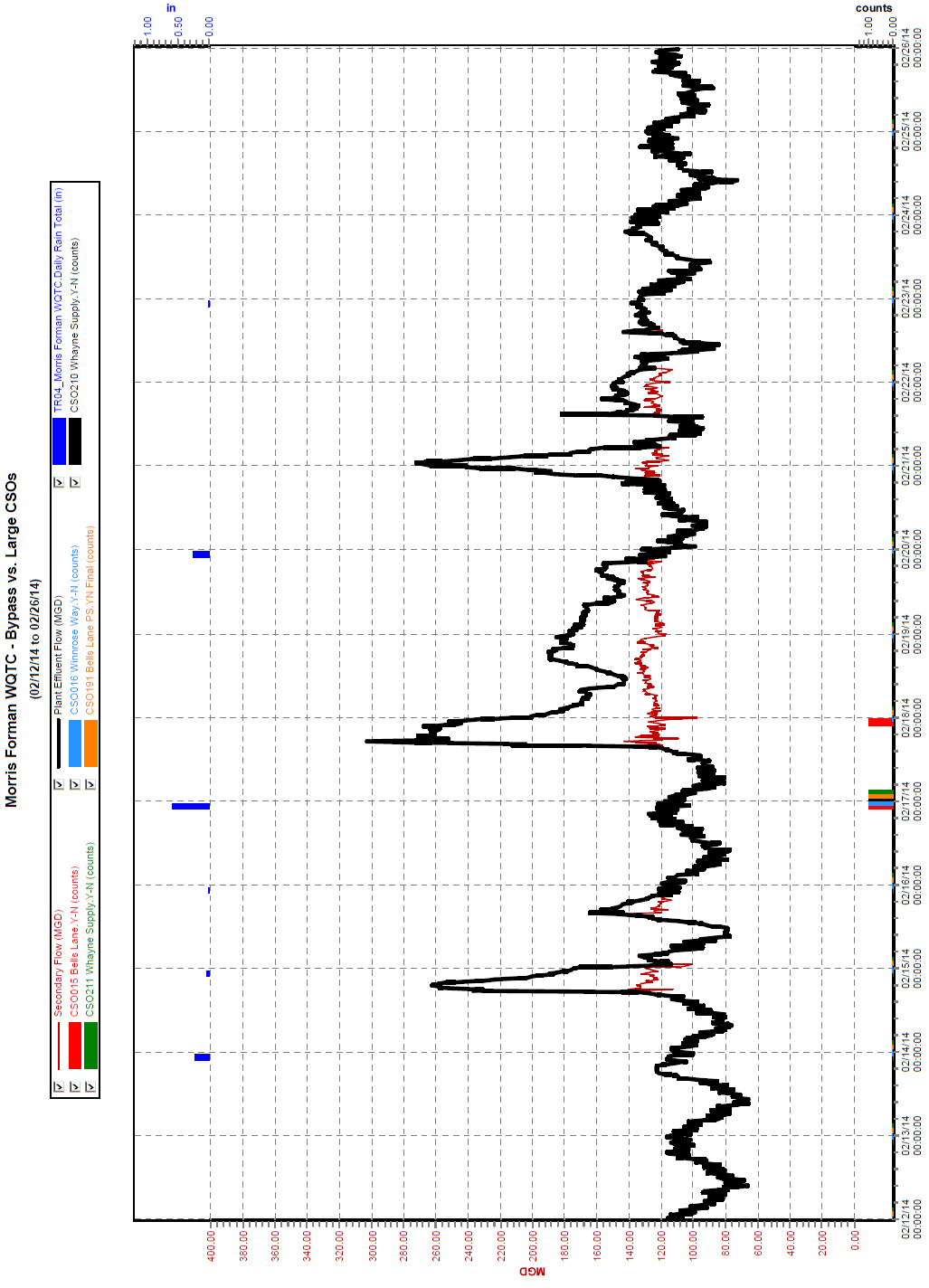
capacity. These pumping capacity limitations are being addressed by the Bells Lane Wet Weather Treatment Facilities project scheduled to bid in April 2014. As a result of scheduled preventive maintenance activities and corrective maintenance requirements identified during the scheduled maintenance, two secondary clarifiers were out of service for most of the quarter. Plant staff were able to maintain flows of 120 – 140 MGD through the secondary process during this period of reduced clarifier capacity. During the rain event on March 29 the plant flows began falling off right after shift change and the incoming operator failed to recognize the need to make gate adjustments to continue to maximize flow through the secondary process. This condition was corrected when noticed, and the operator was re-trained in the procedures to follow during wet weather events.

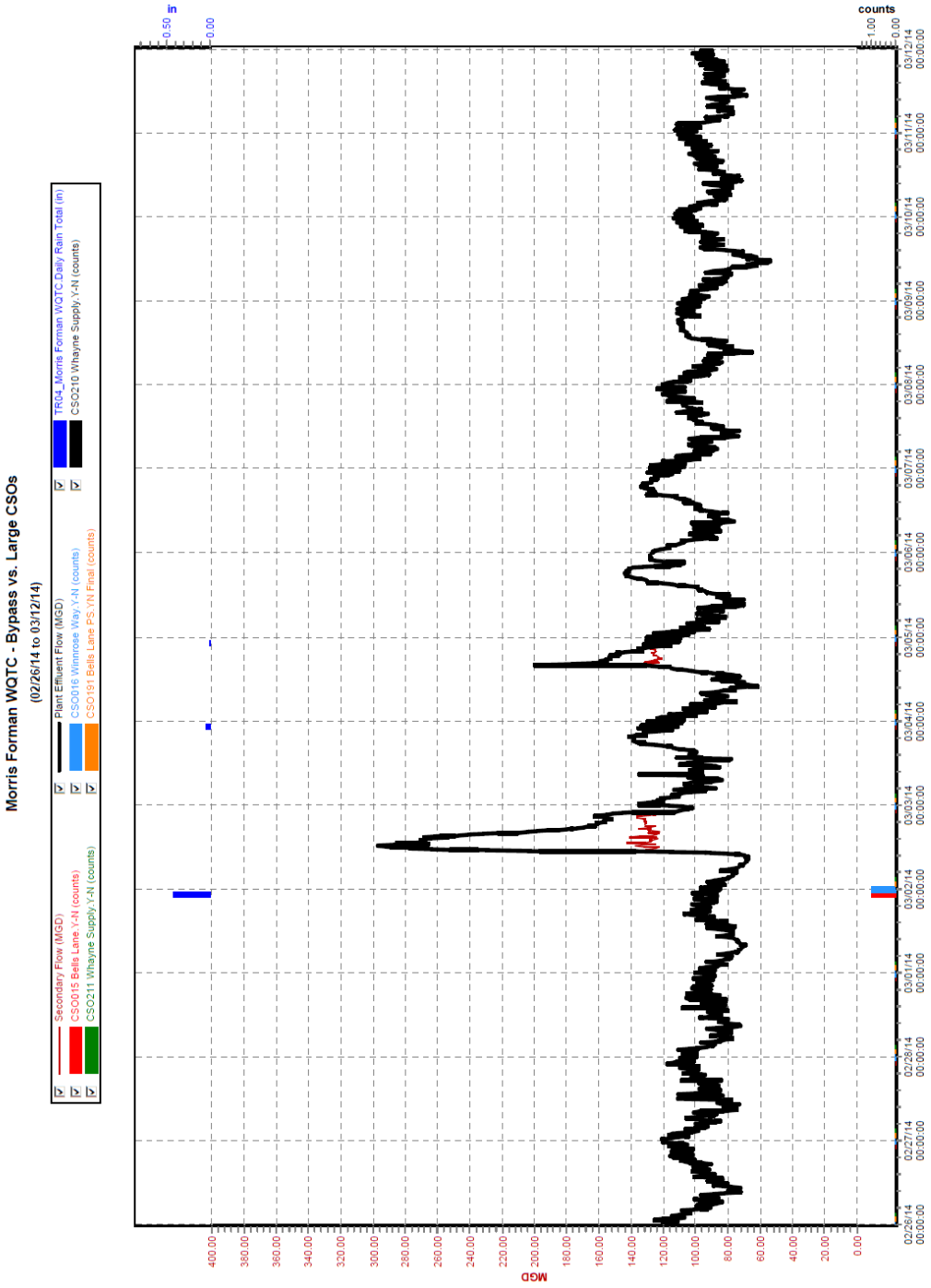
Design began on upgrades to improve Headworks performance and reliability. A project kick-off meeting was held in January 2014, and the 30% design review documents were completed at the end of March. Design will continue on this project through the next reporting period.

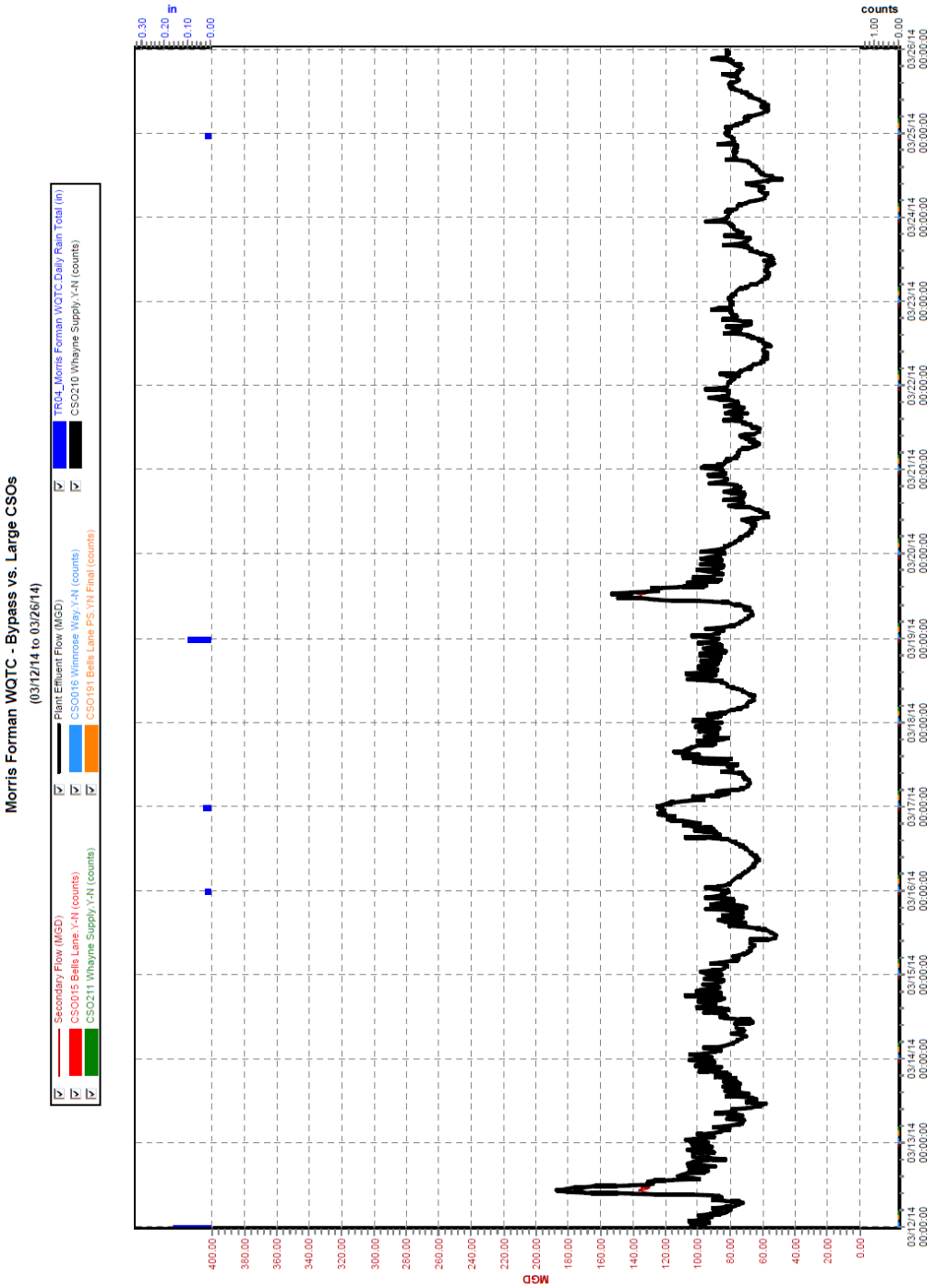

Morris Forman WQTC - Bypass vs. Large CSOs
(01/01/14 to 01/15/14)
Secondary Flow (MGD)
CSO015 Bells Lane Y-N (counts)
CSO211 Whayne Supply Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winnrose Way Y-N (counts)
CSO191 Bells Lane PS Y-N Final (counts)
TR04_Morris Forman WQTC Daily Rain Total (in)
CSO210 Whayne Supply Y-N (counts)
in
counts
MGD

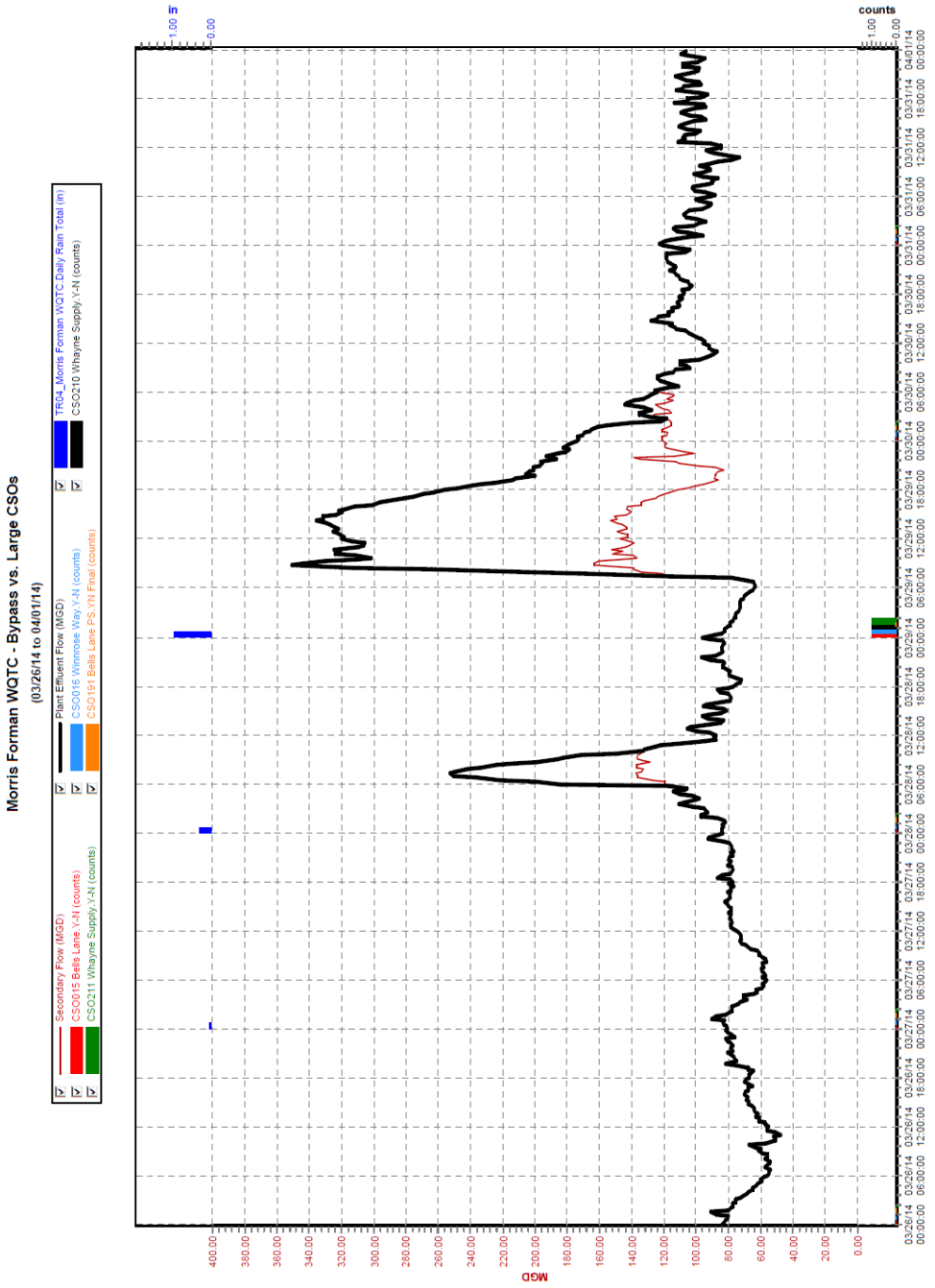

Morris Forman WQTC - Bypass vs. Large CSOs
(01/15/14 to 01/29/14)
Secondary Flow (MGD)
CSO015 Bells Lane Y-N (counts)
CSO211 Whayne Supply Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winmrose Way Y-N (counts)
CSO191 Bells Lane PS_YN Final (counts)
TR04_Morris Forman WQTC Daily Rain Total (in)
CSO210 Whayne Supply Y-N (counts)
in
counts
MGD


Morris Forman WQTC - Bypass vs. Large CSOs
(01/29/14 to 02/12/14)
Secondary Flow (MGD)
CSO015 Bells Lane Y-N (counts)
CSO211 Whayne Supply Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winnrose Way Y-N (counts)
CSO191 Bells Lane PS Y/N Final (counts)
TR04_Morris Forman WQTC Daily Rain Total (in)
CSO210 Whayne Supply Y-N (counts)
in
counts
MGD


Morris Forman WQTC - Bypass vs. Large CSOs
(02/12/14 to 02/26/14)
Secondary Flow (MGD)
CSO015 Bells Lane,Y-N (counts)
CSO211 Whayne Supply,Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winnrose Way,Y-N (counts)
CSO191 Bells Lane PS,Y/N Final (counts)
TRG4_Morris Forman WQTC,Daily Rain Total (in)
CSO210 Whayne Supply,Y-N (counts)
in
counts
MGD


Morris Forman WQTC - Bypass vs. Large CSOs
(02/26/14 to 03/12/14)
Secondary Flow (MGD)
CSO015 Belle Lane Y-N (counts)
CSO211 Whayne Supply Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winnrose Way Y-N (counts)
CSO191 Belle Lane PS Y-N Final (counts)
TRS4_Morris Forman WQTC Daily Rain Total (in)
CSO210 Whayne Supply Y-N (counts)
in
counts
MGD


Morris Forman WQTC - Bypass vs. Large CSOs
(03/12/14 to 03/26/14)
Secondary Flow (MGD)
CSO015 Bells Lane Y-N (counts)
CSO211 Whayne Supply Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winnrose Way Y-N (counts)
CSO191 Bells Lane PS Y-N Final (counts)
TR04_Morris Forman WQTC Daily Rain Total (in)
CSO210 Whayne Supply Y-N (counts)
in
counts
MGD


Morris Forman WQTC - Bypass vs. Large CSOs
(03/26/14 to 04/01/14)
Secondary Flow (MGD)
CSO015 Bells Lane Y-N (counts)
CSO211 Whayne Supply Y-N (counts)
Plant Effluent Flow (MGD)
CSO016 Winnrose Way Y-N (counts)
CSO191 Bells Lane PS Y-N Final (counts)
TRG4_Morris Forman WQTC Daily Rain Total (in)
CSO210 Whayne Supply Y-N (counts)
in
counts
MGD

There were no KPDES permit violations at Morris Forman WQTC during January, February or March of 2014.

During this reporting period, the following activities were continued and/or completed:

- Wet Weather Operational Plan – Wet Weather SOP training was completed with an operations consultant conducting "train the trainer" sessions for the MSD training department and Morris Forman WQTC process supervisors.
- RTC Integration – Staff developed draft control algorithms for integrating the Northern Ditch Diversion into the RTC system. These were reviewed and refined through development of a proposed wet weather SOP for the system that also includes the Southeast Diversion Structure, Buechel Basin, and the Derek R Guthrie WQTC high rate treatment facility. It is expected that full integration in an automated mode will be implemented incrementally, starting with a period of manual operation to validate the control assumptions, followed by increasing level of system automation as the automated controls for individual components are implemented, validated, and then incorporated into the overall control system.
- RTC Performance Assessment – The main objective of the RTC Performance Assessment is to determine whether the available flow and storage capacities within the system are being utilized to their full potential. A draft technical memorandum was developed to complete an RTC performance assessment and give staff potential areas to improve RTC operations. Real time events were used to calibrate and verify the hydraulic model which operates the RTC system. A baseline was developed to analyze the behavior of each RTC site in order to assess the actual versus planned performance, as established during the original design. Draft recommendations were developed to optimize system performance if applicable for each of the existing RTC locations. During the next reporting period, staff will review the final recommendations to enhance the RTC system and develop a plan to implement these changes.
- Headworks Replacement Project – Design began to replace the existing headworks to improve reliability and plant hydraulics. A 30% design submittal was submitted towards the end of the reporting period. During the next reporting period, MSD staff will review 30% design submittal. Design will continue on this project through the next reporting period.
- SWOR2 Modifications – Design began for the improvements to the gate actuators at the site. The existing gate actuator hydraulic units will be replaced with electrical units and moved to grade level. The existing hydraulic actuator and control sensors are in the sewage flow, inside the Southern Outfall. The gate positioning sensors, which allow the site to run in auto, frequently fail due to moisture requiring the site to be operated manually achieving minimal wet weather storage. An 80% design submittal was received during this reporting period. During the reporting period, it is anticipated that design will be completed and the project will be advertised for construction.

- Ashland Avenue and Brady Lake Basins – During the reporting period both these sites experienced gate stem failures forcing each site to be operated manually. Repairs have been completed at Ashland Avenue. During the next reporting period, the gate stem repairs will be completed at the Brady Lake.

Louisville/Jefferson County
Metropolitan Sewer District

WET WEATHER STORAGE IN THE MORRIS FORMAN SEWER SYSTEM VIA THE RTC SYSTEM

Period	
From :	01/01/2014
To :	03/31/2014

Event Number	Wet Weather Event			Rainfall			Wet Weather Storage Volume (MG)								High River Levels	Comments
				Average*	Max**											
	Start Date	End Date	Duration	TRFD (in)	TRFD (in)	Rain Gauge	SWPS SG Chamber (14.5)	SWOR2 (7.5)	Brady Lake and Executive Inn Storage (13.4)	Southern Outfall (3.5)	Ashland (1.0)	Ohio River Interceptor (4.1)	Sneads Branch (2.5)	Total		
2014-002	01/05/14 14:20	01/06/14 05:35	15:15:00	0.55	0.59	TR11	10.4	0.0	0.3	3.0	0.0	2.2	0.1	15.9	No	Moderate storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland had a regulator dysfunction, Brady Lake and SWSG were manually operated.
2014-004	1/10/14 23:45	1/12/14 6:20	30:35:00	1.00	1.20	TR14	15.1	0.0	4.2	0.0	0.0	1.6	0.9	21.7	No	Large storm cells homogeneously distributed over the service area . SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland had a regulator dysfunction, Brady Lake was manually operated.
2014-005	1/13/14 13:45	1/14/14 1:00	11:15:00	0.21	0.30	TR04	6.5	0.0	0.0	0.4	0.0	1.6	0.0	8.4	No	Small storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland had a regulator dysfunction, Brady Lake was manually operated.
2014-010	2/2/14 2:15	2/2/14 18:50	16:35:00	0.50	0.58	TR11	13.0	0.0	1.0	3.2	0.0	2.7	0.0	19.8	No	Moderate storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-012	2/4/14 18:05	2/8/14 4:10	82:05:00	0.64	1.13	TR11	15.4	0.0	4.7	0.2	0.0	0.9	1.5	22.6	No	Moderate storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-016	2/14/14 11:50	2/15/14 3:50	16:00:00	0.27	0.36	TR12	6.5	0.0	0.0	0.8	0.0	1.0	0.0	8.2	No	Small storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-019	2/17/14 14:05	2/19/14 18:50	52:45:00	0.51	0.59	TR04	14.8	0.7	2.6	4.2	0.4	4.3	0.0	27.0	No	Large storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-020	2/20/14 18:50	2/21/14 7:10	12:20:00	0.30	0.38	TR11	5.6	0.0	0.8	0.8	0.0	1.2	0.0	8.3	No	Moderate storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-023	3/2/14 9:05	3/3/14 9:10	24:05:00	0.45	0.51	TR11	12.9	0.0	1.3	3.8	0.0	4.0	0.0	22.1	No	Large storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-025	3/5/14 10:40	3/5/14 21:50	11:10:00	0.03	0.17	TR13	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	No	Very small storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-029	3/28/14 0:05	3/28/14 13:35	13:30:00	0.23	0.28	TR04	5.8	0.0	0.1	1.7	0.0	1.9	0.0	9.5	No	Moderate storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
2014-030	3/29/14 5:50	3/30/14 3:15	21:25:00	0.86	0.98	TR12	13.9	0.0	2.6	4.6	0.0	3.3	0.8	25.1	No	Large storm cells heterogeneously distributed over the service area. SWOR2 was manually controlled with its gates in the open position and minimal available storage utilization. Ashland and Brady Lake were also manually operated.
TOTAL							**121.2**	**0.7**	**17.5**	**22.5**	**0.4**	**24.6**	**3.2**	**190.0**		

SECTION 2: Program Activities for Sewer Overflow Response Protocol

2.1 SORP Program Background

Per Paragraph 24.d. of the Amended Consent Decree, MSD initially submitted the Sewer Overflow Response Protocol (SORP) to EPA and KDEP on February 10, 2006, and received comments on March 13, 2006.

MSD completely revised the SORP documentation in 2011. The draft of this revised document was submitted for comment on August 22, 2011. Comments from the EPA and KDEP were received and addressed, and the document was resubmitted October 28, 2011. Final approval of the updated SORP document was received February 21, 2012. A hard copy of the approved document has been distributed to each division throughout MSD and a viewable, downloadable electronic version has been posted to the MSD Project WIN website www.msdprojectwin.org.

The current approved SORP document is now dated February 21, 2012, and can be viewed on the MSD Project WIN website www.msdprojectwin.org. Updates to the SORP document were submitted in August 2012, with confirmation of approvals on October 25, 2012. These updates are posted on the Project WIN website. The following activities were performed during this reporting period.

2.2 Overflow Management and Field Documentation

- Monitored approximately 157 sanitary sewer overflow (SSO) sites, which have been grouped into routes based on the range of rainfall rates necessary to cause a SSO. These routes are monitored during rain events depending on the magnitude and location of the storm. If an overflow is observed, a Discharge Work Order is created to document the event. During this quarter, Regulatory Services and Engineering staff documented 27 suspected or unauthorized discharges through route reconnaissance. Inspection routes were run during rain events as described in the following table:

Route Description	01/11/2014	02/04/2014	02/17/2014
ENGINEERING RAIN EVENT SSO INSPECTION ROUTE	X	X	
RS HIKES POINT RAIN EVENT SSO INSPECTION ROUTE	X	X	X
RS JEFFERSONTOWN RAIN EVENT SSO INSPECTION ROUTE	X	X	
RS JEFFERSONTOWN/FERN CREEK RAIN EVENT SSO INSPECTION ROUTE	X	X	
RS MIDDLE/MUDDY FORK RAIN EVENT SSO INSPECTION ROUTE	X	X	

- Due to Capacity related issues, during this reporting period, MSD Metro Operations staff hauled 170,400 gallons of sewage. MSD also hauled due to other issues as indicated in the following table:

MSD Hauled Volumes In Gallons (January 1, 2014 - March 31, 2014)				
Problem	January	February	March	Total
LACK OF SYSTEM CAPACIT	90,400	80,000	-	170,400
POWER FAILURE	-	6,000	-	6,000
OBSTRUCTION	-	39,000	-	39,000
Grand Total	**90,400**	**125,000**	-	**215,400**

2.3 Staff Training and Communication

- Reviewed and updated the training documentation for the 2014 first quarter SORP training that included Preparing, Monitoring and Response to Overflows.
- Commenced planning for the 2014 second quarter SORP training that will focus on Overflow Assessment, Establishing Control Zones, Mitigation and Documentation.
- Conducted the following SORP Quarterly training sessions which were attended by 271 employees.

Staff Training Participation - January 1, 2014 - March 31, 2014				
Date	Dept./Area	Location	Module	Attendees
2/26/2014	Morris Foreman Staff	MFWQTC	Preparing, Monitoring and Response to Overflows	9
2/26/2014	Morris Foreman Staff	MFWQTC	Preparing, Monitoring and Response to Overflows	40
2/26/2014	Morris Foreman Staff	MFWQTC	Preparing, Monitoring and Response to Overflows	15
3/5/2014	Morris Foreman Staff	MFWQTC	Preparing, Monitoring and Response to Overflows	11
3/5/2014	Morris Foreman Staff	MFWQTC	Preparing, Monitoring and Response to Overflows	8
3/5/2014	Morris Foreman Staff	MFWQTC	Preparing, Monitoring and Response to Overflows	7
3/6/2014	RMS/ENG Staff	CMF A & B	Preparing, Monitoring and Response to Overflows	39
3/7/2014	I&FP Staff	CMF A	Preparing, Monitoring and Response to Overflows	14
3/12/2014	West OPS	DRGWQTC	Preparing, Monitoring and Response to Overflows	10
3/12/2014	East OPS	FFWQTC	Preparing, Monitoring and Response to Overflows	21
3/13/2014	RMS/ENG Staff	CMF A & B	Preparing, Monitoring and Response to Overflows	54
3/14/2014	I&FP Staff	CMF A	Preparing, Monitoring and Response to Overflows	22
3/19/2014	Central OPS	CCWQTC	Preparing, Monitoring and Response to Overflows	21
Total				271

SECTION 3: Program Activities for Discharge Abatement Plans

3.1 Integrated Overflow Abatement Plan (IOAP)

As a requirement of the Amended Consent Decree, per Paragraph 25, MSD is to prepare and submit for review and approval discharge abatement plans for the elimination of unauthorized discharges from the separate sanitary sewer system and the combined sewer system, the reduction and control of discharges from the CSO locations identified in the Morris Forman WQTC KPDES permit, and the improvement of water quality in the receiving waters.

The Final Sanitary Sewer Discharge Plan and the Final CSO Long Term Control Plan were submitted concurrently and certified on December 19, 2008, under the title of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010.

MSD submitted an IOAP modification request to EPA/KDEP on September 20, 2012, with partial approval granted via certified letter on October 25, 2012. The modified project package, program descriptions and progress, and updated supporting text are included in the revised IOAP, submitted in draft form to EPA/KDEP on June 14, 2013. Comments were received from EPA/KDEP during this reporting period, and responses were essentially complete at the end of March. Discussion have been ongoing with EPA and KDEP regarding the form and format of the revised submittal. It is anticipated that MSD will receive direction from EPA/KDEP during the next reporting period, with a final re-submittal completed shortly after the direction is received.

3.2 Sanitary Sewer Discharge Plan (SSDP)

The Sanitary Sewer Discharge Plan (SSDP) addresses the overflows and unauthorized discharges from the separate sanitary sewer system. Three separate plans have been submitted under this program as described below and outlined in Paragraph 25.a. of the Amended Consent Decree.

3.2.1 Updated Sanitary Sewer Overflow Plan Implementation

MSD prepared and submitted the Updated Sanitary Sewer Overflow Plan (SSOP) on February 10, 2006. This plan included an overview of the MSD sanitary sewer overflow abatement program and specific actions taken to reduce/eliminate overflows from the sanitary sewer system. This document included a list of the proposed improvements to be accomplished by December 31, 2008. Activities required under the Updated SSOP have been completed.

3.2.2 Interim Sanitary Sewer Discharge Plan

MSD submitted for approval an Interim Sanitary Sewer Discharge Plan (ISSDP) on September 30, 2007. Comments were received on January 8, 2008. MSD resubmitted the revised ISSDP on March 7, 2008, and received an approval letter for the ISSDP on July 24, 2008. The approved ISSDP document can be viewed on the MSD Project WIN website www.msdprojectwin.org. All projects required by the ISSDP have been completed and certified, with the exception of the Derek R. Guthrie WQTC expansion. The Derek R. Guthrie WQTC was operational in accordance with information previously submitted. The project has achieved overflow reduction performance as planned and designed. No treatment capacity related sanitary sewer overflows have occurred with the exception of the discharges related to

the bar screen failure previously reported in the February 20, 2013, DMR (January reporting period) for DRG WQTC, and one discharge related to a grit system problem that reduced plant capacity to 150 MGD for a short time. MSD is currently working with attorneys to finalize the certification.

3.2.3 Final Sanitary Sewer Discharge Plan

MSD submitted for approval a Final Sanitary Sewer Discharge Plan (SSDP) on December 19, 2008, as Volume 3 of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010. A revised SSDP was included in the IOAP revision, submitted June 14, 2013, with a follow-up submittal scheduled during the next reporting period as described in Section 3.1.

- Prospect WQTC Elimination Projects Easement Status - A total of 54 easements have been identified.
- Acquired 53 of these Prospect easements to-date. Details on the easement progress and status:
    - River Road Interceptor- 18 Easements acquired – project complete.
    - River Road Interceptor Phase 1A- 2 Easements acquired – project under construction.
    - Hite Creek WQTC Pump Station- 2 Easements acquired – project under construction.
    - Hite Creek WQTC Interceptor and FM Phase 1- 1 Easement acquired – project under construction.
    - Hite Creek WQTC Interceptor and FM Phase 2- 3 Easements acquired – project under construction.
    - Hite Creek WQTC FM Phase 3A- 1 Easement acquired – project under construction.
    - Hite Creek WQTC FM Phase 3B- 22 Easements acquired – project under construction.
    - Shadow Wood WQTC Elimination- 1 Easement acquired, 1 Easement in process, letter sent - project under design.
    - Hunting Creek North WQTC Elimination- 3 Easements acquired - project will be advertised in April 2014.

3.3 CSO Long Term Control Plan

The CSO Long Term Control Plan (LTCP) addresses the overflows and unauthorized discharges from the CSS. Two separate plans have been submitted under this program as described below and outlined in Paragraph 25.b. of the Amended Consent Decree.

3.3.1 Interim CSO Long Term Control Plan

The Interim CSO LTCP was initially submitted to EPA and KDEP on February 10, 2006. MSD received an approval letter dated February 22, 2007, for the Interim LTCP. The approved Interim LTCP can be viewed on the MSD Project WIN website www.msdprojectwin.org.

This plan includes an overview of the MSD program, efforts taken to reduce/eliminate discharges from the CSS and the list of proposed improvements to be accomplished by December 31, 2008. All projects associated with this plan have been completed.

3.3.2 Final CSO Long Term Control Plan

MSD submitted for approval the Final CSO LTCP on December 19, 2008, as Volume 2 of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010. A revised LTCP was included in the IOAP revision, submitted June 14, 2013, with a follow-up submittal scheduled for the next reporting period, as described in Section 3.1.

3.3.3 Green Program Update

MSD continued program activities to provide incentives to private property owners to reduce the amount of impervious surface that drains to the combined sewer system. This program is outlined in the brochure at the following link:
http://www.msdlouky.org/pdfs/Green_Infrastructure_Incentives_Savings_Weba.pdf

The green program incentives are being applied to reflect the values of green projects in CSO areas or regions based on the latest modeling results. This change in application ties incentives directly to overflow reductions in various CSO regions to promote green projects in the areas that provide the most value. Project opportunities are now optimized to best use available funding.

MSD continued development of a green infrastructure website for distribution of information on the programs, incentives, and value to customers.

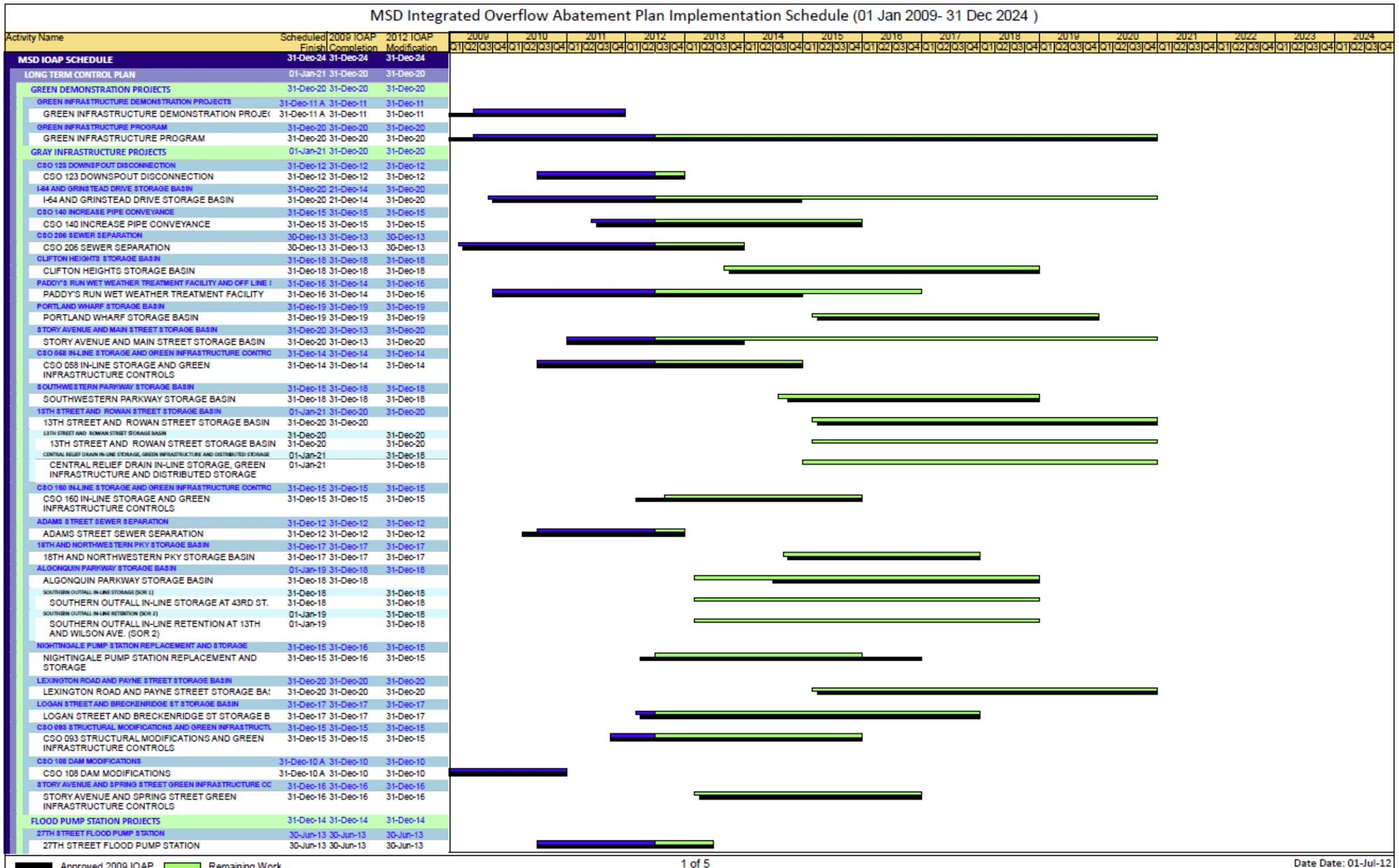
Continued coordination with the green and MS4 program is on-going to optimize resources and regulations to improve water quality.

3.4 Activity Progress Chart

A Gantt chart showing the previous and Proposed IOAP Modification schedules (Refer to IOAP, Volume 1 – Figure 6.3.1 for the previous) for the entire program is provided below.

MSD Integrated Overflow Abatement Plan Implementation Schedule (01 Jan 2009- 31 Dec 2024)

Activity Name	Scheduled Finish	2009 IOAP Completion	2012 IOAP Modification
MSD IOAP SCHEDULE	31-Dec-24	31-Dec-24	31-Dec-24
LONG TERM CONTROL PLAN	01-Jan-21	31-Dec-20	31-Dec-20
GREEN DEMONSTRATION PROJECTS	31-Dec-20	31-Dec-20	31-Dec-20
GREEN INFRASTRUCTURE DEMONSTRATION PROJECTS	31-Dec-11 A	31-Dec-11	31-Dec-11
GREEN INFRASTRUCTURE DEMONSTRATION PROJE(	31-Dec-11 A	31-Dec-11	31-Dec-11
GREEN INFRASTRUCTURE PROGRAM	31-Dec-20	31-Dec-20	31-Dec-20
GREEN INFRASTRUCTURE PROGRAM	31-Dec-20	31-Dec-20	31-Dec-20
GRAY INFRASTRUCTURE PROJECTS	01-Jan-21	31-Dec-20	31-Dec-20
CSO 123 DOWNSPOUT DISCONNECTION	31-Dec-12	31-Dec-12	31-Dec-12
CSO 123 DOWNSPOUT DISCONNECTION	31-Dec-12	31-Dec-12	31-Dec-12
I-64 AND GRINSTEAD DRIVE STORAGE BASIN	31-Dec-20	21-Dec-14	31-Dec-20
I-64 AND GRINSTEAD DRIVE STORAGE BASIN	31-Dec-20	21-Dec-14	31-Dec-20
CSO 140 INCREASE PIPE CONVEYANCE	31-Dec-15	31-Dec-15	31-Dec-15
CSO 140 INCREASE PIPE CONVEYANCE	31-Dec-15	31-Dec-15	31-Dec-15
CSO 206 SEWER SEPARATION	30-Dec-13	31-Dec-13	30-Dec-13
CSO 206 SEWER SEPARATION	30-Dec-13	31-Dec-13	30-Dec-13
CLIFTON HEIGHTS STORAGE BASIN	31-Dec-18	31-Dec-18	31-Dec-18
CLIFTON HEIGHTS STORAGE BASIN	31-Dec-18	31-Dec-18	31-Dec-18
PADDY'S RUN WET WEATHER TREATMENT FACILITY AND OFF LINE S	31-Dec-16	31-Dec-14	31-Dec-16
PADDY'S RUN WET WEATHER TREATMENT FACILITY	31-Dec-16	31-Dec-14	31-Dec-16
PORTLAND WHARF STORAGE BASIN	31-Dec-19	31-Dec-19	31-Dec-19
PORTLAND WHARF STORAGE BASIN	31-Dec-19	31-Dec-19	31-Dec-19
STORY AVENUE AND MAIN STREET STORAGE BASIN	31-Dec-20	31-Dec-13	31-Dec-20
STORY AVENUE AND MAIN STREET STORAGE BASIN	31-Dec-20	31-Dec-13	31-Dec-20
CSO 058 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTRO	31-Dec-14	31-Dec-14	31-Dec-14
CSO 058 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROLS	31-Dec-14	31-Dec-14	31-Dec-14
SOUTHWESTERN PARKWAY STORAGE BASIN	31-Dec-18	31-Dec-18	31-Dec-18
SOUTHWESTERN PARKWAY STORAGE BASIN	31-Dec-18	31-Dec-18	31-Dec-18
13TH STREET AND ROWAN STREET STORAGE BASIN	01-Jan-21	31-Dec-20	31-Dec-20
13TH STREET AND ROWAN STREET STORAGE BASIN	31-Dec-20	31-Dec-20	
13TH STREET AND ROWAN STREET STORAGE BASIN	31-Dec-20		31-Dec-20
13TH STREET AND ROWAN STREET STORAGE BASIN	31-Dec-20		31-Dec-20
CENTRAL RELIEF DRAIN IN-LINE STORAGE, GREEN INFRASTRUCTURE AND DISTRIBUTED STORAGE	01-Jan-21		31-Dec-18
CENTRAL RELIEF DRAIN IN-LINE STORAGE, GREEN INFRASTRUCTURE AND DISTRIBUTED STORAGE	01-Jan-21		31-Dec-18
CSO 160 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTRO	31-Dec-15	31-Dec-15	31-Dec-15
CSO 160 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROLS	31-Dec-15	31-Dec-15	31-Dec-15
ADAMS STREET SEWER SEPARATION	31-Dec-12	31-Dec-12	31-Dec-12
ADAMS STREET SEWER SEPARATION	31-Dec-12	31-Dec-12	31-Dec-12
18TH AND NORTHWESTERN PKY STORAGE BASIN	31-Dec-17	31-Dec-17	31-Dec-17
18TH AND NORTHWESTERN PKY STORAGE BASIN	31-Dec-17	31-Dec-17	31-Dec-17
ALGONQUIN PARKWAY STORAGE BASIN	01-Jan-19	31-Dec-18	31-Dec-18
ALGONQUIN PARKWAY STORAGE BASIN	31-Dec-18	31-Dec-18	
SOUTHERN OUTFALL IN-LINE STORAGE (SOR 1)	31-Dec-18		31-Dec-18
SOUTHERN OUTFALL IN-LINE STORAGE AT 43RD ST.	31-Dec-18		31-Dec-18
SOUTHERN OUTFALL IN-LINE RETENTION (SOR 2)	01-Jan-19		31-Dec-18
SOUTHERN OUTFALL IN-LINE RETENTION AT 13TH AND WILSON AVE. (SOR 2)	01-Jan-19		31-Dec-18
NIGHTINGALE PUMP STATION REPLACEMENT AND STORAGE	31-Dec-15	31-Dec-16	31-Dec-15
NIGHTINGALE PUMP STATION REPLACEMENT AND STORAGE	31-Dec-15	31-Dec-16	31-Dec-15
LEXINGTON ROAD AND PAYNE STREET STORAGE BASIN	31-Dec-20	31-Dec-20	31-Dec-20
LEXINGTON ROAD AND PAYNE STREET STORAGE BA!	31-Dec-20	31-Dec-20	31-Dec-20
LOGAN STREET AND BRECKENRIDGE ST STORAGE BASIN	31-Dec-17	31-Dec-17	31-Dec-17
LOGAN STREET AND BRECKENRIDGE ST STORAGE B	31-Dec-17	31-Dec-17	31-Dec-17
CSO 093 STRUCTURAL MODIFICATIONS AND GREEN INFRASTRUCTL	31-Dec-15	31-Dec-15	31-Dec-15
CSO 093 STRUCTURAL MODIFICATIONS AND GREEN INFRASTRUCTURE CONTROLS	31-Dec-15	31-Dec-15	31-Dec-15
CSO 108 DAM MODIFICATIONS	31-Dec-10 A	31-Dec-10	31-Dec-10
CSO 108 DAM MODIFICATIONS	31-Dec-10 A	31-Dec-10	31-Dec-10
STORY AVENUE AND SPRING STREET GREEN INFRASTRUCTURE CC	31-Dec-16	31-Dec-16	31-Dec-16
STORY AVENUE AND SPRING STREET GREEN INFRASTRUCTURE CONTROLS	31-Dec-16	31-Dec-16	31-Dec-16
FLOOD PUMP STATION PROJECTS	31-Dec-14	31-Dec-14	31-Dec-14
27TH STREET FLOOD PUMP STATION	30-Jun-13	30-Jun-13	30-Jun-13
27TH STREET FLOOD PUMP STATION	30-Jun-13	30-Jun-13	30-Jun-13



Approved 2009 IOAP Remaining Work
Completed Work

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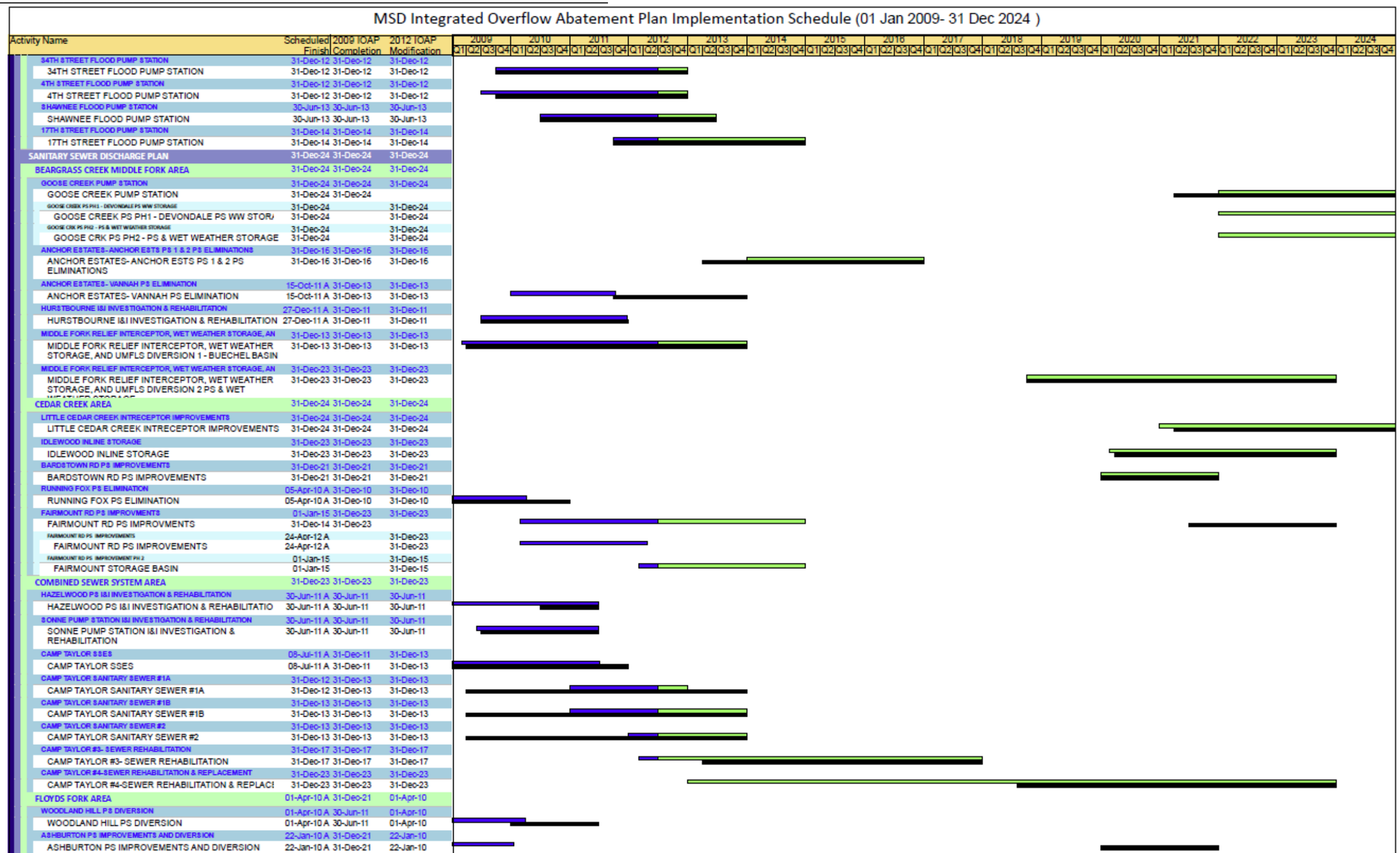
Date Date: 01-Jul-12

MSD Integrated Overflow Abatement Plan Implementation Schedule (01 Jan 2009- 31 Dec 2024)

Activity Name	Scheduled Finish	2009 IOAP Completion	2012 IOAP Modification
34TH STREET FLOOD PUMP STATION	31-Dec-12	31-Dec-12	31-Dec-12
34TH STREET FLOOD PUMP STATION	31-Dec-12	31-Dec-12	31-Dec-12
4TH STREET FLOOD PUMP STATION	31-Dec-12	31-Dec-12	31-Dec-12
4TH STREET FLOOD PUMP STATION	31-Dec-12	31-Dec-12	31-Dec-12
SHAWNEE FLOOD PUMP STATION	30-Jun-13	30-Jun-13	30-Jun-13
SHAWNEE FLOOD PUMP STATION	30-Jun-13	30-Jun-13	30-Jun-13
17TH STREET FLOOD PUMP STATION	31-Dec-14	31-Dec-14	31-Dec-14
17TH STREET FLOOD PUMP STATION	31-Dec-14	31-Dec-14	31-Dec-14
SANITARY SEWER DISCHARGE PLAN	31-Dec-24	31-Dec-24	31-Dec-24
BEARGRASS CREEK MIDDLE FORK AREA	31-Dec-24	31-Dec-24	31-Dec-24
GOOSE CREEK PUMP STATION	31-Dec-24	31-Dec-24	31-Dec-24
GOOSE CREEK PUMP STATION	31-Dec-24	31-Dec-24	
GOOSE CREEK PS PH1 - DEVONDALE PS WW STORAGE	31-Dec-24		31-Dec-24
GOOSE CREEK PS PH1 - DEVONDALE PS WW STOR/	31-Dec-24		31-Dec-24
GOOSE CRK PS PH2 - PS & WET WEATHER STORAGE	31-Dec-24		31-Dec-24
GOOSE CRK PS PH2 - PS & WET WEATHER STORAGE	31-Dec-24		31-Dec-24
ANCHOR ESTATES- ANCHOR ESTS PS 1 & 2 PS ELIMINATIONS	31-Dec-16	31-Dec-16	31-Dec-16
ANCHOR ESTATES- ANCHOR ESTS PS 1 & 2 PS ELIMINATIONS	31-Dec-16	31-Dec-16	31-Dec-16
ANCHOR ESTATES- VANNAH PS ELIMINATION	15-Oct-11 A	31-Dec-13	31-Dec-13
ANCHOR ESTATES- VANNAH PS ELIMINATION	15-Oct-11 A	31-Dec-13	31-Dec-13
HURSTBOURNE I&I INVESTIGATION & REHABILITATION	27-Dec-11 A	31-Dec-11	31-Dec-11
HURSTBOURNE I&I INVESTIGATION & REHABILITATION	27-Dec-11 A	31-Dec-11	31-Dec-11
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AN	31-Dec-13	31-Dec-13	31-Dec-13
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AND UMFLS DIVERSION 1 - BUECHEL BASIN	31-Dec-13	31-Dec-13	31-Dec-13
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AN	31-Dec-23	31-Dec-23	31-Dec-23
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AND UMFLS DIVERSION 2 PS & WET	31-Dec-23	31-Dec-23	31-Dec-23
CEDAR CREEK AREA	31-Dec-24	31-Dec-24	31-Dec-24
LITTLE CEDAR CREEK INTRECEPTOR IMPROVEMENTS	31-Dec-24	31-Dec-24	31-Dec-24
LITTLE CEDAR CREEK INTRECEPTOR IMPROVEMENTS	31-Dec-24	31-Dec-24	31-Dec-24
IDLEWOOD INLINE STORAGE	31-Dec-23	31-Dec-23	31-Dec-23
IDLEWOOD INLINE STORAGE	31-Dec-23	31-Dec-23	31-Dec-23
BARDSTOWN RD PS IMPROVEMENTS	31-Dec-21	31-Dec-21	31-Dec-21
BARDSTOWN RD PS IMPROVEMENTS	31-Dec-21	31-Dec-21	31-Dec-21
RUNNING FOX PS ELIMINATION	05-Apr-10 A	31-Dec-10	31-Dec-10
RUNNING FOX PS ELIMINATION	05-Apr-10 A	31-Dec-10	31-Dec-10
FAIRMOUNT RD PS IMPROVMENTS	01-Jan-15	31-Dec-23	31-Dec-23
FAIRMOUNT RD PS IMPROVMENTS	31-Dec-14	31-Dec-23	
FAIRMOUNT RD PS IMPROVEMENTS	24-Apr-12 A		31-Dec-23
FAIRMOUNT RD PS IMPROVEMENTS	24-Apr-12 A		31-Dec-23
FAIRMOUNT RD PS IMPROVEMENT PH 2	01-Jan-15		31-Dec-15
FAIRMOUNT STORAGE BASIN	01-Jan-15		31-Dec-15
COMBINED SEWER SYSTEM AREA	31-Dec-23	31-Dec-23	31-Dec-23
HAZELWOOD PS I&I INVESTIGATION & REHABILITATION	30-Jun-11 A	30-Jun-11	30-Jun-11
HAZELWOOD PS I&I INVESTIGATION & REHABILITATIO	30-Jun-11 A	30-Jun-11	30-Jun-11
SONNE PUMP STATION I&I INVESTIGATION & REHABILITATION	30-Jun-11 A	30-Jun-11	30-Jun-11
SONNE PUMP STATION I&I INVESTIGATION & REHABILITATION	30-Jun-11 A	30-Jun-11	30-Jun-11
CAMP TAYLOR SSES	08-Jul-11 A	31-Dec-11	31-Dec-13
CAMP TAYLOR SSES	08-Jul-11 A	31-Dec-11	31-Dec-13
CAMP TAYLOR SANITARY SEWER #1A	31-Dec-12	31-Dec-13	31-Dec-13
CAMP TAYLOR SANITARY SEWER #1A	31-Dec-12	31-Dec-13	31-Dec-13
CAMP TAYLOR SANITARY SEWER #1B	31-Dec-13	31-Dec-13	31-Dec-13
CAMP TAYLOR SANITARY SEWER #1B	31-Dec-13	31-Dec-13	31-Dec-13
CAMP TAYLOR SANITARY SEWER #2	31-Dec-13	31-Dec-13	31-Dec-13
CAMP TAYLOR SANITARY SEWER #2	31-Dec-13	31-Dec-13	31-Dec-13
CAMP TAYLOR #3- SEWER REHABILITATION	31-Dec-17	31-Dec-17	31-Dec-17
CAMP TAYLOR #3- SEWER REHABILITATION	31-Dec-17	31-Dec-17	31-Dec-17
CAMP TAYLOR #4-SEWER REHABILITATION & REPLACEMENT	31-Dec-23	31-Dec-23	31-Dec-23
CAMP TAYLOR #4-SEWER REHABILITATION & REPLACI	31-Dec-23	31-Dec-23	31-Dec-23
FLOYDS FORK AREA	01-Apr-10 A	31-Dec-21	01-Apr-10
WOODLAND HILL PS DIVERSION	01-Apr-10 A	30-Jun-11	01-Apr-10
WOODLAND HILL PS DIVERSION	01-Apr-10 A	30-Jun-11	01-Apr-10
ASHBURTON PS IMPROVEMENTS AND DIVERSION	22-Jan-10 A	31-Dec-21	22-Jan-10
ASHBURTON PS IMPROVEMENTS AND DIVERSION	22-Jan-10 A	31-Dec-21	22-Jan-10



Approved 2009 IOAP
Remaining Work
Completed Work

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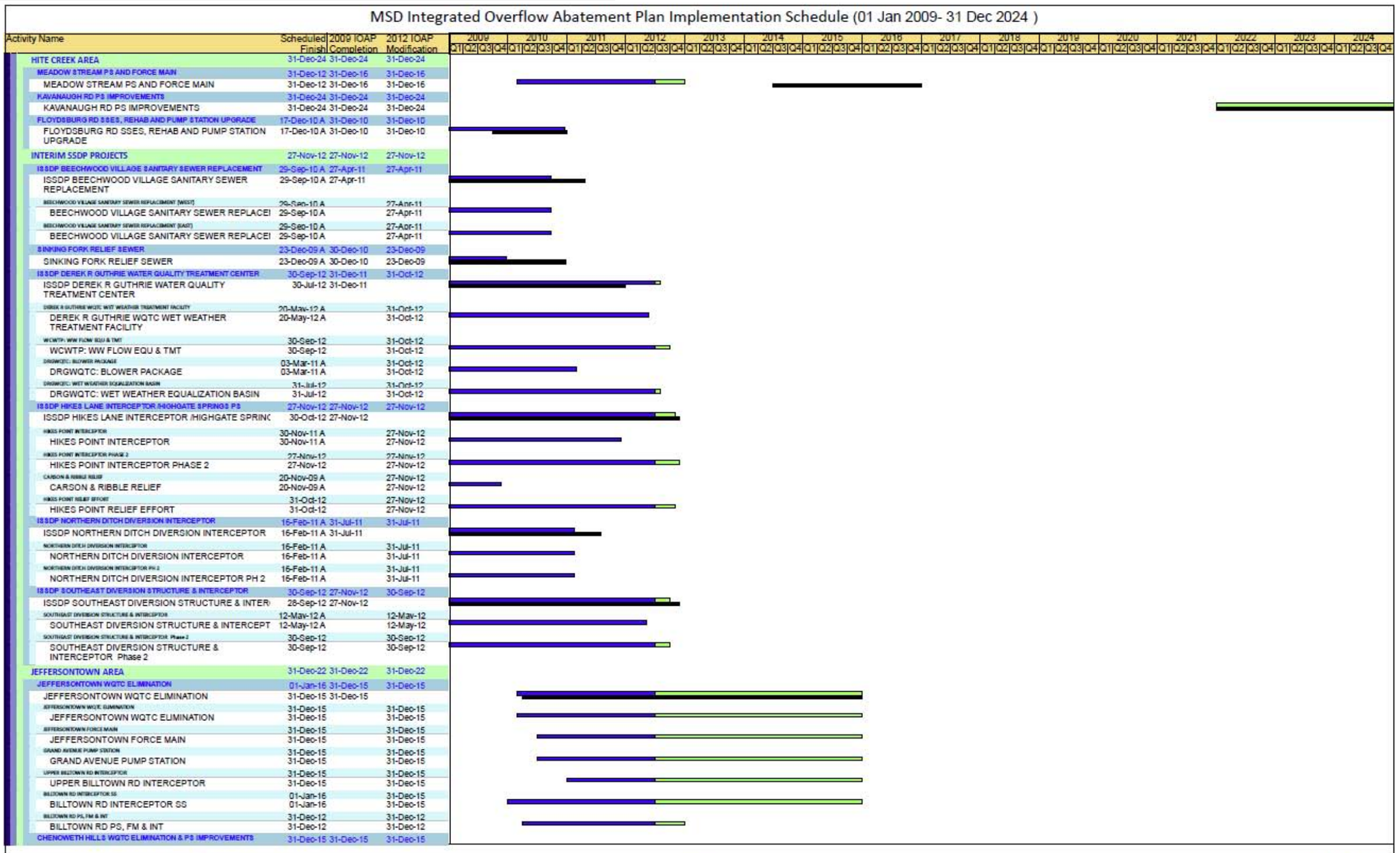
Date Date: 01-Jul-12

MSD Integrated Overflow Abatement Plan Implementation Schedule (01 Jan 2009- 31 Dec 2024)

Activity Name	Scheduled Finish	2009 IOAP Completion	2012 IOAP Modification
HITE CREEK AREA	31-Dec-24	31-Dec-24	31-Dec-24
MEADOW STREAM PS AND FORCE MAIN	31-Dec-12	31-Dec-16	31-Dec-16
MEADOW STREAM PS AND FORCE MAIN	31-Dec-12	31-Dec-16	31-Dec-16
KAVANAUGH RD PS IMPROVEMENTS	31-Dec-24	31-Dec-24	31-Dec-24
KAVANAUGH RD PS IMPROVEMENTS	31-Dec-24	31-Dec-24	31-Dec-24
FLOYDSBURG RD SSES, REHAB AND PUMP STATION UPGRADE	17-Dec-10 A	31-Dec-10	31-Dec-10
FLOYDSBURG RD SSES, REHAB AND PUMP STATION UPGRADE	17-Dec-10 A	31-Dec-10	31-Dec-10
INTERIM SSDP PROJECTS	27-Nov-12	27-Nov-12	27-Nov-12
ISSDP BEECHWOOD VILLAGE SANITARY SEWER REPLACEMENT	29-Sep-10 A	27-Apr-11	27-Apr-11
ISSDP BEECHWOOD VILLAGE SANITARY SEWER REPLACEMENT	29-Sep-10 A	27-Apr-11	
BEECHWOOD VILLAGE SANITARY SEWER REPLACEMENT [WEST]	29-Sep-10 A		27-Apr-11
BEECHWOOD VILLAGE SANITARY SEWER REPLACEI	29-Sep-10 A		27-Apr-11
BEECHWOOD VILLAGE SANITARY SEWER REPLACEMENT [EAST]	29-Sep-10 A		27-Apr-11
BEECHWOOD VILLAGE SANITARY SEWER REPLACEI	29-Sep-10 A		27-Apr-11
SINKING FORK RELIEF SEWER	23-Dec-09 A	30-Dec-10	23-Dec-09
SINKING FORK RELIEF SEWER	23-Dec-09 A	30-Dec-10	23-Dec-09
ISSDP DEREK R GUTHRIE WATER QUALITY TREATMENT CENTER	30-Sep-12	31-Dec-11	31-Oct-12
ISSDP DEREK R GUTHRIE WATER QUALITY TREATMENT CENTER	30-Jul-12	31-Dec-11	
DEREK R GUTHRIE WQTC WET WEATHER TREATMENT FACILITY	20-May-12 A		31-Oct-12
DEREK R GUTHRIE WQTC WET WEATHER TREATMENT FACILITY	20-May-12 A		31-Oct-12
WCWTP: WW FLOW EQU & TMT	30-Sep-12		31-Oct-12
WCWTP: WW FLOW EQU & TMT	30-Sep-12		31-Oct-12
DRGWQTC: BLOWER PACKAGE	03-Mar-11 A		31-Oct-12
DRGWQTC: BLOWER PACKAGE	03-Mar-11 A		31-Oct-12
DRGWQTC: WET WEATHER EQUALIZATION BASIN	31-Jul-12		31-Oct-12
DRGWQTC: WET WEATHER EQUALIZATION BASIN	31-Jul-12		31-Oct-12
ISSDP HIKES LANE INTERCEPTOR /HIGHGATE SPRINGS PS	27-Nov-12	27-Nov-12	27-Nov-12
ISSDP HIKES LANE INTERCEPTOR /HIGHGATE SPRINC	30-Oct-12	27-Nov-12	
HIKES POINT INTERCEPTOR	30-Nov-11 A		27-Nov-12
HIKES POINT INTERCEPTOR	30-Nov-11 A		27-Nov-12
HIKES POINT INTERCEPTOR PHASE 2	27-Nov-12		27-Nov-12
HIKES POINT INTERCEPTOR PHASE 2	27-Nov-12		27-Nov-12
CARSON & RIBBLE RELIEF	20-Nov-09 A		27-Nov-12
CARSON & RIBBLE RELIEF	20-Nov-09 A		27-Nov-12
HIKES POINT RELIEF EFFORT	31-Oct-12		27-Nov-12
HIKES POINT RELIEF EFFORT	31-Oct-12		27-Nov-12
ISSDP NORTHERN DITCH DIVERSION INTERCEPTOR	16-Feb-11 A	31-Jul-11	31-Jul-11
ISSDP NORTHERN DITCH DIVERSION INTERCEPTOR	16-Feb-11 A	31-Jul-11	
NORTHERN DITCH DIVERSION INTERCEPTOR	16-Feb-11 A		31-Jul-11
NORTHERN DITCH DIVERSION INTERCEPTOR	16-Feb-11 A		31-Jul-11
NORTHERN DITCH DIVERSION INTERCEPTOR PH 2	16-Feb-11 A		31-Jul-11
NORTHERN DITCH DIVERSION INTERCEPTOR PH 2	16-Feb-11 A		31-Jul-11
ISSDP SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR	30-Sep-12	27-Nov-12	30-Sep-12
ISSDP SOUTHEAST DIVERSION STRUCTURE & INTER	28-Sep-12	27-Nov-12	
SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR	12-May-12 A		12-May-12
SOUTHEAST DIVERSION STRUCTURE & INTERCEPT	12-May-12 A		12-May-12
SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR Phase 2	30-Sep-12		30-Sep-12
SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR Phase 2	30-Sep-12		30-Sep-12
JEFFERSONTOWN AREA	31-Dec-22	31-Dec-22	31-Dec-22
JEFFERSONTOWN WQTC ELIMINATION	01-Jan-16	31-Dec-15	31-Dec-15
JEFFERSONTOWN WQTC ELIMINATION	31-Dec-15	31-Dec-15	
JEFFERSONTOWN WQTC ELIMINATION	31-Dec-15		31-Dec-15
JEFFERSONTOWN WQTC ELIMINATION	31-Dec-15		31-Dec-15
JEFFERSONTOWN FORCE MAIN	31-Dec-15		31-Dec-15
JEFFERSONTOWN FORCE MAIN	31-Dec-15		31-Dec-15
GRAND AVENUE PUMP STATION	31-Dec-15		31-Dec-15
GRAND AVENUE PUMP STATION	31-Dec-15		31-Dec-15
UPPER BILLTOWN RD INTERCEPTOR	31-Dec-15		31-Dec-15
UPPER BILLTOWN RD INTERCEPTOR	31-Dec-15		31-Dec-15
BILLTOWN RD INTERCEPTOR SS	01-Jan-16		31-Dec-15
BILLTOWN RD INTERCEPTOR SS	01-Jan-16		31-Dec-15
BILLTOWN RD PS, FM & INT	31-Dec-12		31-Dec-12
BILLTOWN RD PS, FM & INT	31-Dec-12		31-Dec-12
CHENOWETH HILLS WQTC ELIMINATION & PS IMPROVEMENTS	31-Dec-15	31-Dec-15	31-Dec-15



Approved 2009 IOAP
Remaining Work
Completed Work

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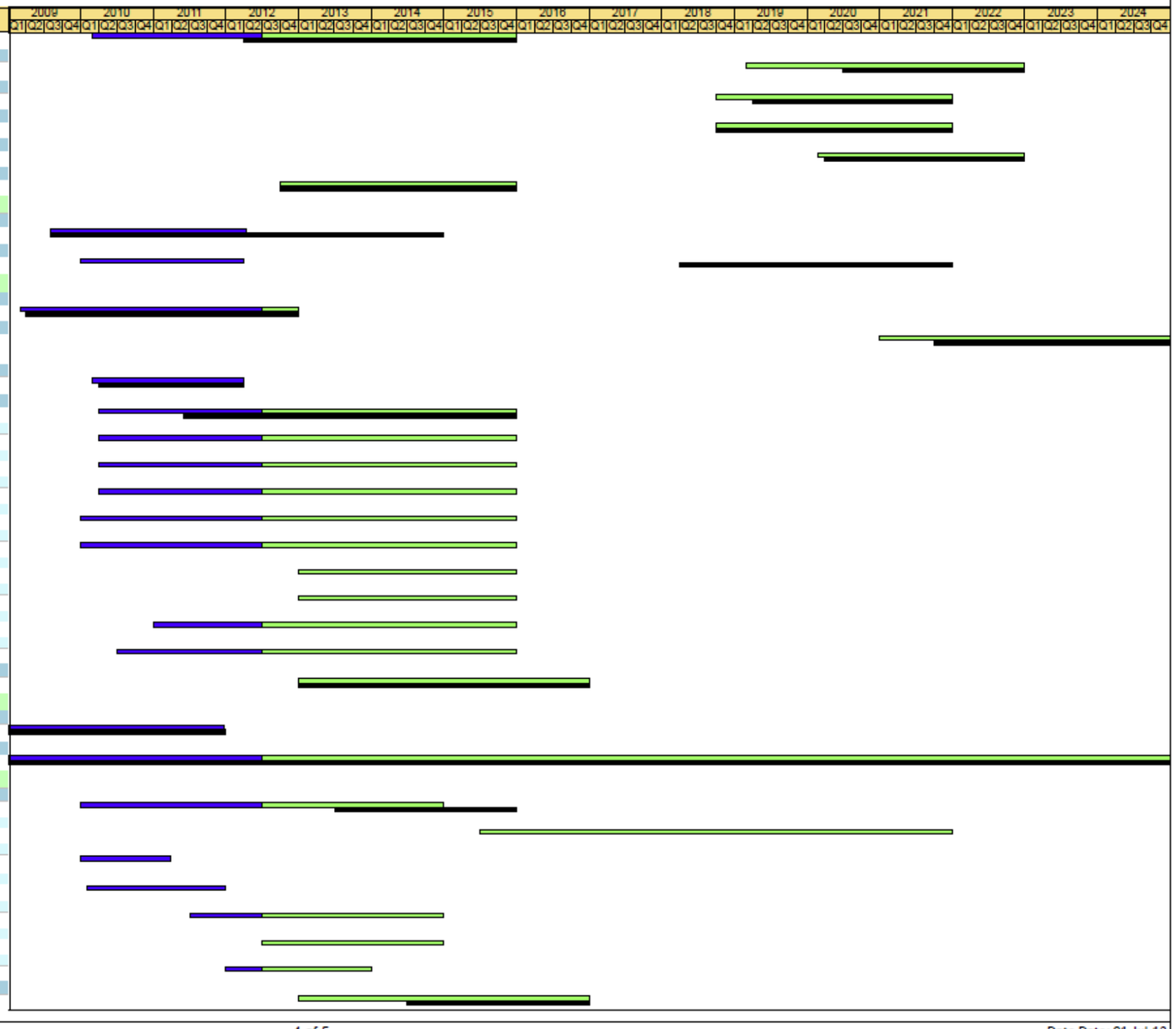
Date Date: 01-Jul-12

MSD Integrated Overflow Abatement Plan Implementation Schedule (01 Jan 2009- 31 Dec 2024)

Activity Name	Scheduled Finish	2009 IOAP Completion	2012 IOAP Modification
CHENOWETH HILLS WQTC ELIMINATION & PS ELIMINA	31-Dec-15	31-Dec-15	31-Dec-15
DELL RD & CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	31-Dec-22	31-Dec-22	31-Dec-22
DELL RD & CHARLANE PKWY INTERCEPTOR IMPROVE	31-Dec-22	31-Dec-22	31-Dec-22
RAINTREE & MARIAN CT PH1 - PS ELIMINATION	31-Dec-21	31-Dec-21	31-Dec-21
RAINTREE & MARIAN CT PH1 - PS ELIMINATION	31-Dec-21	31-Dec-21	31-Dec-21
RAINTREE & MARIAN CT PS ELIMINATION	31-Dec-21	31-Dec-21	31-Dec-21
RAINTREE & MARIAN CT PS ELIMINATION	31-Dec-21	31-Dec-21	31-Dec-21
MONTICELLO PS ELIMINATION	31-Dec-22	31-Dec-22	31-Dec-22
MONTICELLO PS ELIMINATION	31-Dec-22	31-Dec-22	31-Dec-22
KLONDIKE INTERCEPTOR	31-Dec-15	31-Dec-15	31-Dec-15
KLONDIKE INTERCEPTOR	31-Dec-15	31-Dec-15	31-Dec-15
MILL CREEK AREA	13-Apr-12 A	31-Dec-21	31-Dec-21
SHIVELY INTERCEPTOR	13-Apr-12 A	31-Dec-14	31-Dec-14
SHIVELY INTERCEPTOR	13-Apr-12 A	31-Dec-14	31-Dec-14
EAST ROCKFORD LANE PS RELOCATION	30-Mar-12 A	31-Dec-21	31-Dec-21
EAST ROCKFORD LANE PS RELOCATION	30-Mar-12 A	31-Dec-21	31-Dec-21
OHIO RIVER FORCE MAIN AREA	31-Dec-24	31-Dec-24	31-Dec-24
MELLWOOD SYS 1 - MELLWOOD PS & FORCE MAIN	31-Dec-12	31-Dec-12	31-Dec-12
MELLWOOD SYS 1 - MELLWOOD PS & FORCE MAIN	31-Dec-12	31-Dec-12	31-Dec-12
MELLWOOD SYS 2 - WINTON & MOCKINGBIRD PS ELIM & PIPE UPGF	31-Dec-24	31-Dec-24	31-Dec-24
MELLWOOD SYS 2 - WINTON & MOCKINGBIRD PS ELIM & PIPE UPGRADES	31-Dec-24	31-Dec-24	31-Dec-24
DERINGTON CT PS I/I INVESTIGATION & REHABILITATION	30-Mar-12 A	31-Mar-12	31-Mar-12
DERINGTON CT PS I/I INVESTIGATION & REHABILITATI	30-Mar-12 A	31-Mar-12	31-Mar-12
PROSPECT WQTC ELIMINATIONS	31-Dec-15	31-Dec-15	31-Dec-15
PROSPECT WQTC ELIMINATIONS	31-Dec-15	31-Dec-15	
HARRODS CREEK PS & FM	31-Dec-15		31-Dec-15
HARRODS CREEK PS & FM	31-Dec-15		31-Dec-15
HARRODS CREEK INT	31-Dec-15		31-Dec-15
HARRODS CREEK INT	31-Dec-15		31-Dec-15
HARRODS CREEK INT PH 2	31-Dec-15		31-Dec-15
HARRODS CREEK INT PH 2	31-Dec-15		31-Dec-15
RIVER ROAD INT	31-Dec-15		31-Dec-15
RIVER ROAD INT	31-Dec-15		31-Dec-15
TIMBERLAKE & HUNTING CREEK S WQTC ELIM	31-Dec-15		31-Dec-15
TIMBERLAKE & HUNTING CREEK S WQTC ELIM	31-Dec-15		31-Dec-15
KEN CARLA WQTC ELIM	31-Dec-15		31-Dec-15
KEN CARLA WQTC ELIM	31-Dec-15		31-Dec-15
HARRODS CREEK INT PH 3	31-Dec-15		31-Dec-15
HARRODS CREEK INT PH 3	31-Dec-15		31-Dec-15
SHADOW WOOD WWTP ELIM	31-Dec-15		31-Dec-15
SHADOW WOOD WWTP ELIM	31-Dec-15		31-Dec-15
N HUNTING CREEK PS & FM	31-Dec-15		31-Dec-15
N HUNTING CREEK PS & FM	31-Dec-15		31-Dec-15
PROSPECT #3 - ORFM SYSTEM IMPROVEMENTS	31-Dec-16	31-Dec-16	31-Dec-16
PROSPECT #3 - ORFM SYSTEM IMPROVEMENTS	31-Dec-16	31-Dec-16	31-Dec-16
OTHER PROJECTS	30-Dec-24	31-Dec-24	30-Dec-24
CPE/CCP MODIFICATIONS TO WQTC	19-Dec-11 A	31-Dec-11	31-Dec-11
CPE/CCP MODIFICATIONS TO WQTC	19-Dec-11 A	31-Dec-11	31-Dec-11
I/I REDUCTION PROGRAM	30-Dec-24	31-Dec-24	30-Dec-24
I/I REDUCTION PROGRAM	30-Dec-24	31-Dec-24	30-Dec-24
POND CREEK AREA	31-Dec-24	31-Dec-24	31-Dec-24
LEE ANN WAY PUMP STATION IMPROVEMENTS	31-Dec-21	31-Dec-15	31-Dec-15
LEE ANN WAY PUMP STATION IMPROVEMENTS	31-Dec-14	31-Dec-15	
LEA ANN WAY SANITARY SEWER I/I REHAB	31-Dec-21		31-Dec-15
LEA ANN WAY SANITARY SEWER I/I REHAB	31-Dec-21		31-Dec-15
LEE ANN WAY PS SYSTEM SSES	30-Mar-11 A		31-Dec-15
LEE ANN WAY PS SYSTEM SSES	30-Mar-11 A		31-Dec-15
LEE ANN WAY PH 2 ICA	31-Dec-11 A		31-Dec-15
LEE ANN WAY PH 2 ICA	31-Dec-11 A		31-Dec-15
LEE ANN WAY SSR PH 1	31-Dec-14		31-Dec-15
LEE ANN WAY SSR PH 1	31-Dec-14		31-Dec-15
LEE ANN WAY SSR PH 2	01-Jan-15		31-Dec-15
LEE ANN WAY SSR PH 2	01-Jan-15		31-Dec-15
LEE ANN WAY INTERCEPTOR I/I REHAB	31-Dec-13		31-Dec-15
LEE ANN WAY INTERCEPTOR I/I REHAB	31-Dec-13		31-Dec-15
OUTER LOOP & CAVEN AREA PIPE UPGRADES	31-Dec-16	31-Dec-16	31-Dec-24
OUTER LOOP & CAVEN AREA PIPE UPGRADES	31-Dec-16	31-Dec-16	31-Dec-24



Approved 2009 IOAP Remaining Work
Completed Work

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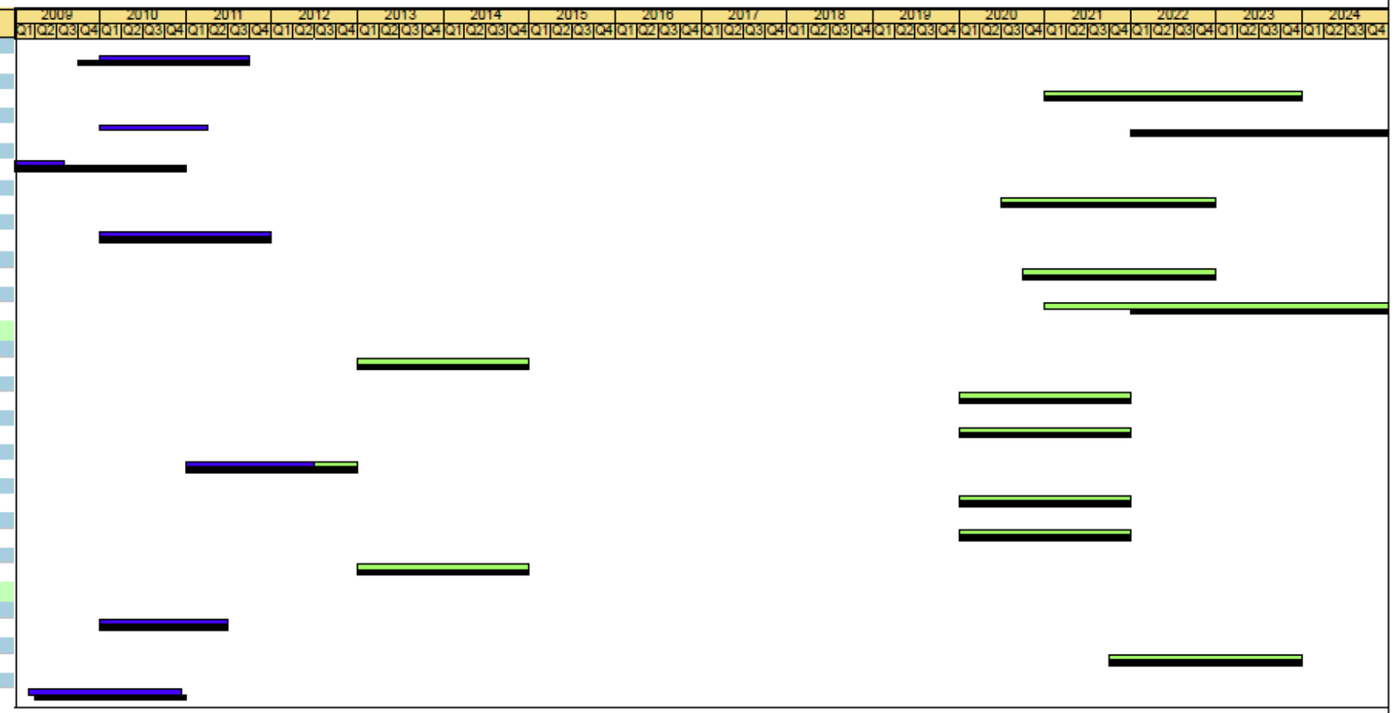
Date Date: 01-Jul-12

MSD Integrated Overflow Abatement Plan Implementation Schedule (01 Jan 2009- 31 Dec 2024)

Activity Name	Scheduled Finish	2009 IOAP Completion	2012 IOAP Modification
EDSEL PS I/I INVESTIGATION & REHABILITATION	27-Sep-11 A	30-Sep-11	30-Sep-11
EDSEL PS I/I INVESTIGATION & REHABILITATION	27-Sep-11 A	30-Sep-11	30-Sep-11
CINDERELLA PS ELIMINATION	31-Dec-23	31-Dec-23	31-Dec-23
CINDERELLA PS ELIMINATION	31-Dec-23	31-Dec-23	31-Dec-23
GOVERNMENT CENTER PS ELIMINATION	01-Apr-11 A	31-Dec-24	31-Dec-24
GOVERNMENT CENTER PS ELIMINATION	01-Apr-11 A	31-Dec-24	31-Dec-24
AVANTI PS ELIMINATION	28-Jul-09 A	31-Dec-10	31-Dec-10
AVANTI PS ELIMINATION	28-Jul-09 A	31-Dec-10	31-Dec-10
CHARLESWOOD INTERCEPTOR EXTENSION	31-Dec-22	31-Dec-22	31-Dec-22
CHARLESWOOD INTERCEPTOR EXTENSION	31-Dec-22	31-Dec-22	31-Dec-22
LANTANA PS I/I INVESTIGATION & REHABILITATION	29-Dec-11 A	31-Dec-11	29-Dec-11
LANTANA PS I/I INVESTIGATION & REHABILITATION	29-Dec-11 A	31-Dec-11	29-Dec-11
LEVEN PS ELIMINATION	31-Dec-22	31-Dec-22	31-Dec-22
LEVEN PS ELIMINATION	31-Dec-22	31-Dec-22	31-Dec-22
CAVEN AVENUE WW STORAGE	31-Dec-24	31-Dec-24	31-Dec-24
CAVEN AVENUE PS ELIMINATION	31-Dec-24	31-Dec-24	31-Dec-24
SMALL WWTP AREA	31-Dec-21	31-Dec-21	31-Dec-21
RIDING RIDGE PS IMPROVEMENTS	31-Dec-14	31-Dec-14	31-Dec-14
RIDING RIDGE PS IMPROVEMENTS	31-Dec-14	31-Dec-14	31-Dec-14
LUCAS LN PS INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
LUCAS LN PS INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
ST. RENE RD PS INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
ST. RENE RD PS INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
LAKE FOREST PS IMPROVEMENTS	31-Dec-12	31-Dec-12	31-Dec-12
LAKE FOREST PS IMPROVEMENTS	31-Dec-12	31-Dec-12	31-Dec-12
GUNPOWDER PS INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
GUNPOWDER PS INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
FOX HARBOR INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
FOX HARBOR INLINE STORAGE	31-Dec-21	31-Dec-21	31-Dec-21
FAIRWAY VIEW PS IMPROVEMENTS	31-Dec-14	31-Dec-14	31-Dec-14
FAIRWAY VIEW PS IMPROVEMENTS	31-Dec-14	31-Dec-14	31-Dec-14
SOUTHEASTERN DIVERSION AREA	31-Dec-23	31-Dec-23	31-Dec-23
PARKVIEW ESTATES I/I INVESTIGATION & REHABILITATION	28-Jun-11 A	30-Jun-11	30-Jun-11
PARKVIEW ESTATES I/I INVESTIGATION & REHABILITA	28-Jun-11 A	30-Jun-11	30-Jun-11
SUTHERLAND INTERCEPTOR	31-Dec-23	31-Dec-23	31-Dec-23
SUTHERLAND INTERCEPTOR	31-Dec-23	31-Dec-23	31-Dec-23
BEARGRASS INTERCEPTOR REHABILITATION PH 2	14-Dec-10 A	31-Dec-10	31-Dec-10
BEARGRASS INTERCEPTOR REHABILITATION PH 2	14-Dec-10 A	31-Dec-10	31-Dec-10



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Remaining Work
Completed Work

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Date Date: 01-Jul-12

SECTION 4: Program Activities for Public Outreach, Education, Notification and Participation

4.1 Public Notification Program

MSD has developed a program aimed at notifying the community of the objectives of Project WIN and how to lessen the risks associated with coming into contact with sewage overflows.

4.2 Public Education Programs

MSD has developed a public education program aimed at disseminating information to the public on MSD's primary business functions with emphasis on wastewater, storm water and flood protection. Efforts continued to utilize various media outlets, including television, radio, magazines, and newspapers to serve as a conduit for circulating information to the public.

During the reporting period, MetroTV aired programs detailing the IOAP Public Input Meetings (with presentations on the IOAP revisions), and a rain barrel installation video.

4.3 Public Outreach Programs

MSD has developed a public education program aimed at expanding the public's knowledge on MSD's primary business functions of wastewater, storm water and flood protection, with an emphasis on Project WIN Program elements.

4.3.1 IOAP Project and Program Meetings

MSD facilitates meetings for the Wet Weather Team (WWT), and the public to review regulatory commitments, update progress on projects and initiatives, and to gather public input on efforts. During the reporting period, MSD facilitated and planned for the following meetings:

- Facilitated an IOAP meeting on March 25, 2014, at Lincoln Elementary School (930 East Main Street) to discuss IOAP overview, and the Clifton Heights Storage Basin.
- Planned a public meeting in June to discuss and receive comments on the Camp Taylor Sewer Rehabilitation and the Nightingale Pump Station Projects.

SECTION 5: Capacity Management Operations and Maintenance Report

Per Paragraph 24.c of the Amended Consent Decree, the Capacity Management Operations and Maintenance (CMOM) Self Assessment Report was submitted to EPA and KDEP on February 10, 2006. MSD received a letter of approval on August 22, 2006. The approved CMOM document can be viewed on the MSD Project WIN website www.msdprojectwin.org.

The primary objectives of CMOM are as follows:

Capacity – Ensuring that adequate wet and dry weather capacity is maintained in existing and new infrastructure

Management – Implementing programs in support of operations and maintenance activities required to ensure KPDES permit compliance and promote public health by remedying design, construction and operational deficiencies; training staff; and performing activities in a safe manner

Operations – Implementing written standard operating procedures to operate system components as designed to meet permit requirements

Maintenance – Implementing systematic, comprehensive asset maintenance and rehabilitation programs to prevent overflows, maximize system reliability and ensure system sustainability

Although the program implementation deadlines from the CMOM Self Assessment Report were previously met, MSD continued to enhance the activities listed below during this reporting period. Highlights of the CMOM program implementation over this reporting period are outlined below.

5.1 Management Programs

M-E-9 Infrastructure Rehabilitation

Activity details are provided in the CMOM schedule provided as **Section 5.4 – CMOM Activity Schedule**.

M-E-10 System Capacity Assurance Program (SCAP)

A current copy of the SCAP Credit Balance is included as **Appendix D**.

5.2 Operations Programs

O-A-1 Pump Station Operations Programs (Routine Operating Programs)
Activity details are provided in the CMOM schedule provided as **Section 5.4 – CMOM Activity Schedule**.

O-A-2 Pump Station Operations Programs (Emergency Operating Programs)

Activity details are provided in the CMOM schedule provided as **Section 5.4 – CMOM Activity Schedule**.

5.3 Comprehensive Performance Evaluations and Composite Correction Plans (CPE/CCP)

Per requirements of MSD's 2009 Amended Consent Decree, MSD implemented a Comprehensive Performance Evaluation (CPE) and Composite Correction Plan (CCP) program for the District's water quality treatment centers (WQTCs). Although the IOAP CPE assessments defined specific WQTC improvements to be completed by December 31, 2011, MSD will continue to implement CPE/CCP activities as part of the District's CMOM Program. This section will list such activities per WQTC as they occur each reporting period and will be outlined below.

5.3.1 Hite Creek Water Quality Treatment Center

During this reporting period, MSD has been reviewing the final draft version of the Facilities Plan Update. During the next reporting period, MSD will be arranging for a public hearing and preparing to submit the Facilities Plan Update to the Kentucky Division of Water for review and approval.

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule.**

5.3.2 Floyds Fork Water Quality Treatment Center

During this reporting period, the Floyds Fork WQTC was in full operation, able to accept the additional flow from upstream customers. The contractor was on site to address warranty items that required repairs. During the next reporting period, MSD expects that the project will reach final completion. The expansion project provides an average daily design capacity of 6.5 MGD.

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule.**

5.3.3 Derek R. Guthrie Water Quality Treatment Center

During this reporting period, MSD has continued working on the Facilities Plan Update with the alternative analysis finalized and exhibits revised along with preparing an internal review of the document. During the next reporting period, the draft document will be reviewed by MSD staff and project schedule will be updated.

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.4 Cedar Creek Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.5 Prospect Area Water Quality Treatment Center Updates

Submitted the elimination plan for the five WQTCs serving Prospect (Timberlake, Hunting Creek North, Hunting Creek South, Ken Carla, and Shadow Wood), to EPA and KDEP on March 31, 2009. Received approval of this plan on September 24, 2009, and work is proceeding on the projects defined in the IOAP. See **Section 3 – Program Activities for Discharge Abatement Plans** for an update on the design and construction of the projects that make up the elimination plan for the Prospect Area WQTCs.

5.3.5.1 Timberlake Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.5.2 Hunting Creek North Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.5.3 Hunting Creek South Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.5.4 Ken Carla Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.5.5 Shadow Wood Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.6 Jeffersontown Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.7 Starview Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.8 Berrytown Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.9 Chenoweth Hills Water Quality Treatment Center

CMOM related capital projects will be provided in the schedule provided as **Section 5.4 – CMOM Activity Schedule**.

5.3.10 Other Water Quality Treatment Centers

CMOM related capital projects will be provided in the schedule provided as **Section 5.4 – CMOM Activity Schedule**.

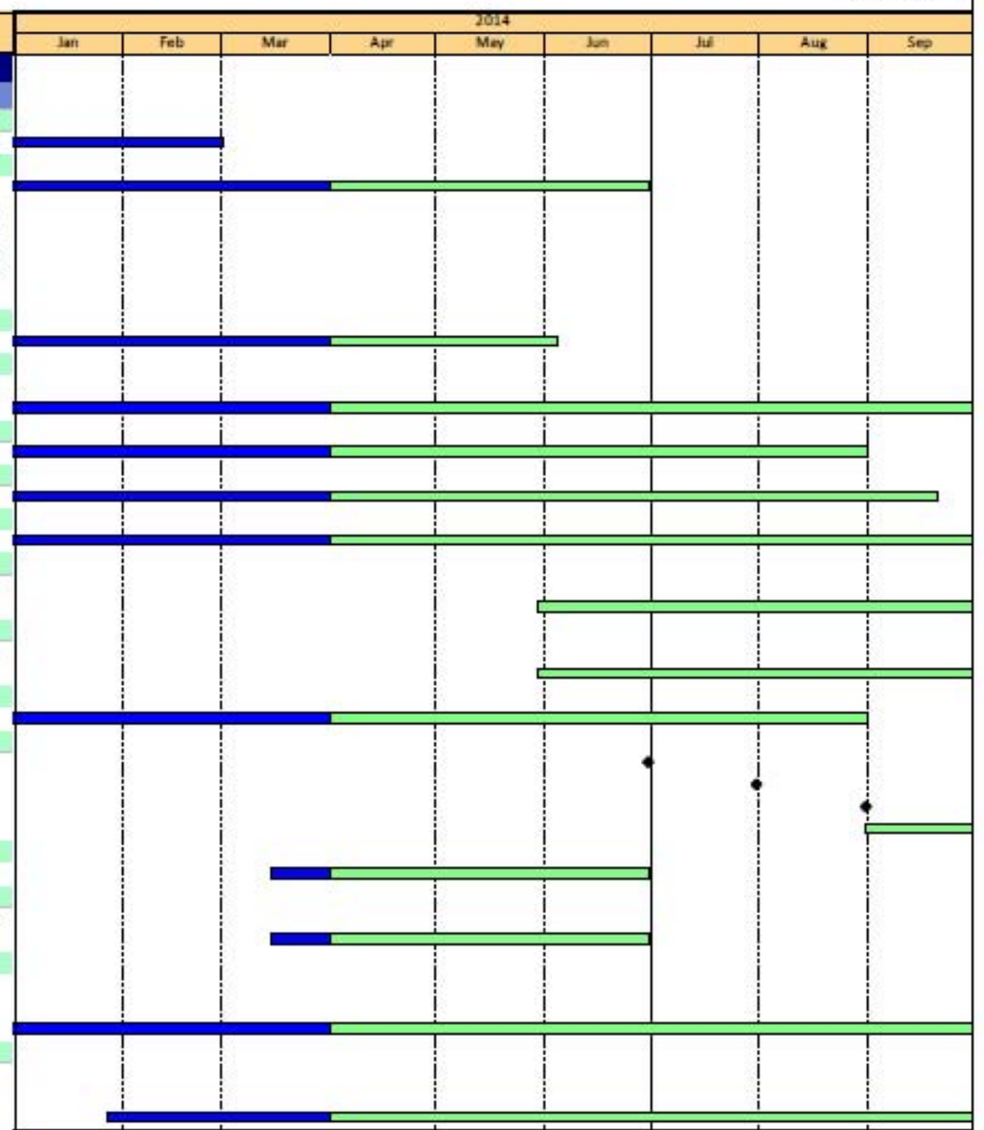
- McNeely Lake WQTC – The McNeely Lake Sanitary Sewer and Force Main project is currently in construction phase and is scheduled for completion in Fall 2014. This gravity portion is approximately 75% of the total length of gravity line required to eliminate the McNeely Lake WQTC. A private developer is responsible for extending the remaining gravity sewer through a future residential development to within 500 feet of the McNeely Lake WQTC. Once the private development plans are finalized, MSD will begin design of the remaining gravity portion to eliminate the WQTC. MSD anticipates eliminating McNeely Lake WQTC by December 31, 2015, but is dependent on the private developer portion being completed.
- Silver Heights WQTC – Construction is in progress. It is anticipated that construction will continue and the Silver Heights WQTC will be off-line by August 31, 2014.
- Bancroft WQTC – The scope of this project has been modified from storage at Devondale PS to conveyance from Devondale to a 0.33 MGD Pump Station and a 0.25 MG Storage Basin at Bancroft WQTC. This change is due to the elimination of the nearby Devondale Pump Station which is part of the IOAP. Design of this project is ongoing. During the next reporting period, it is anticipated that the project will be advertised for construction with construction beginning Summer 2014. The Bancroft WQTC and Devondale Pump Station will be off-line by December 31, 2015.
- Glenview Bluff – Construction is in progress. During the next reporting period, it is anticipated that construction will continue and the Glenview Bluff WQTC will be off-line by December 31, 2014.

5.4 CMOM Activity Schedule

CMOM capital project milestones for the period of January 1, 2014, through March 31, 2014, as well as a look-ahead for the period of April 1, 2014, through September 30, 2014, are provided in the schedule below.

MSD CMOM FY14 Annual Commitments Schedule (01 April 2014 - 30 September 2014) — Date: 30-Apr-14

Activity ID	Activity Name	Physical % Complete	Start	Finish
CMOM FY ANNUAL REPORT COMMITMENTS FINAL			01-Jun-12A	30-Jun-15
M-E-9 Infrastructure Rehabilitation			01-Jun-12A	30-Jun-15
Annual I/I FY 12 Project (H09205)			01-Mar-13A	01-Mar-14A
A5080	Warranty	100%	01-Mar-13A	01-Mar-14A
Annual I/I FY13 Project (H09206)			19-Nov-12A	30-Jun-15
A5090	Contract Administration	99%	19-Nov-12A	30-Jun-14
A5570	Camp Taylor 4	100%	15-Dec-12A	01-Nov-13A
A5590	Stonybrook	100%	01-Mar-13A	01-Oct-13A
A5620	Pike Alley CIPP	100%	01-Jun-13A	01-Nov-13A
A5600	Middle MH WT Lids	100%	01-Sep-13A	01-Nov-13A
A5100	Warranty	0%	30-Jun-14*	30-Jun-15
Lee Ann Way Interceptor I/I Rehabilitation Project (H12064)			04-Jun-13A	04-Jun-14
A3040	Warranty	80%	04-Jun-13A	04-Jun-14
Lee Ann Way East - Stonybrook Rehabilitation Project (CD8433)			15-Dec-12A	01-Nov-14
A3910	Construction	100%	15-Dec-12A	01-Oct-13A
A4020	Warranty	50%	01-Nov-13A	01-Nov-14
Lake Forest Sanitary Sewer Rehabilitation Project (H11303)			01-Sep-13A	31-Aug-14
A3370	Warrany	75%	01-Sep-13A	31-Aug-14
Prospect Phase I Sanitary Sewer Rehabilitation Project (H11311)			20-Sep-13A	20-Sep-14
A3240	Construction	70%	20-Sep-13A	20-Sep-14
Meadow Stream Sanitary Sewer Rehabilitation Project (H11305)			21-Oct-13A	21-Oct-14
A4910	Construction	50%	21-Oct-13A	21-Oct-14
Lee Ann Way East - Fegenbush Rehabilitation Project (CD8433)			01-Dec-12A	30-May-15
A3960	Construction	100%	01-Dec-12A	01-Oct-13A
A4010	Warranty	0%	30-May-14*	30-May-15
Lee Ann Way East - Fern Creek Rehabilitation Project (CD8433)			05-Oct-12A	30-May-15
A4160	Construction	100%	05-Oct-12A	01-Oct-13A
A5690	Warranty	0%	30-May-14*	30-May-15
Caven Avenue Rehab Project (H11304)			03-Sep-13A	31-Aug-14
A5290	Construction	95%	03-Sep-13A	31-Aug-14
Beargrass Interceptor Rehab Project (H09207)			30-Jun-14	31-Mar-15
A5370	Ad	0%	30-Jun-14*	
A5380	Bid Open	0%	31-Jul-14*	
A5390	Award	0%	31-Aug-14*	
A5400	Construction	0%	31-Aug-14*	31-Mar-15
Berrytown Rehab Project (H11299)			15-Mar-14A	30-Jun-14
A5500	Construction	0%	15-Mar-14A	30-Jun-14
Starview Rehab Project (H11312)			01-Aug-13A	30-Jun-14
A5510	Design	100%	01-Aug-13A	01-Nov-13A
A5550	Construction	0%	15-Mar-14A	30-Jun-14
Camp Taylor Area 3 Rehab Project (H09218)			01-Oct-13A	31-Dec-14
A5430	Bid Open	100%	01-Oct-13A	
A5440	Award	100%	28-Oct-13A	
A5450	Construction	25%	01-Dec-13A	31-Dec-14
Annual I/I FY14 Project (H14184)			15-Oct-13A	30-Dec-14
A5710	Bid Open	100%	15-Oct-13A	
A5720	Award	100%	16-Dec-13A	
A5730	Construction	0%	28-Jan-14A	01-Dec-14

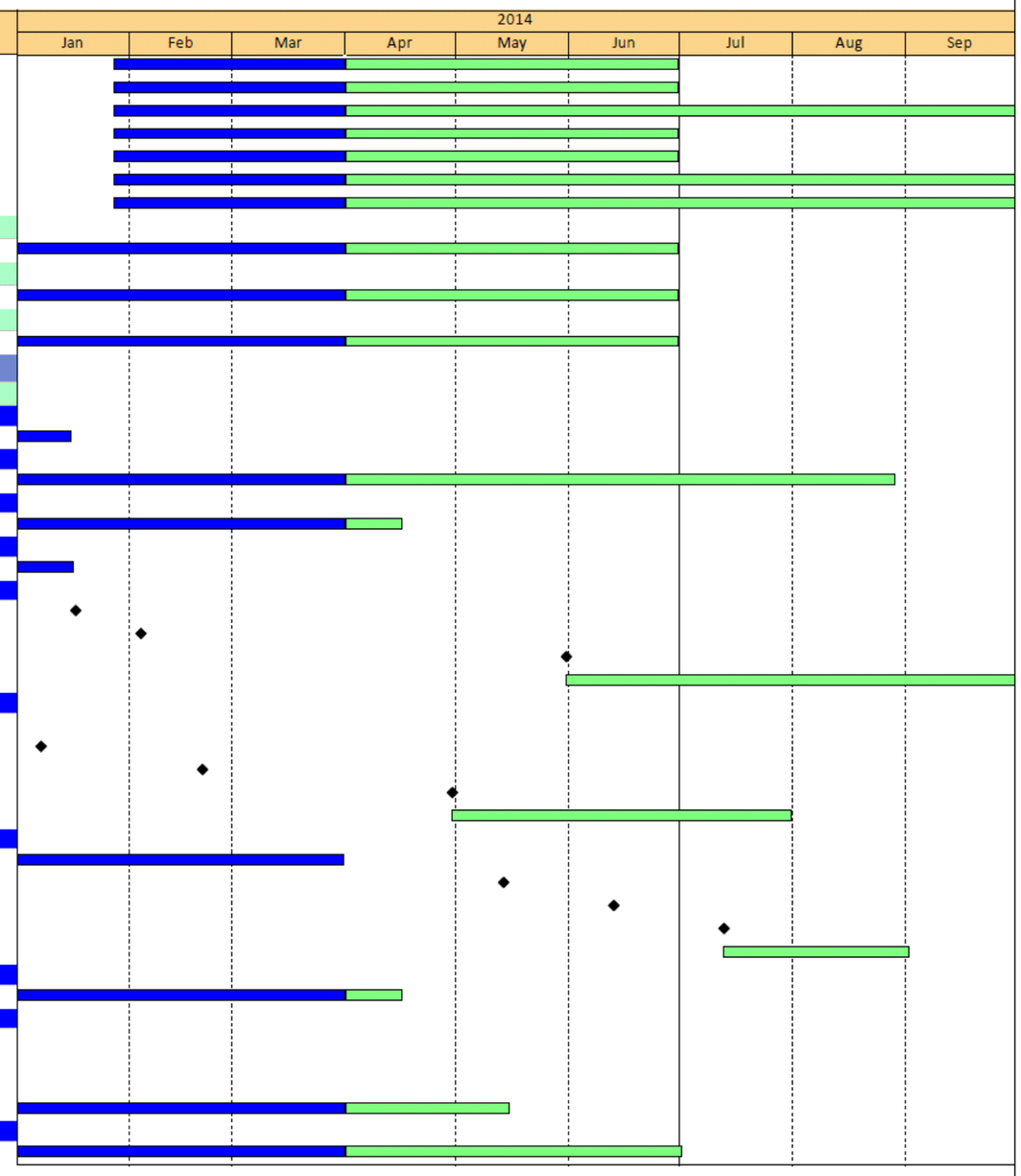


1 of 3 — Data Date: 01-Apr-14

MSD CMOM FY14 Annual Commitments Schedule (01 April 2014 - 30 September 2014)

Date: 30-Apr-14

Activity ID	Activity Name	Physical % Complete	Start	Finish
A5740	Berrytown	0%	28-Jan-14 A	30-Jun-14
A6140	Camp Taylor Tophats	0%	28-Jan-14 A	30-Jun-14
A6150	Hillridge	0%	28-Jan-14 A	30-Dec-14
A6160	Rosa Terrace	0%	28-Jan-14 A	30-Jun-14
A6170	Starview	0%	28-Jan-14 A	30-Jun-14
A6180	Goose Creek	0%	28-Jan-14 A	30-Dec-14
A6190	LAW Quad3 Whispering Hills	0%	28-Jan-14 A	30-Dec-14
FY13 ICA Project			01-Jun-12 A	30-Jun-14
A4410	Planning	95%	01-Jun-12 A	30-Jun-14
Goose Creek PS SSES (H11407)			01-Apr-13 A	30-Jun-14
A4950	Planning	95%	01-Apr-13 A	30-Jun-14
Nightingale PS SSES (H11313)			15-Jul-13 A	30-Jun-14
A5110	Planning	60%	15-Jul-13 A	30-Jun-14
Pump Station Operations Programs			04-Jan-13 A	30-Sep-14
O-A-2 Emergency Operation Programs			04-Jan-13 A	30-Sep-14
Trinity Homes Pump Station Emergency Generator & Access Road (H11440)			16-Jan-13 A	16-Jan-14 A
A2310	Warranty	100%	16-Jan-13 A	16-Jan-14 A
Trinity Homes Pump Station Roof Hatch (H13154)			28-Aug-13 A	28-Aug-14
A5560	Warranty	70%	28-Aug-13 A	28-Aug-14
Northern Ditch Diversion Structure Flow Meter Manhole Project (H13033)			16-Apr-13 A	16-Apr-14
A5120	Warranty	95%	16-Apr-13 A	16-Apr-14
Royster Basin Access Road Project (H12163)			16-Jan-13 A	16-Jan-14 A
A5200	Warranty	100%	16-Jan-13 A	16-Jan-14 A
Royster Basin Generator Project (H12163)			17-Jan-14 A	30-Sep-14
A4820	Ad	100%	17-Jan-14 A	
A4850	Bid Open	100%	04-Feb-14 A	
A4830	Award	0%	31-May-14*	
A4840	Construction	0%	31-May-14*	30-Sep-14
St. Matthews #4 Pump Station Modification Project (H14211)			01-Jul-13 A	31-Jul-14
A5790	Design	100%	01-Jul-13 A	26-Nov-13 A
A5800	Ad	100%	08-Jan-14 A	
A5830	Bid Open	100%	21-Feb-14 A	
A5810	Award	0%	30-Apr-14*	
A5820	Construction	0%	30-Apr-14*	31-Jul-14
Gunpowder Pump Station FM Modification Project (H14211)			01-Sep-13 A	01-Sep-14
A6040	Design	100%	01-Sep-13 A	31-Mar-14 A
A6050	Ad	0%	14-May-14*	
A6060	Bid Open	0%	13-Jun-14*	
A6070	Award	0%	13-Jul-14*	
A6080	Construction	0%	13-Jul-14*	01-Sep-14
Prospect Point Pump Station Access Road (H13084)			16-Apr-13 A	16-Apr-14
A5140	Warranty	95%	16-Apr-13 A	16-Apr-14
Brandies FPS Ventilation Modifications (H09352)			01-Oct-13 A	15-May-14
A5020	Ad	100%	01-Oct-13 A	
A5030	Bid Open	100%	30-Oct-13 A	
A5040	Award	100%	26-Nov-13 A	
A5050	Construction	100%	26-Nov-13 A	15-May-14
Valley Village PS Header Piping Improvements Project (H09352)			03-Jul-13 A	01-Jul-14
A5060	Warranty	75%	03-Jul-13 A	01-Jul-14



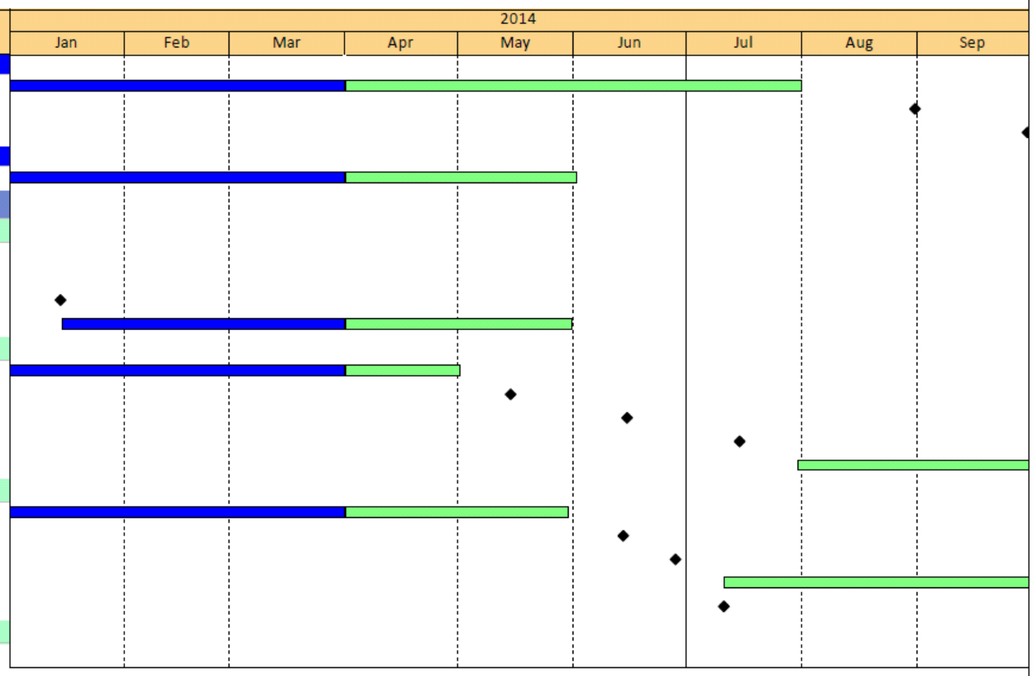
2 of 3

Date Date: 01-Apr-14

MSD CMOM FY14 Annual Commitments Schedule (01 April 2014 - 30 September 2014)

Date: 30-Apr-14

Activity ID	Activity Name	Physical % Complete	Start	Finish
4th Street FPS Gate and Switch Gear Replacement Project (F12095)			04-Jan-13 A	30-Sep-14
A5150	Design	70%	04-Jan-13 A	31-Jul-14
A5160	Ad	0%	31-Aug-14*	
A5170	Bid Open	0%	30-Sep-14*	
Shannon Run PS Elimination Project (B13132)			01-Jun-13 A	01-Jun-14
A5300	Warranty	80%	01-Jun-13 A	01-Jun-14
CPE/CPE Treatment Plant Activities			01-Dec-12 A	31-Oct-14
Morris Forman WWTP Sampling Manholes (H14107)			18-Oct-13 A	31-May-14
A4710	Ad	100%	18-Oct-13 A	
A4740	Bid Open	100%	21-Nov-13 A	
A4720	Award	100%	15-Jan-14 A	
A4730	Construction	80%	15-Jan-14 A	31-May-14
MFWQTP Rubbertown Sampling Manholes (H09374)			02-Sep-13 A	31-Oct-14
A6090	Design	95%	02-Sep-13 A	01-May-14
A6100	Ad	0%	15-May-14*	
A6130	Bid Open	0%	15-Jun-14*	
A6110	Award	0%	15-Jul-14*	
A6120	Construction	0%	31-Jul-14*	31-Oct-14
Berrytown Tank Rehabilation (H09374)			01-Mar-13 A	09-Oct-14
A5350	Design	5%	01-Mar-13 A	30-May-14
A5310	Ad	0%	14-Jun-14*	
A5320	Bid Open	0%	28-Jun-14*	
A5330	Construction	0%	11-Jul-14*	09-Oct-14
A5340	Award	0%	11-Jul-14*	
Hillridge WTP Diversion Project (A13070)			01-Dec-12 A	01-Dec-13 A
A5680	Warranty	100%	01-Dec-12 A	01-Dec-13 A



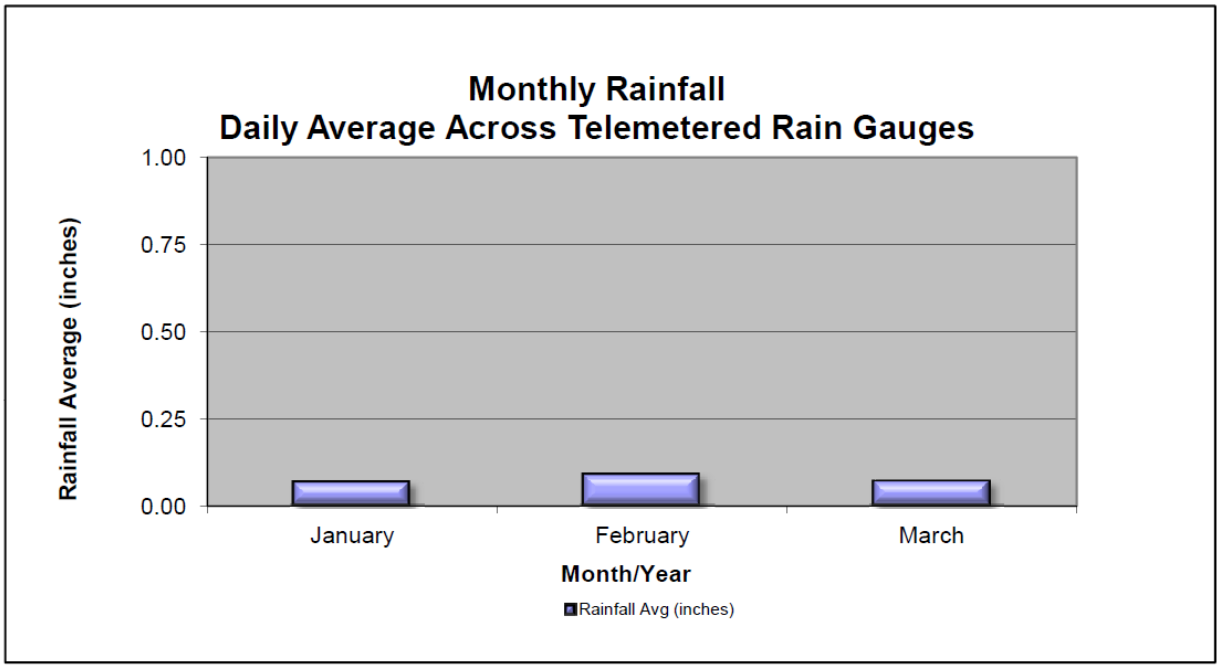
3 of 3

Date Date: 01-Apr-14

SECTION 6: Project WIN Performance Overview

6.1 Rainfall

The number and the volume of wet weather overflows are directly related to the amount of rain that has fallen during the reporting period. The following graph shows the Jefferson County average rainfall amounts for the last quarter. Data was pulled from MSD's Rain Gauges.



A storm frequency analysis for CSOs is included as **Appendix E**.

6.2 Collection System Unauthorized Discharges

6.2.1 Collection System Overflows to Waters of the United States (WUS)

MSD recorded information related to overflows reaching Waters of the United States (WUS) for the reporting period. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. Details of these overflows will be included in the Annual Report for the period of July 1, 2013, through June 30, 2014, and will be posted on the Project WIN website. During this quarter, 52 overflows to the Waters of the United States (WUS) have been reported.

Unauthorized Discharges (Waters of the United States)			
Problem	**Dry Weather**	**Wet Weather**	**Total**
Blending at Jtown WQTC	0	2	**2**
Bypass at WQTC	1	5	**6**
Lack of System Capacity	0	36	**36**
Mechanical Failure	0	1	**1**
Obstruction-Not Grease / Roots	1	0	**1**
Power Outage (LG&E)	0	1	**1**
Structural Failure	1	0	**1**
Utility Damaged MSD Asset	3	1	**4**
Total	**6**	**46**	**52**

6.2.2 Overflows to Ground (EXT)

MSD recorded information related to overflows to the ground that did not reach waters of the United States for the reporting period. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. These overflows will be included in the Annual Report for the period of July 1, 2013, through June 30, 2014.

6.2.3 Overflows to Interior (INT)

MSD recorded information related to overflows to building interiors for the reporting period. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. These overflows, that are the result of an issue in the main line, will be included in the Annual Report for the period of July 1, 2013, through June 30, 2014.

6.2.4 Dry Weather CSOs

MSD recorded information related to dry weather overflows from permitted combined sewer overflow outfalls. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. A detailed report of these overflows will be included in the Annual Report for the period of July 1, 2013, through June 30, 2014. The table below summarizes dry weather CSOs that occurred during the quarter. Appendix A-1 includes details on the dry weather overflows that occurred in the quarter.

Dry Weather CSO - October 1, 2013 - December 31, 2013					
CSO	**Type of Discharge**	**Date/Time**	**Problem**	**Cause**	**Volume (GAL)**
CSO113	DISDW	01/23/2014	OBSTRUCTION-NOT GREASE / ROOTS	LARGE HANDBAG BLOCKING LOW-FLOW LINE.	100
CSO132	DISDW	01/07/2014	UTILITY DAMAGED MSD ASSET	WATER MAIN BREAK IN BROWNSBORO RD	37,833
CSO206	DISDW	01/09/2014	UTILITY DAMAGED MSD ASSET	WATER MAIN BREAK AT SPRING DRIVE	531,500
CSO206	DISDW	01/30/2014	UTILITY DAMAGED MSD ASSET	WATER MAIN BREAK AT SPRING DRIVE	469,198

6.3 CSO Reductions

Included in **Appendix B** is the CSO data for this quarter. A summary of any data anomalies and the CSO data for each monitored overflow has been graphed along with rainfall information from the nearest rain gauge to facilitate review of the overflows that occurred.

- No CSO reduction projects were completed during the reporting period.

6.4 SSO Reductions

Estimation of SSO volume is not available in the same manner as it is for the CSO locations. The SSO volume reductions are estimates based on actual observations or from flow monitoring information.

- No SSO reduction projects were completed during the reporting period.

6.5 Gravity Line Preventive Maintenance

Each quarter, data and statistics relating to the cleaning, inspection, and maintenance of sewer assets performed under the Gravity Line Preventive Maintenance (GLPM) are reported. The following data was compiled for the period of January 1, 2014, through March 31, 2014. The first table includes data and targets. The second table includes unplanned maintenance and other maintenance activities that are performed in response to inspection.

Rolling quarterly GLPM performance is related to unplanned maintenance; therefore no targets have been developed.

Rolling Quarterly GLPM Performance With Targets							
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Total	Target/ qtr	% of Annual Target
Combined Sewer Area							
Catch Basins Cleaned CSO Area - PM	9,499	4,861	6,581	3,953	24,894	4,460	22%
CSO Inspections	1,319	1,348	1,391	1,316	5,374	1,272	26%
Sanitary Sewer Area							
Catch Basins Cleaned SSO Area - PM	2,329	1,587	386	1,519	5,821	1,144	33%
County Wide							
Sewer Main Inspections MSD Crews (LF)	260,951	294,960	243,515	322,297	1,121,722	198,000	41%
Sewer Main Inspections Contractor (LF)	0	183,976	538,432	327,271	1,049,679	198,000	41%
Total Inspections (LF)	260,951	478,936	781,947	649,568	2,171,401	396,000	41%

Rolling Quarterly GLPM Performance					
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Total
Combined Sewer Area					
Catch Basins Cleaned CSO Area - UM	238	291	202	191	922
CSO Debris Removal WO	99	152	123	90	464
Chemical Root Treatment CSO Area (LF)	797	0	282	0	1,079
Root Cutting CSO Area (LF)	40	3,293	7,457	28,878	39,668
Flushing and Cleaning of Sewer Mains CSO Area (LF)	5,586	11,282	8,146	11,442	36,456
Sanitary Sewer Area					
Catch Basins Cleaned SSO Area - UM	83	96	120	79	378
Chemical Root Treatment SSO Area (LF)	86,669	0	0	0	86,669
Root Cutting SSO Area (LF)	13,919	14,517	17,796	23,325	69,557
Flushing and Cleaning of Sewer Mains SSO Area (LF)	32,037	23,146	30,245	16,004	101,432

6.6 Water Quality Treatment Center Bypasses

6.6.1 Bypass Events

The table below summarizes the bypasses that occurred in the reporting period.

Bypass Events - January 1, 2014 - March 31, 2014			
Type of Bypass	**Date**	**ID**	**Facility Name**
RAIN EVENT DISCHARGE	01/11/14	MSD0209	BERRYTOWN
RAIN EVENT DISCHARGE	01/11/14	MSD0209	BERRYTOWN
RAIN EVENT DISCHARGE	02/05/14	MSD0209	BERRYTOWN
RAIN EVENT DISCHARGE	02/05/14	MSD0258	SILVER HEIGHTS
RAIN EVENT DISCHARGE	02/05/14	MSD0289	CEDAR CREEK
DRY WEATHER DISCHARGE	01/05/14	MSD0293	TIMBERLAKE

6.6.2 Bypass Corrective Actions

Each quarter, an assessment of bypasses will occur to determine the root cause of the bypass, the failure category, corrective actions to be taken, possible programmatic solutions, and corrective action completion date. Refer to the table below for causes of bypasses and respective corrective actions that occurred January 1, 2014, through March 31, 2014.

Bypass Summary - January 1, 2014 to March 31, 2014					
DATE	WQTC	WORK ORDER	FAILURE CODE	BYPASS DESCRIPTION	FAILURE RESOLUTION
Capacity (CAP)					
January 11, 2014	BERRYTOWN	2095063	CAP	The #1 treatment plant experienced a bypass when a heavy rain event caused elevated water levels in plant clarifier weirs. The bypassed flow received preliminary and secondary treatment. Because of the elevated levels in the tanks, water flowed out of cuts for air piping in walls between aeration tank and clarifiers. Air to aeration tank was shut off prior to bypass. Approximately 28,700 gallons overflowed. This plant is designed for 0.075 MGD. The approximate total plant flow for January 11 was 0.243408 MGD.	If operational needs for resources allow, in the event of heavy rain, MSD will haul wastewater from the plant.
January 11, 2014	BERRYTOWN	2095073	CAP	The #2 treatment plant experienced a bypass when a heavy rain event caused elevated water levels in plant clarifier weirs. The bypassed flow received preliminary and secondary treatment. Because of the elevated levels in the tanks, water flowed out of cuts for air piping in walls between aeration tank and clarifiers. Air to aeration tank was shut off prior to bypass. Approximately 18,700 gallons overflowed. This plant is designed for 0.075 MGD. The approximate total plant flow for January 11 was 0.243408 MGD.	If operational needs for resources allow, in the event of heavy rain, MSD will haul wastewater from the plant.

Bypass Summary - January 1, 2014 to March 31, 2014					
DATE	WQTC	WORK ORDER	FAILURE CODE	BYPASS DESCRIPTION	FAILURE RESOLUTION
February 5, 2014	BERRYTOWN	2107935	CAP	On February 5, 2014, MSD personnel found Berrytown WQTC #1 plant bypassing to waters of the U.S. between the aeration tank and the secondary clarifier. The cause of the bypass was due to lack of system capacity. Approximately 3,175 gallons bypassed secondary treatment and disinfection treatment. However, it did receive full preliminary treatment. The plant SOP was followed. The secondary aeration was shut off prior to the bypass to reduce the volume of solids bypassing. Peak flow during this event was 0.430 MGD. Plant flow during this bypass was 0.118 MG. The plant design flow is 0.075 MG.	If operational needs for resources allow, in the event of heavy rain, MSD will haul wastewater from the plant. This treatment plant is scheduled to be eliminated by December 31, 2015.
Human Error (OPN)					
January 5, 2014	TIMBERLAKE	2091866	OPN	The Timber Lake WQTC experienced a bypass of secondary solids at the #2 plant. Approximately 121 gallons of biosolids bypassed secondary treatment due to rags and other debris accumulating and clogging the influent gates to plant #3 and #4. Due to this obstruction, all of the influent flow was forced to plants #1 and #2. This increased amount of flow exceeded treatment capacity and displaced solids in plant #2. The bypass volume did receive preliminary and disinfection treatment.	MSD staff raised the plant influent splitter box slide gates to ensure rags and debris will not obstruct flow.

Bypass Summary - January 1, 2014 to March 31, 2014					
DATE	WQTC	WORK ORDER	FAILURE CODE	BYPASS DESCRIPTION	FAILURE RESOLUTION
February 5, 2014	CEDAR CREEK	2107913	OPN	On February 5, 2014, MSD personnel found secondary clarifier effluent water overflowing to waters of the U.S. at the tertiary sand filter channel. Upon discovery, MSD personnel manually opened the tertiary sand filter hydraulic relief gate to stop the bypass. Approximately 100 gallons of partially treated sewage bypassed. The bypass was caused by the tertiary sand filter relief gate not being in "automatic" control mode. The bypassed volume received full preliminary and secondary treatment. However, it did not receive tertiary filter treatment or UV disinfection treatment. Peak flow during bypass was 23.12 MGD. Plant design flow is 7.5 MG.	MSD is currently in the process of implementing a wet weather SOP for Cedar Creek WQTC. Upon completion of the SOP, MSD will train Cedar Creek WQTC assigned operators on the wet weather SOP. In the meantime, MSD will re-train Cedar Creek WQTC assigned operators on proper operation of tertiary sand filters and related equipment.
Facility Failure (Mechanical - MCH, Electrical - ELE, Structural - SRT)					
February 5, 2014	SILVER HEIGHTS	2108069	STR	On February 5, 2014, MSD personnel found Silver Heights WQTC bypassing to waters of the U.S. at the plant effluent discharge pipe. The cause of the bypass was due to a break in the effluent discharge pipe. Approximately 100 gallons bypassed. The bypassed volume received full preliminary, secondary and disinfection treatment. However, it was not discharged to the permitted location of the receiving stream.	Once plant flow decreased, MSD hauled the plant to stop effluent discharge. MSD contractor excavated site and repaired broken discharge pipe on February 6, 2014. This treatment plant is scheduled to be eliminated by December 31, 2015.
External Power failures (LGE Related-PWR)					

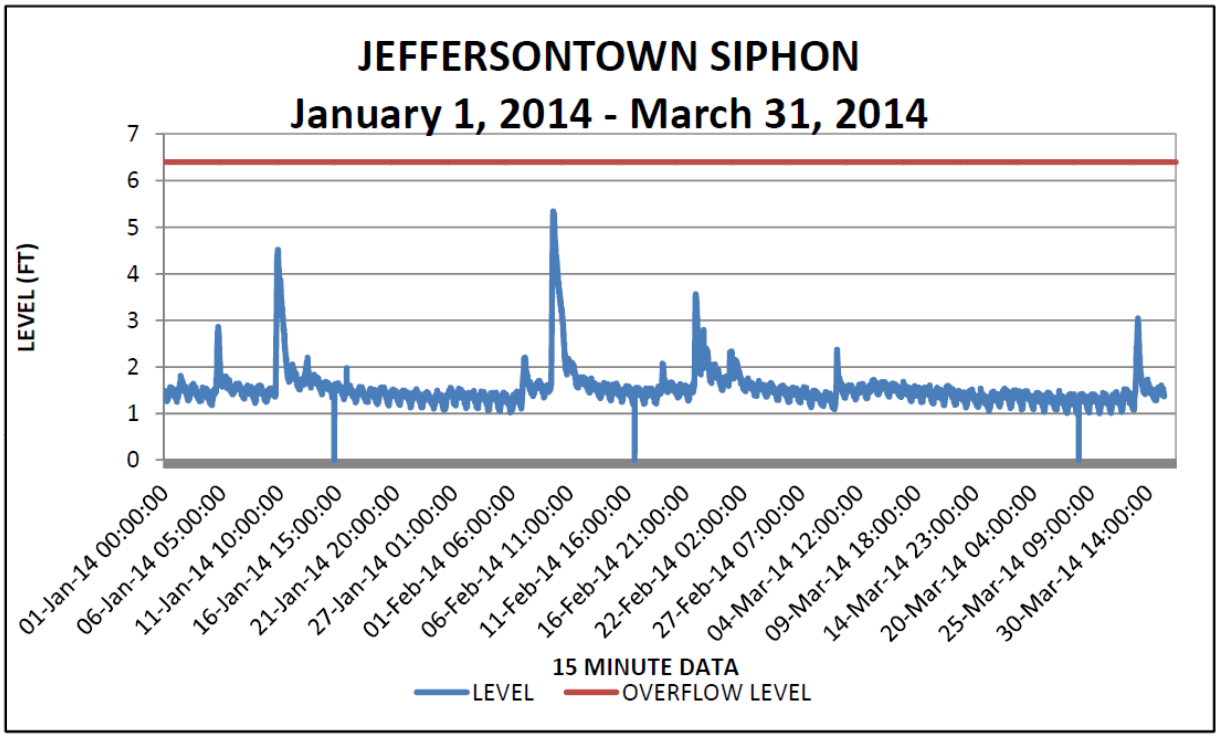
Bypass Summary - January 1, 2014 to March 31, 2014					
DATE	WQTC	WORK ORDER	FAILURE CODE	BYPASS DESCRIPTION	FAILURE RESOLUTION
N/A	N/A	N/A	N/A	No bypasses of this category occurred during the reporting period.	N/A
Utility Damage					
N/A	N/A	N/A	N/A	No bypasses of this category occurred during the reporting period.	N/A

6.6.3 Jeffersontown Water Quality Treatment Center

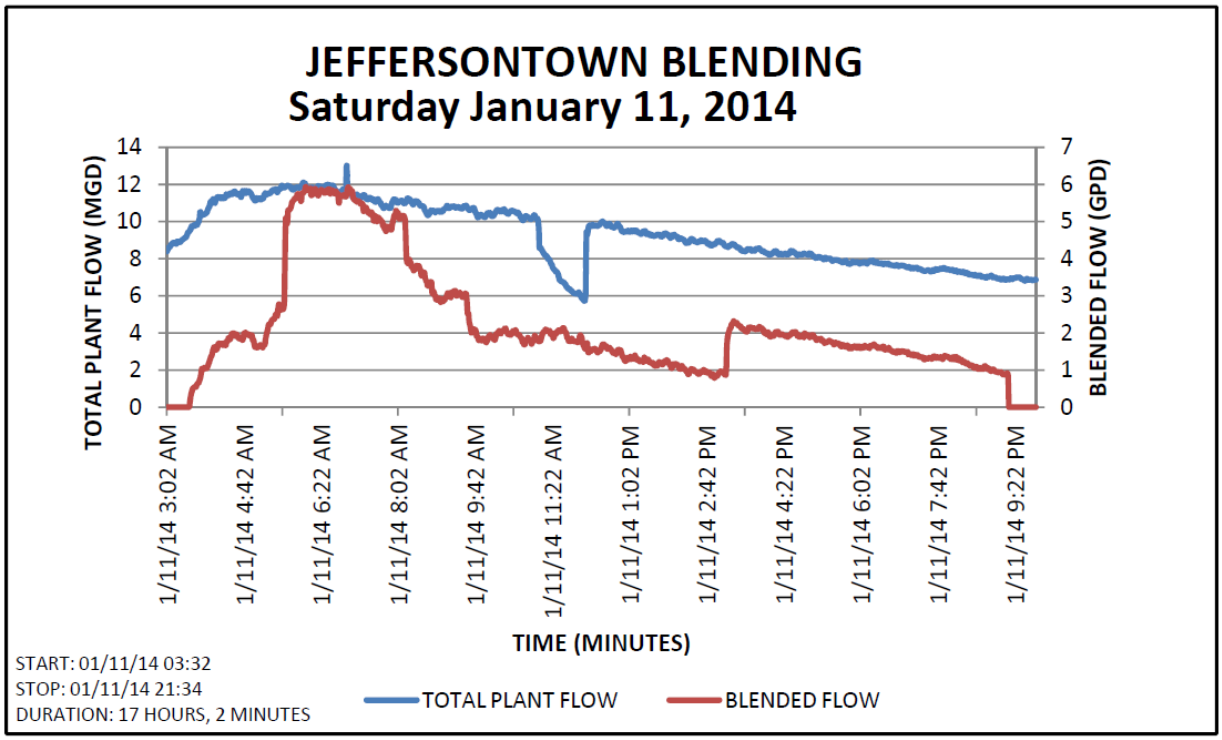
MSD submitted a Jeffersontown WQTC Process Control Plan on October 31, 2008, as required by paragraph 26.a of the Amended Consent Decree. MSD received comments on December 12, 2008, and resubmitted the plan January 16, 2009, and again on February 20, 2009. MSD received conditional approval of this document from EPA on April 1, 2009, pending finalization of the Amended Consent Decree that was under consideration by the Federal Court at the time the Process Control Plan was submitted. The Process Control Plan was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010.

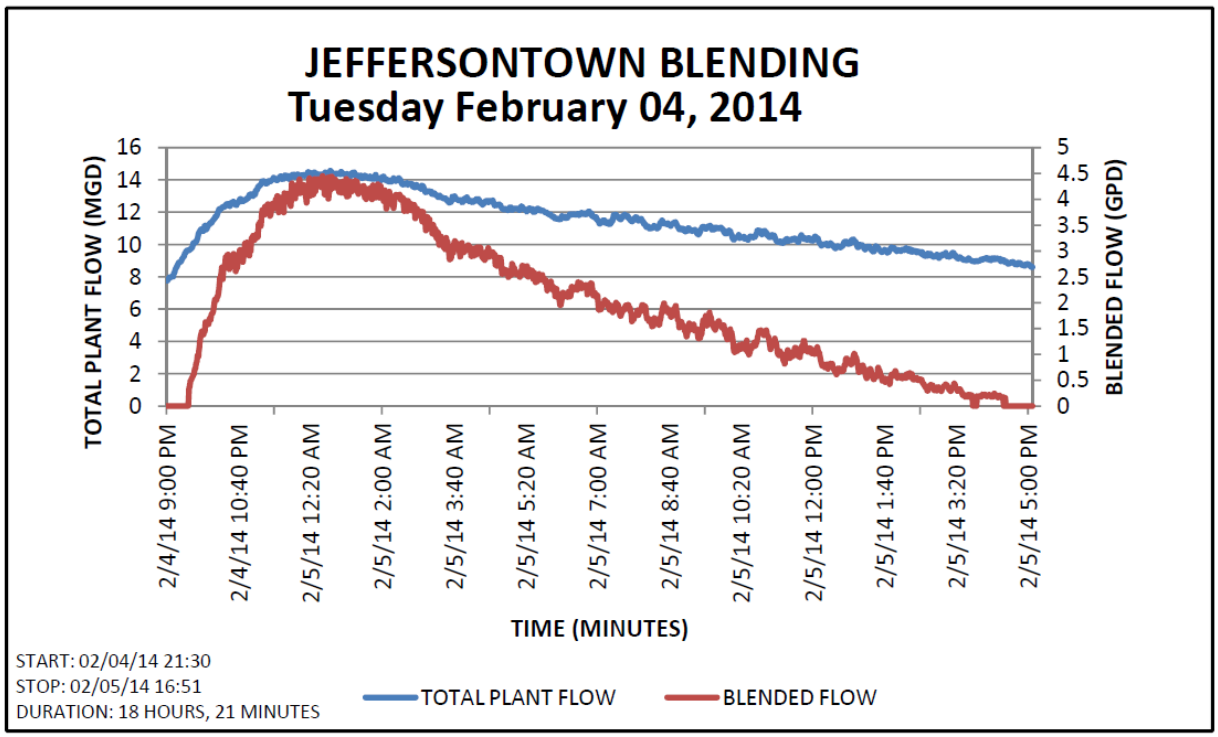
The following activities occurred at the Jeffersontown WQTC during the reporting period:

- Inspections were conducted upstream of the Jeffersontown WQTC Headworks two times (January 11, 2014 & February 4, 2014). No overflows were reported as a result of the inspections and no overflows were recorded at the Jeffersontown Siphon.



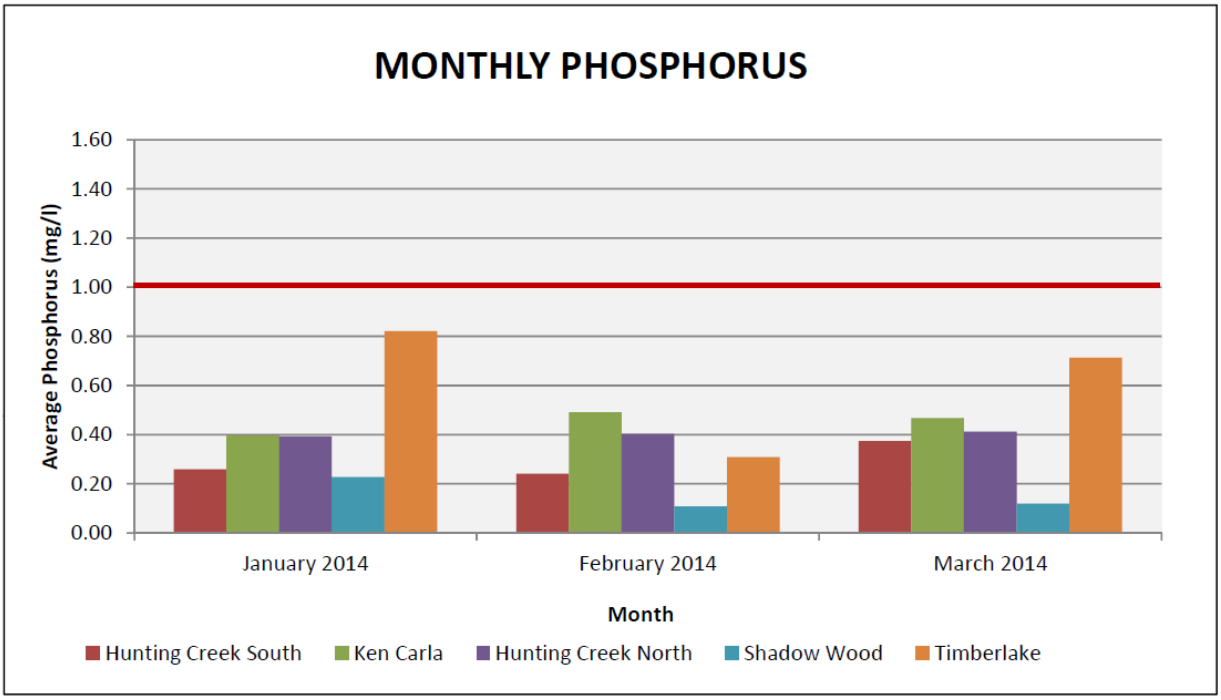
- There were two blending events during the reporting period. Below are charts for each blending event that show total plant flow during the blending event.


JEFFERSONTOWN BLENDING
Saturday January 11, 2014
TOTAL PLANT FLOW (MGD)
BLENDED FLOW (GPD)
TIME (MINUTES)
1/11/14 3:02 AM
1/11/14 4:42 AM
1/11/14 6:22 AM
1/11/14 8:02 AM
1/11/14 9:42 AM
1/11/14 11:22 AM
1/11/14 1:02 PM
1/11/14 2:42 PM
1/11/14 4:22 PM
1/11/14 6:02 PM
1/11/14 7:42 PM
1/11/14 9:22 PM
START: 01/11/14 03:32
STOP: 01/11/14 21:34
DURATION: 17 HOURS, 2 MINUTES
TOTAL PLANT FLOW
BLENDED FLOW


JEFFERSONTOWN BLENDING
Tuesday February 04, 2014
TOTAL PLANT FLOW (MGD)
BLENDED FLOW (GPD)
TIME (MINUTES)
2/4/14 9:00 PM
2/4/14 10:40 PM
2/5/14 12:20 AM
2/5/14 2:00 AM
2/5/14 3:40 AM
2/5/14 5:20 AM
2/5/14 7:00 AM
2/5/14 8:40 AM
2/5/14 10:20 AM
2/5/14 12:00 PM
2/5/14 1:40 PM
2/5/14 3:20 PM
2/5/14 5:00 PM
START: 02/04/14 21:30
STOP: 02/05/14 16:51
DURATION: 18 HOURS, 21 MINUTES
TOTAL PLANT FLOW
BLENDED FLOW

6.7 Phosphorus Monitoring at the Prospect WQTCs

As part of the Amended Consent Decree, MSD has agreed to submit phosphorus monitoring data including the calculations of monthly averages with the quarterly reports. MSD WQTCs were under the 1mg/l limit during the reporting period, per the Amended Consent Decree requirement. The following chart displays monthly average phosphorus results for the Prospect WQTCs.



Appendix A-1 - Discharge Work Orders – Dry Weather CSOs

APPENDIX A-1
UNAUTHORIZED DISCHARGES TO WATERS OF UNITED STATES
JANUARY 1, 2014 THROUGH MARCH 31, 2014

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	1215 ELLISON AVE	1/23/14 10:45 AM	01/23/14 11:05 AM	100	Sewer Manhole	CSO113	STREAM	SOUTH FORK BEARGRASS CREEK	LARGE HANDBAG BLOCKING LOW-FLOW LINE.	OBSTRUCTION-NOT GREASE / ROOTS	2100558	NONE NECESSARY, DISCHARGE OCCURED DIRECTLY INTO IMPROVED CHANNEL.	REMOVED HANDBAG FROM MOUTH OF THE LO-FLOW.
MORRIS FORMAN	KY0022411	1919 BROWNSBORO RD	1/7/14 1:30 AM	01/07/14 03:00 PM	37,833	Sewer Manhole	CSO132	STREAM	MUDDY FORK BEARGRASS CREEK	Water Main Break in Brownsboro Rd	UTILITY DAMAGED MSD ASSET	2094679	Pipe Discharge Submerged - No cleanup	Water Company making repairs
MORRIS FORMAN	KY0022411	1700 SPRING DR	1/9/14 5:15 AM	01/09/14 06:45 AM	531,500	Sewer Manhole	CSO206	STREAM	MIDDLE FORK BEARGRASS CREEK	Water Main Break	UTILITY DAMAGED MSD ASSET	2094671	Will be initiated once repairs are completed	Water Company on site making repairs
MORRIS FORMAN	KY0022411	1700 SPRING DR	1/30/14 3:30 AM	01/30/14 09:00 AM	469,198	Sewer Manhole	CSO206	STREAM	MIDDLE FORK BEARGRASS CREEK	Water Main Break	UTILITY DAMAGED MSD ASSET	2103385	Louisville Water Company will be contacted	No repairs needed

Appendix A-2 - Discharge Work Orders – Bypass

APPENDIX A-2
UNAUTHORIZED DISCHARGES TO WATERS OF UNITED STATES
JANUARY 1, 2014 THROUGH MARCH 31, 2014

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
BERRYTOWN	KY0036501	1203 HEAFER RD	01/11/14 2:30: AM	01/11/14 09:38 PM	28700	Sewer Treatment Plant	MSD0209	STREAM	FLOYDS FORK	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BYPASS AT WQTC	2095063	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
BERRYTOWN	KY0036501	1203 HEAFER RD	01/11/14 9:10: AM	01/11/14 09:38 PM	18700	Sewer Treatment Plant	MSD0209	STREAM	FLOYDS FORK	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BYPASS AT WQTC	2095073	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
BERRYTOWN	KY0036501	1203 HEAFER RD	02/05/14 8:30: AM	02/05/14 07:05 PM	3175	Sewer Treatment Plant	MSD0209	STREAM	FLOYDS FORK	LACK OF SYSTEM CAPACITY DUE TO WEATHER EVENT	BYPASS AT WQTC	2107935	NO DEBRIS	DECREASE FLOW
SILVER HEIGHTS	KY0028801	9412 SLAYTON CT	02/05/14 9:45: AM	02/06/14 07:00 AM	100	Sewer Treatment Plant	MSD0258	STREAM	MUD CREEK	PLANT EFFLUENT LINE TO CREEK IS BROKEN	BYPASS AT WQTC	2108069	NO DEBRIS	CONTRACTOR WILL EXCAVATE AND REPAIR LINE
CEDAR CREEK	KY0098540	8605 CEDAR CREEK RD	02/05/14 2:30: AM	02/05/14 02:45 AM	100	Sewer Treatment Plant	MSD0289	GROUND	CEDAR CREEK	bypass gate failed to open Automactically causing 100 galons to come out of the filter building and down the manhole	BYPASS AT WQTC	2107913	no debris ,processed water	manually opened filter bypass gate
TIMBERLAKE	KY0043087	5504 TIMBER RIDGE DR	01/05/14 1:50: PM	01/05/14 01:54 PM	121	Sewer Treatment Plant	MSD0293	GROUND	HARRODS CREEK	debris blocking splitter box caused overflow of plant #2	BYPASS AT WQTC	2091866	msd cleaned and sanitized area	msd removed and cleared blockage

Appendix A-3 - Discharge Work Orders – Blending

APPENDIX A-3
UNAUTHORIZED DISCHARGES TO WATERS OF UNITED STATES
JANUARY 1, 2014 THROUGH MARCH 31, 2014

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	01/11/14 3:31: AM	11/11/04 09:34 PM	1684349	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	2095065	PIPE DISCHARGE SUBMERGED- NO CLEAN UP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	02/04/14 9:30: PM	02/05/14 04:51 PM	1654887	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF CAPACITY DUE TO WEATHER EVENT	BLENDING AT JTOWN WQTC	2107883	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION

Appendix A-4 - Discharge Work Orders – Waters of the United States

APPENDIX A-4
UNAUTHORIZED DISCHARGES TO WATERS OF UNITED STATES
JANUARY 1, 2014 THROUGH MARCH 31, 2014

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	804 N ARBOR DR	01/11/14 8:20: AM	01/11/14 02:45 PM	25250	Sewer Manhole	00056-W	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF CAPACITY DUE TO RAIN EVENT	LACK OF SYSTEM CAPACITY	2095067	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	804 N ARBOR DR	02/05/14 3:00: PM	02/05/14 03:20 PM	25	Sewer Manhole	00056-W	GROUND	MIDDLE FORK BEARGRASS CREEK	LG&E POWER FAIL	POWER OUTAGE (LG&E)	2108237	MSD CLEANED AND SANITIZED AREA	INSTALLED GENERATOR TILL POWER RESTORED
MORRIS FORMAN	KY0022411	804 N ARBOR DR	01/11/14 8:20: AM	01/11/14 09:07 PM	19175	Sewer Manhole	00746	DITCH	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	LACK OF SYSTEM CAPACITY	2095066	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	804 N ARBOR DR	02/04/14 7:30: AM	02/05/14 03:48 PM	12450	Sewer Manhole	00746	DITCH	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY DUE TO WEATHER EVENT	LACK OF SYSTEM CAPACITY	2107919	NO DEBRIS	SITE FOUND DURING WEATHER EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	02/04/14 11:51: PM	02/05/14 02:09 PM	932029	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107908	NO CLEAN UP PERFORMED – PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1726 FRASER DR	02/04/14 11:03: PM	02/05/14 10:10 AM	2400	Sewer Manhole	16649	DITCH	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107909	DISCLN WO# 2108282	LOCATION INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6102 COOPER CHAPEL RD	02/04/14 9:15: PM	02/05/14 08:25 AM	33500	Sewer Manhole	25479	CATCH BASIN	PENNSYLVANIA RUN	LACK OF CAPACITY DUE TO WEATHER EVENT	LACK OF SYSTEM CAPACITY	2107882	NO DEBRIS	SITE FOUND DURING WEATHER EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
DEREK R. GUTHRIE	KY0078956	6102 COOPER CHAPEL RD	02/17/14 6:15: PM	02/17/14 07:15 PM	1200	Sewer Manhole	25479	CATCH BASIN	PENNSYLVANIA RUN	rainevent caused a lack of system capacity	LACK OF SYSTEM CAPACITY	2113277	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	3317 BROWNSBORO RD	02/04/14 10:44: PM	02/05/14 10:44 AM	7200	Sewer Manhole	26752	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107911	DISLCN WO# 2108286	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3317 BROWNSBORO RD	02/05/14 3:18: AM	02/05/14 10:46 AM	1100	Sewer Manhole	26752	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107898	DISCLN WO# 2108139	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	01/11/14 8:15: AM	01/11/14 10:30 AM	6000	Sewer Manhole	27005	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2095062	DISCLN WO# 2095218	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1013 ALTA CIR	02/05/14 12:15: AM	02/05/14 09:53 AM	2200	Sewer Manhole	27007	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107891	DISCLN WO# 2108088	LOCATION INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	01/11/14 2:48: PM	01/11/14 02:00 PM	12000	Sewer Manhole	27116	STREAM	MUD CREEK	LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	2095107	NO CLEAN UP NEEDED	A SOLUTION FOR THIS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	02/04/14 11:30: PM	02/05/14 12:30 PM	19500	Sewer Manhole	27116	STREAM	MUD CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107864	MSD CLEANED AND SANITIZED THE IMPACTED AREA	A SOLUTION FOR THIS IS INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11401 GRAND AVE	02/04/14 10:22: PM	02/05/14 11:05 AM	1750	Sewer Manhole	28551	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107912	DISCLN WO# 2108288	LOCATION INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6810 SANDSTONE BLVD	02/04/14 10:30: PM	02/05/14 08:20 AM	13500	Sewer Manhole	29948	GROUND	FERN CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107862	MSD CLEANED AND SANITIZED THE IMPACTED AREA	A SOLUTION FOR THIS IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	01/11/14 5:30: AM	01/11/14 06:35 AM	1625	Sewer Manhole	31073	DITCH	FERN CREEK	LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	2095053	CREATED DISCLN WO	THIS SOLUTION IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	02/04/14 10:40: PM	02/05/14 08:20 AM	13995	Sewer Manhole	31073	DITCH	FERN CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107861	MSD CLEANED AND SANITIZED THE IMPACTED AREA	A SOLUTION FOR THIS IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	01/11/14 5:30: AM	01/11/14 06:35 AM	1625	Sewer Manhole	31074	DITCH	FERN CREEK	LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	2095056	CREATED WO	A SOLUTION FOR THIS INCLUDED IN THE IOAP

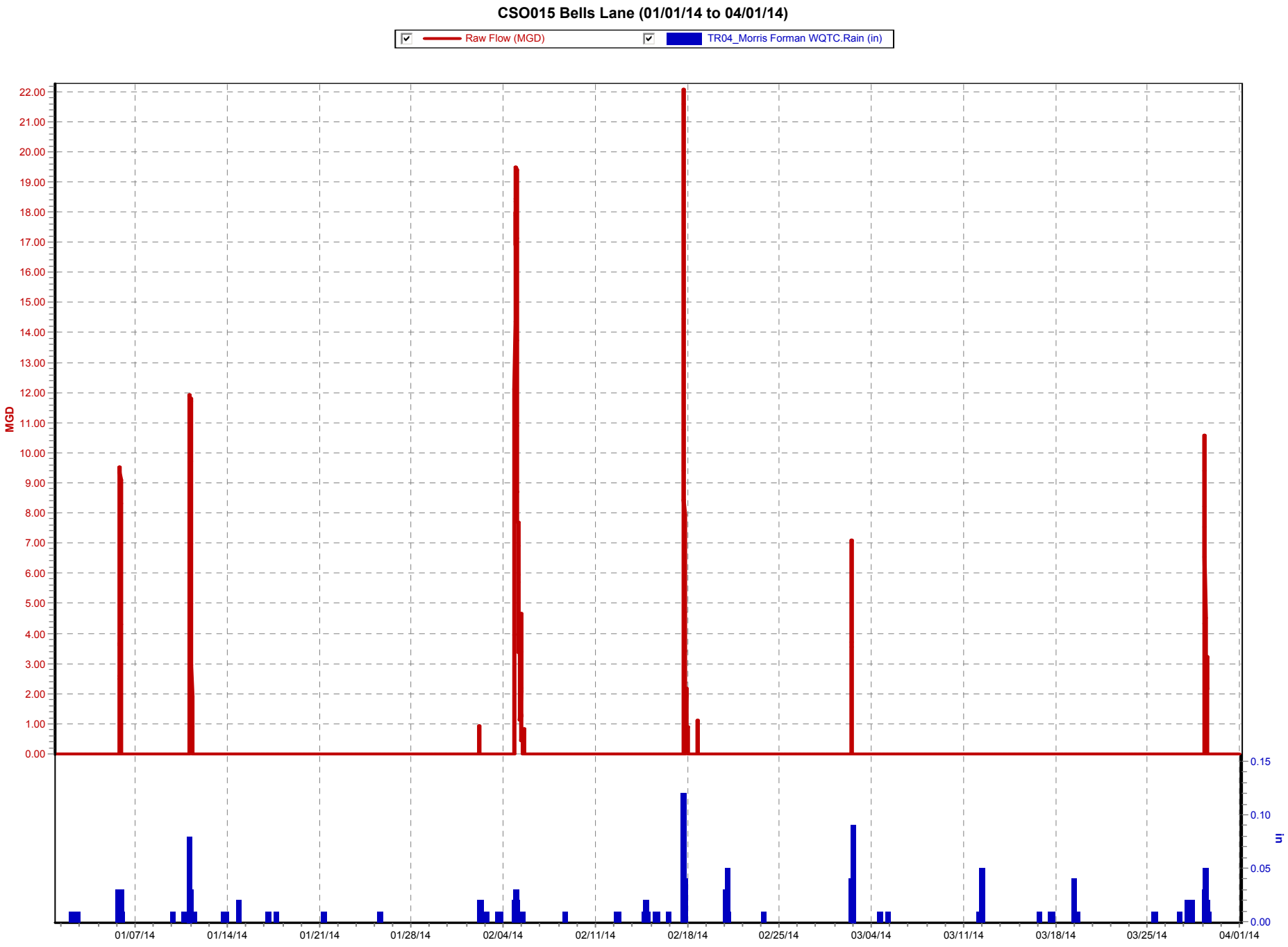
APPENDIX A-4
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
JANUARY 1, 2014 THROUGH MARCH 31, 2014

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	02/04/14 10:40: PM	02/05/14 08:20 AM	27990	Sewer Manhole	31074	DITCH	FERN CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107863	MSD CLEANED AND SANITIZED THE IMPACTED AREA	A SOLUTION FOR THIS IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6707 W ORELL RD	02/04/14 10:18: AM	02/05/14 12:30 PM	23000	Sewer Manhole	32682	STREAM	ALVEY DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107890	DISCLN WO# 2109291	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3540 FINCASTLE RD	02/04/14 11:10: PM	02/05/14 09:42 AM	1450	Sewer Service Line	34093540	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107901	DISCLN WO# 2108151	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3542 FINCASTLE RD	02/04/14 11:09: PM	02/05/14 09:43 AM	1500	Sewer Service Line	34093542	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107899	DISCLN WO# 2108144	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3530 FINCASTLE RD	02/04/14 11:11: PM	02/05/14 09:45 AM	1500	Sewer Manhole	36763	GROUND	CAMP TAYLOR DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107903	DISCLN WO# 2108155	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2120 INDIAN HILLS TRL	02/05/14 2:50: AM	02/05/14 10:10 AM	33000	Sewer Manhole	40871	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY DUE TO WEATHER EVENT	LACK OF SYSTEM CAPACITY	2107902	CONTRACTOR CLEANED & SANITIZED THE AREA	SITE FOUND DURING WEATHER EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	2105 INDIAN HILLS TRL	02/05/14 2:50: AM	02/05/14 10:10 AM	33000	Sewer Manhole	40872	GROUND	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY DURING A WEATHER EVENT	LACK OF SYSTEM CAPACITY	2107900	CONTRACTOR CLEANED & SANITIZED	SITE FOUND DURING WEATHER EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	300 MOCKINGBIRD VALLEY RD	02/05/14 3:18: AM	02/05/14 10:45 AM	1800	Sewer Manhole	41374	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107896	DISCLN WO# 2108134	LOCATION INCLUDE IN THE IOAP
MORRIS FORMAN	KY0022411	1132 ROSTREVOR CIR	02/05/14 12:45: AM	02/05/14 12:30 PM	11500	Sewer Manhole	45835	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107892	DISCLN WO# 2108097	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2315 SENECA VALLEY RD	03/25/14 2:00: PM	03/25/14 05:00 PM	5	Sewer Main	45856	GROUND	MIDDLE FORK BEARGRASS CREEK	STRUCTURAL FAILURE IN THE MAIN SEWER	STRUCTURAL FAILURE	2133553	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	WORK ORDERS 2133503; 2133499; ROOT CUT & REPAIRED MAIN SEWER; SEALED AN EXPOSED JOINT AS A PRECAUTION
MORRIS FORMAN	KY0022411	201 BULLITT LN	02/05/14 1:30: AM	02/05/14 10:15 AM	1500	Sewer Manhole	47582	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107894	DISCLN WO# 2108127	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	202 OXMOOR LN	02/05/14 12:13: AM	02/05/14 10:15 AM	1750	Sewer Manhole	47583	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107893	DISCLN WO# 2108111	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7410 STEEPLECREST CIR	02/05/14 12:15: AM	02/05/14 09:53 AM	2000	Sewer Manhole	47596	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2108128	DISCLN WO#	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	02/04/14 11:15: PM	02/05/14 10:08 AM	4500	Sewer Manhole	51594	DITCH	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107906	DISCLN WO# 2108277	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	02/17/14 5:15: PM	02/17/14 06:45 PM	1500	Sewer Manhole	51594	DITCH	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2113302	DISCLN WO# 2113332	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1804 ROUND RIDGE RD	02/05/14 2:54: AM	02/05/14 10:33 AM	2700	Sewer Manhole	65623	STREAM	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107895	DISCLN WO# 2108131	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3536 FINCASTLE RD	02/04/14 11:12: PM	02/05/14 09:46 AM	1000	Sewer Manhole	99259	GROUND	CAMP TAYLOR DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	2107905	DISCLN WO# 2108160	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	816 N 34TH ST	01/07/14 5:45: AM	01/07/14 06:30 AM	63633	Sewer Manhole	CSO019	STREAM	OHIO RIVER	WATER MAIN BREAK AT 34TH AND GRIFFITHS	UTILITY DAMAGED MSD ASSET	2093436	PIPE DISCHARGE SUBMERGED - NO CLEANUP POSSIBLE	LWC SHUT DOWN WATER MAIN TO MAKE REPAIRS
MORRIS FORMAN	KY0022411	1215 ELLISON AVE	01/23/14 10:45: AM	01/23/14 11:05 AM	100	Sewer Manhole	CSO113	STREAM	SOUTH FORK BEARGRASS CREEK	LARGE HANDBAG BLOCKING LOW-FLOW LINE.	OBSTRUCTION-NOT GREASE / ROOTS	2100558	NONE NECESSARY. DISCHARGE OCCURED DIRECTLY INTO IMPROVED CHANNEL.	REMOVED HANDBAG FROM MOUTH OF THE LO-FLOW.

APPENDIX A-4
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
JANUARY 1, 2014 THROUGH MARCH 31, 2014

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	1919 BROWNSBORO RD	01/07/14 1:30: AM	01/07/14 03:00 PM	37833	Sewer Manhole	CSO132	STREAM	MUDDY FORK BEARGRASS CREEK	Water Main Break in Brownsboro Rd	UTILITY DAMAGED MSD ASSET	2094679	Pipe Discharge Submerged - No cleanup	Water Company making repairs
MORRIS FORMAN	KY0022411	1700 SPRING DR	01/09/14 5:15: AM	01/09/14 06:45 AM	531500	Sewer Manhole	CSO206	STREAM	MIDDLE FORK BEARGRASS CREEK	Water Main Break	UTILITY DAMAGED MSD ASSET	2094671	Will be initiated once repairs are completed	Water Company on site making repairs
MORRIS FORMAN	KY0022411	1700 SPRING DR	01/30/14 3:30: AM	01/30/14 09:00 AM	469198	Sewer Manhole	CSO206	STREAM	MIDDLE FORK BEARGRASS CREEK	Water Main Break	UTILITY DAMAGED MSD ASSET	2103385	Louisville Water Company will be contacted	No repairs needed
MORRIS FORMAN	KY0022411	2120 INDIAN HILLS TRL	02/05/14 2:30: AM	02/05/14 02:45 AM	750	Sewer Lift Station	MSD0186-PS	DITCH	MUDDY FORK BEARGRASS CREEK	NO PUMPS RUNNING	MECHANICAL FAILURE	2107885	NO DEBRIS	TURN PUMPS ON
BERRYTOWN	KY0036501	1203 HEAFER RD	01/11/14 2:30: AM	01/11/14 09:38 PM	28700	Sewer Treatment Plant	MSD0209	STREAM	FLOYDS FORK	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BYPASS AT WQTC	2095063	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
BERRYTOWN	KY0036501	1203 HEAFER RD	01/11/14 9:10: AM	01/11/14 09:38 PM	18700	Sewer Treatment Plant	MSD0209	STREAM	FLOYDS FORK	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BYPASS AT WQTC	2095073	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
BERRYTOWN	KY0036501	1203 HEAFER RD	02/05/14 8:30: AM	02/05/14 07:05 PM	3175	Sewer Treatment Plant	MSD0209	STREAM	FLOYDS FORK	LACK OF SYSTEM CAPACITY DUE TO WEATHER EVENT	BYPASS AT WQTC	2107935	NO DEBRIS	DECREASE FLOW
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	01/11/14 3:31: AM	11/11/04 09:34 PM	1684349	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	2095065	PIPE DISCHARGE SUBMERGED- NO CLEAN UP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	02/04/14 9:30: PM	02/05/14 04:51 PM	1654887	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF CAPACITY DUE TO WEATHER EVENT	BLENDING AT JTOWN WQTC	2107883	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
SILVER HEIGHTS	KY0028801	9412 SLAYTON CT	02/05/14 9:45: AM	02/06/14 07:00 AM	100	Sewer Treatment Plant	MSD0258	STREAM	MUD CREEK	PLANT EFFLUENT LINE TO CREEK IS BROKEN	BYPASS AT WQTC	2108069	NO DEBRIS	CONTRACTOR WILL EXCAVATE AND REPAIR LINE
CEDAR CREEK	KY0098540	8605 CEDAR CREEK RD	02/05/14 2:30: AM	02/05/14 02:45 AM	100	Sewer Treatment Plant	MSD0289	GROUND	CEDAR CREEK	bypass gate failed to open Automactically causing 100 galons to come out of the filter building and down the manhole	BYPASS AT WQTC	2107913	no debris ,processed water	manually opened filter bypass gate
TIMBERLAKE	KY0043087	5504 TIMBER RIDGE DR	01/05/14 1:50: PM	01/05/14 01:54 PM	121	Sewer Treatment Plant	MSD0293	GROUND	HARRODS CREEK	debris blocking splitter box caused overflow of plant #2	BYPASS AT WQTC	2091866	msd cleaned and sanitized area	msd removed and cleared blockage
DEREK R. GUTHRIE	KY0078956	9114 CINDERELLA LN	02/05/14 4:00: AM	02/05/14 08:15 AM	12750	Sewer Lift Station	MSD1013-PS	DITCH	FISHPOOL CREEK	LACK OF SYSTEM CAPACITY DUE TO WEATHER EVENT	LACK OF SYSTEM CAPACITY	2107897	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING WEATHER EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	8410 SAUREL DR	02/05/14 12:50: AM	02/05/14 04:15 PM	46250	Sewer Lift Station	MSD1024-PS	DITCH	GOOSE CREEK	LACK OF SYSTEM CAPACITY DUE TO WEATHER EVENT	LACK OF SYSTEM CAPACITY	2107884	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING WEATHER EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR

Appendix B – CSO Flow Monitoring Data


CSO015 Bells Lane (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR04_Morris Forman WQTC.Rain (in)
MGD
in
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
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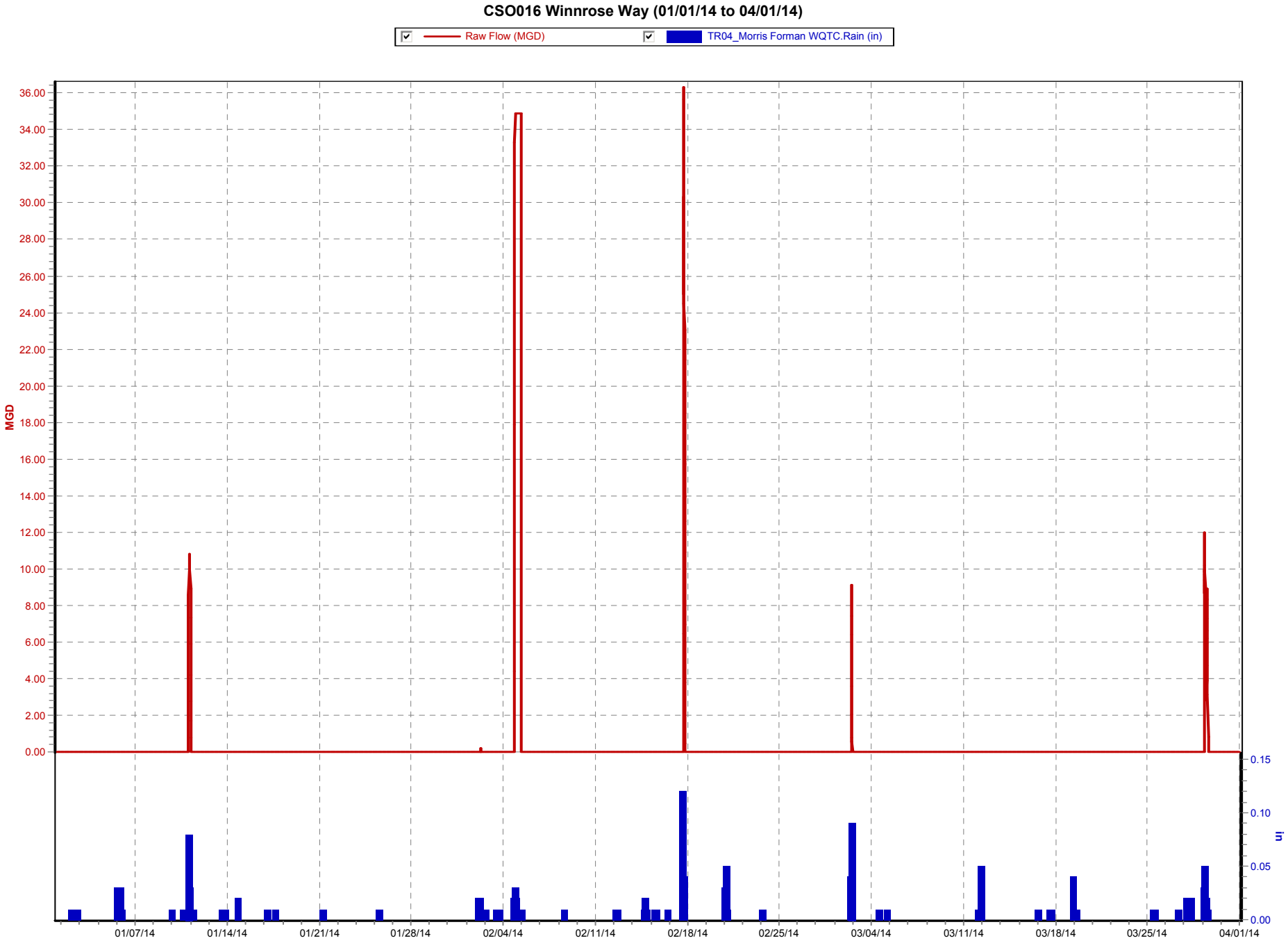
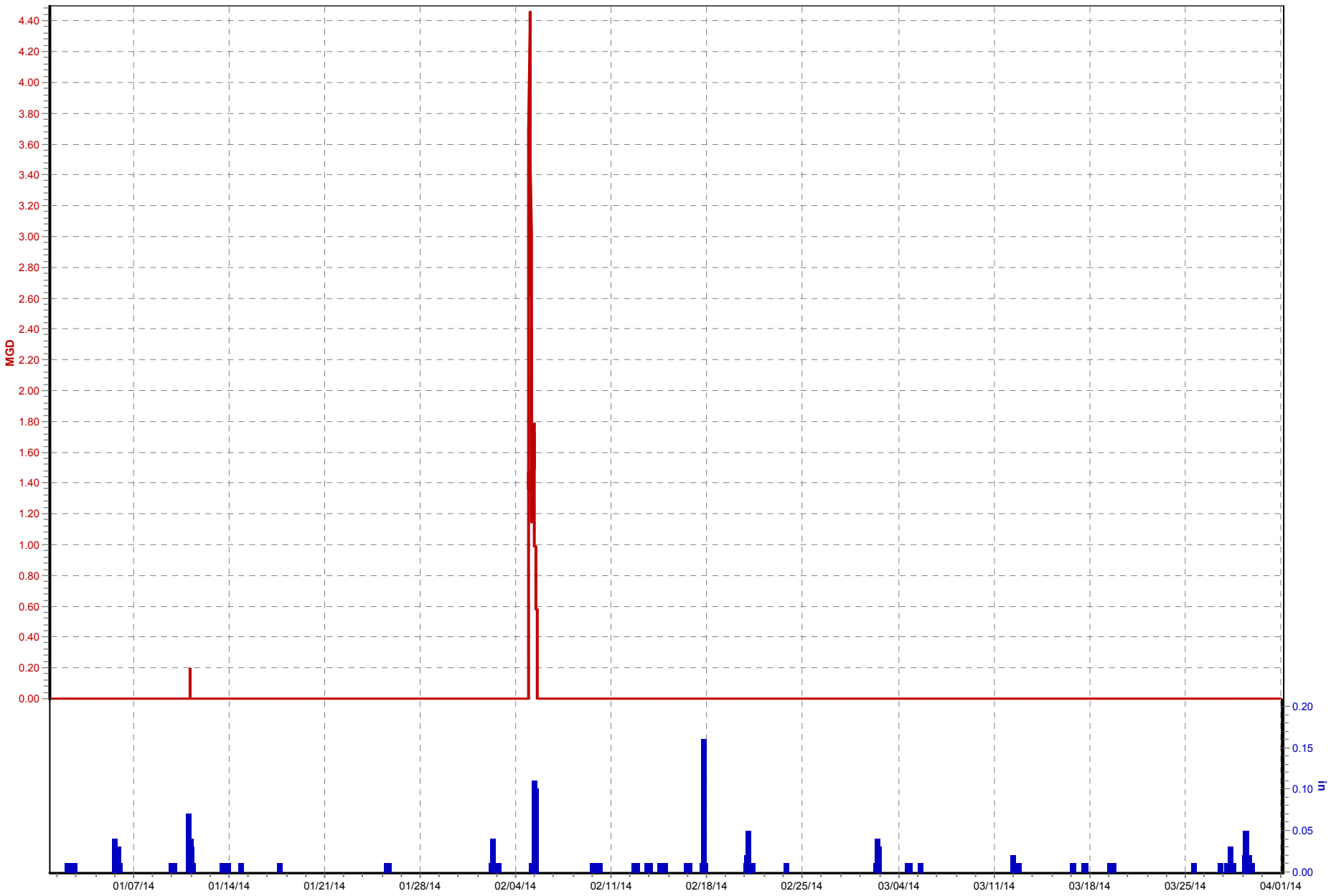
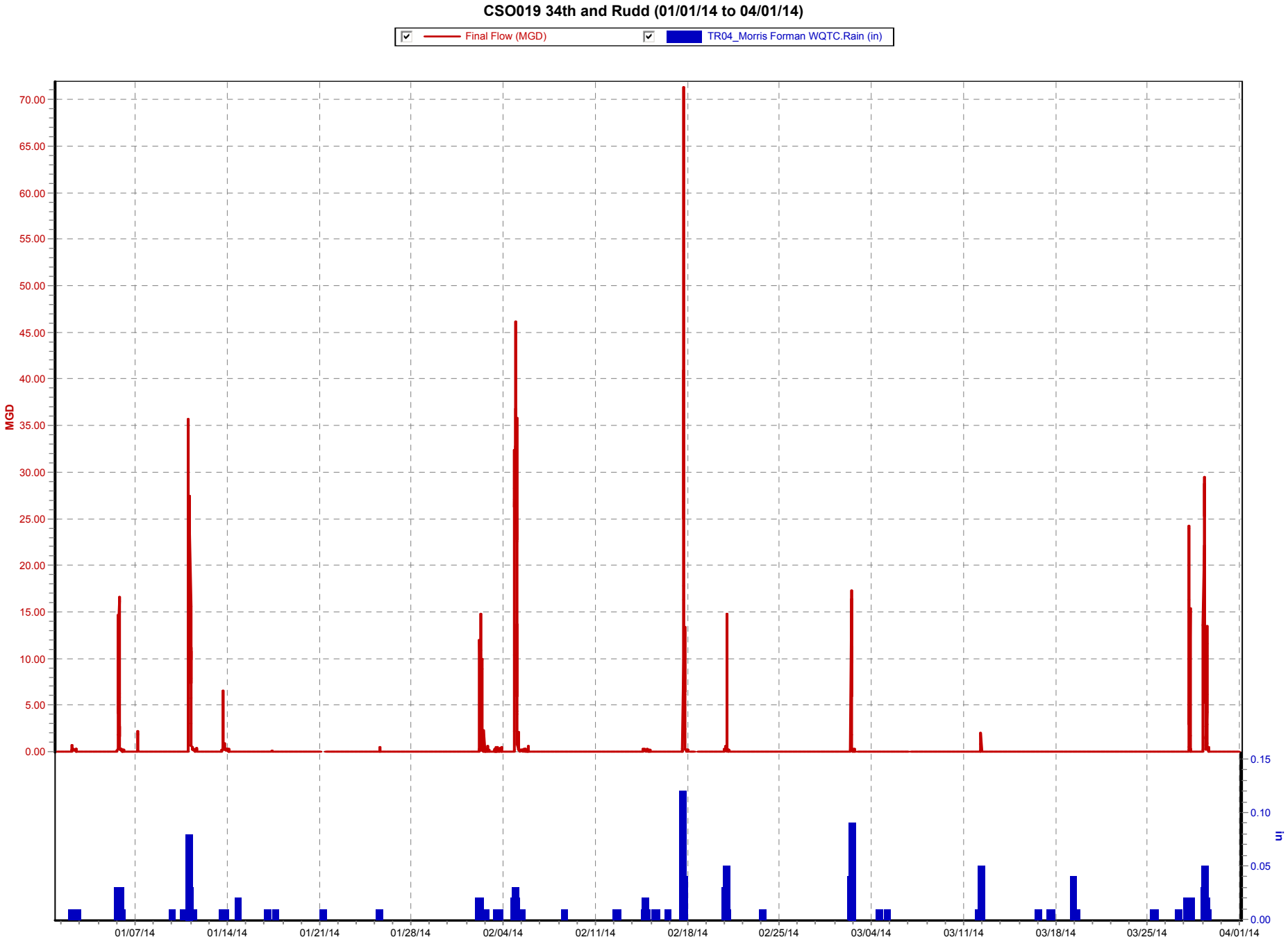
03/25/14
04/01/14

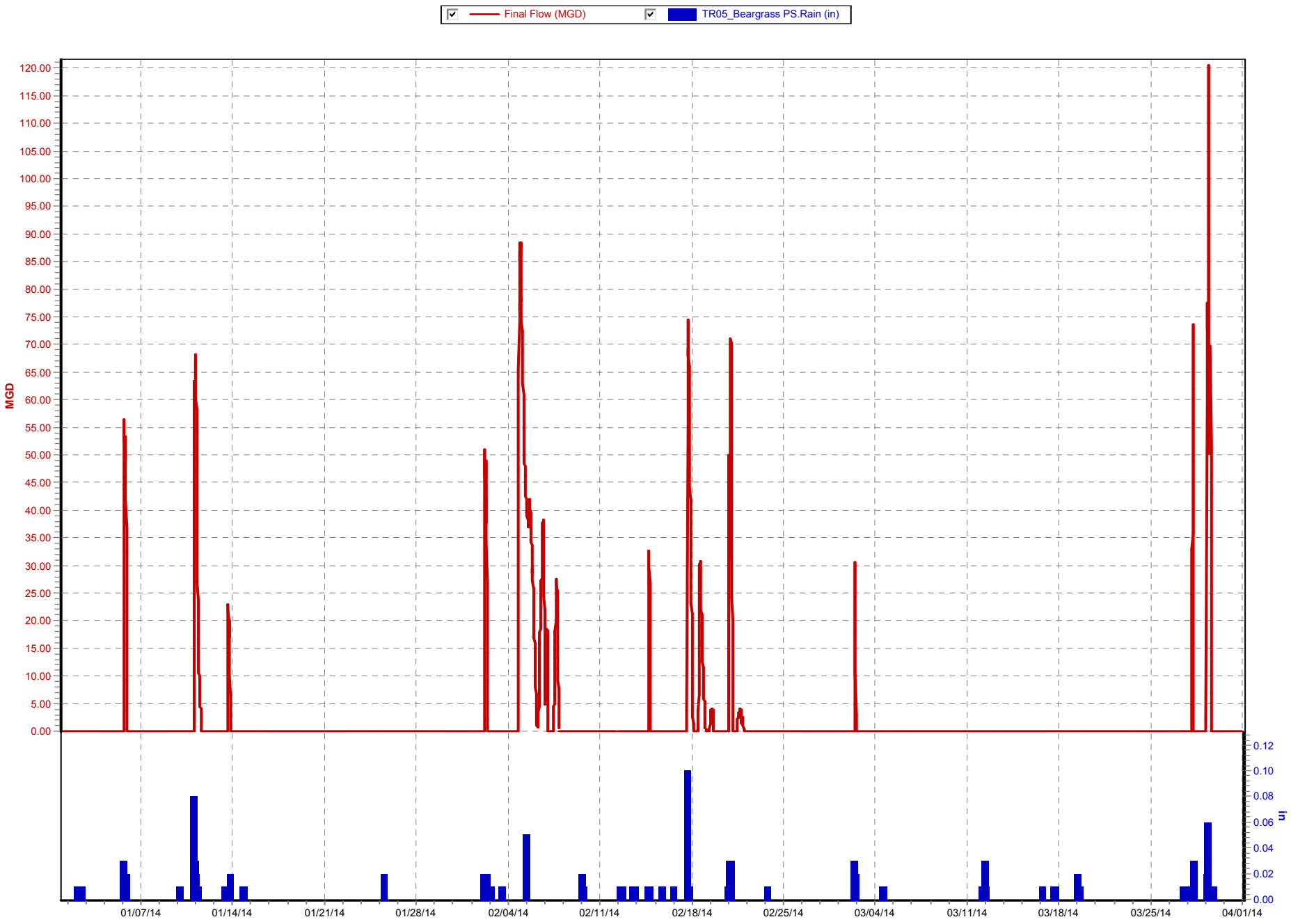

CSO016 Winnrose Way (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR04_Morris Forman WQTC.Rain (in)
MGD
in
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

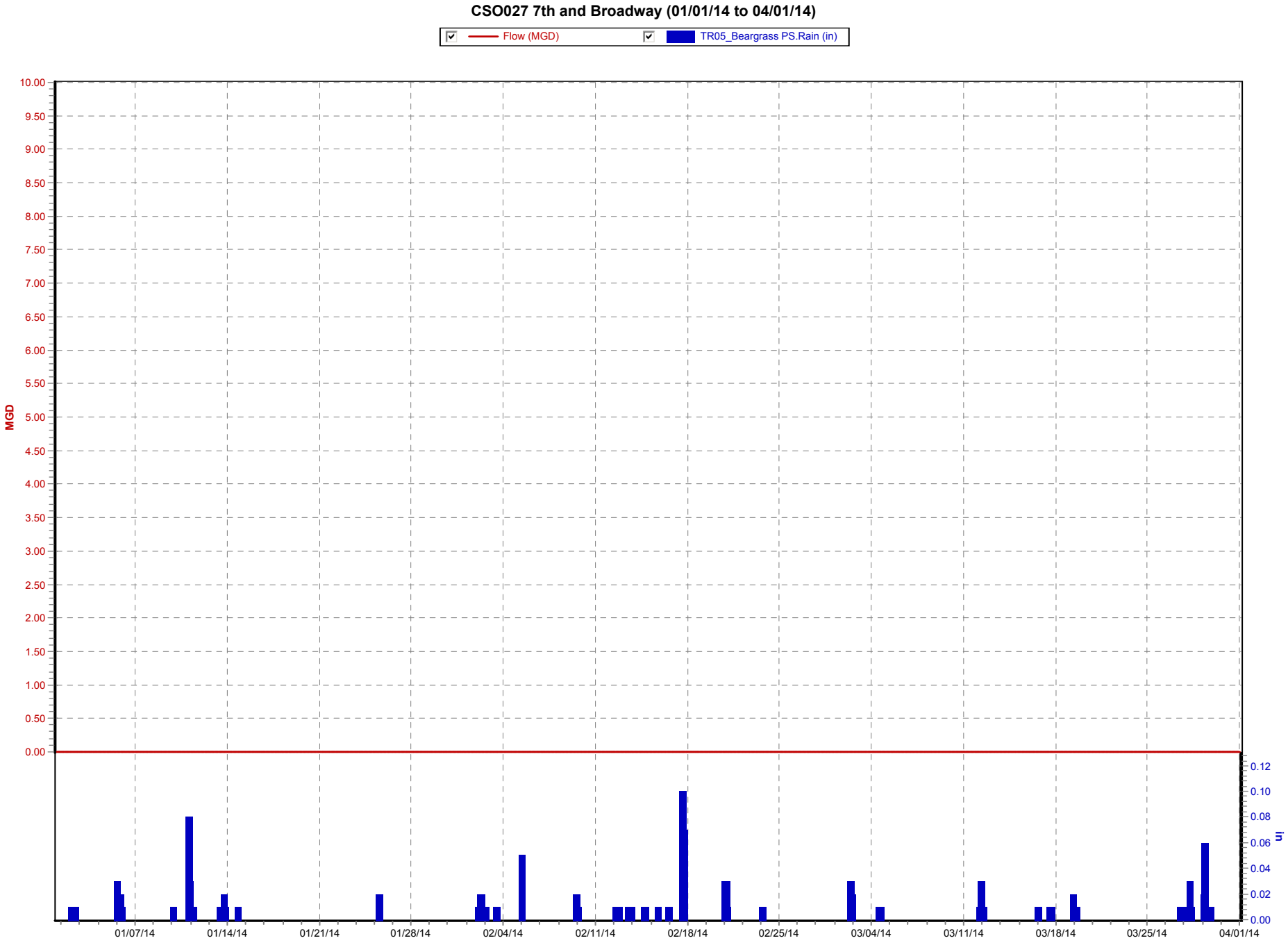
CSO018 Nightingale Rd (01/01/14 to 04/01/14)

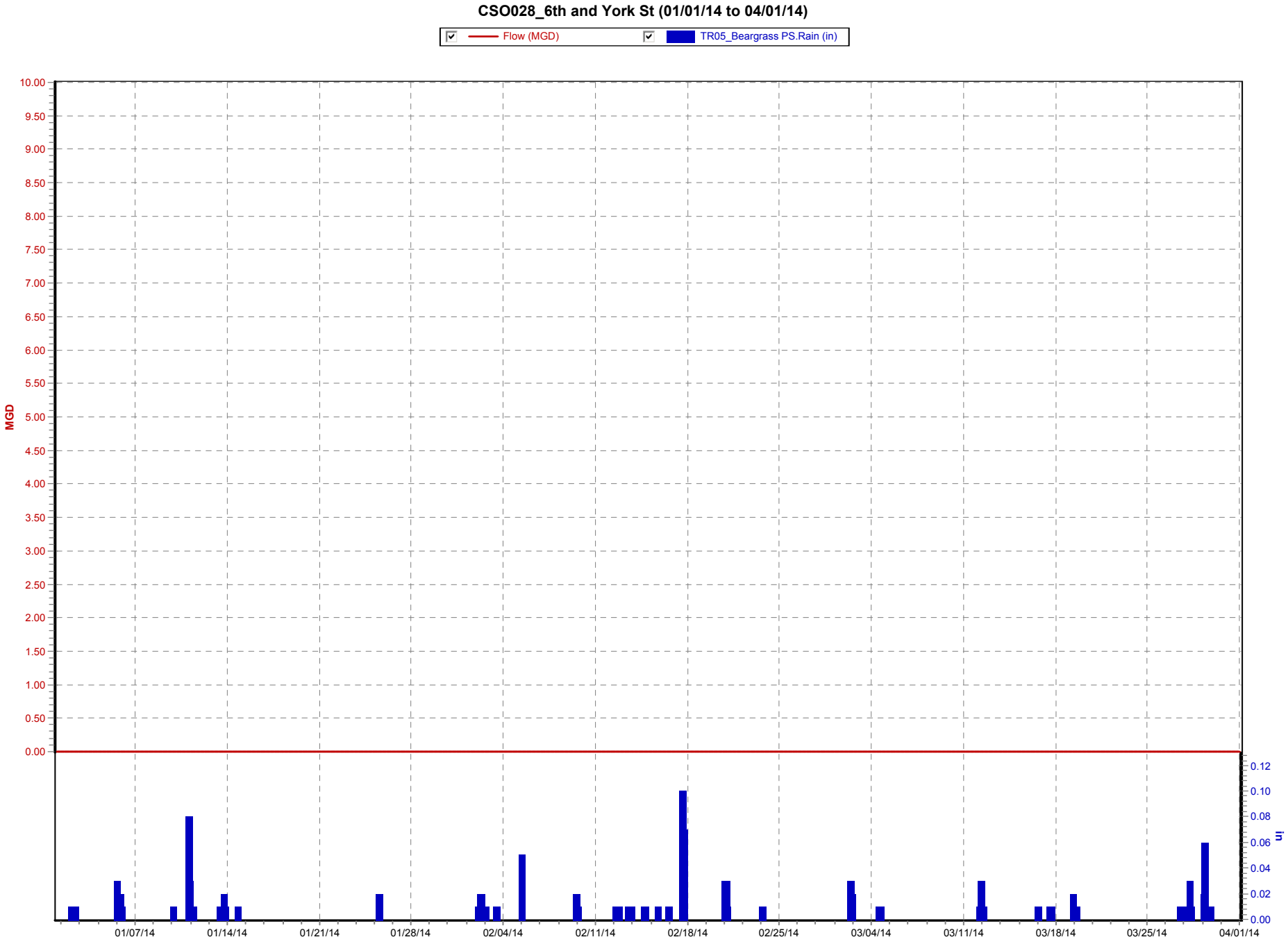


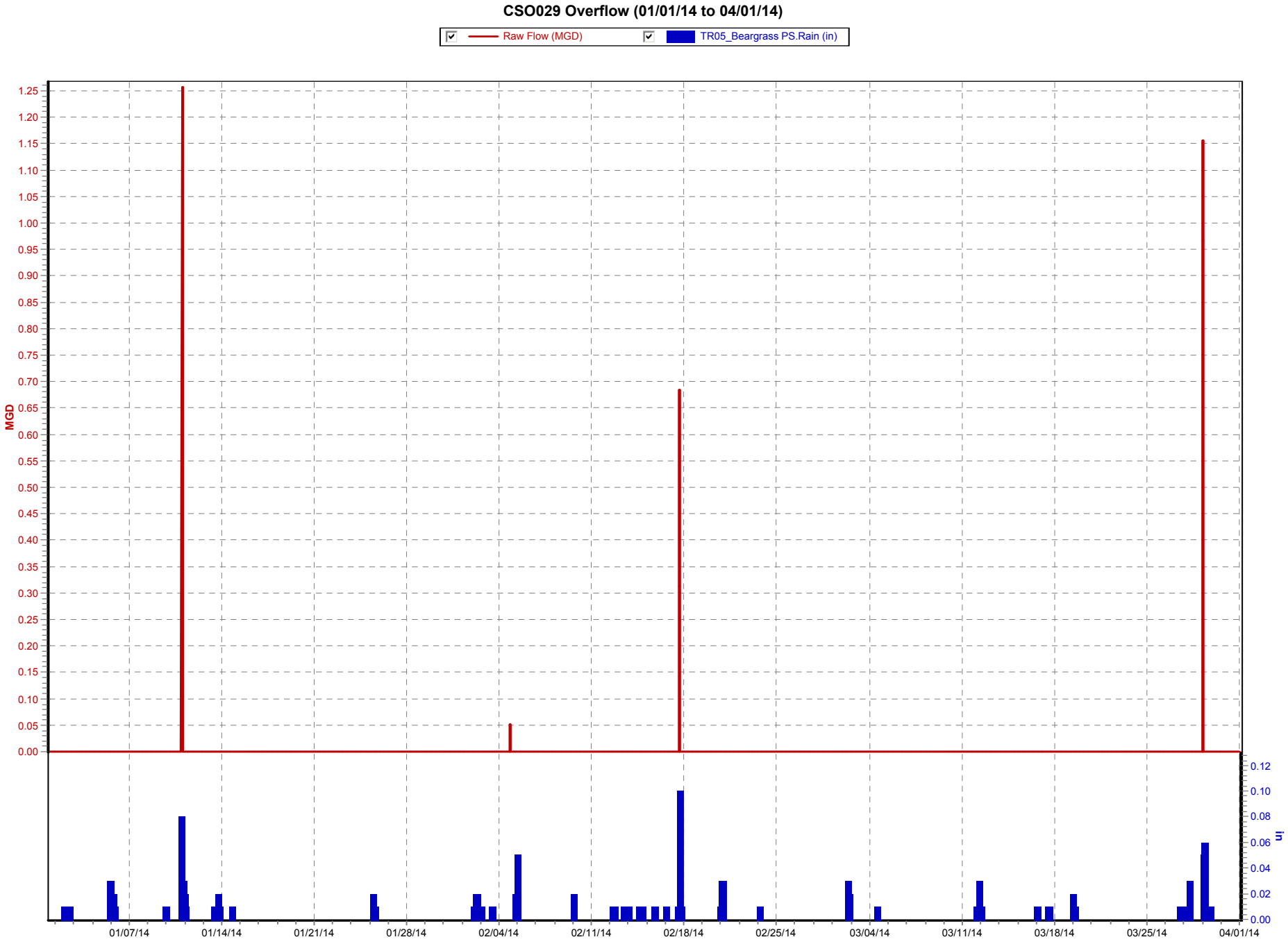

CSO019 34th and Rudd (01/01/14 to 04/01/14)
Final Flow (MGD)
TR04_Morris Forman WQTC.Rain (in)
MGD
in
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

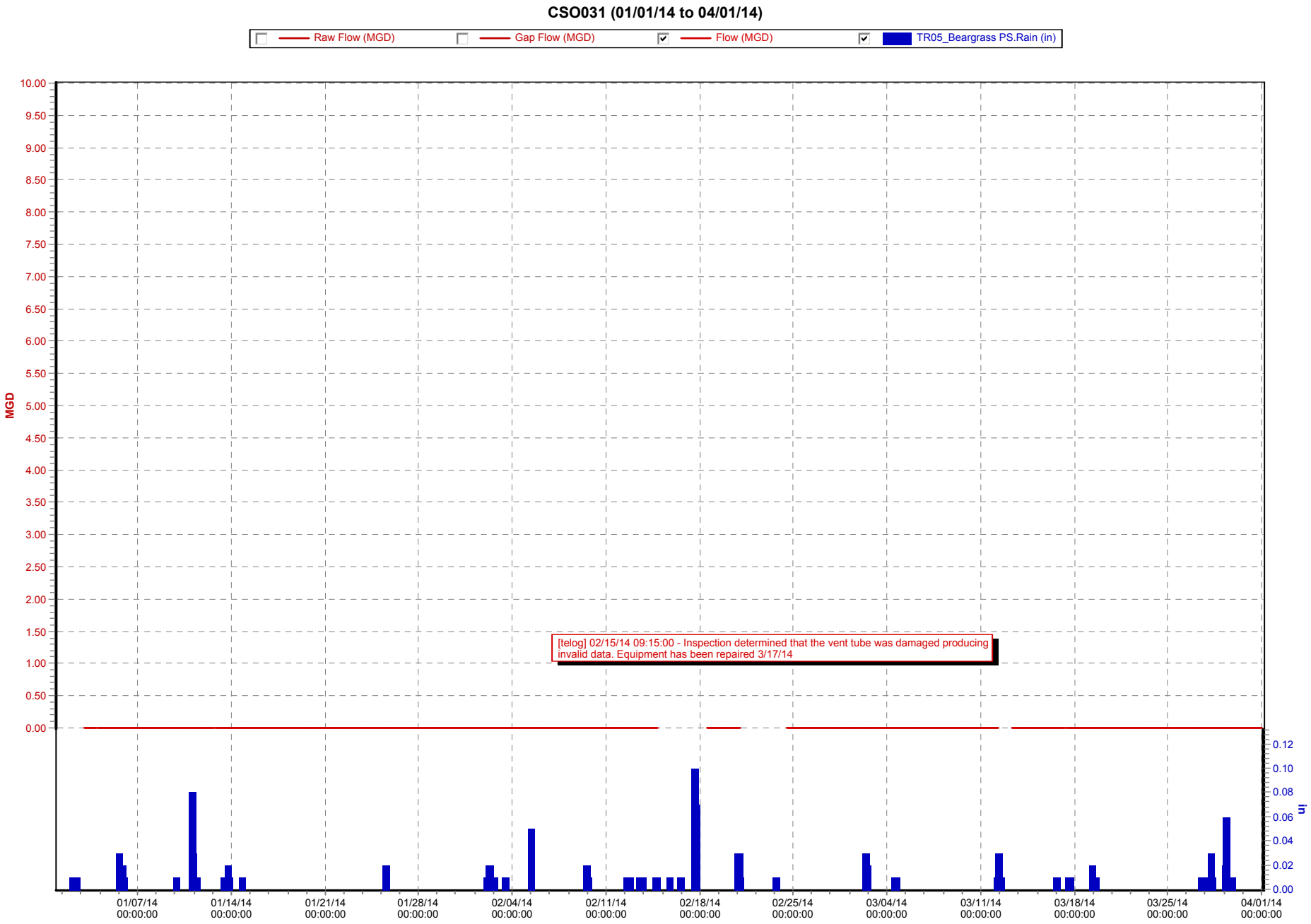
CSO020 Buchanan St by Stark PS (01/01/14 to 04/01/14)

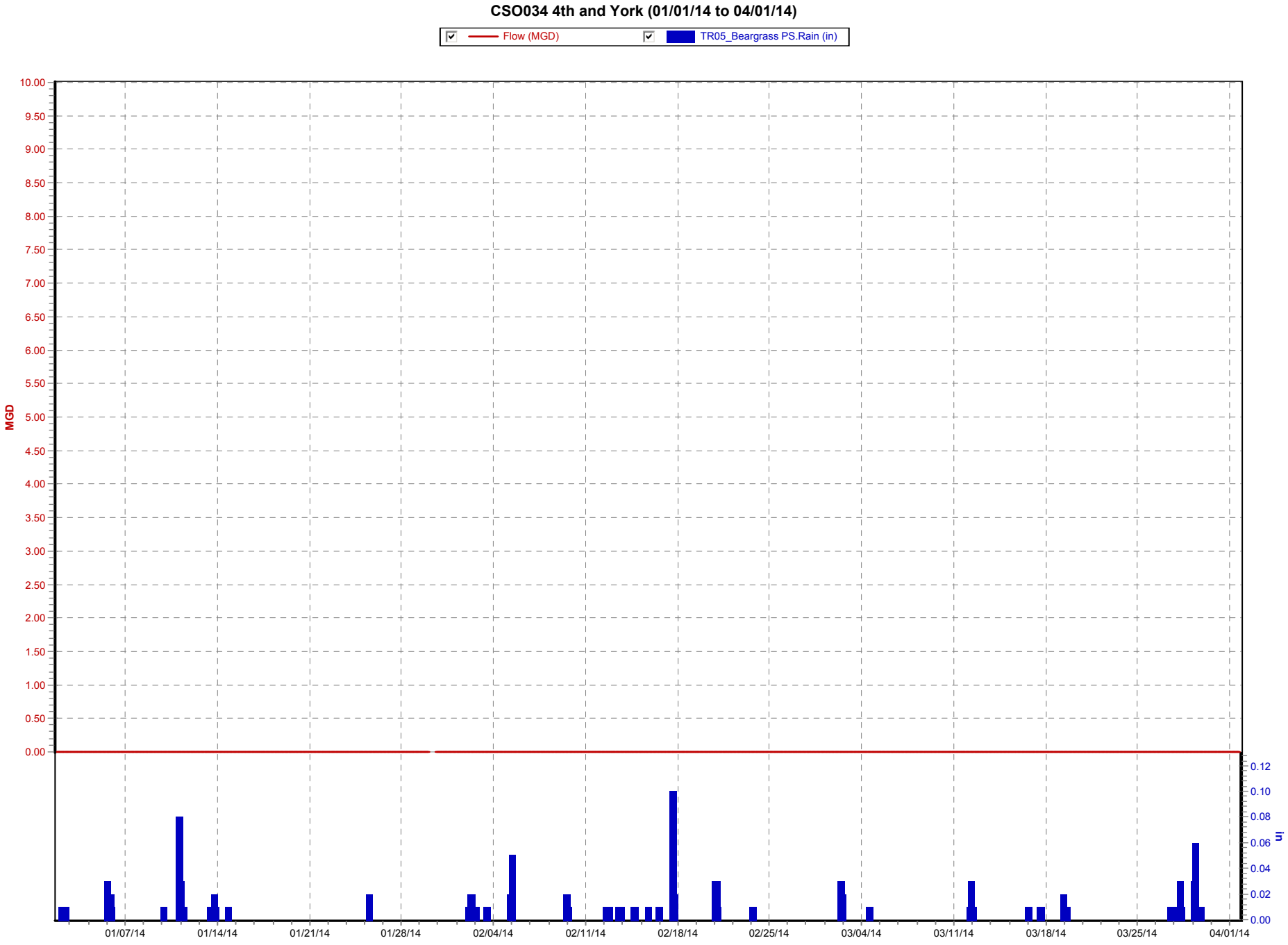


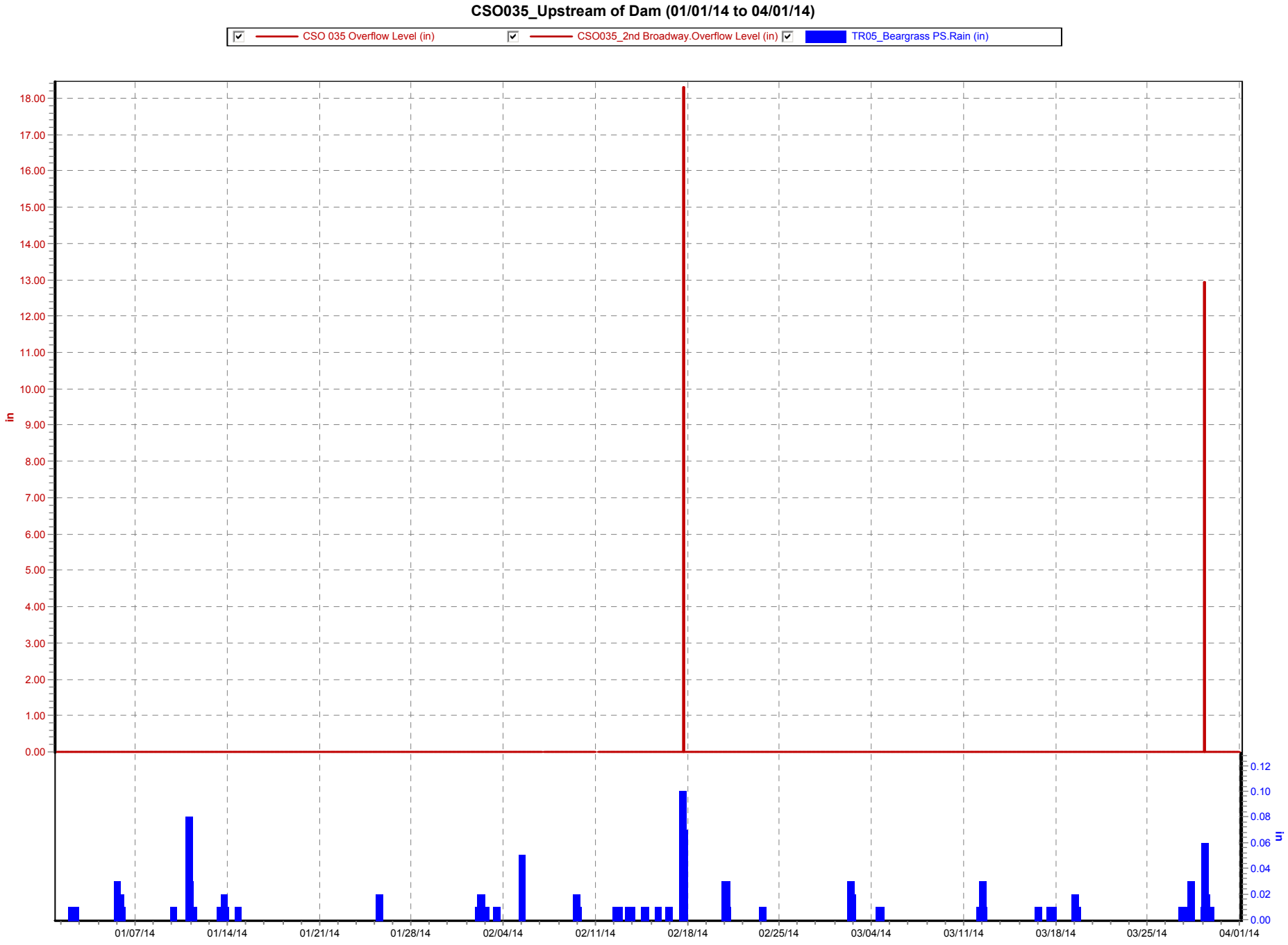

CSO027 7th and Broadway (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

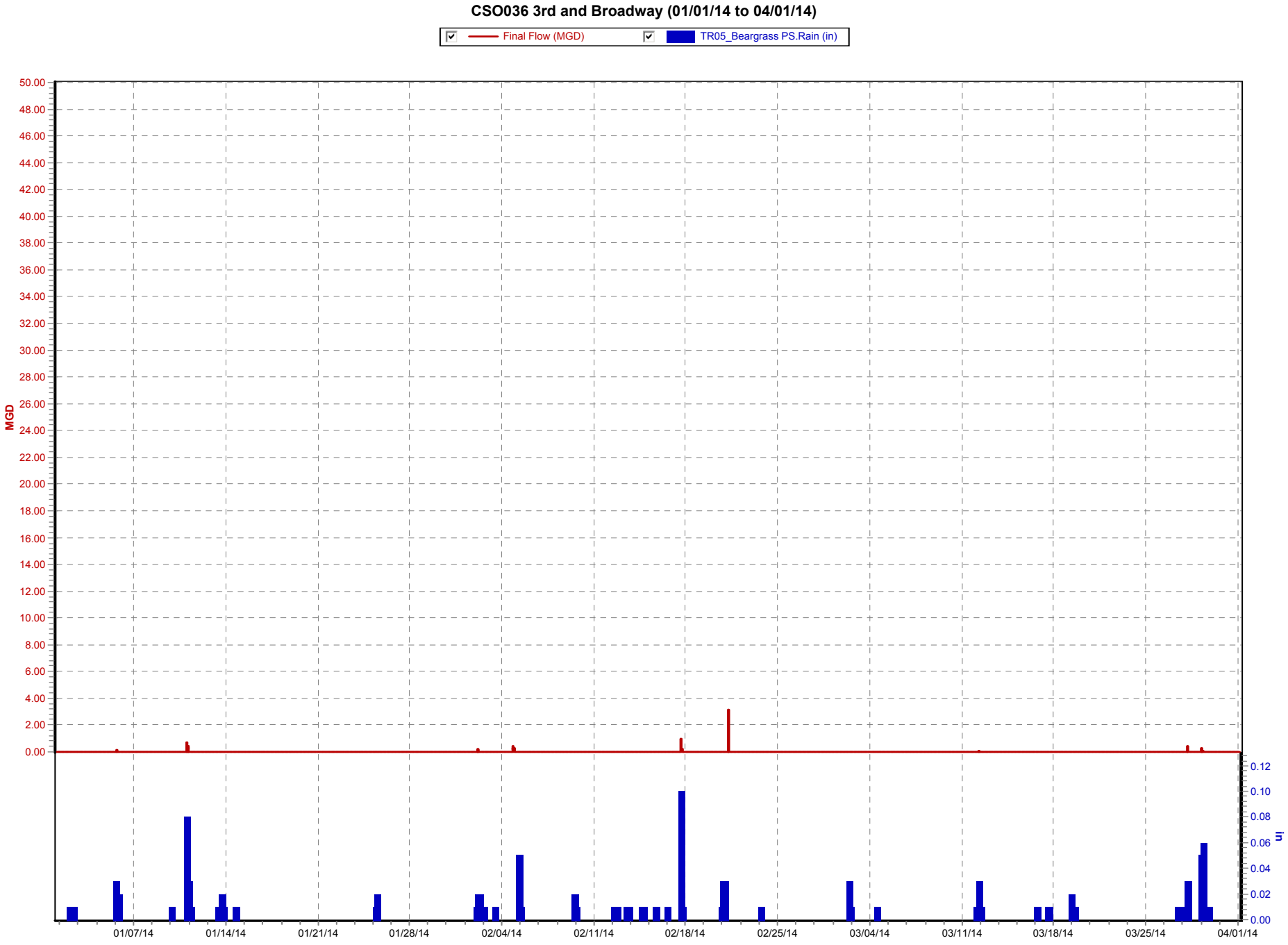

CSO028_6th and York St (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14


CSO029 Overflow (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
1.25
1.20
1.15
1.10
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

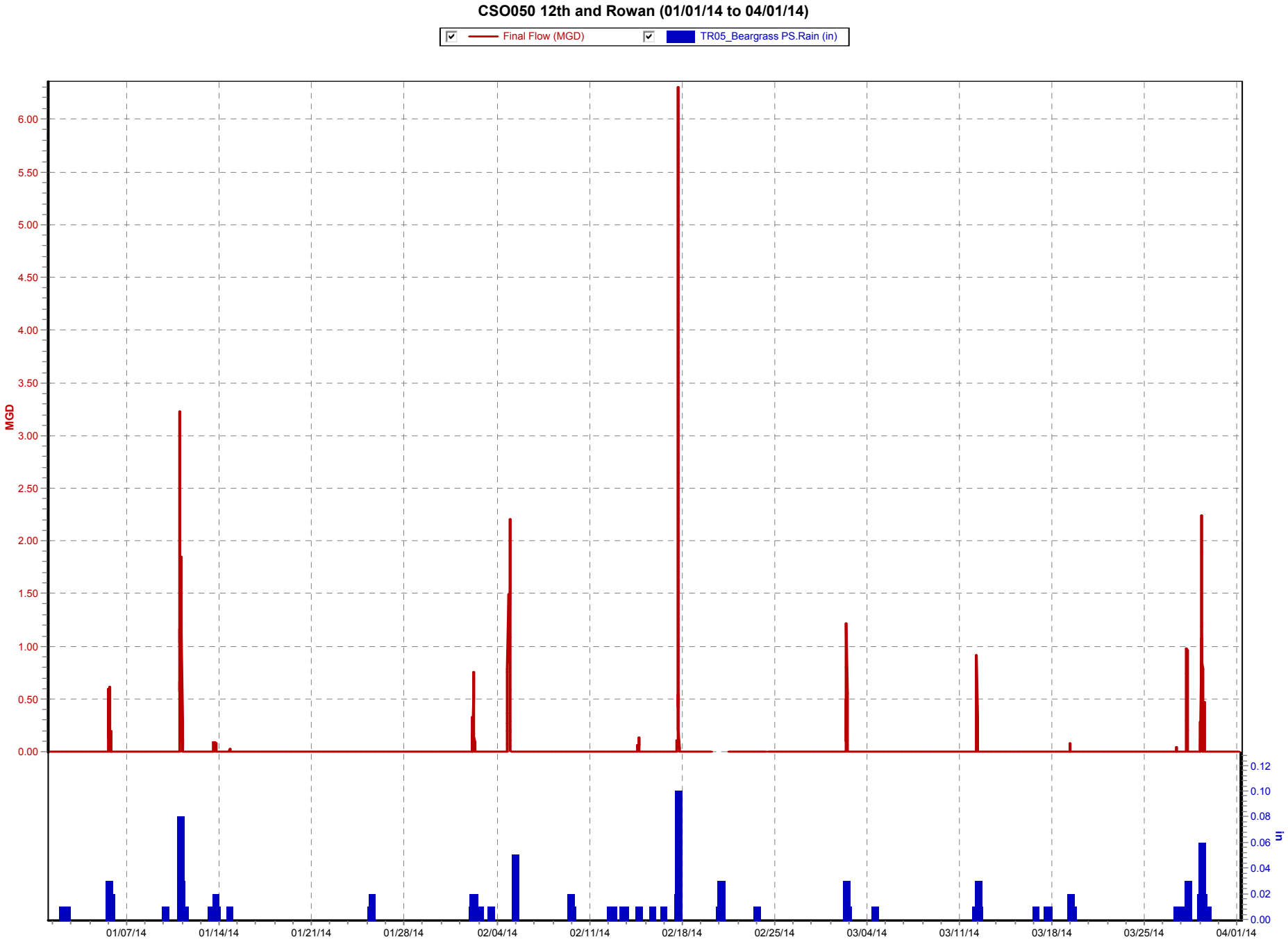

CSO031 (01/01/14 to 04/01/14)
Raw Flow (MGD)
Gap Flow (MGD)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
[telog] 02/15/14 09:15:00 - Inspection determined that the vent tube was damaged producing invalid data. Equipment has been repaired 3/17/14
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO034 4th and York (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

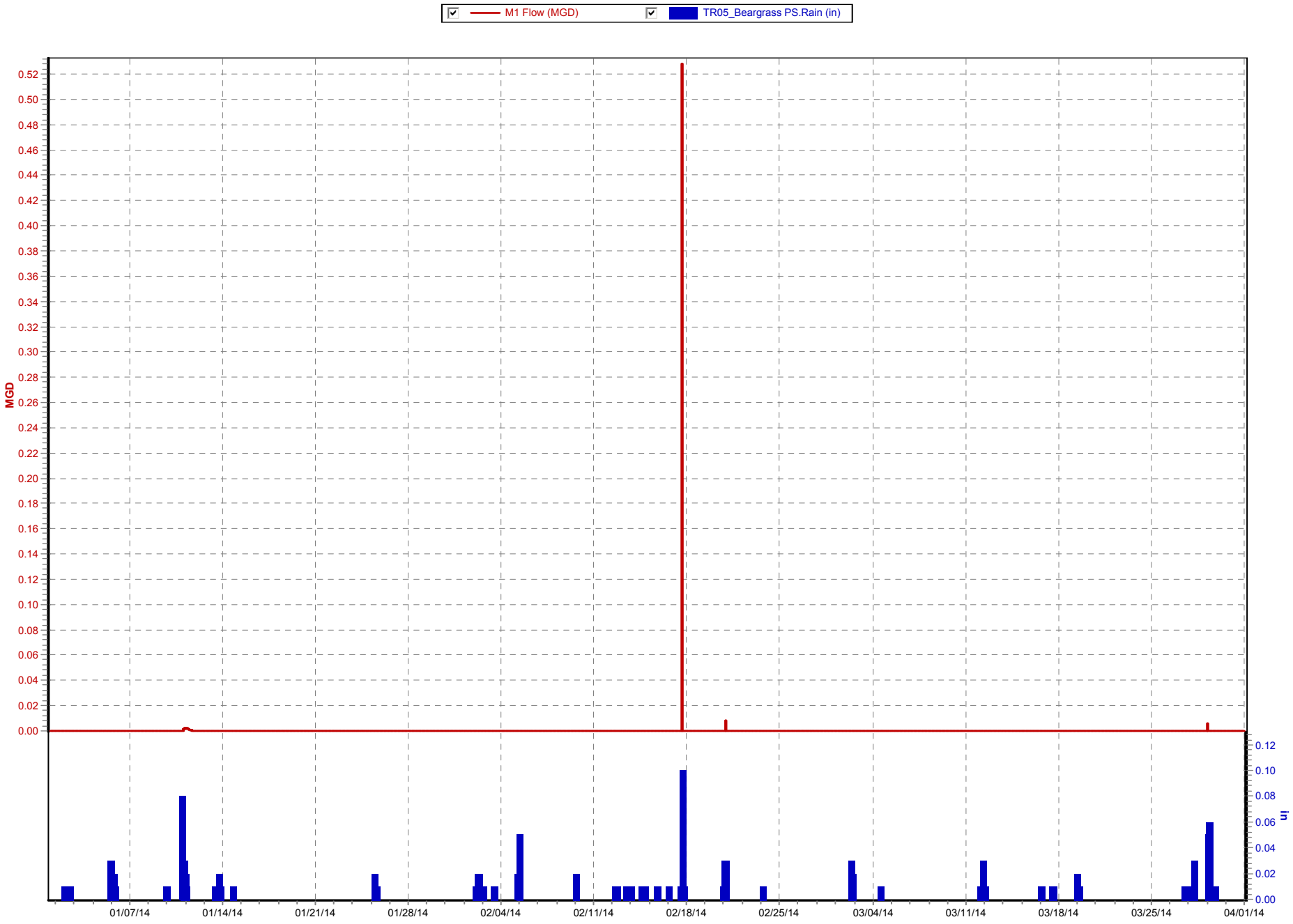

CSO035_Upstream of Dam (01/01/14 to 04/01/14)
CSO 035 Overflow Level (in)
CSO035_2nd Broadway.Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

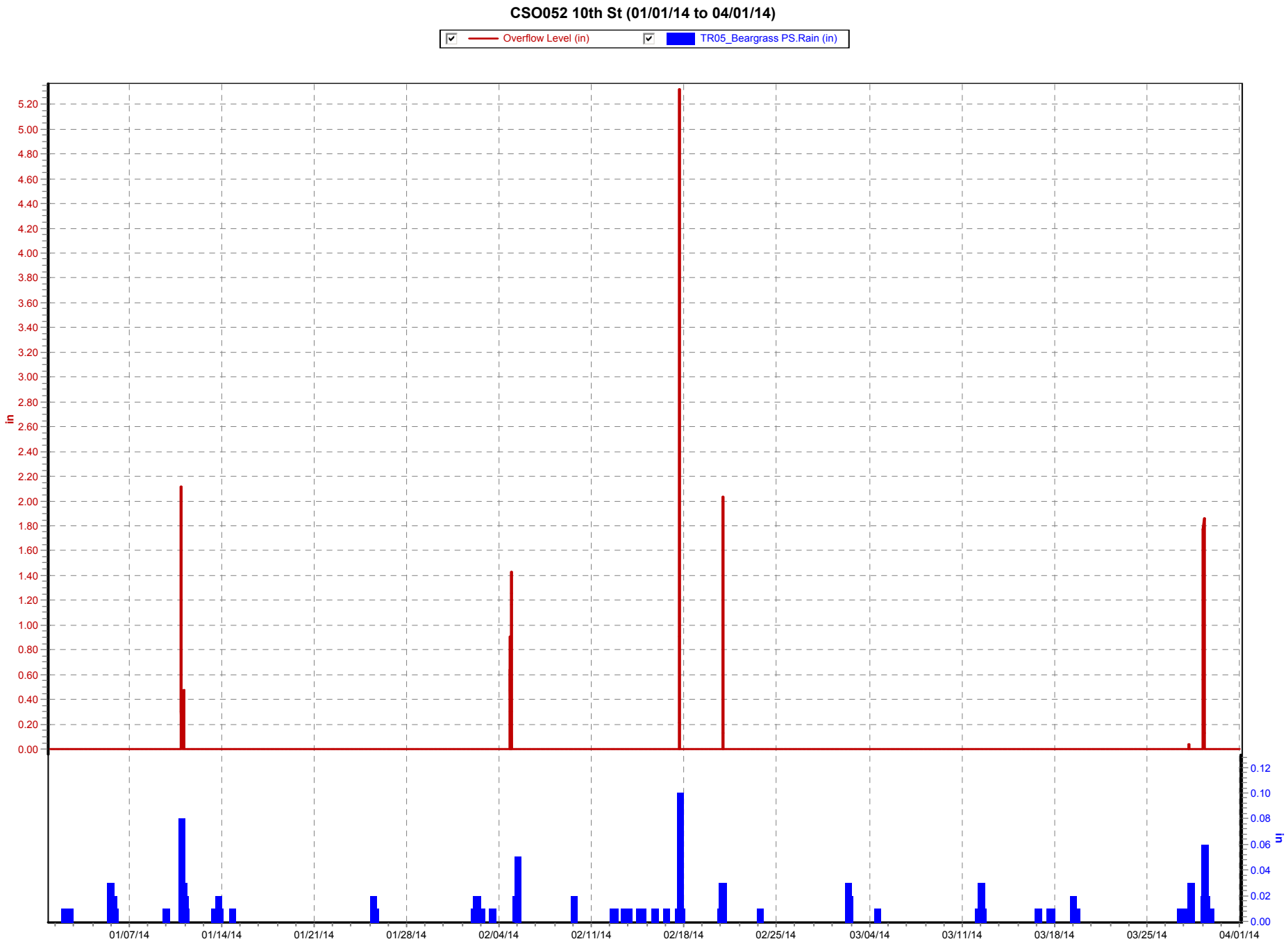

CSO036 3rd and Broadway (01/01/14 to 04/01/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
50.00
48.00
46.00
44.00
42.00
40.00
38.00
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

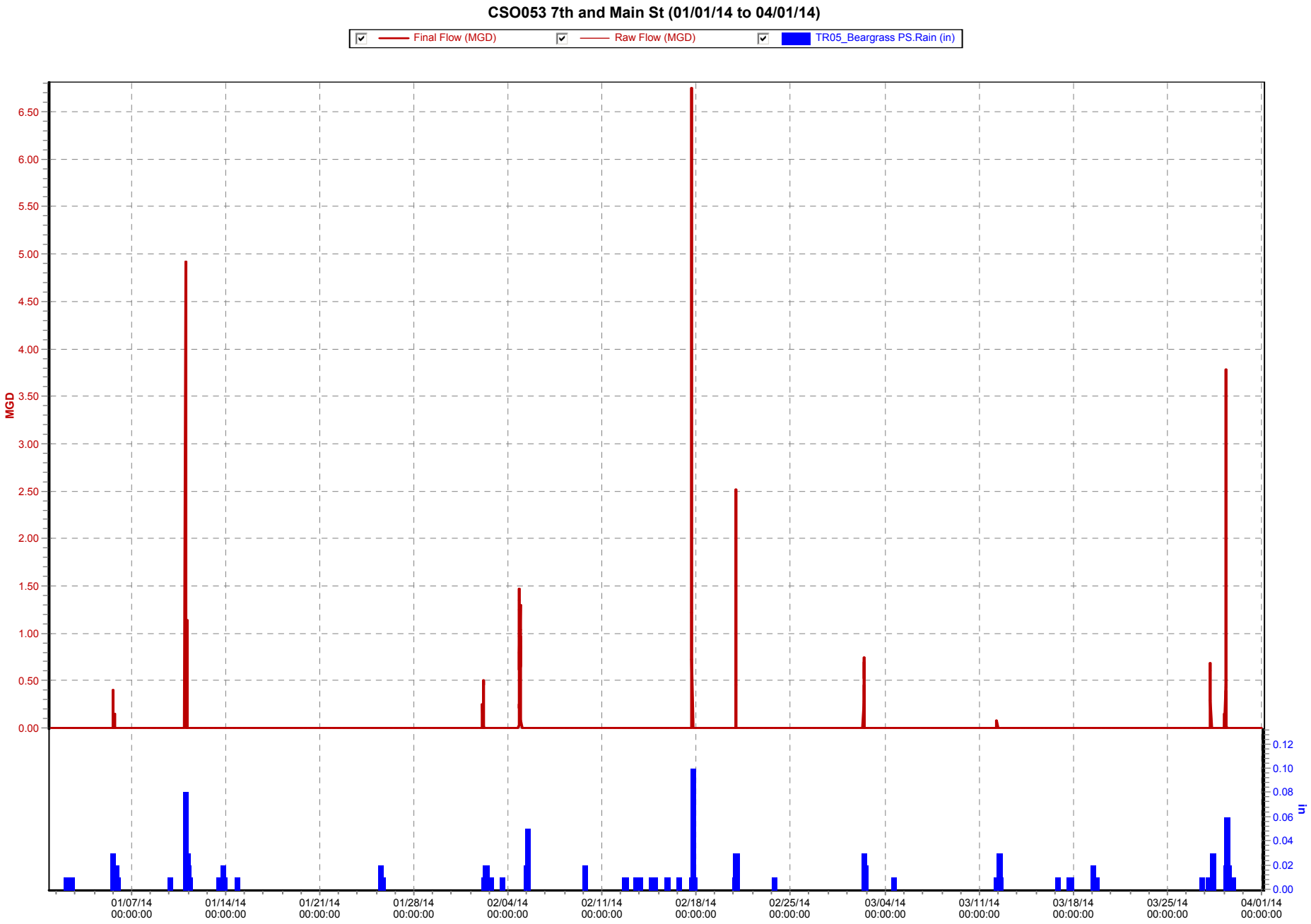
CSO038 5th and Broadway (01/01/14 to 04/01/14)

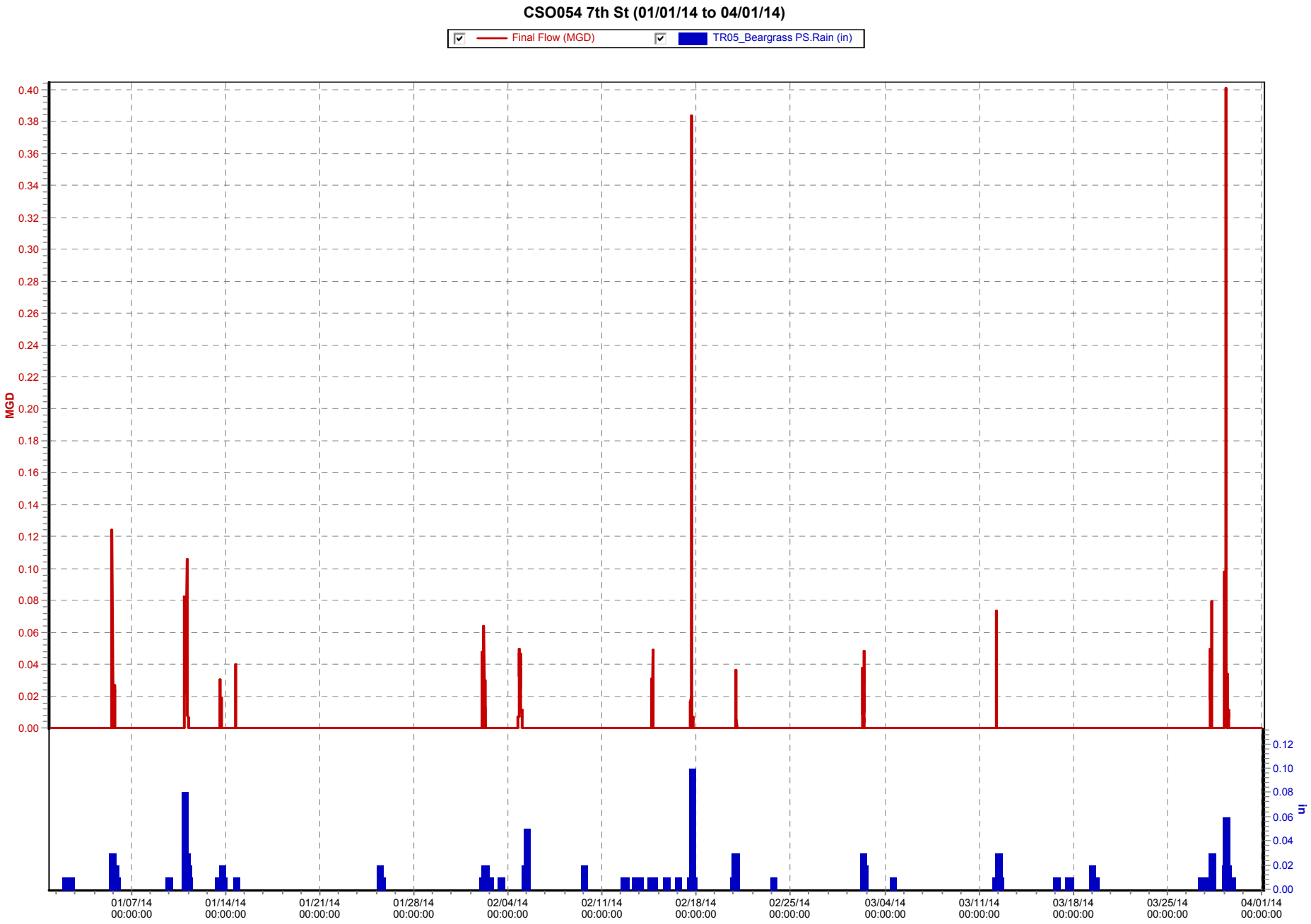

CSO050 12th and Rowan (01/01/14 to 04/01/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

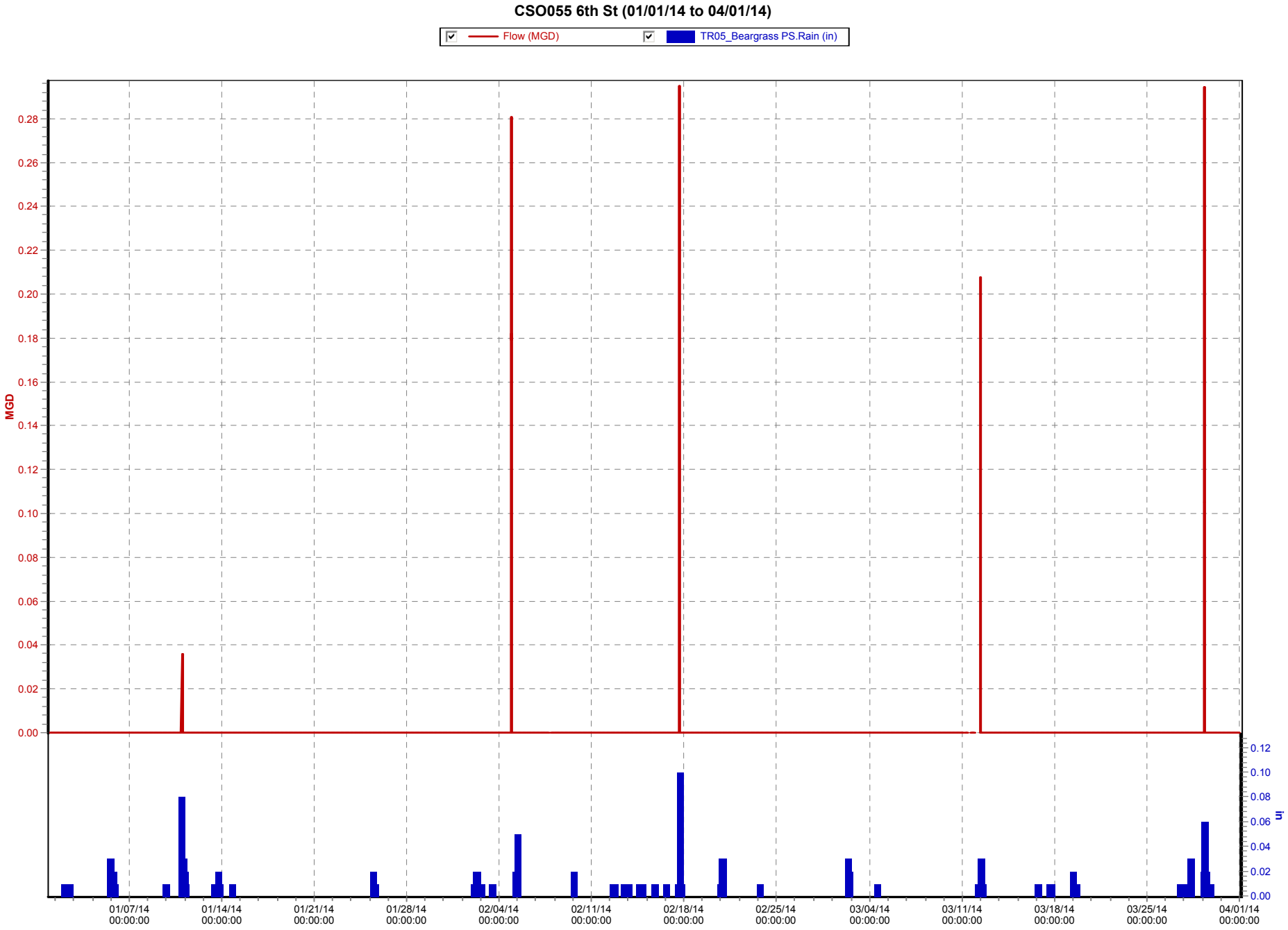
CSO051 11th St and Main St (01/01/14 to 04/01/14)

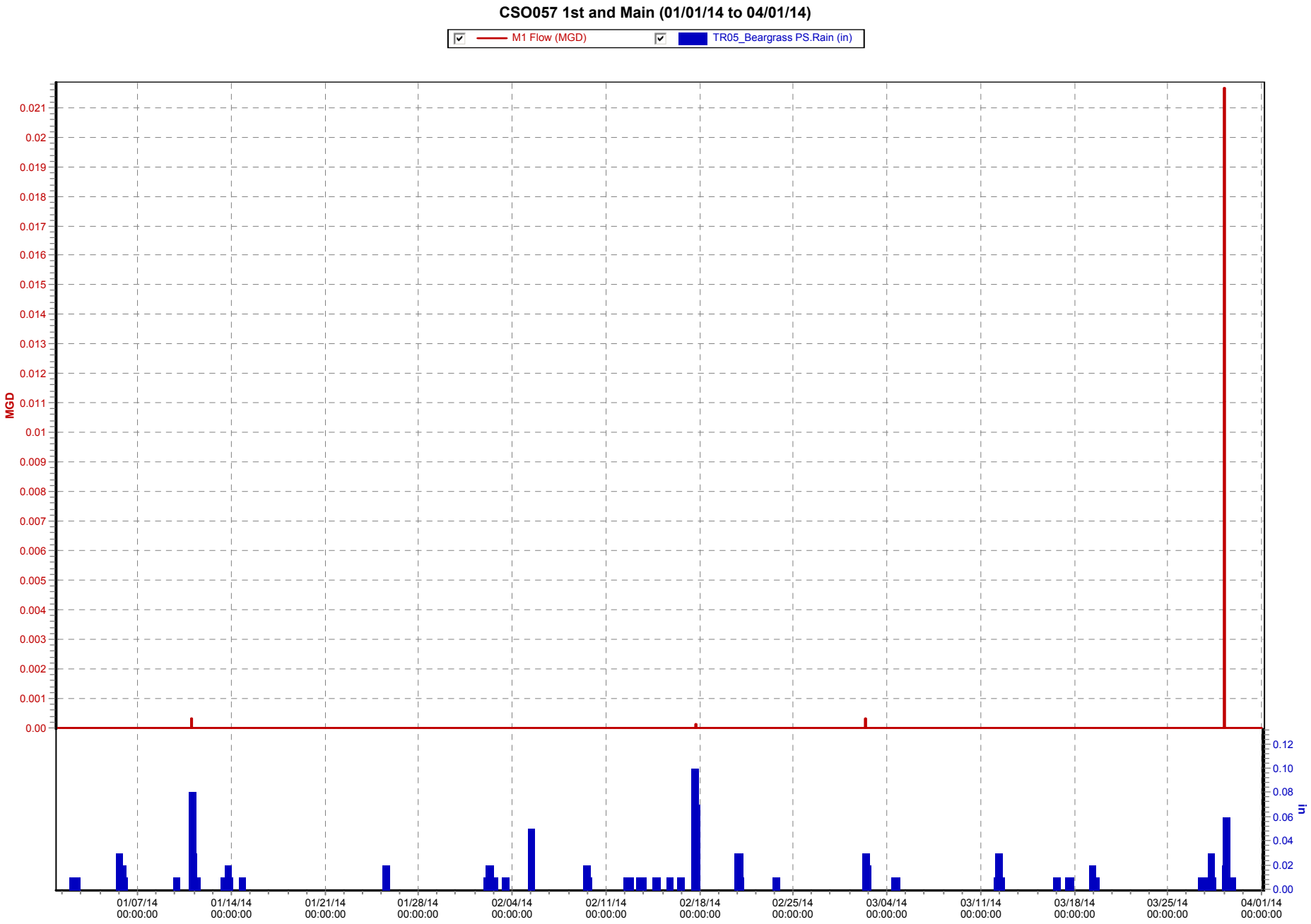


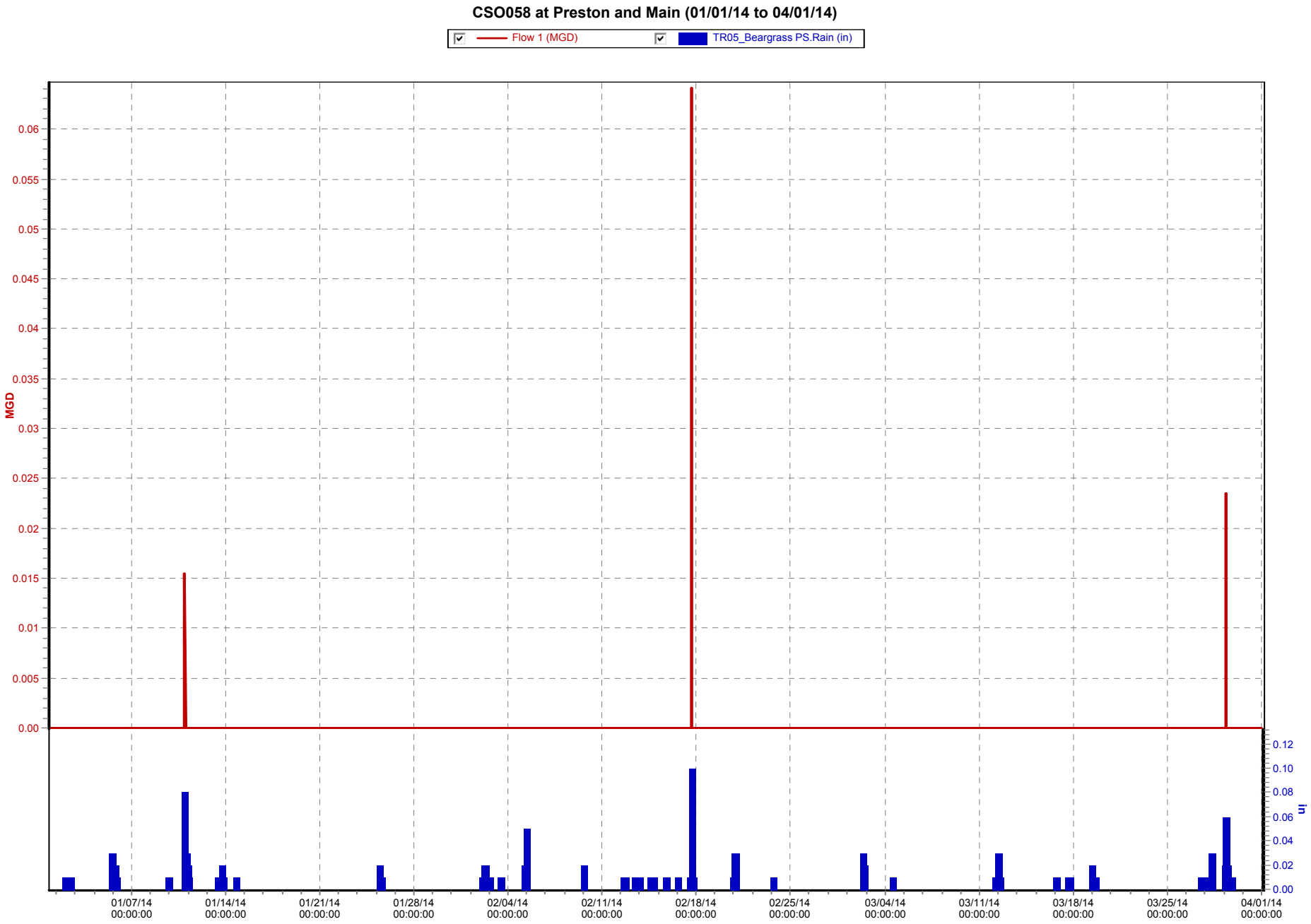

CSO052 10th St (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
5.20
5.00
4.80
4.60
4.40
4.20
4.00
3.80
3.60
3.40
3.20
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

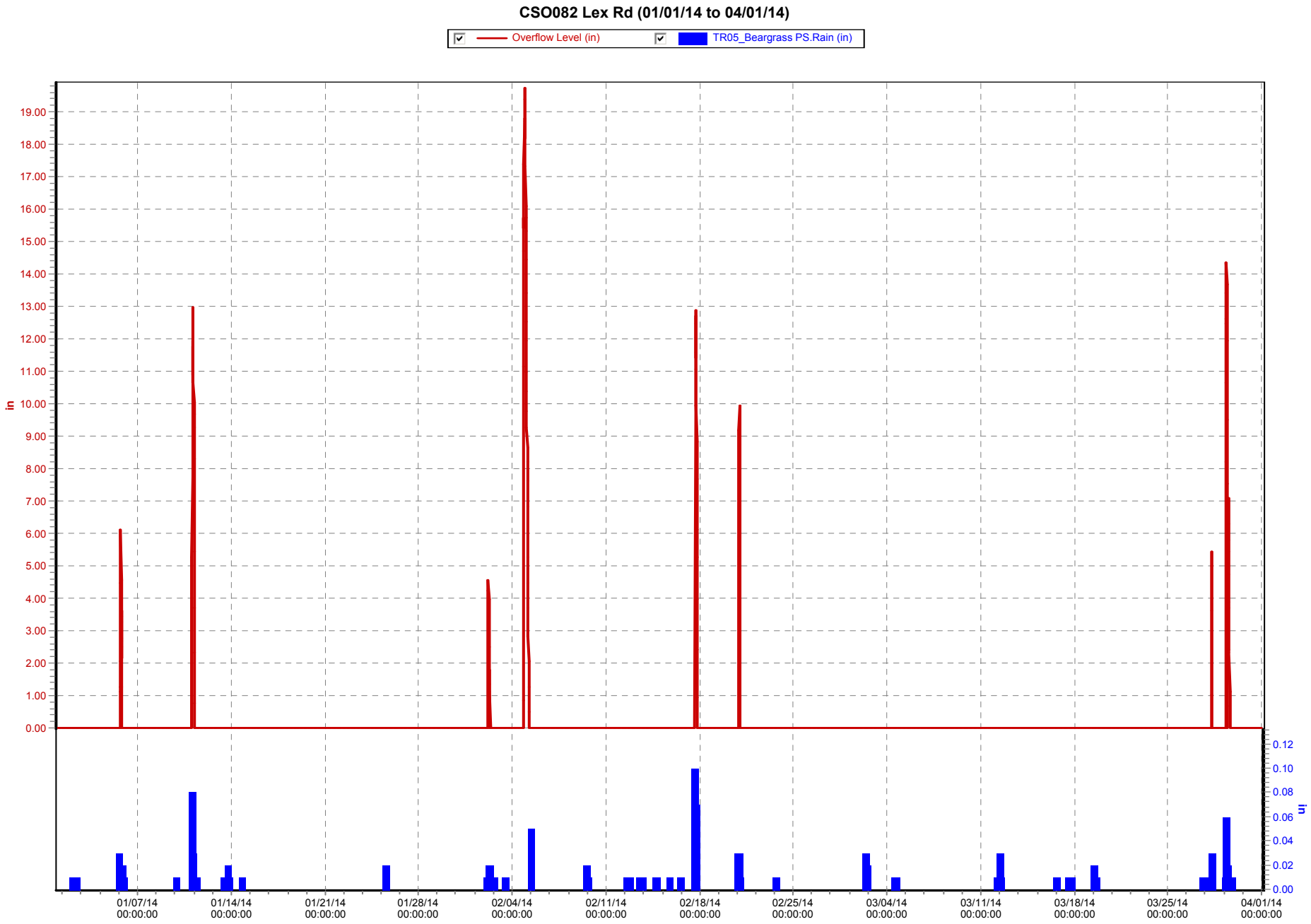

CSO053 7th and Main St (01/01/14 to 04/01/14)
Final Flow (MGD)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

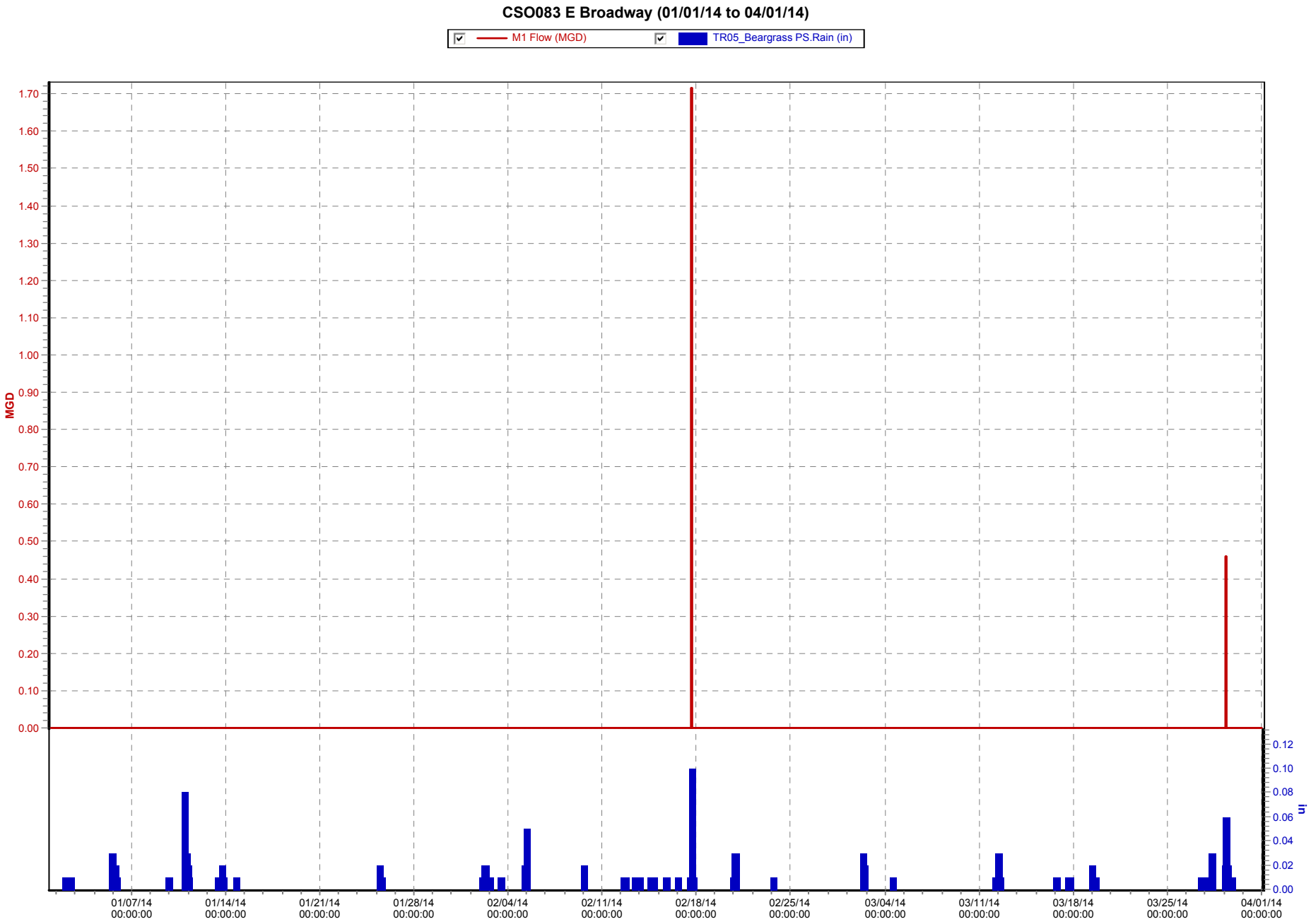

CSO054 7th St (01/01/14 to 04/01/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
0.40
0.38
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

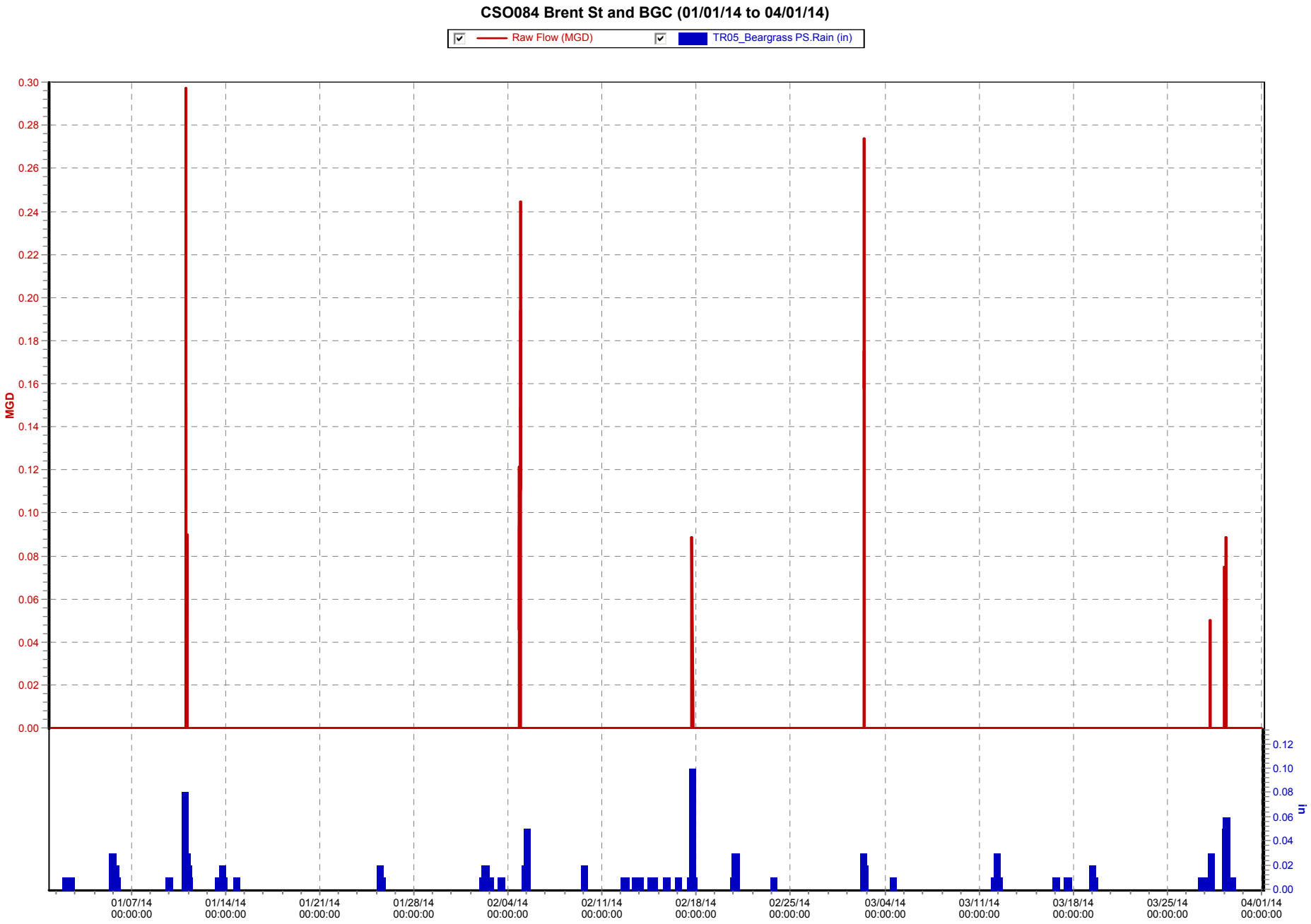

CSO055 6th St (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

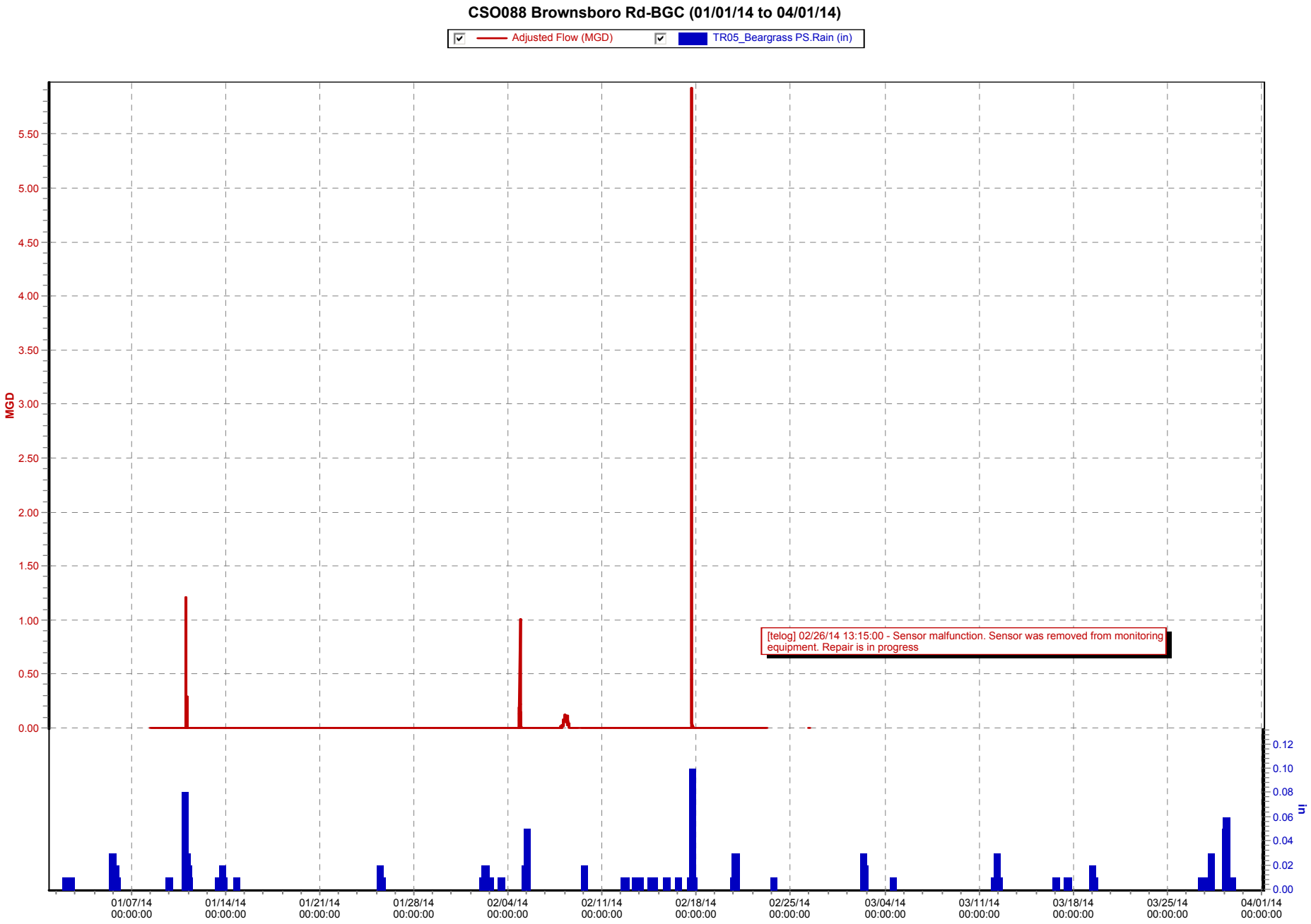

CSO057 1st and Main (01/01/14 to 04/01/14)
M1 Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
0.021
0.02
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO058 at Preston and Main (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO082 Lex Rd (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

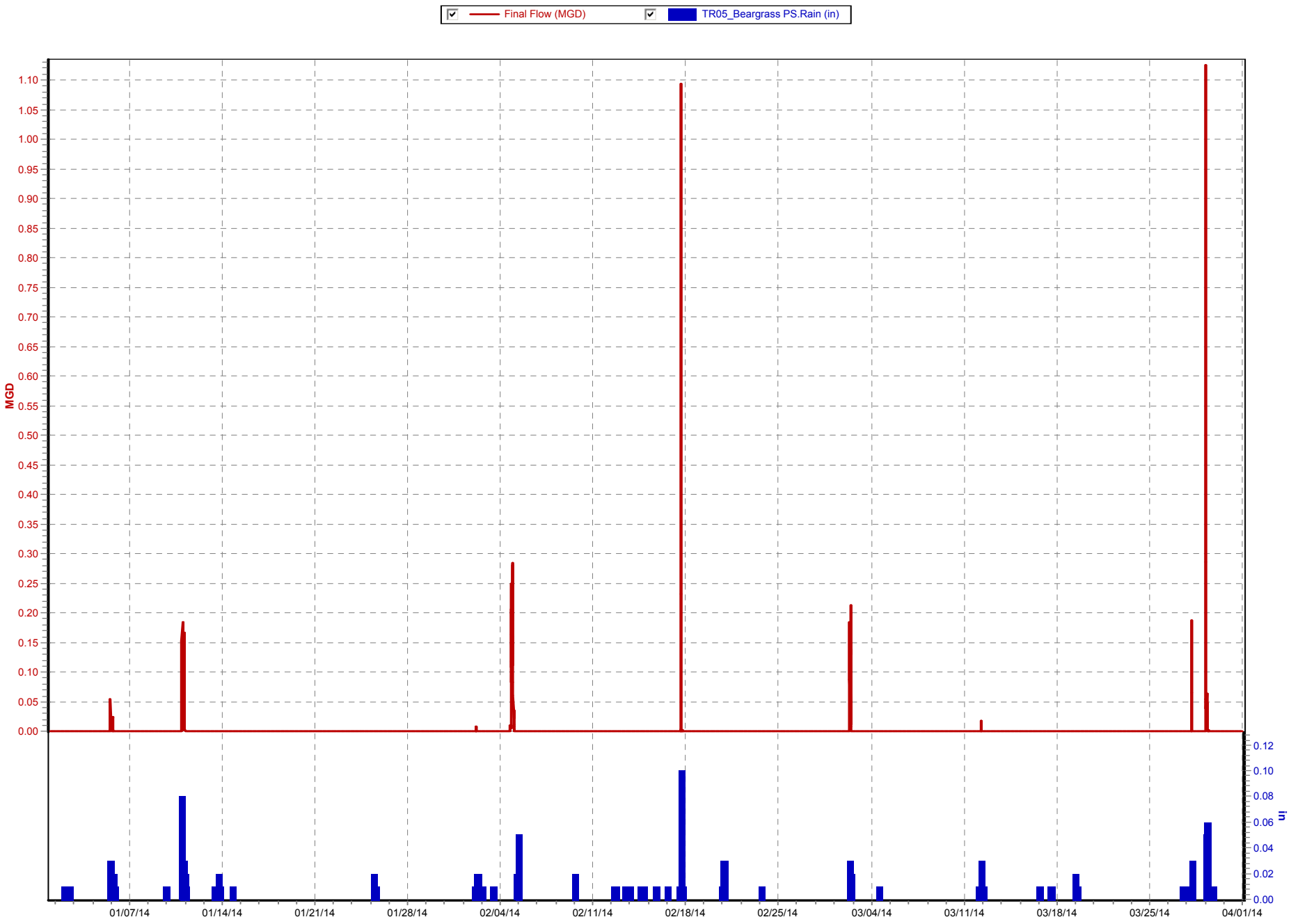

CSO083 E Broadway (01/01/14 to 04/01/14)
M1 Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

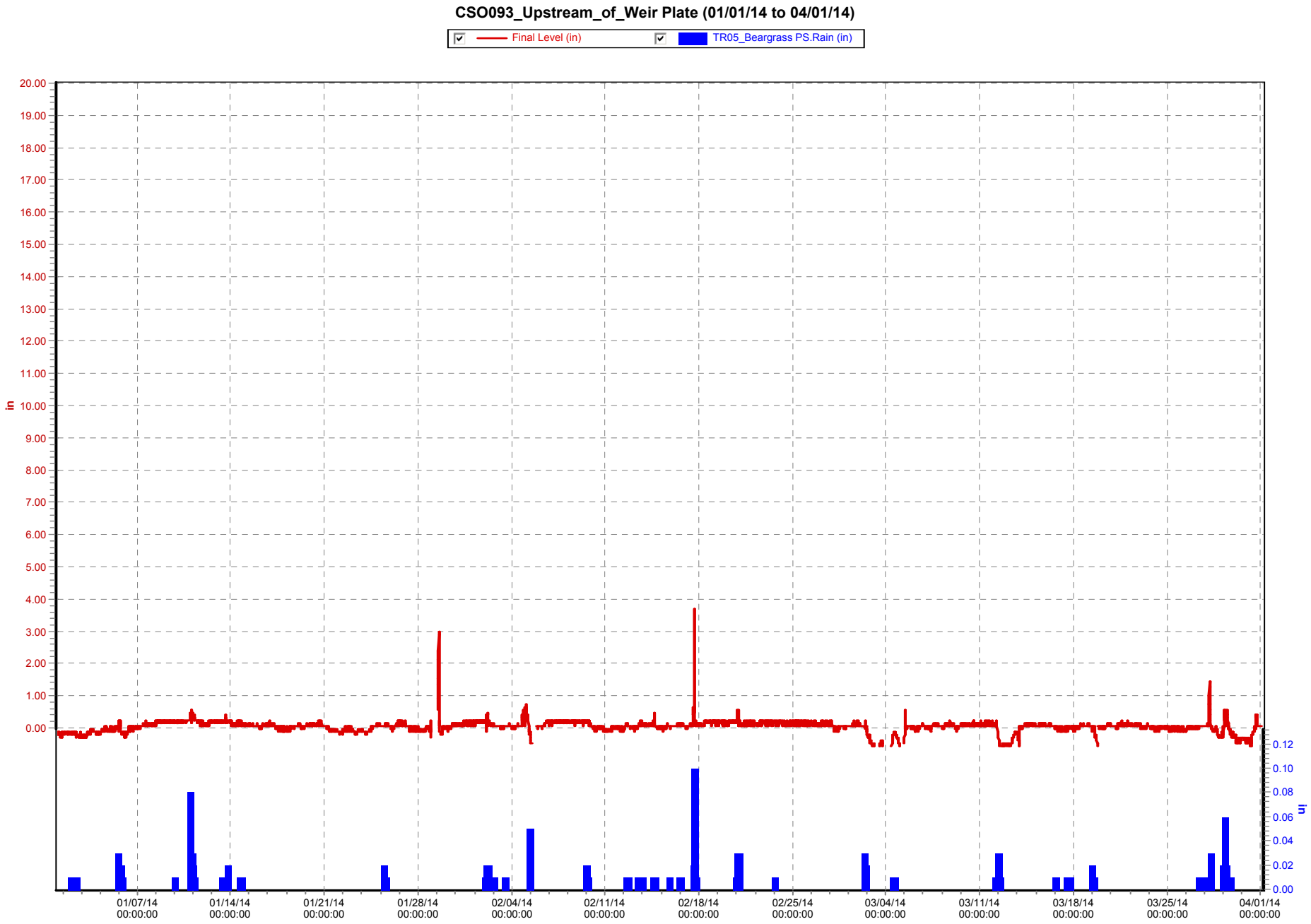

CSO084 Brent St and BGC (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO088 Brownsboro Rd-BGC (01/01/14 to 04/01/14)
Adjusted Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
[telog] 02/26/14 13:15:00 - Sensor malfunction. Sensor was removed from monitoring equipment. Repair is in progress
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

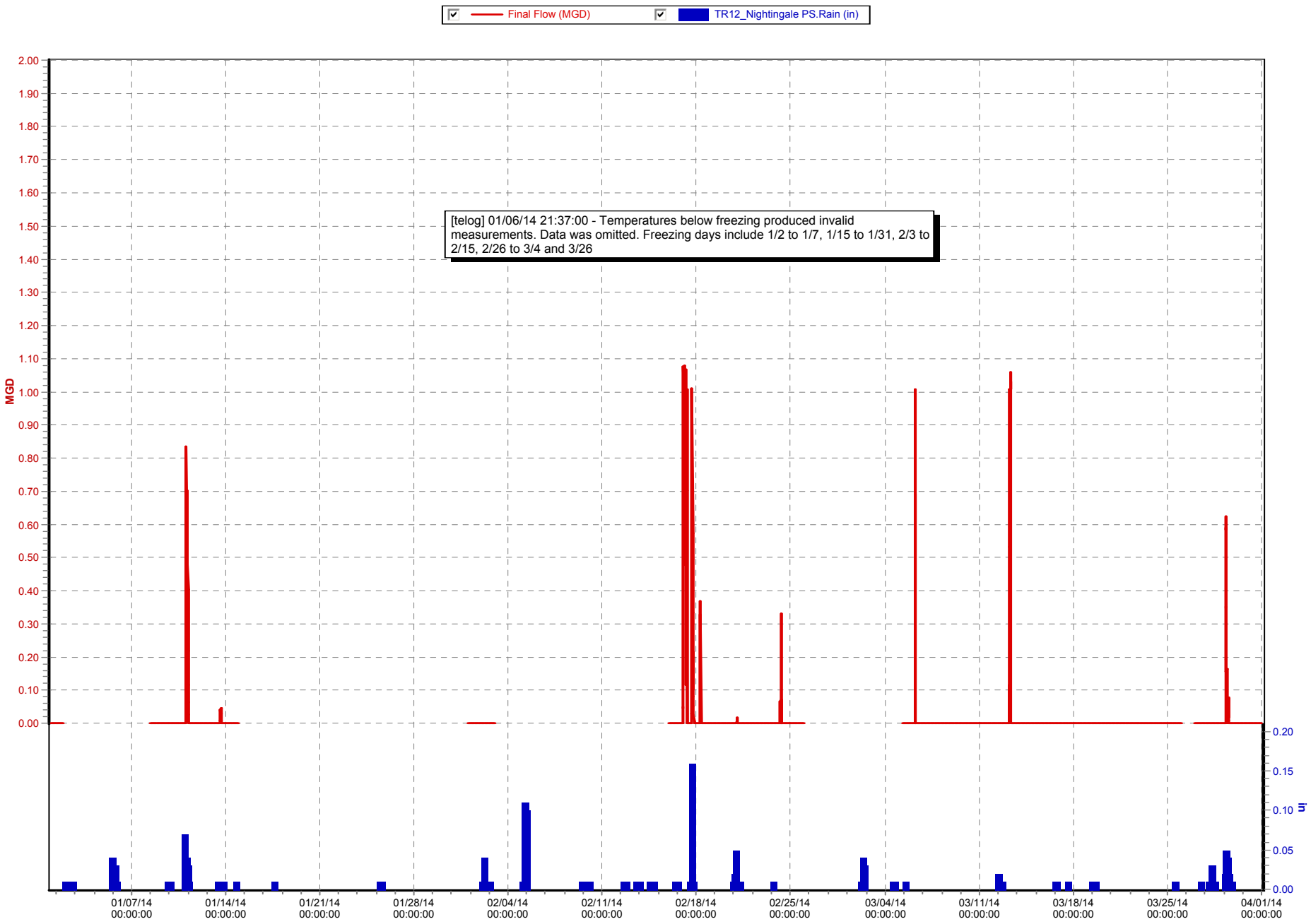
CSO091 Schiller Ave (01/01/14 to 04/01/14)

CSO092 Schiller Ave (01/01/14 to 04/01/14)

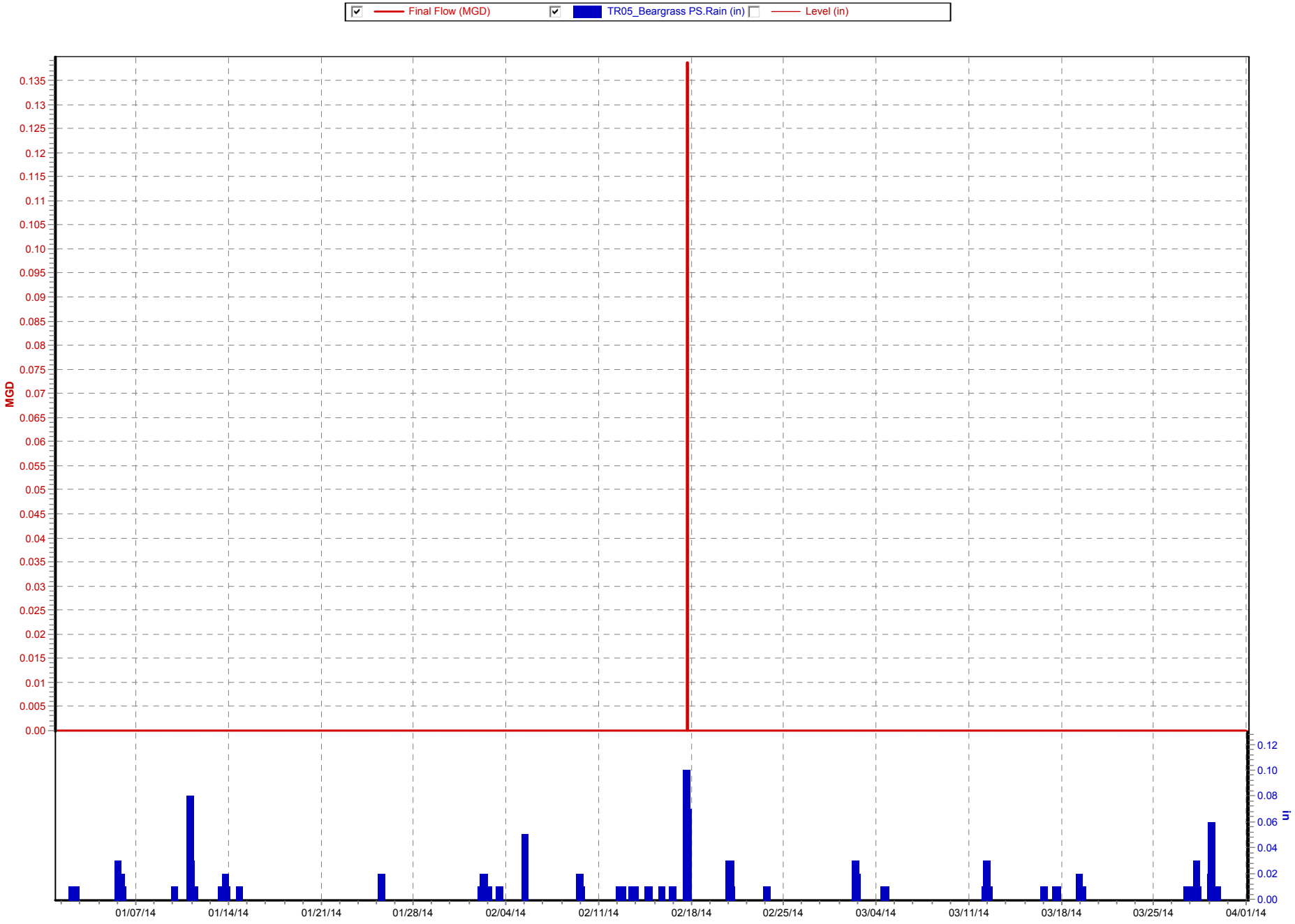


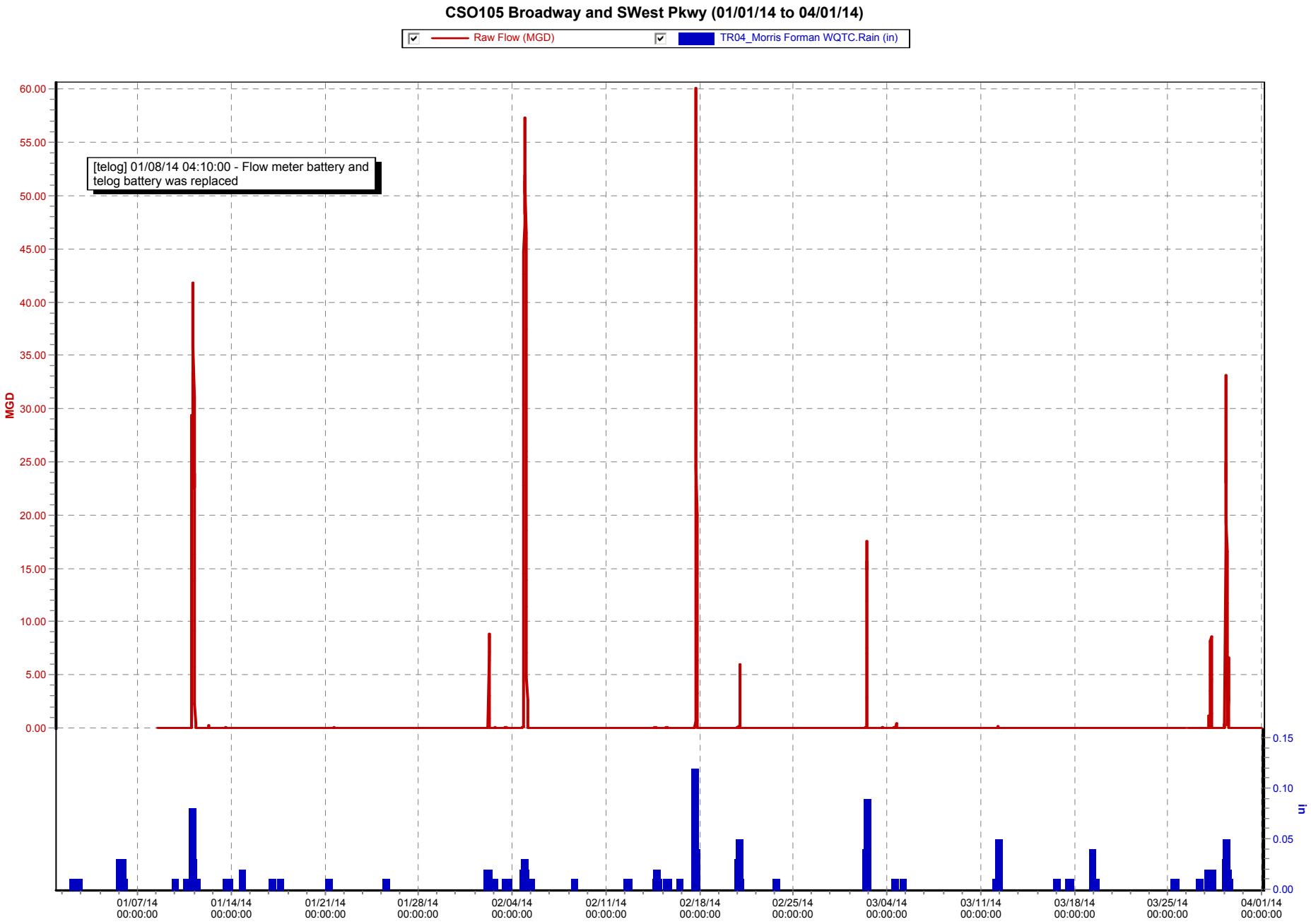

CSO093_Upstream_of_Weir Plate (01/01/14 to 04/01/14)
Final Level (in)
TR05_Beargrass PS.Rain (in)
in
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

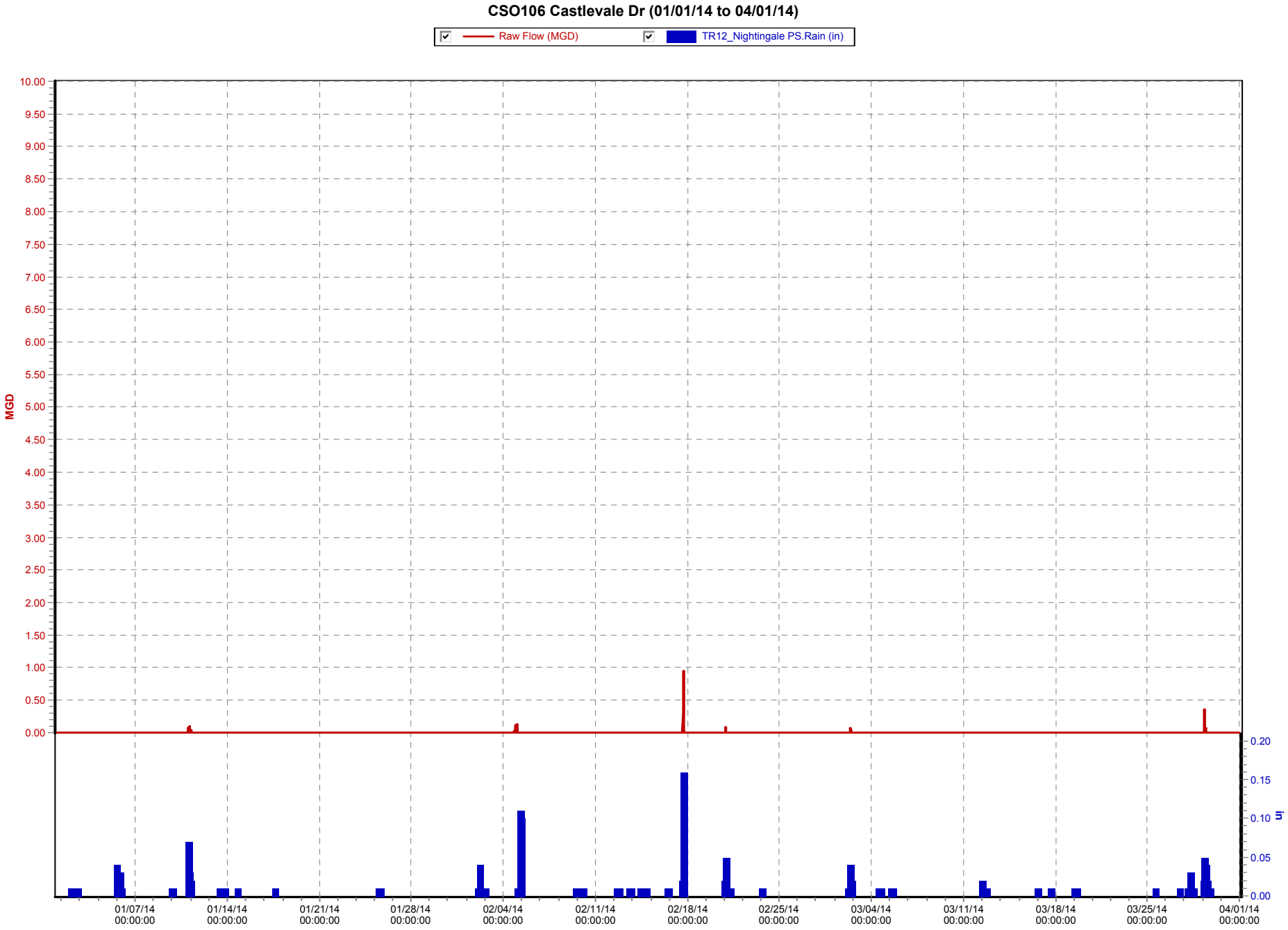
CSO097 Castlevale Dr (01/01/14 to 04/01/14)

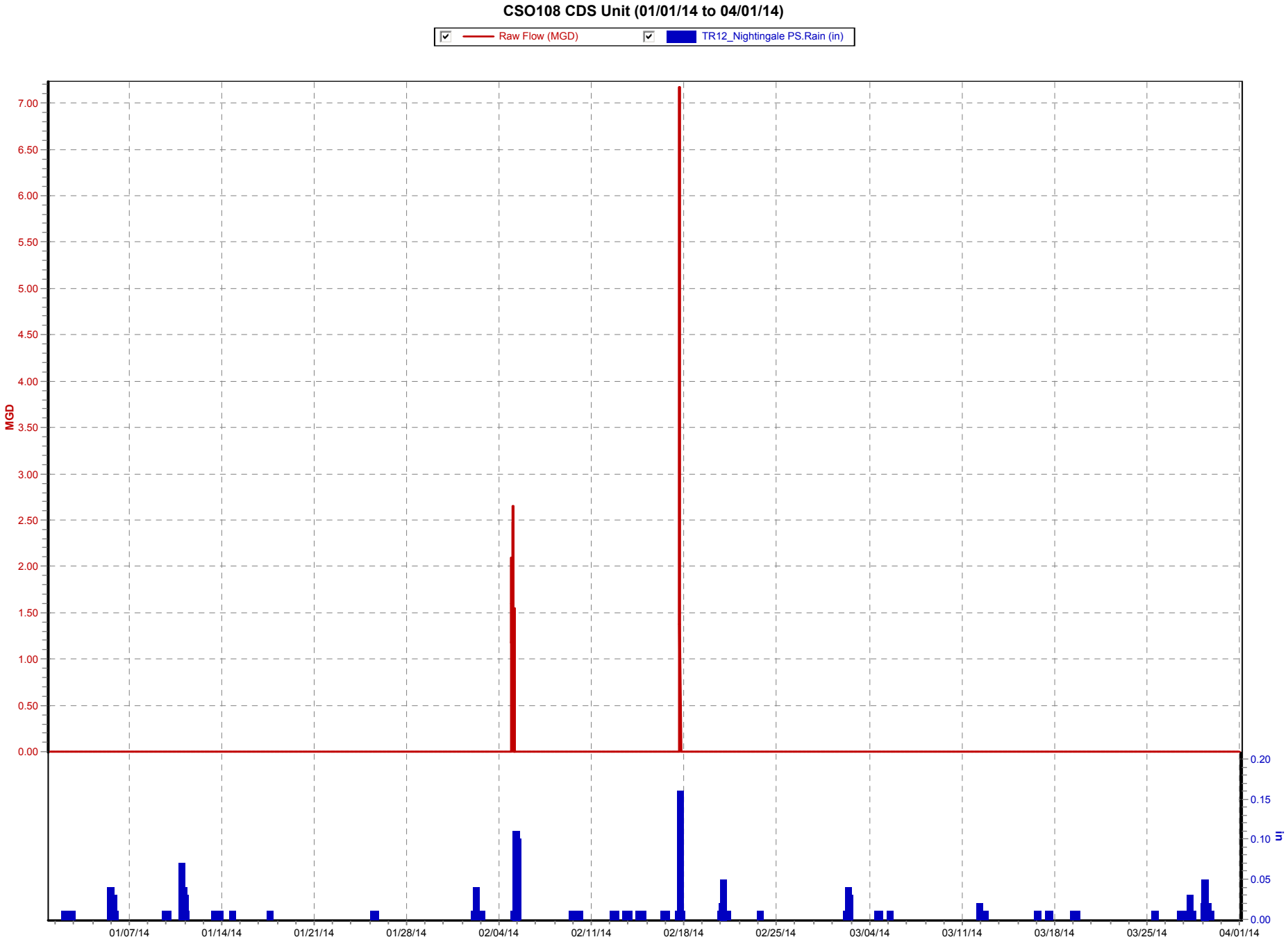


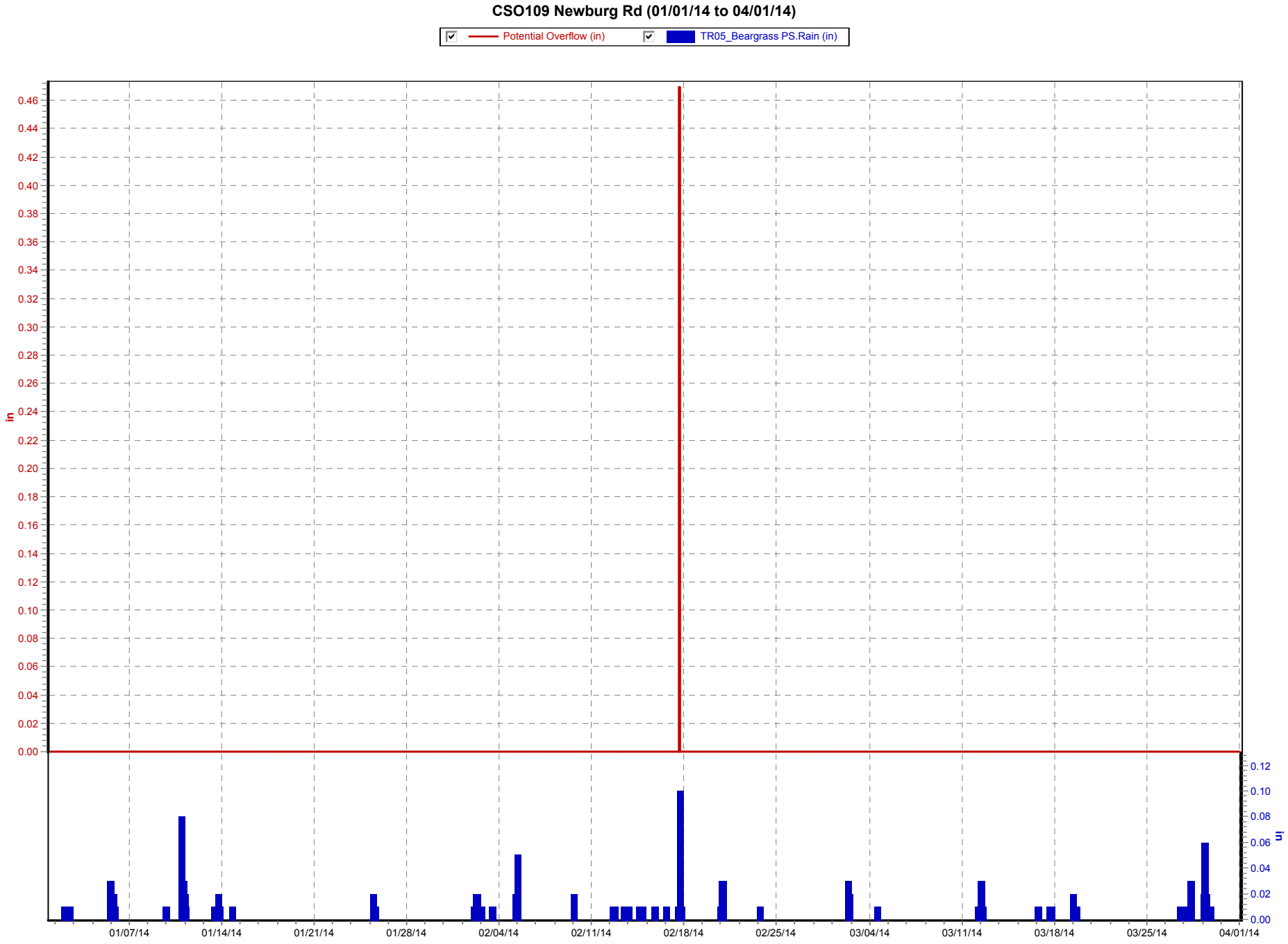
CSO104 SWest Pkwy and Broadway (01/01/14 to 04/01/14)



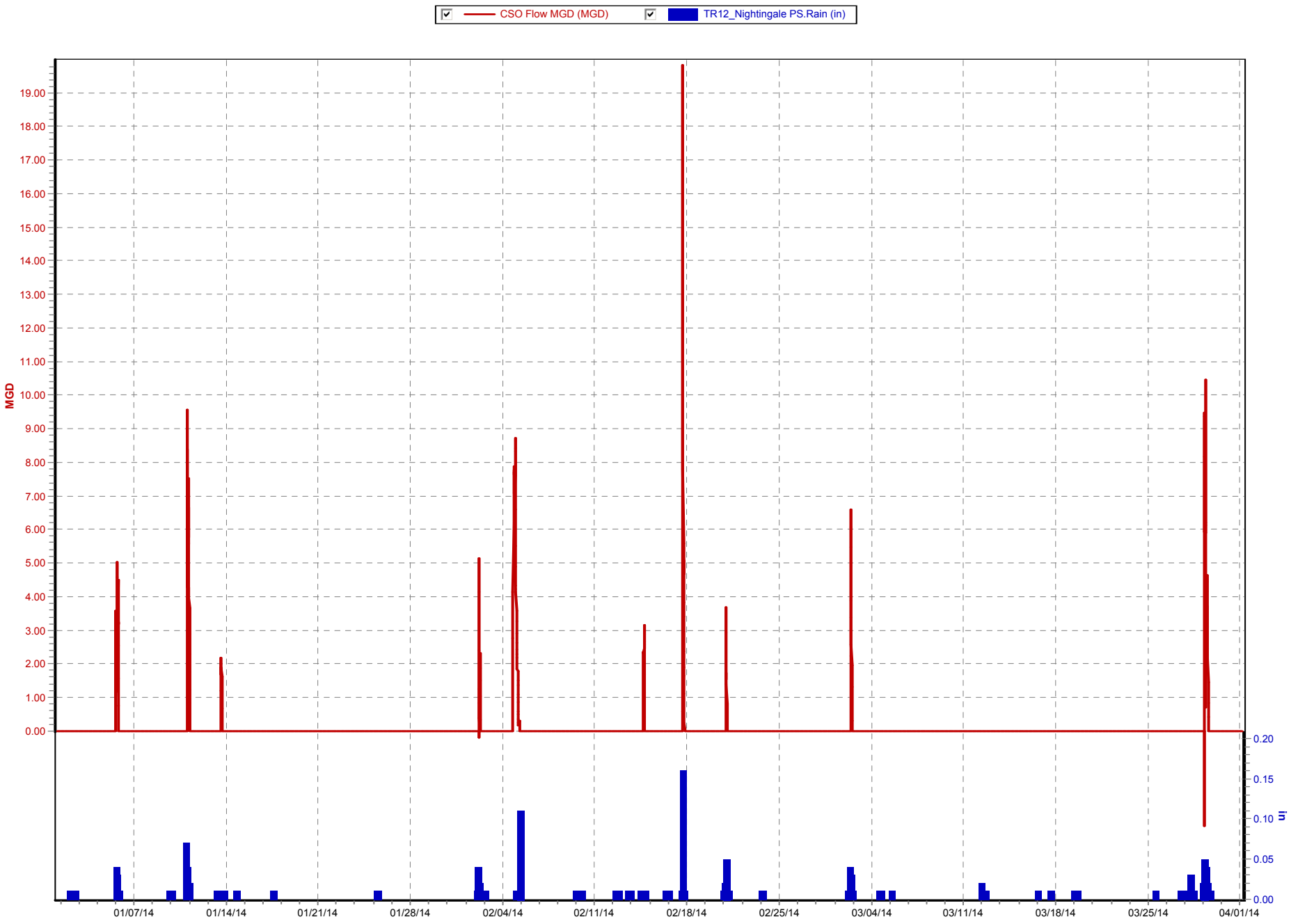

CSO105 Broadway and SWest Pkwy (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR04_Morris Forman WQTC.Rain (in)
[telog] 01/08/14 04:10:00 - Flow meter battery and telog battery was replaced
MGD
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.15
0.10
0.05
0.00
IN
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO106 Castlevale Dr (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR12_Nightingale PS.Rain (in)
MGD
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.20
0.15
0.10
0.05
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

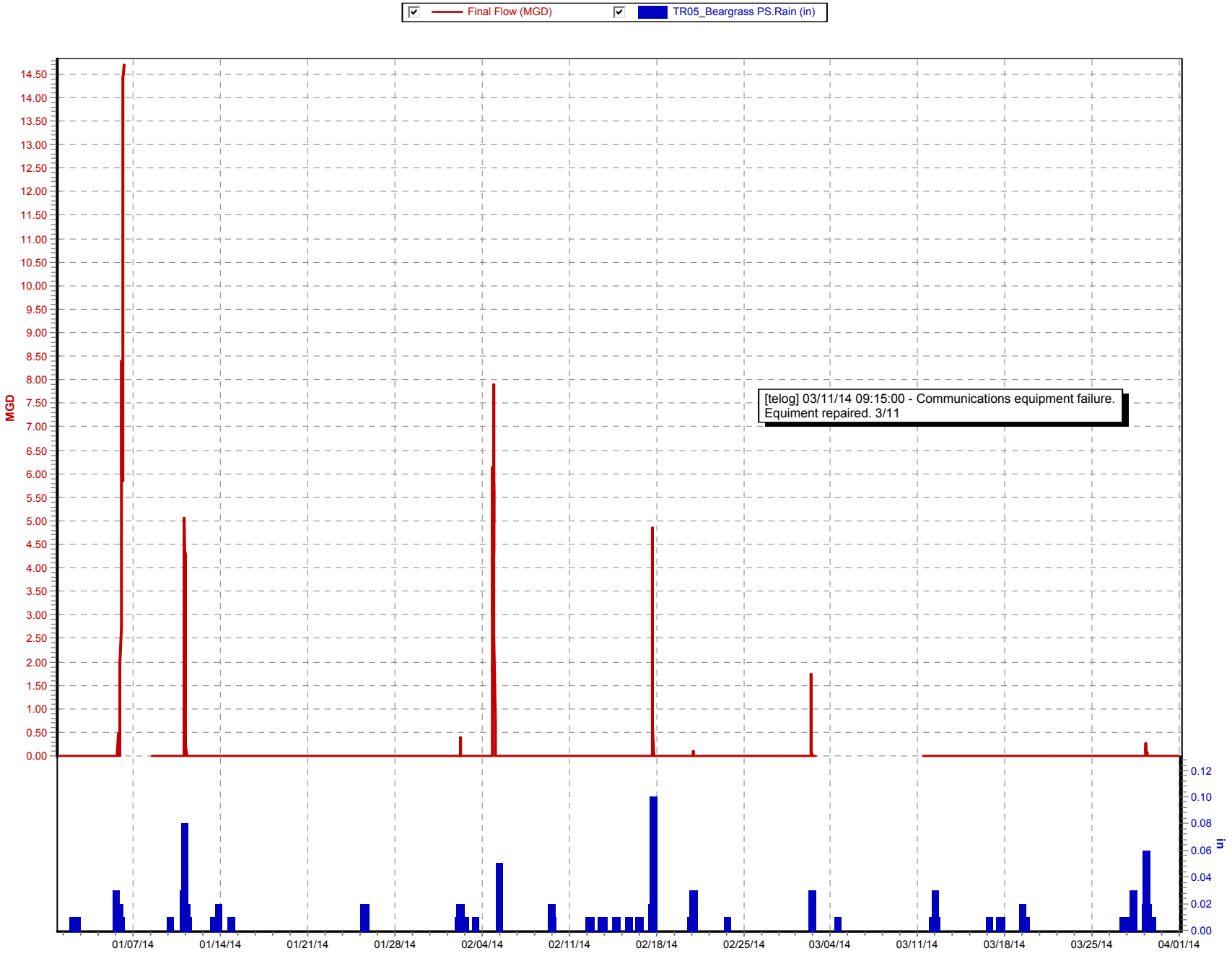

CSO108 CDS Unit (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR12_Nightingale PS.Rain (in)
MGD
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
in
0.20
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

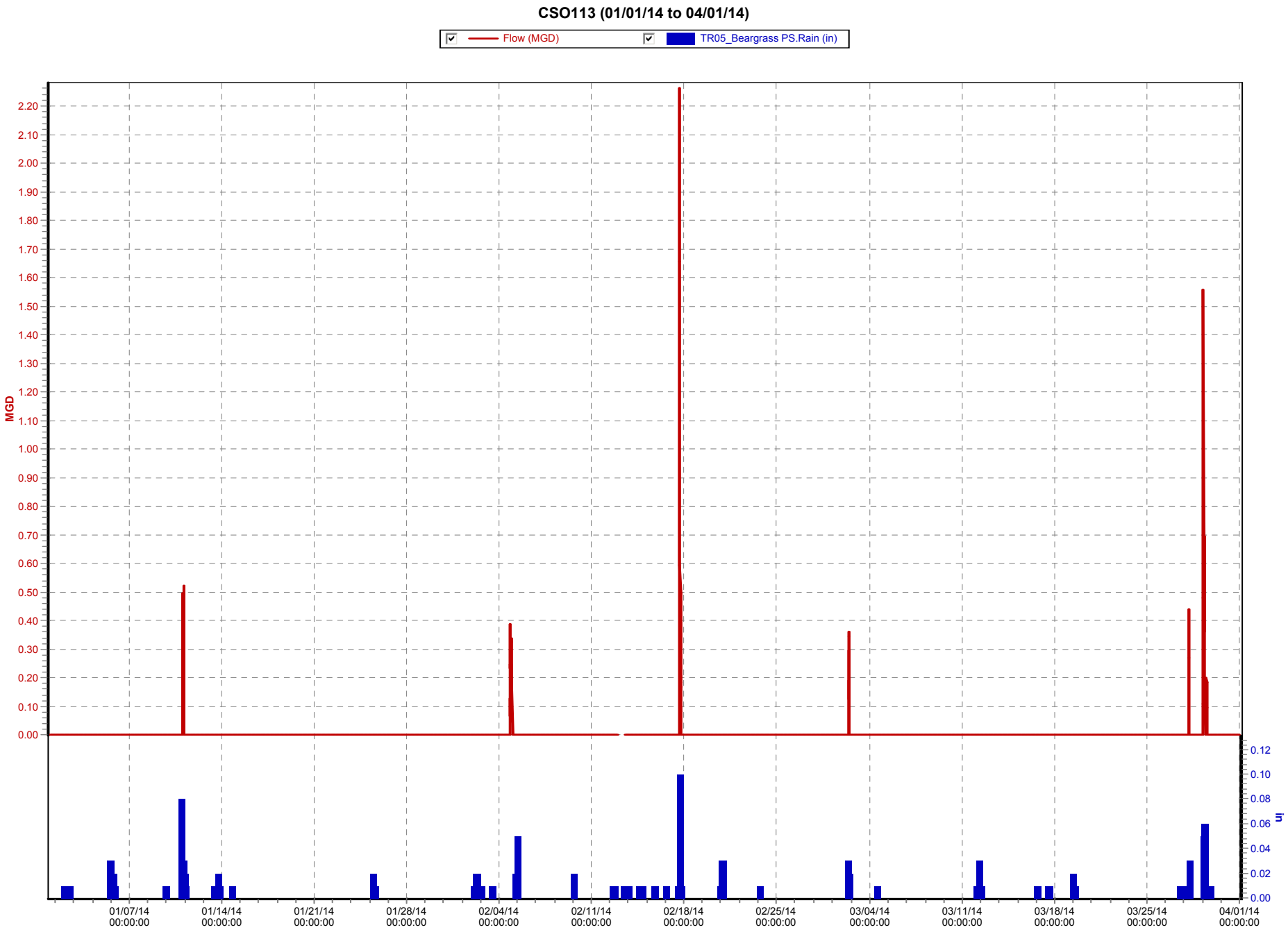

CSO109 Newburg Rd (01/01/14 to 04/01/14)
Potential Overflow (in)
TR05_Beargrass PS.Rain (in)
in
0.46
0.44
0.42
0.40
0.38
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

CSO110_CSO and Upstream (01/01/14 to 04/01/14)

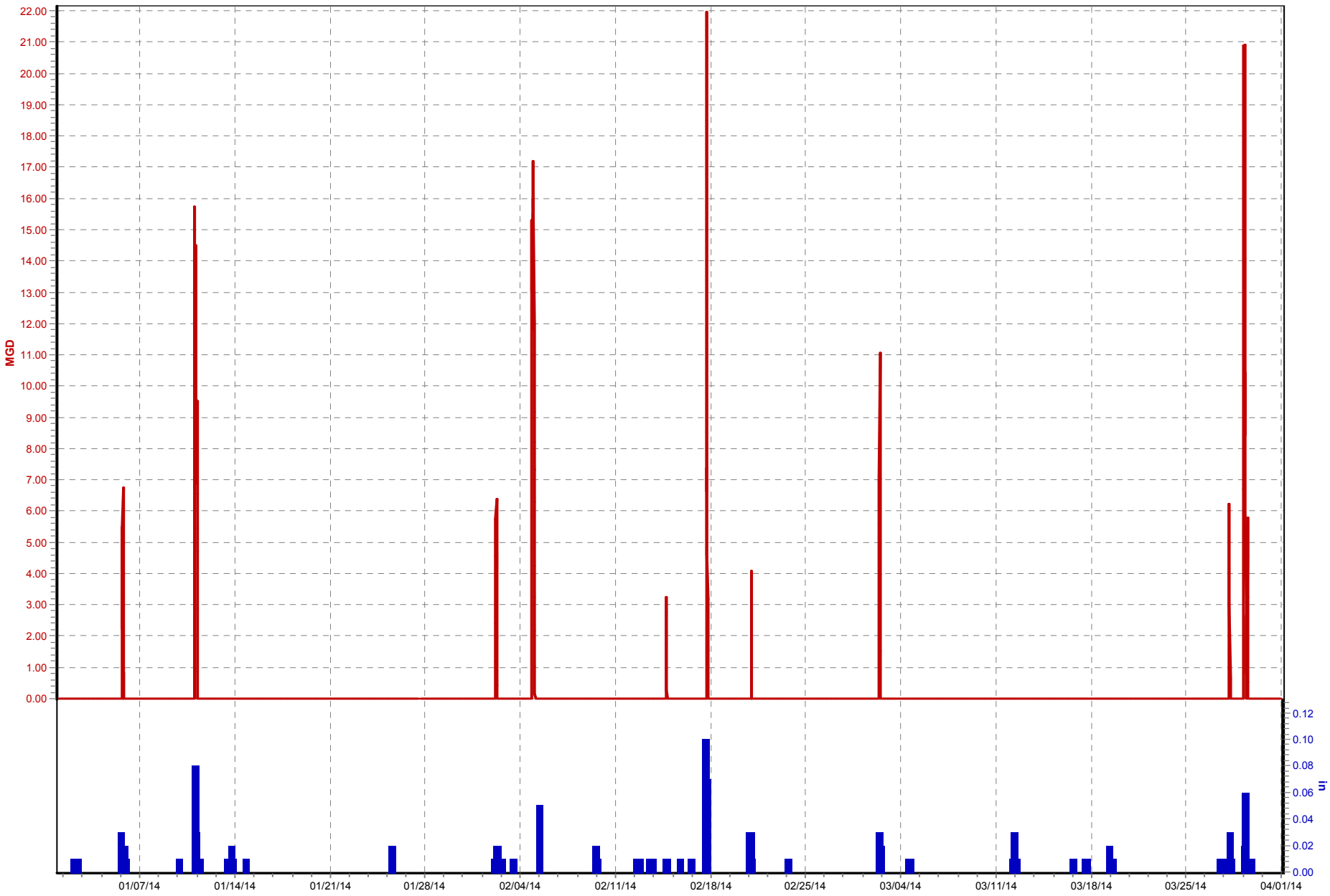


CSO111 Eastern Pkwy and BGC (01/01/14 to 04/01/14)

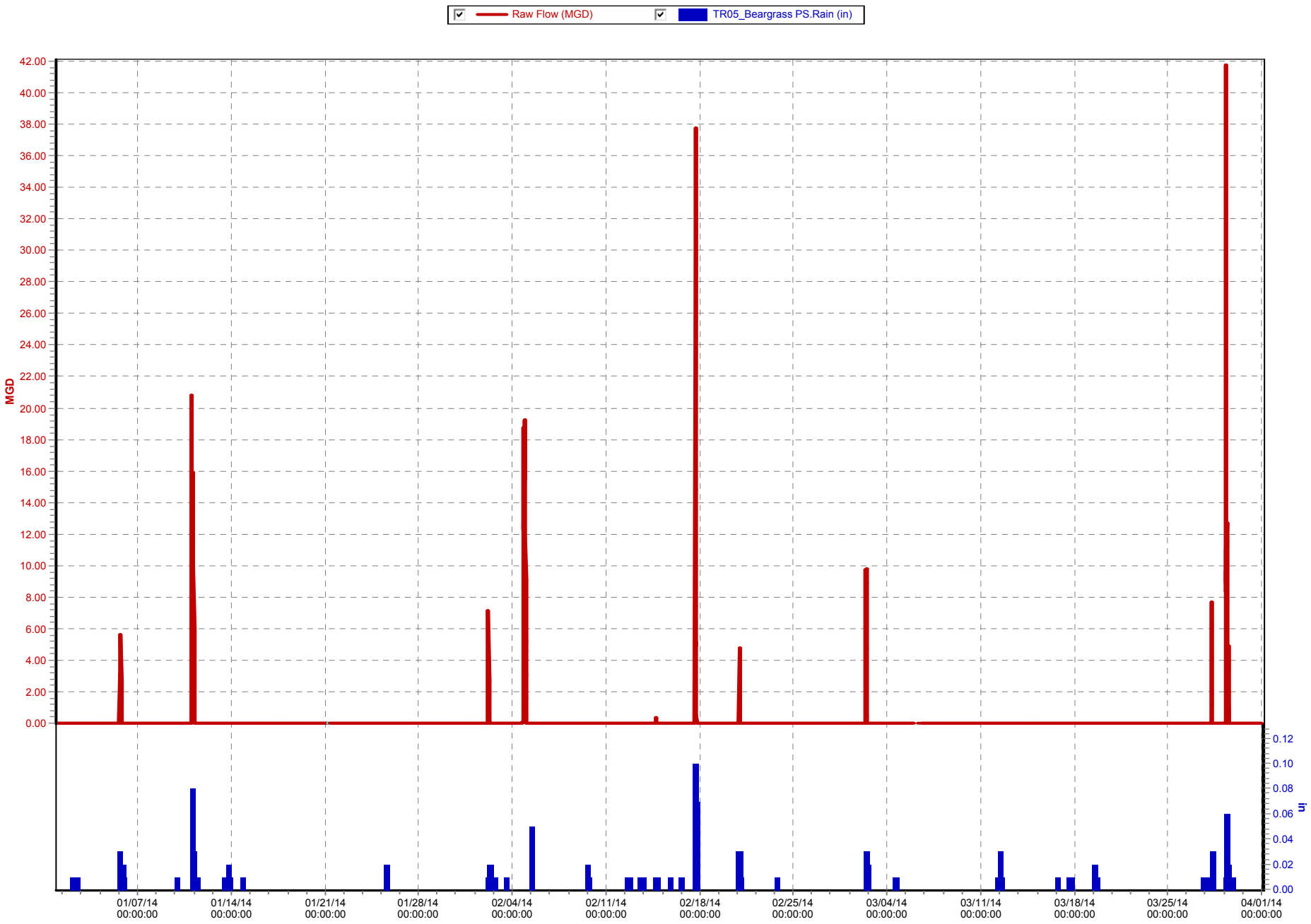


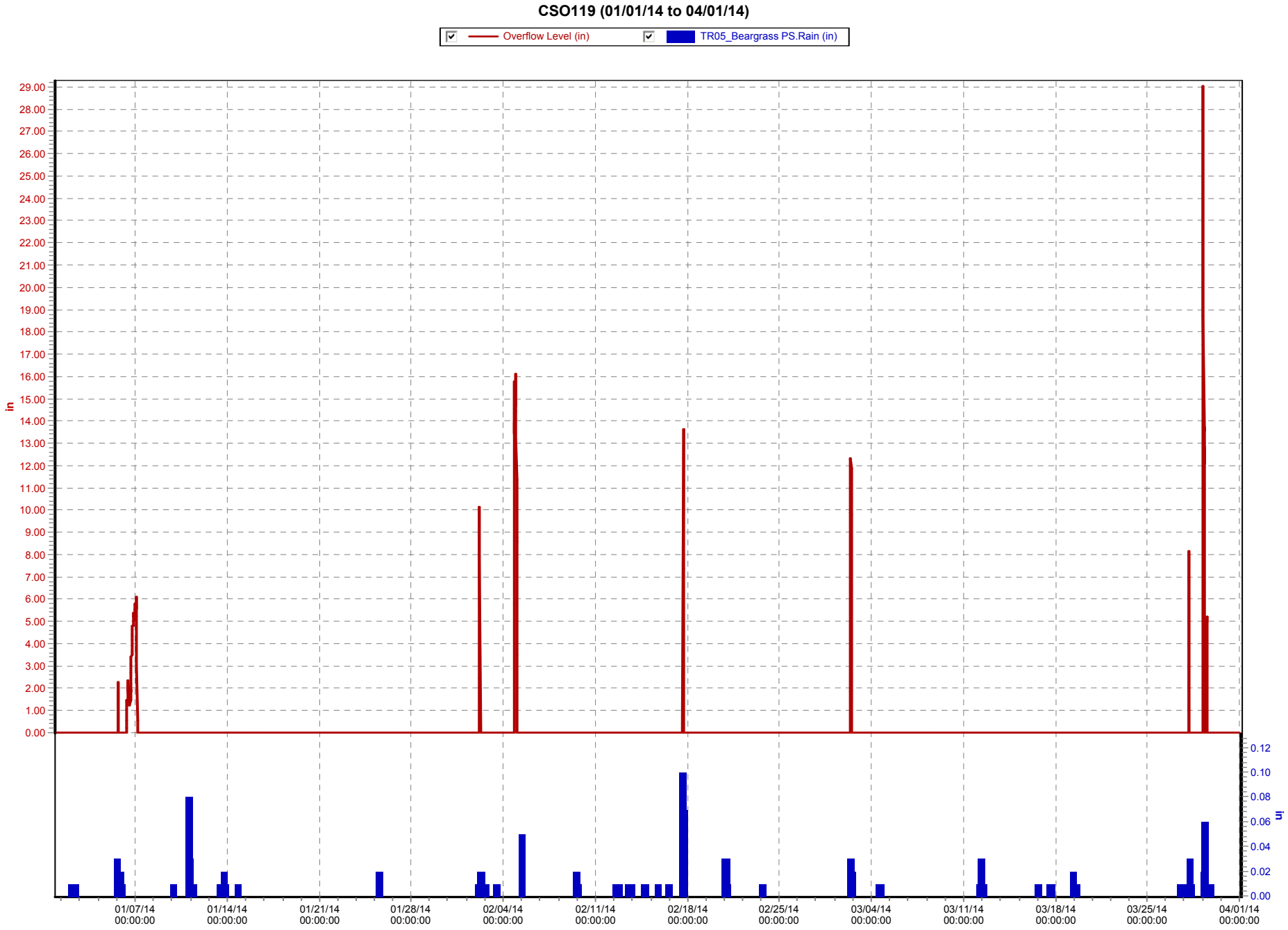

CSO113 (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

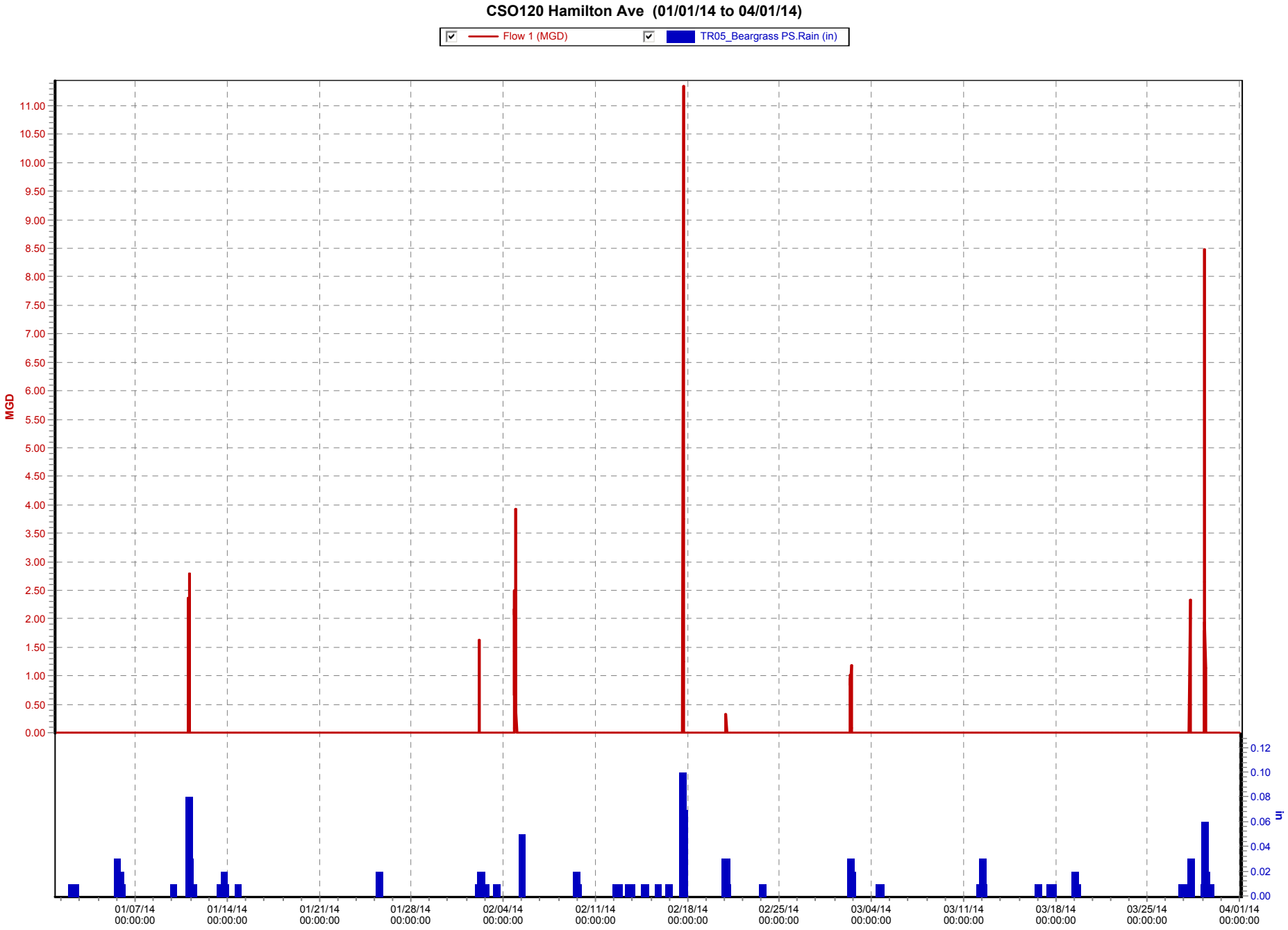
CSO117 Dry Sewer and BGC Logan (01/01/14 to 04/01/14)

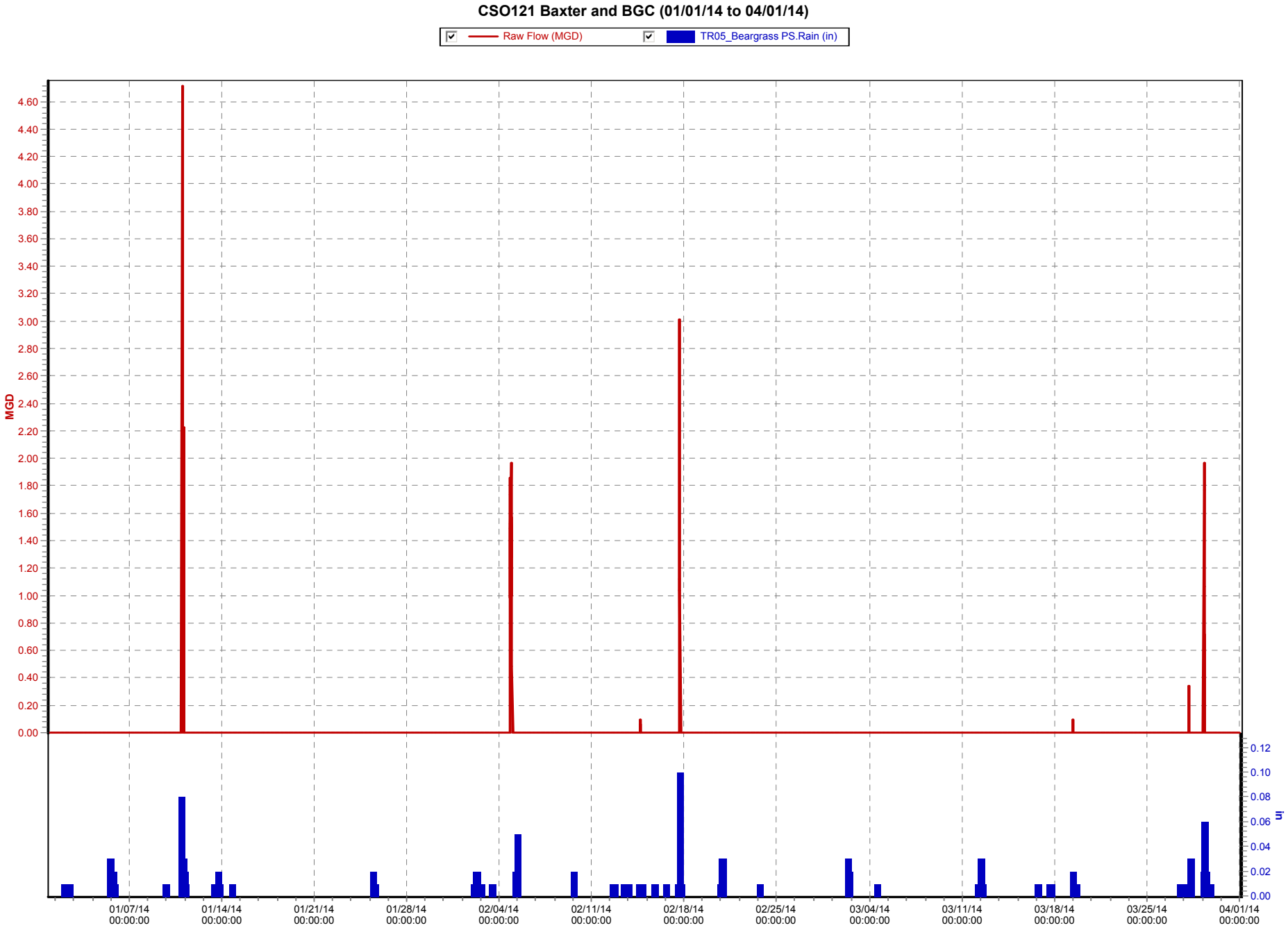


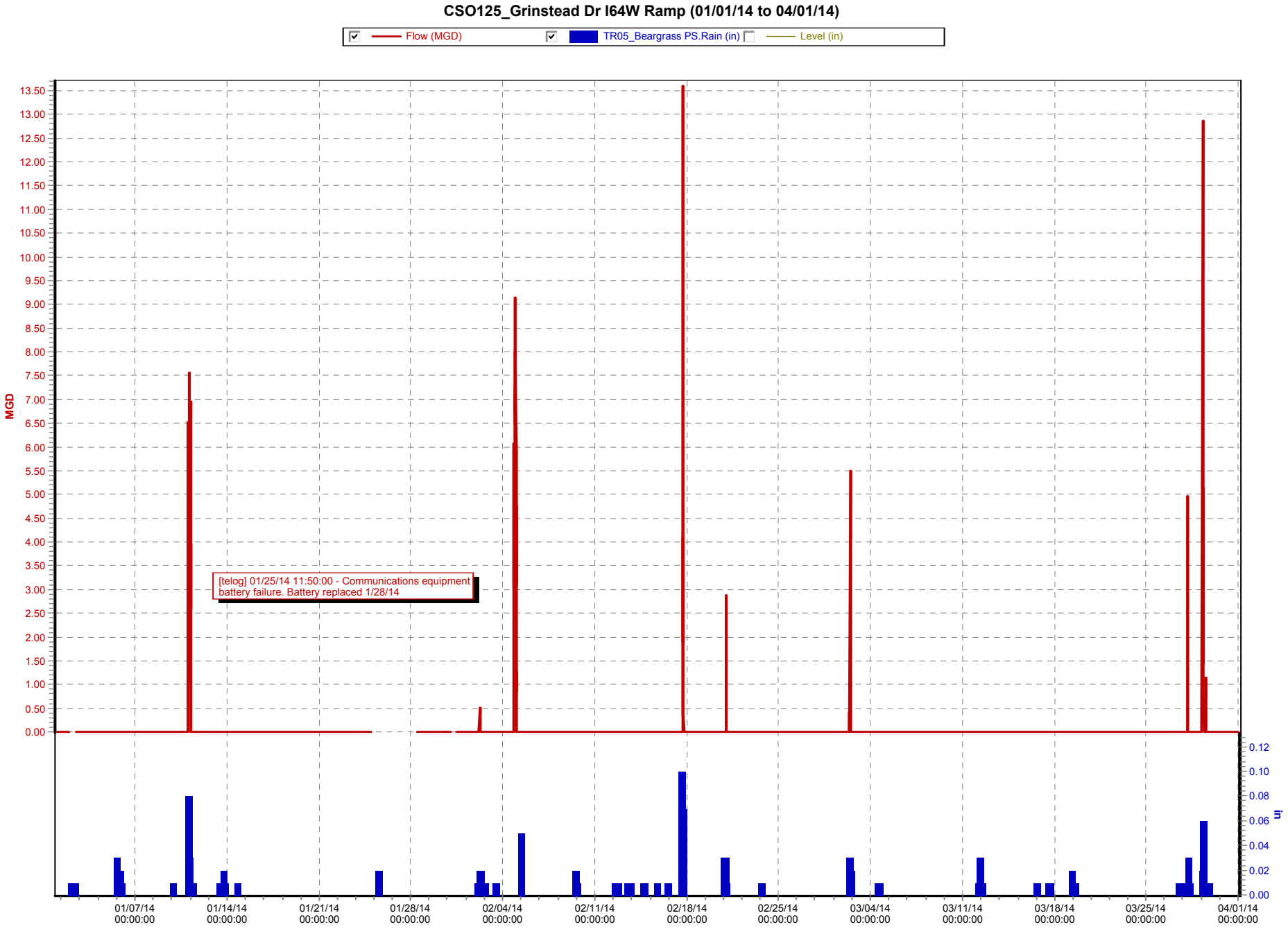
CSO118 Broadway and BGC (01/01/14 to 04/01/14)



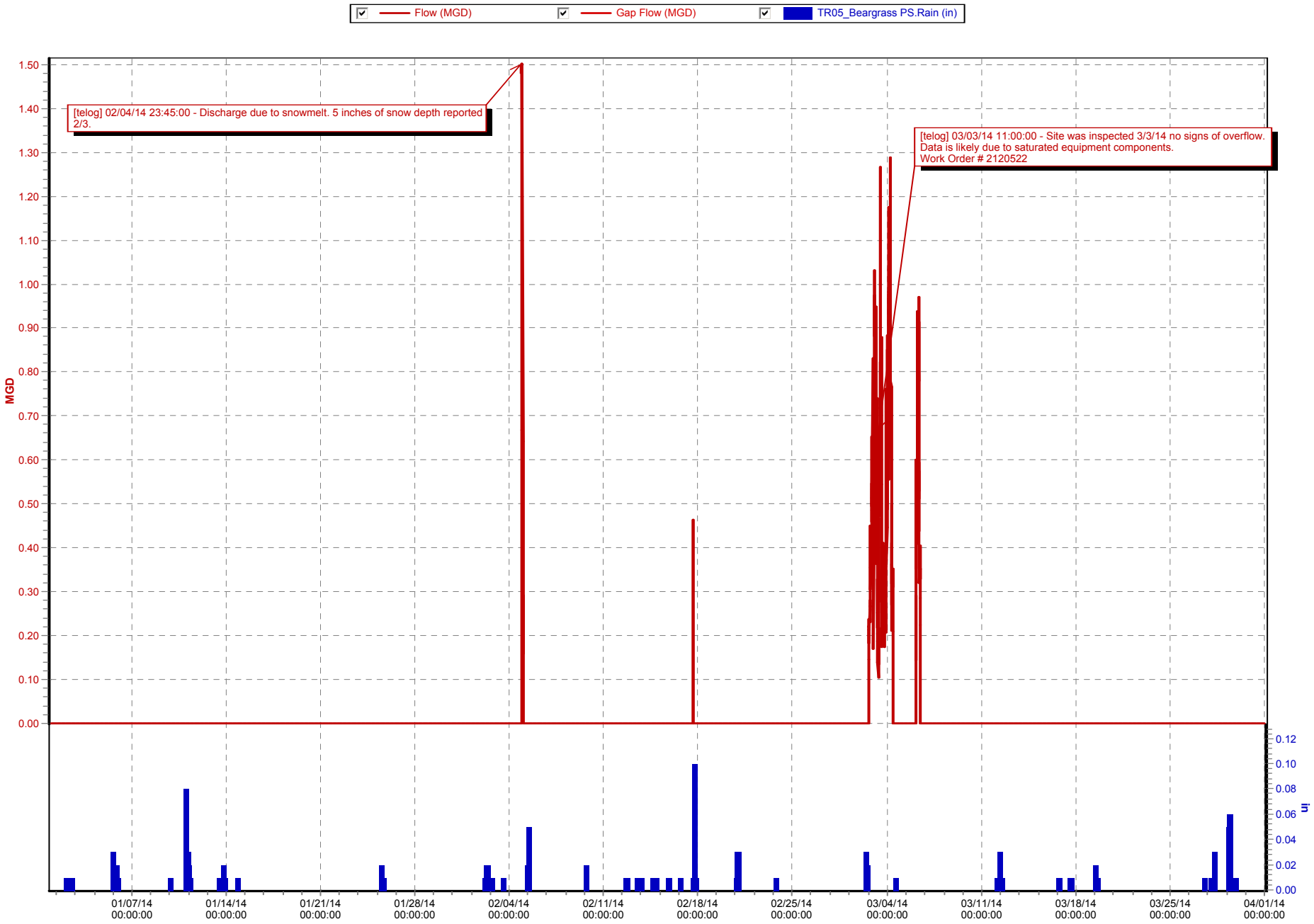

CSO119 (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
29.00
28.00
27.00
26.00
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

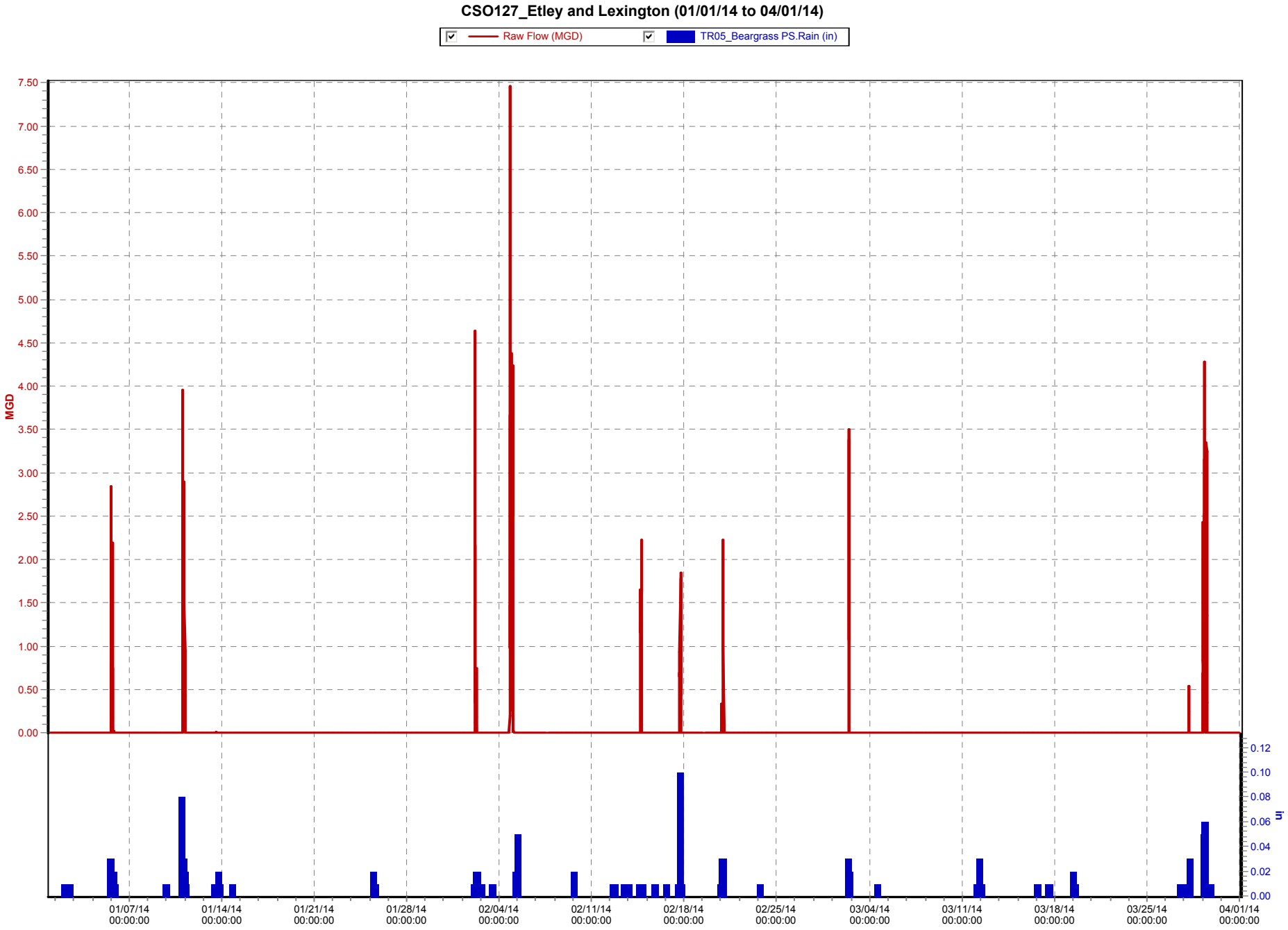

CSO120 Hamilton Ave (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

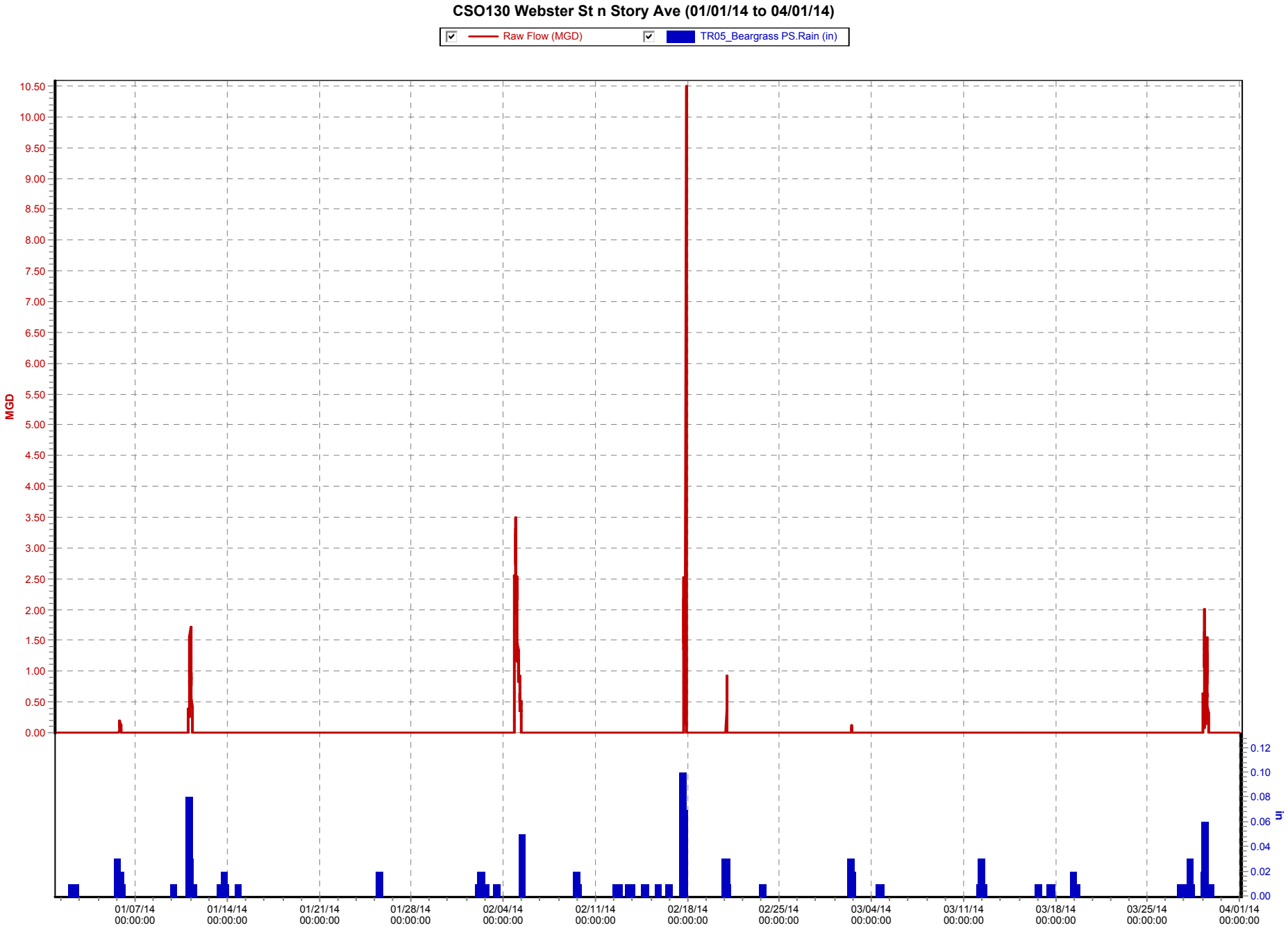

CSO121 Baxter and BGC (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
4.60
4.40
4.20
4.00
3.80
3.60
3.40
3.20
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO125_Grinstead Dr I64W Ramp (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
Level (in)
MGD
in
[telog] 01/25/14 11:50:00 - Communications equipment battery failure. Battery replaced 1/28/14
13.50
13.00
12.50
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

CSO126_ Saunders (01/01/14 to 04/01/14)

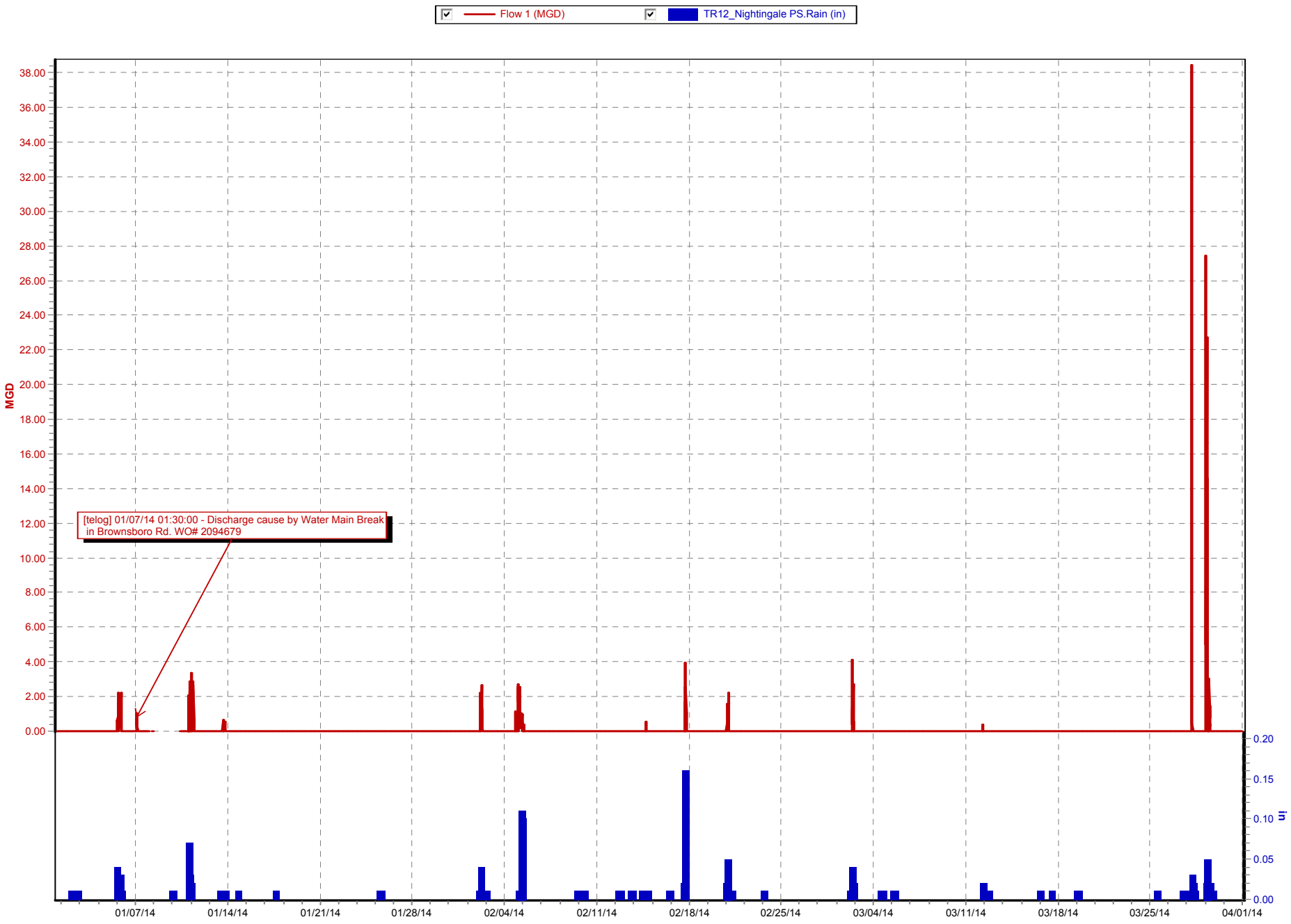


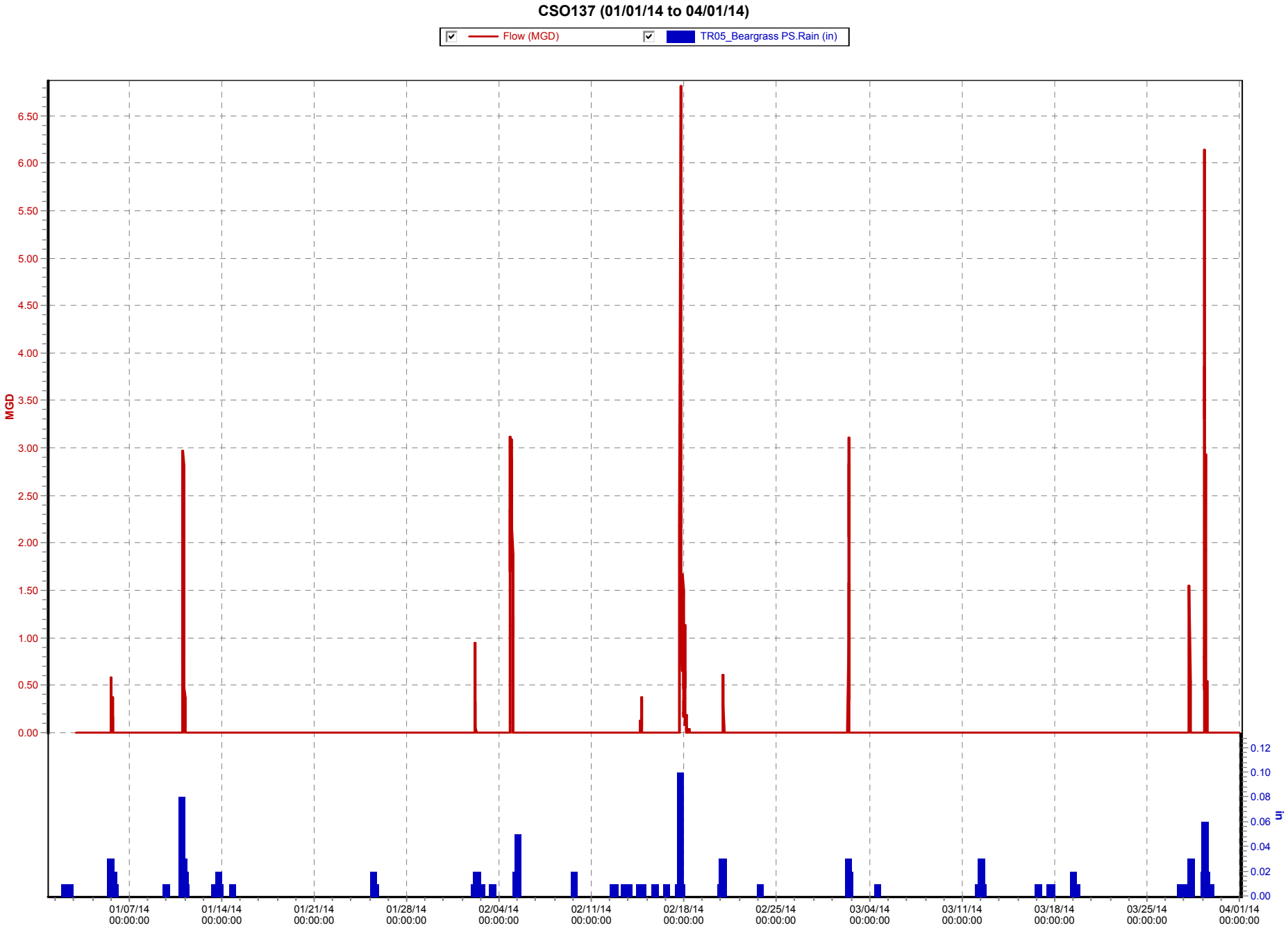

CSO127_Etley and Lexington (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO130 Webster St n Story Ave (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

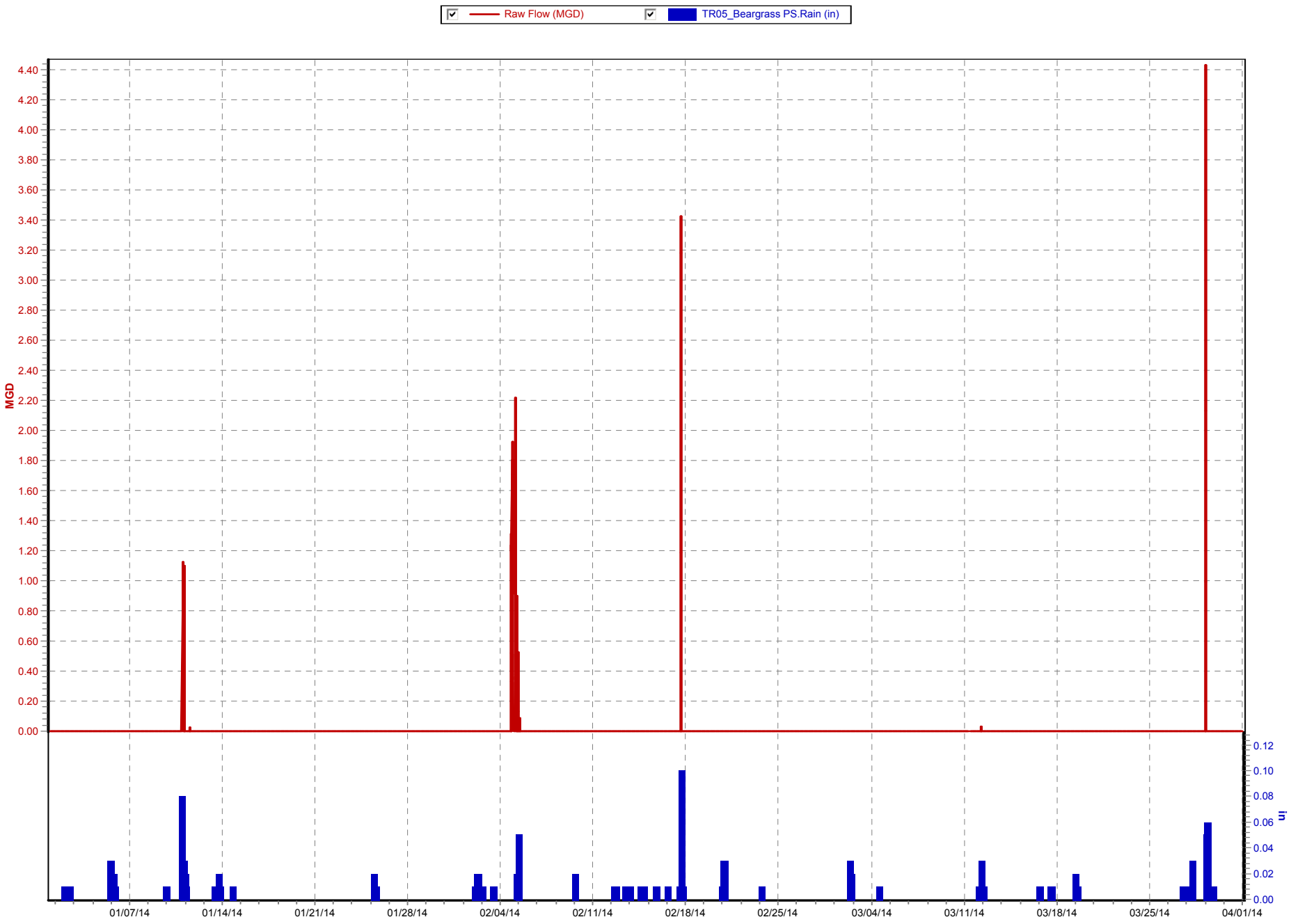
CSO131 Frankfort Ave (01/01/14 to 04/01/14)

CSO132 Brownsboro Rd (01/01/14 to 04/01/14)

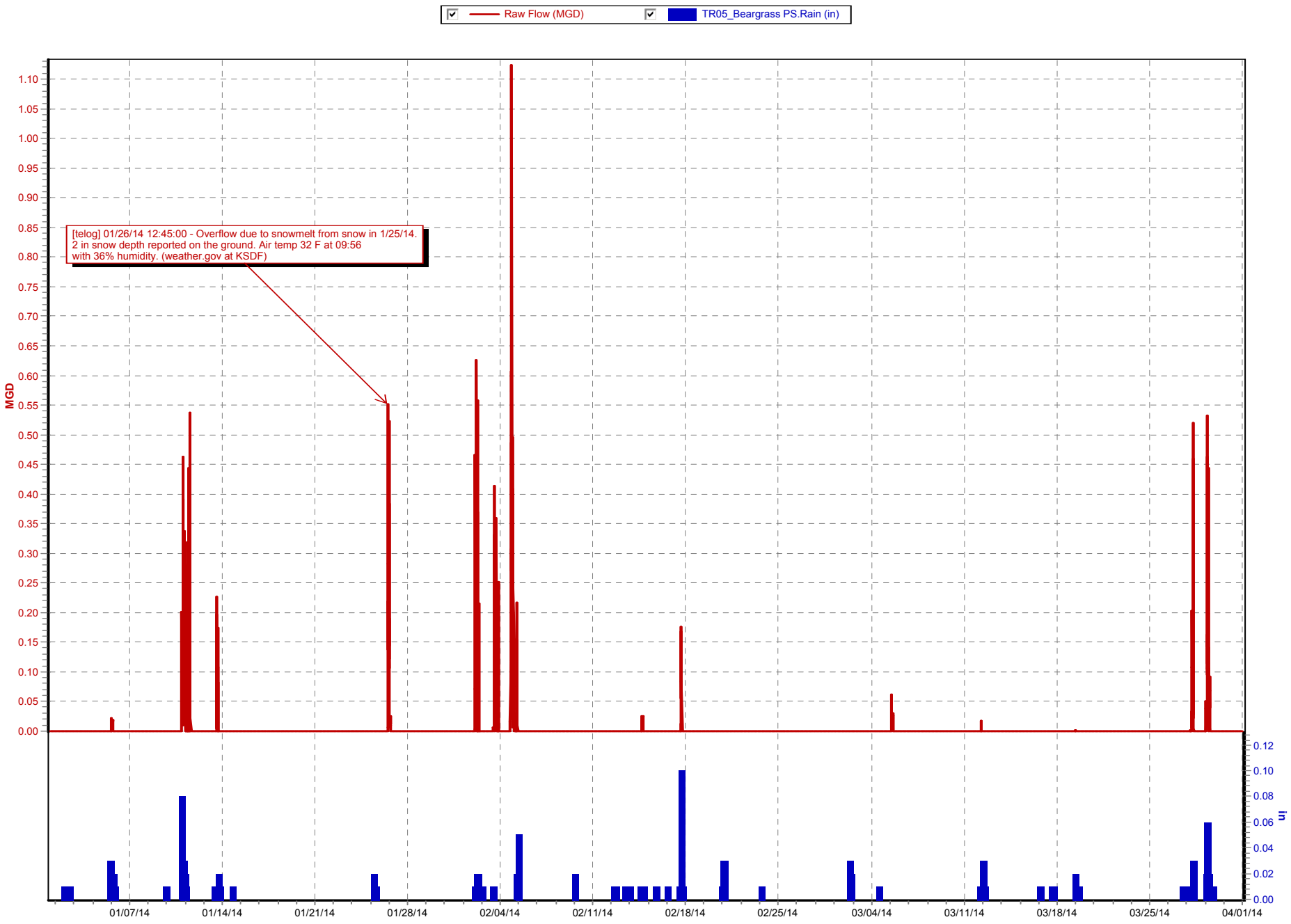


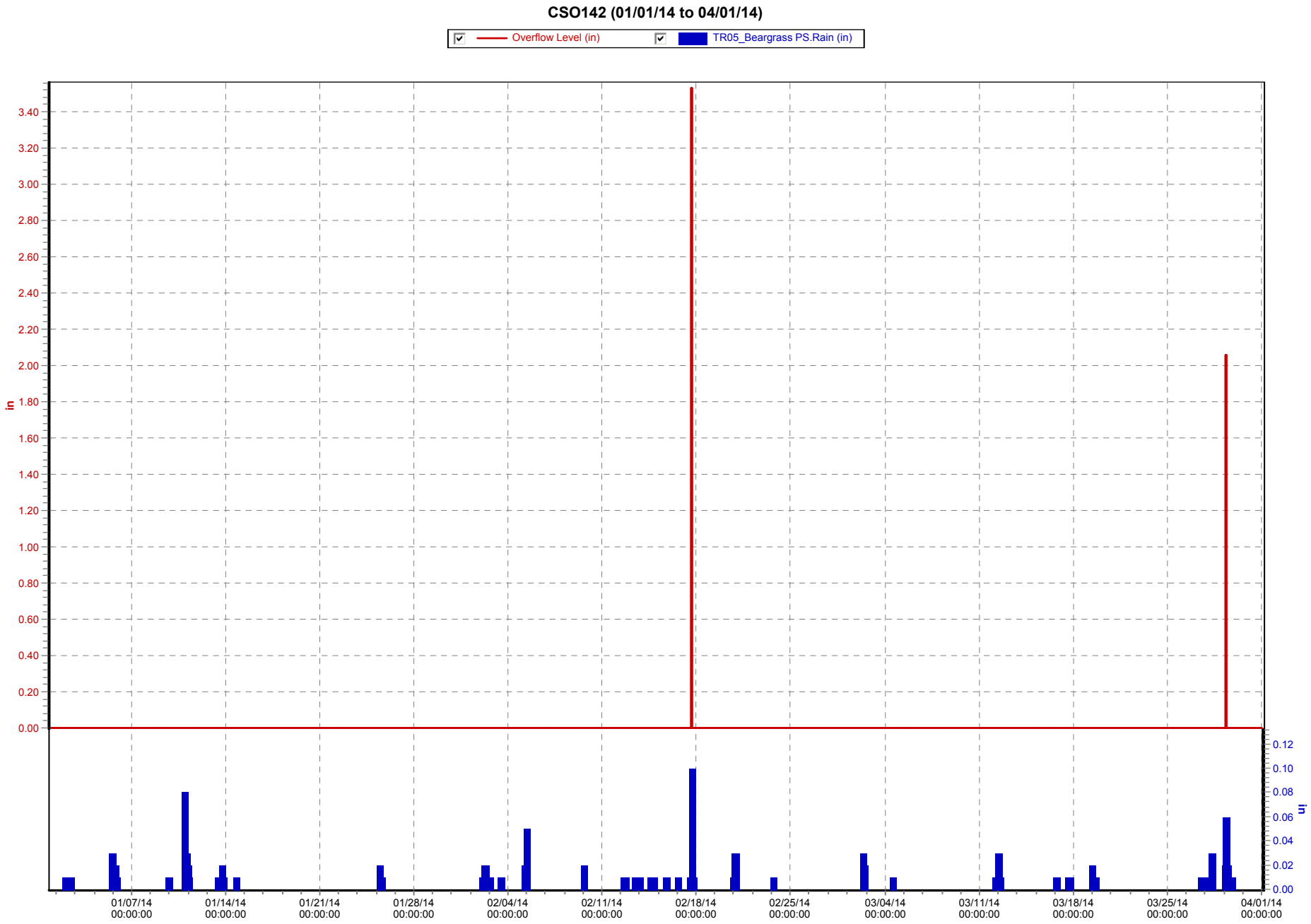

CSO137 (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

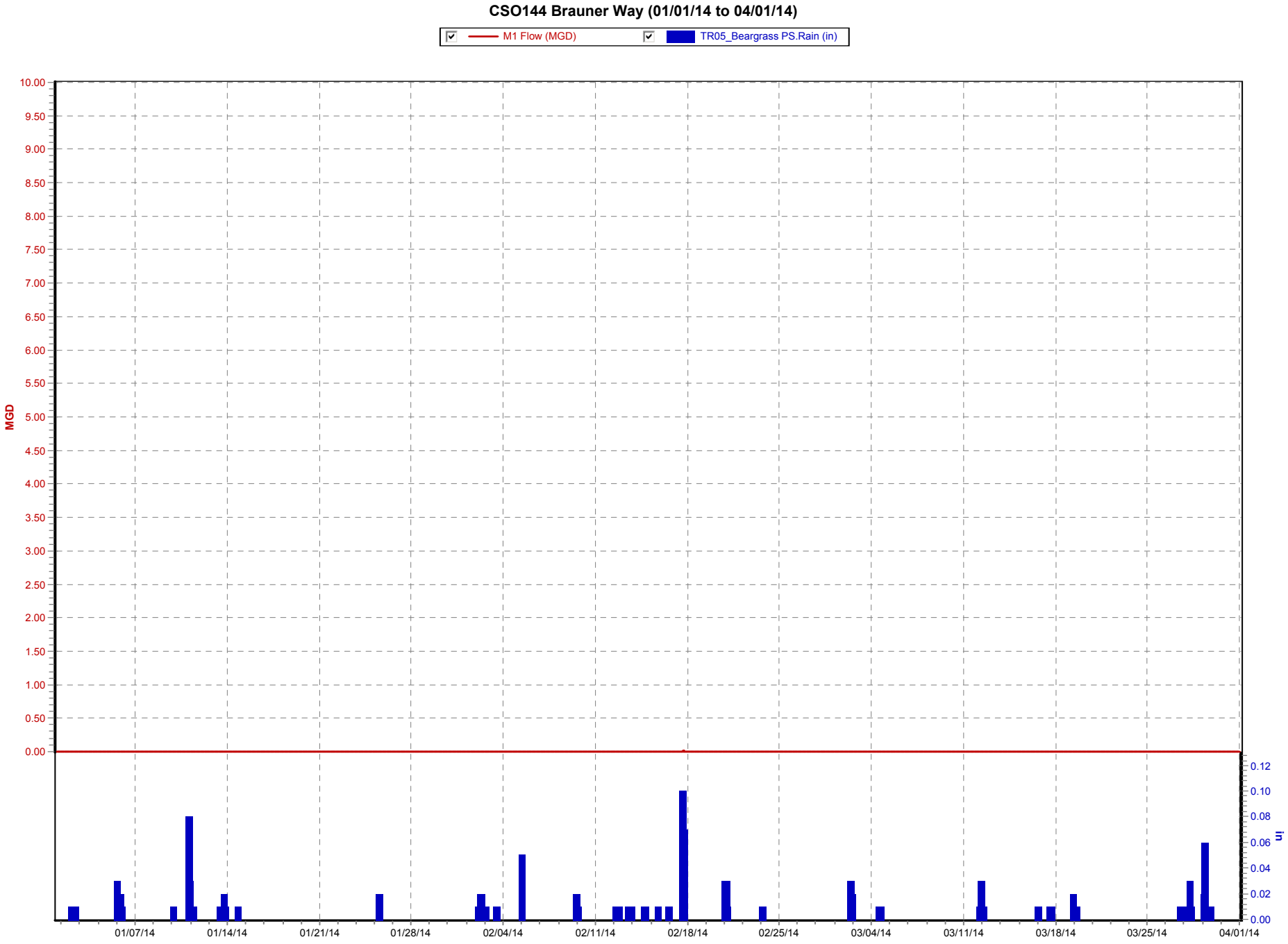
CSO140 Locust St_Lobdell Alley (01/01/14 to 04/01/14)

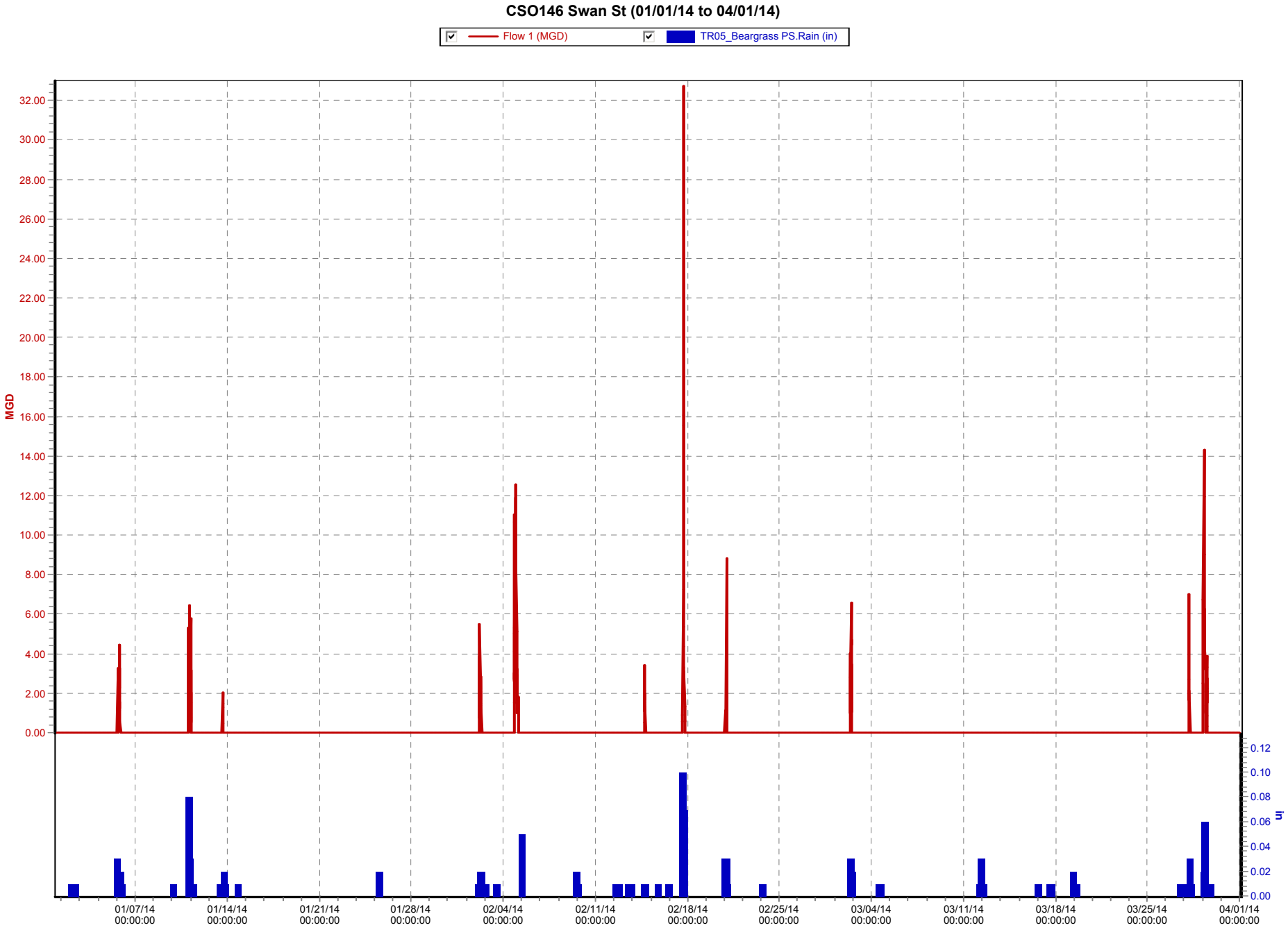


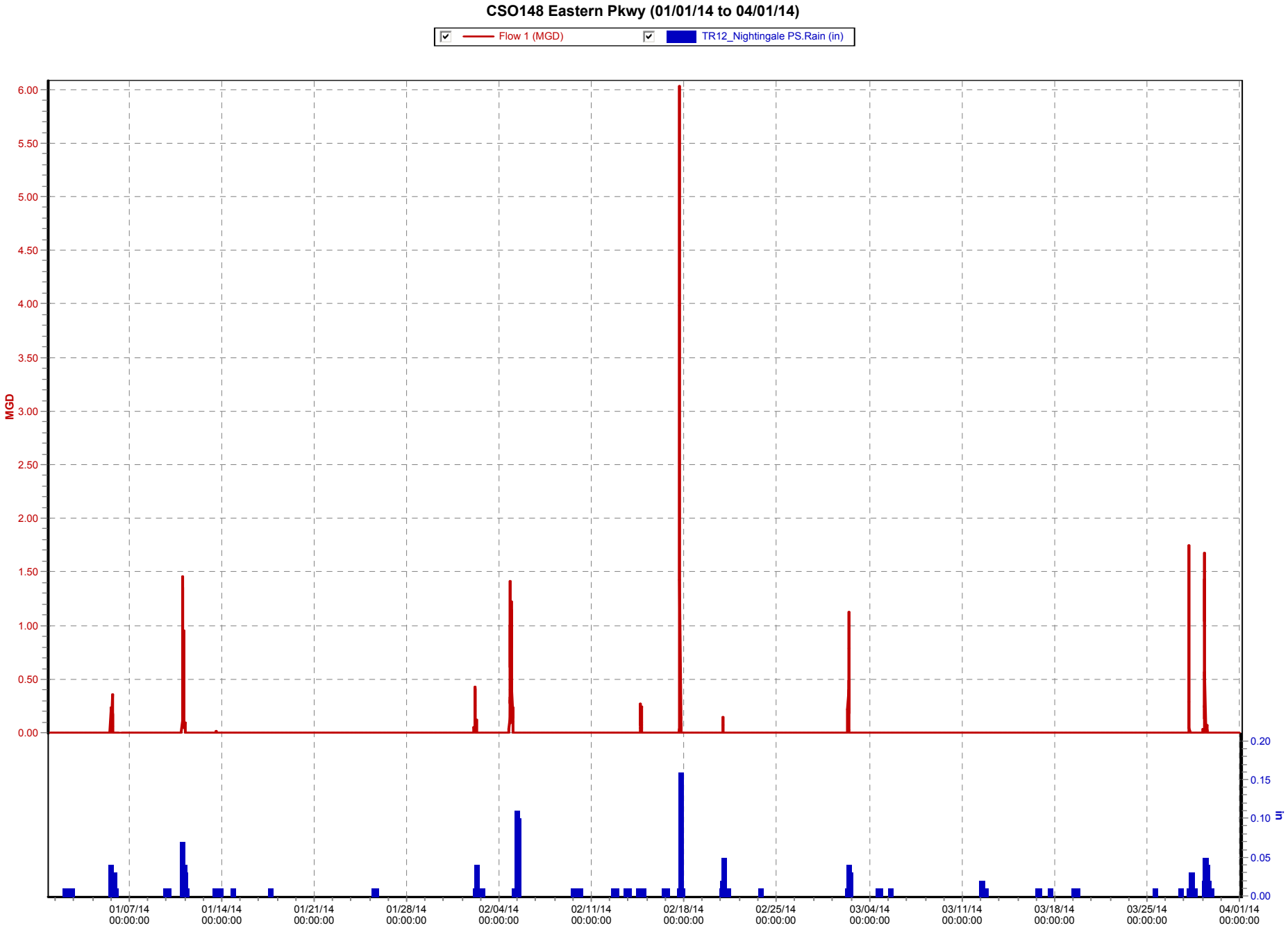
CSO141 Baxter_SF BGC (01/01/14 to 04/01/14)

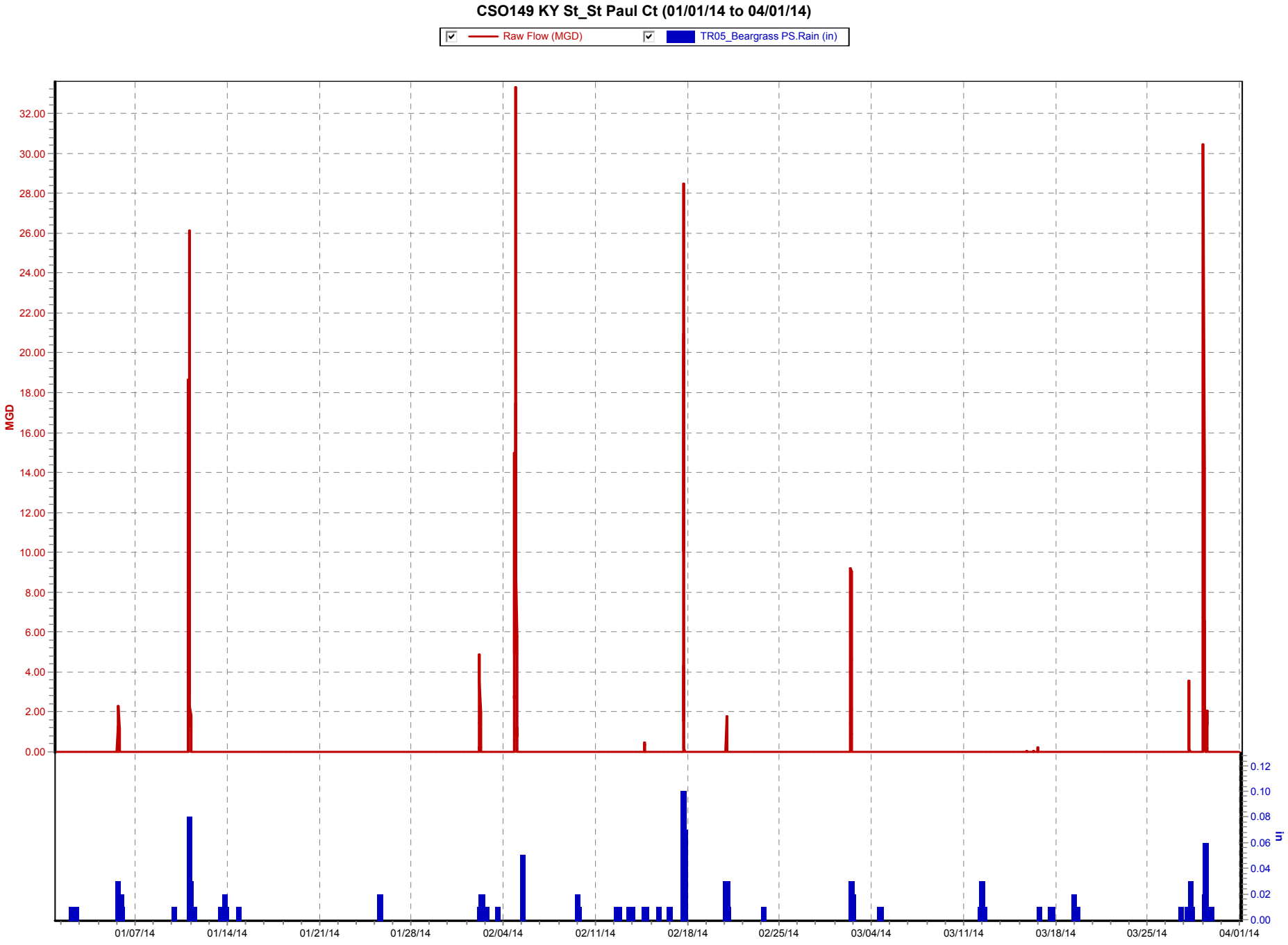


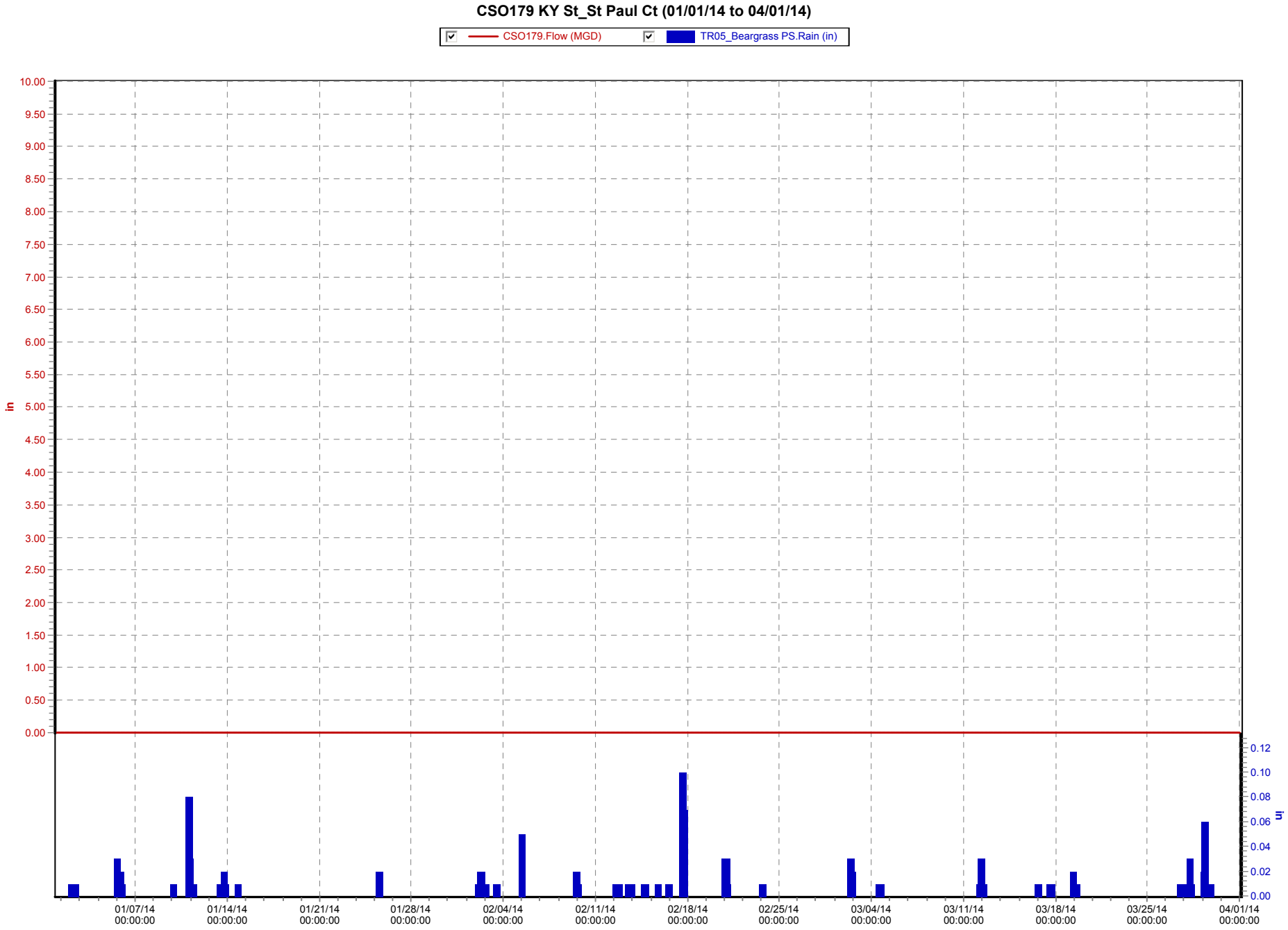

CSO142 (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
3.40
3.20
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

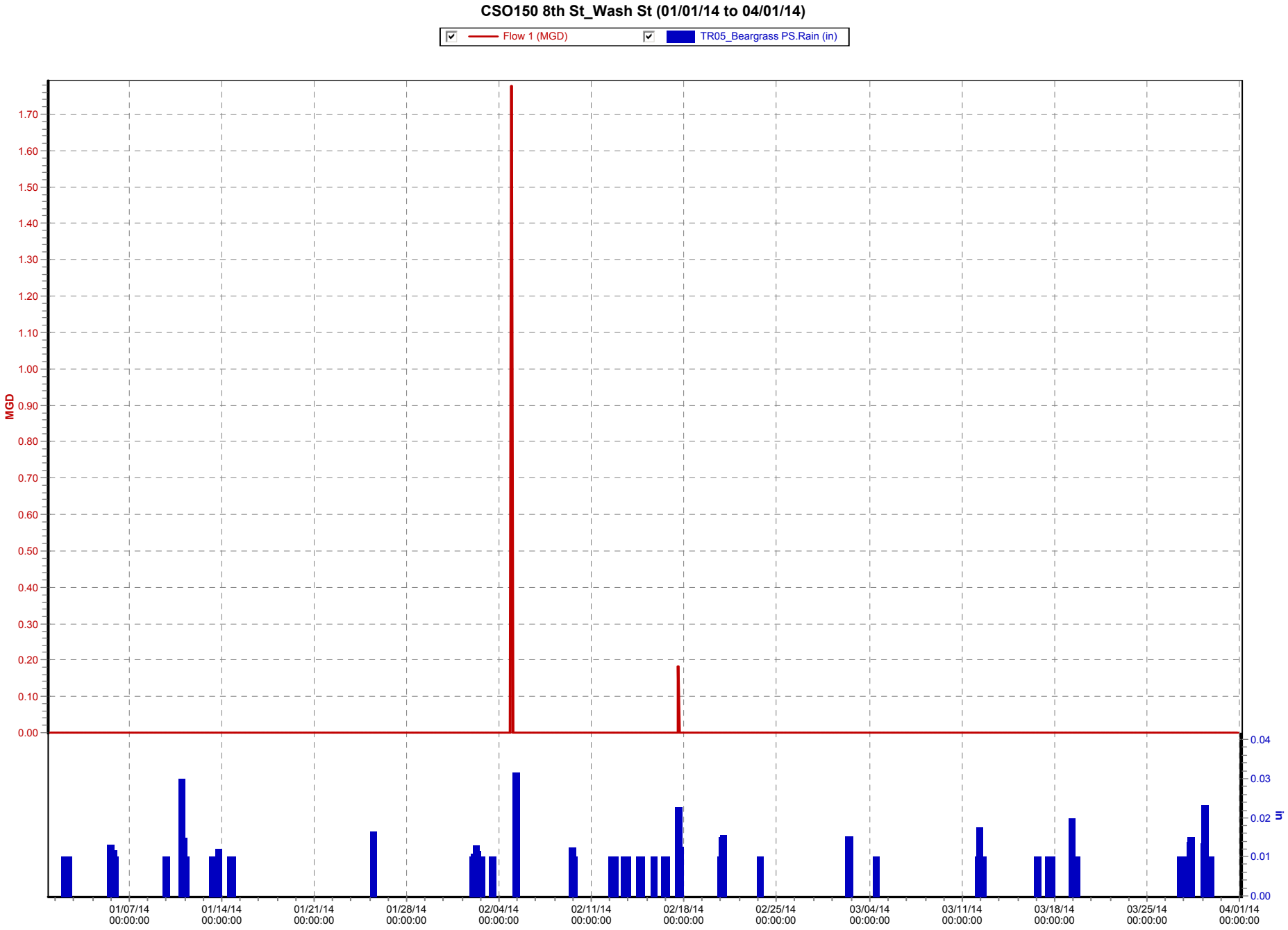

CSO144 Brauner Way (01/01/14 to 04/01/14)
M1 Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

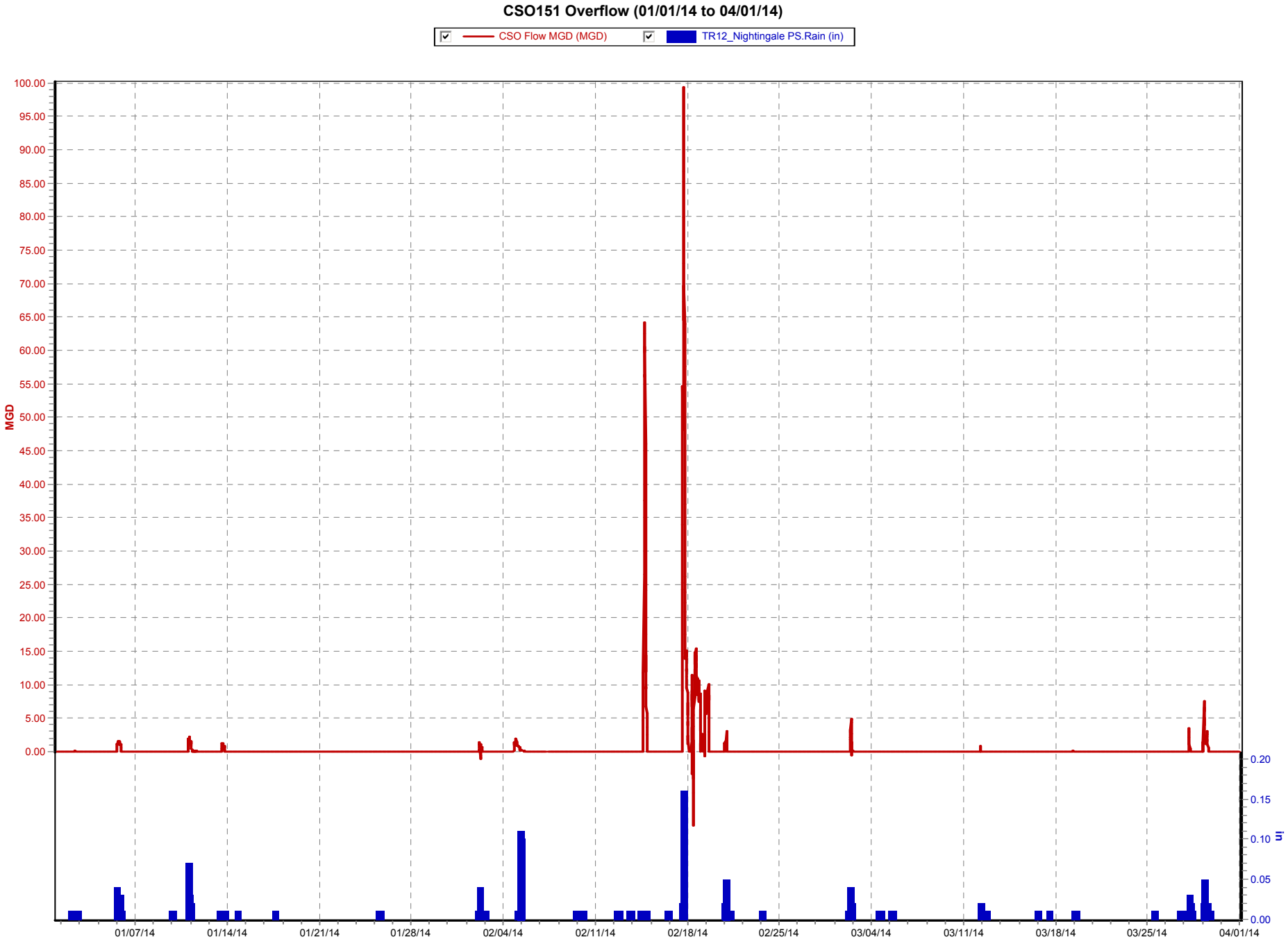

CSO146 Swan St (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

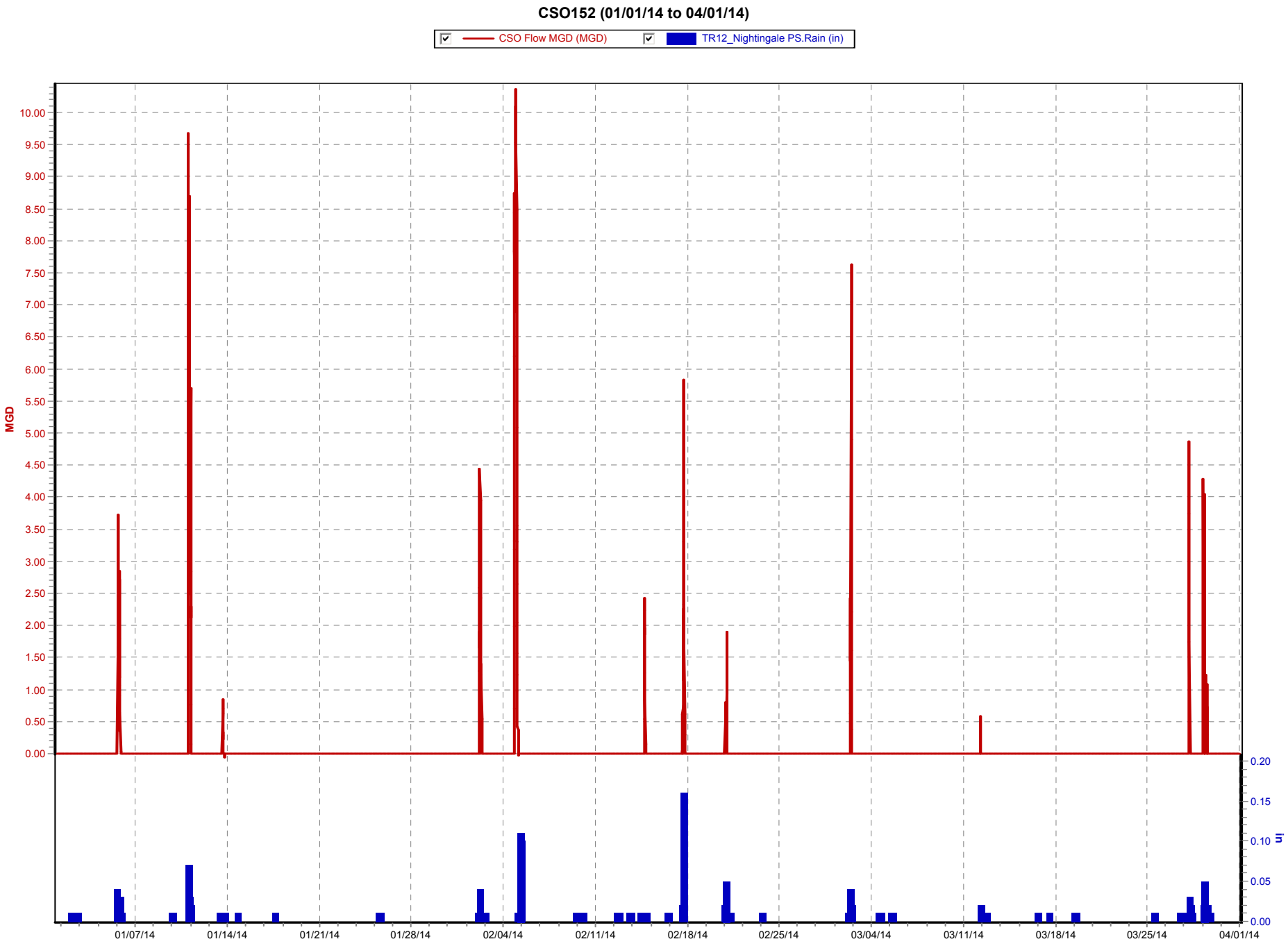

CSO148 Eastern Pkwy (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR12_Nightingale PS.Rain (in)
MGD
IN
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.20
0.15
0.10
0.05
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO149 KY St_St Paul Ct (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

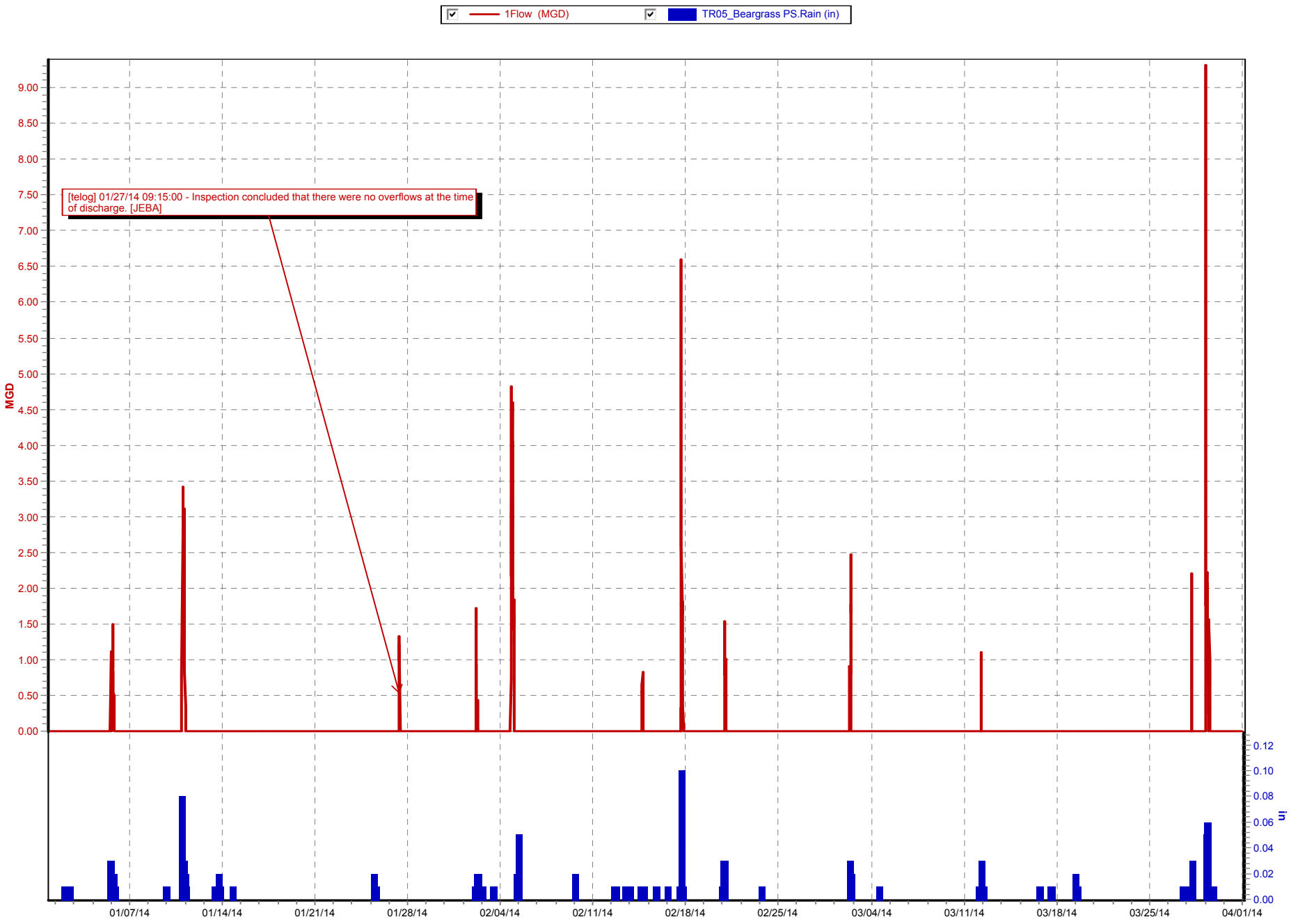

CSO179 KY St_St Paul Ct (01/01/14 to 04/01/14)
CSO179.Flow (MGD)
TR05_Beargrass PS.Rain (in)
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

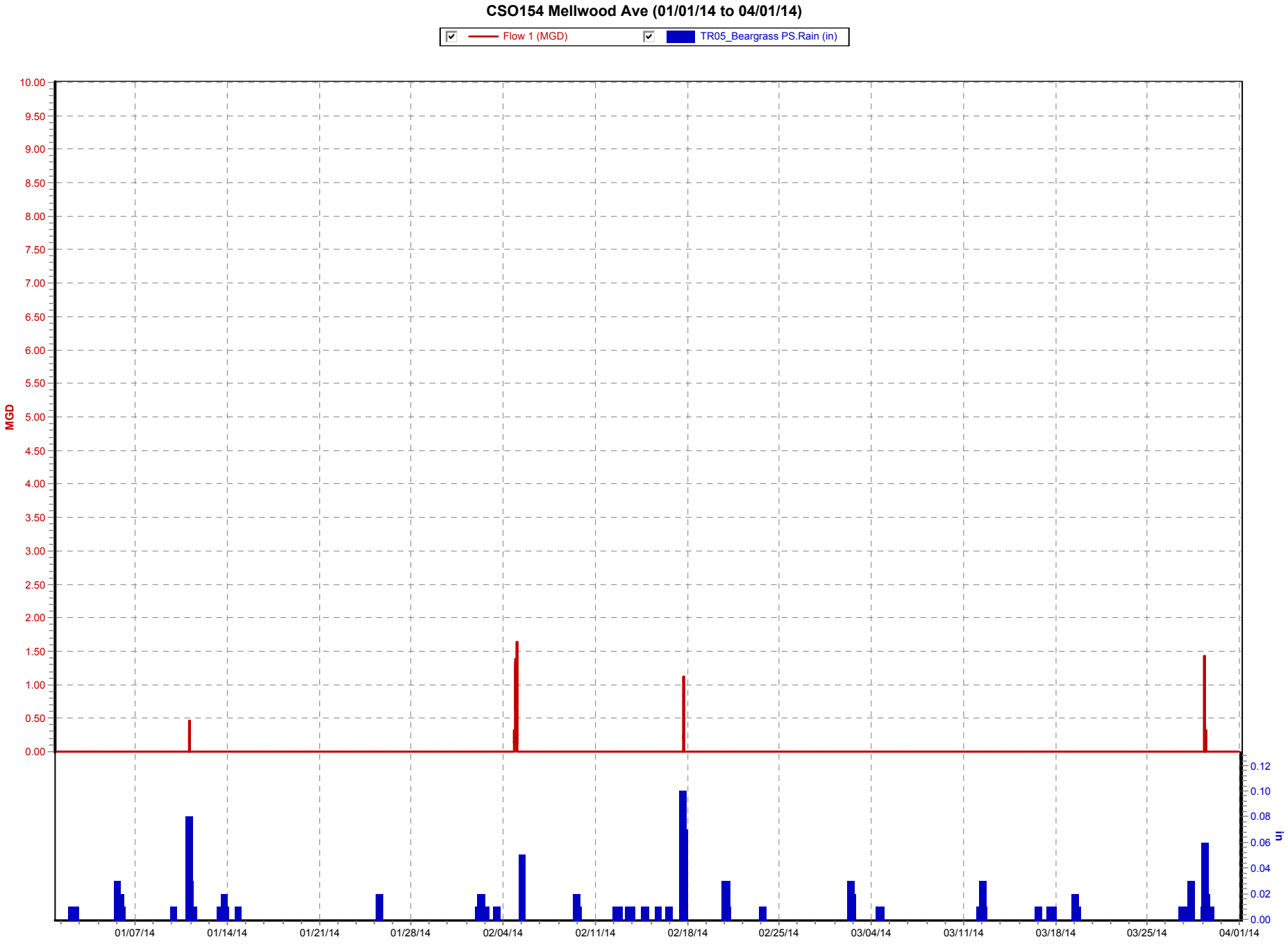

CSO150 8th St_Wash St (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
IN
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.04
0.03
0.02
0.01
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO151 Overflow (01/01/14 to 04/01/14)
CSO Flow MGD (MGD)
TR12_Nightingale PS.Rain (in)
MGD
in
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.20
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

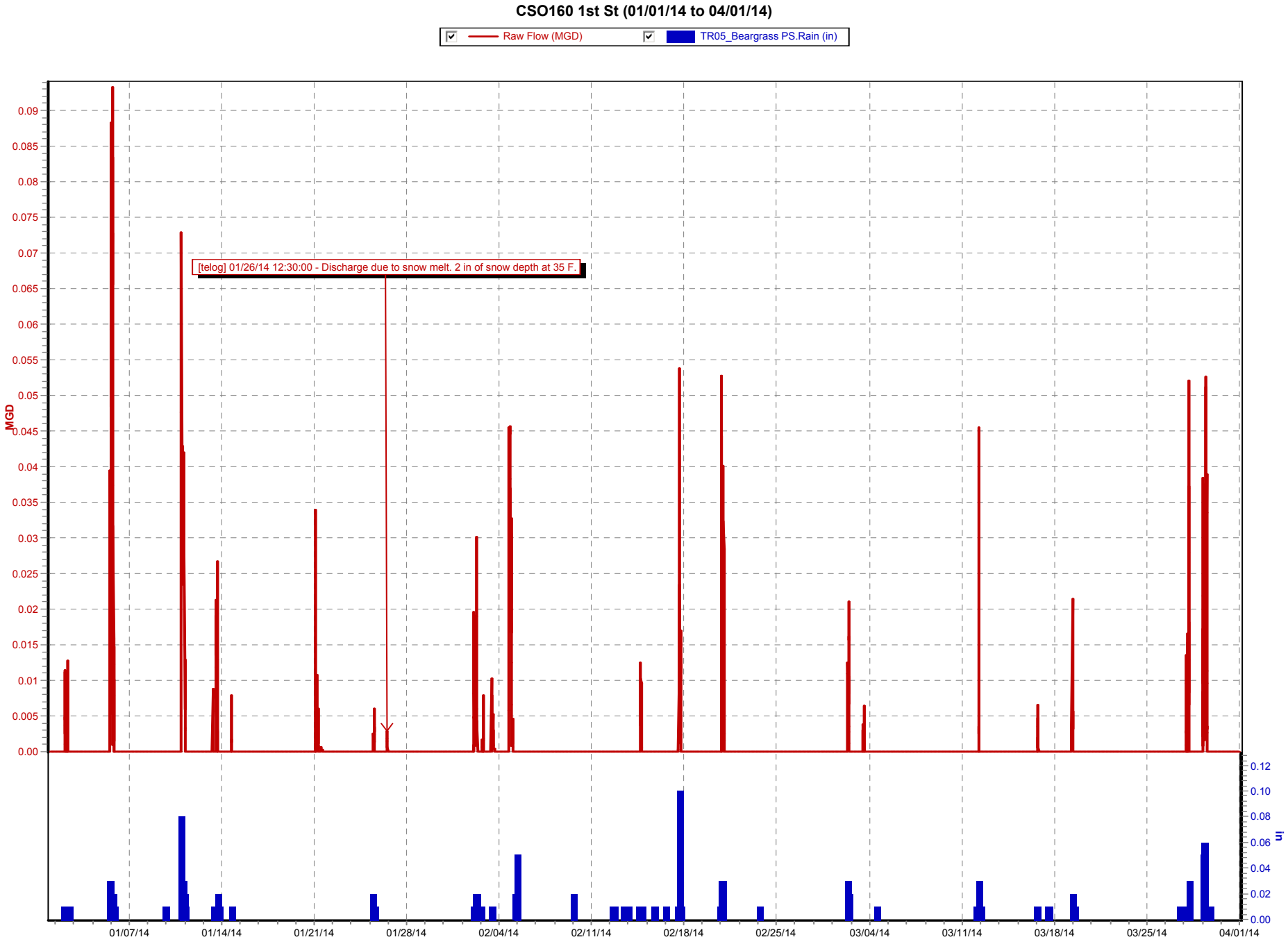

CSO152 (01/01/14 to 04/01/14)
CSO Flow MGD (MGD)
TR12_Nightingale PS.Rain (in)
MGD
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.20
0.15
0.10
0.05
0.00
in
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

CSO153 Lex Rd (01/01/14 to 04/01/14)

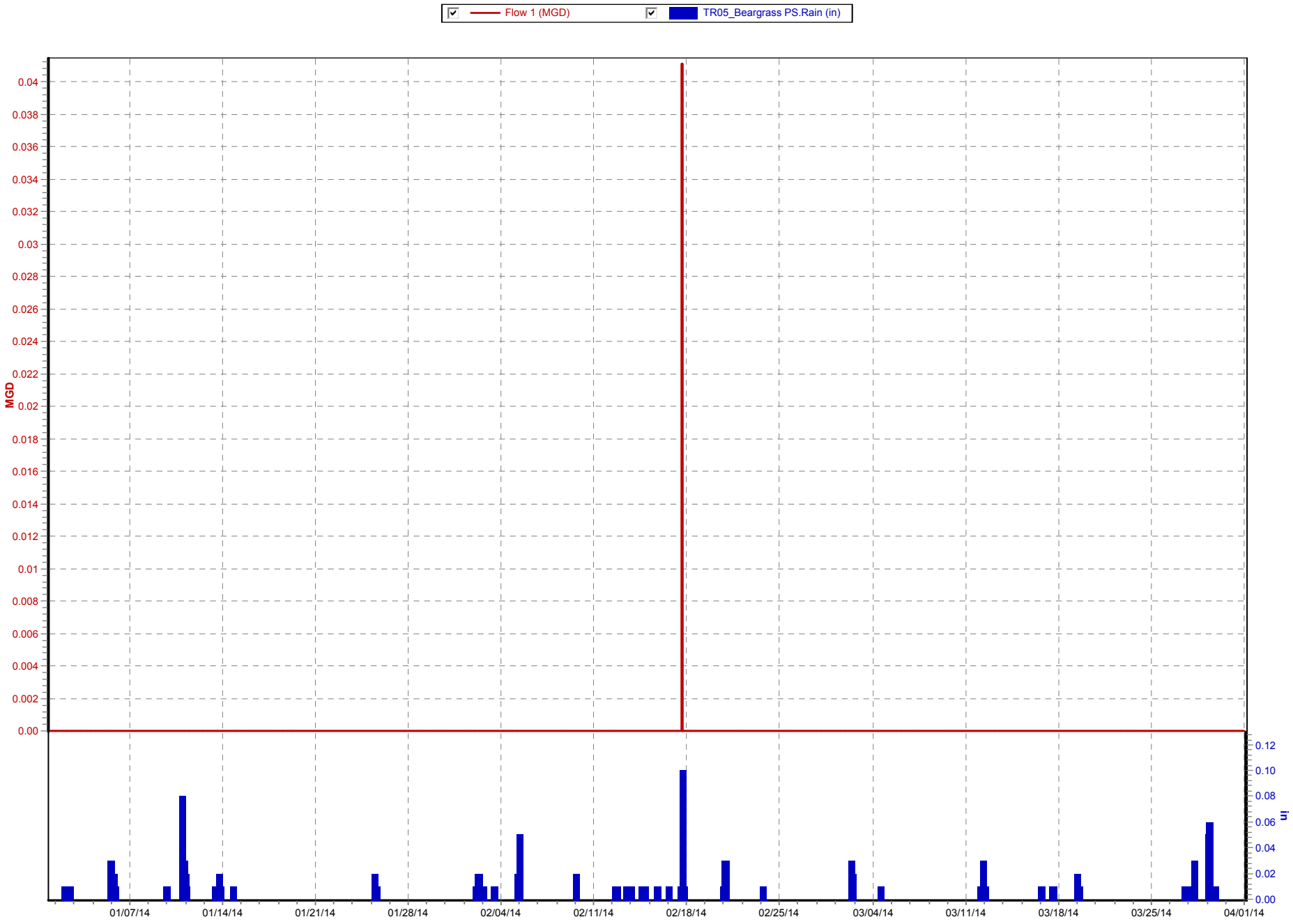


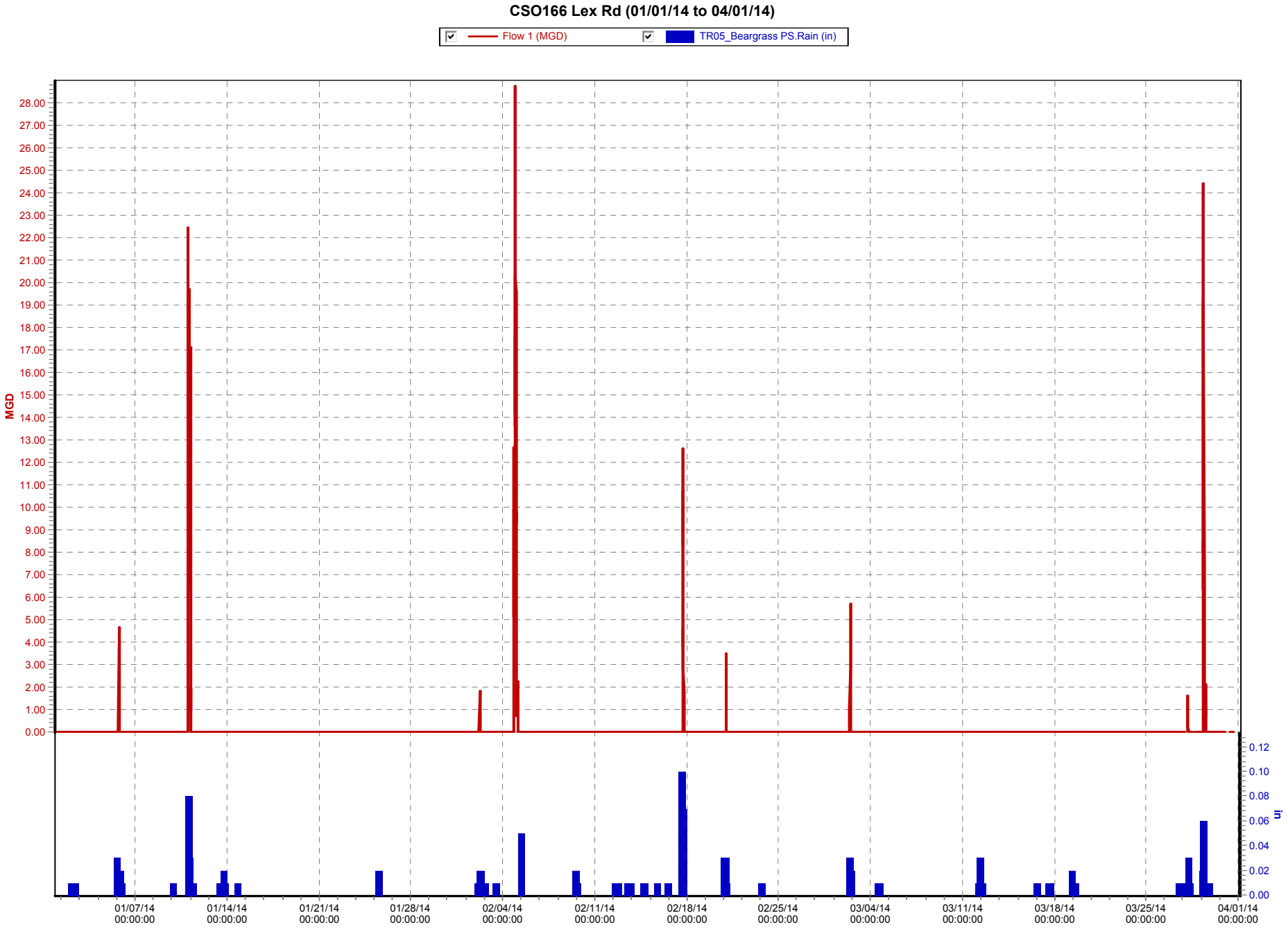

CSO154 Mellwood Ave (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

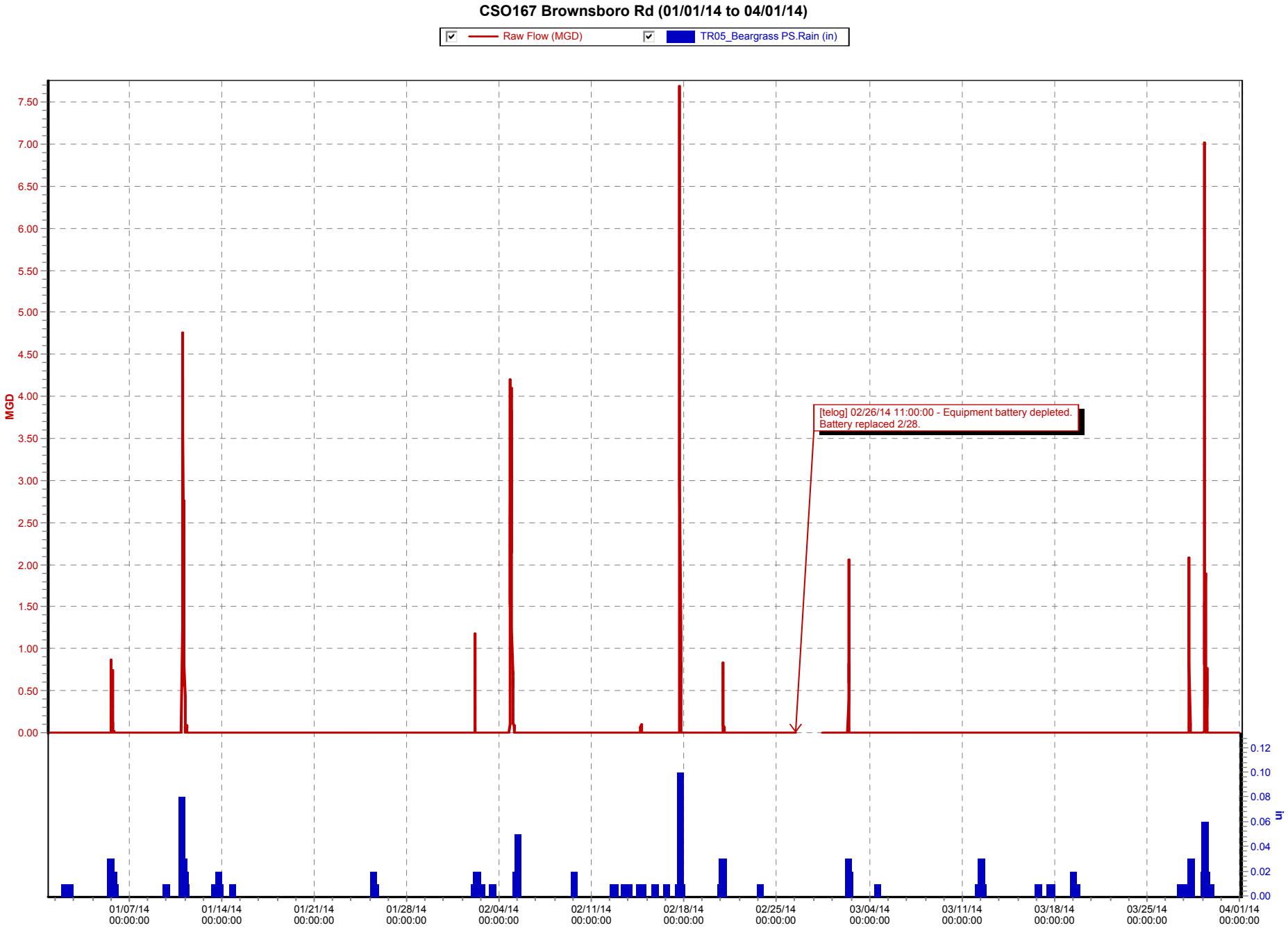
CSO155 Rowan St (01/01/14 to 04/01/14)

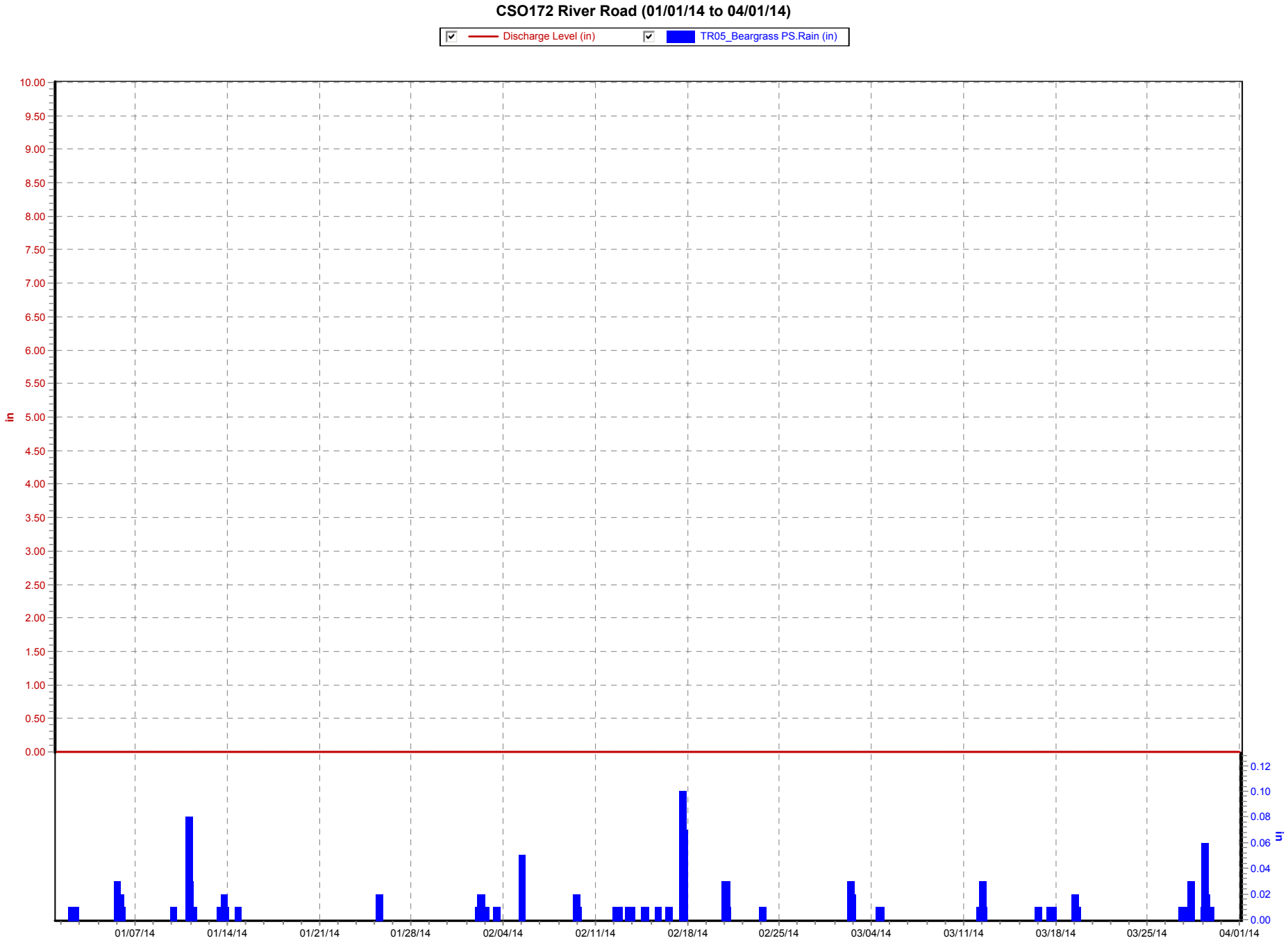

CSO160 1st St (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
[telog] 01/26/14 12:30:00 - Discharge due to snow melt. 2 in of snow depth at 35 F.
MGD
in
0.09
0.085
0.08
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

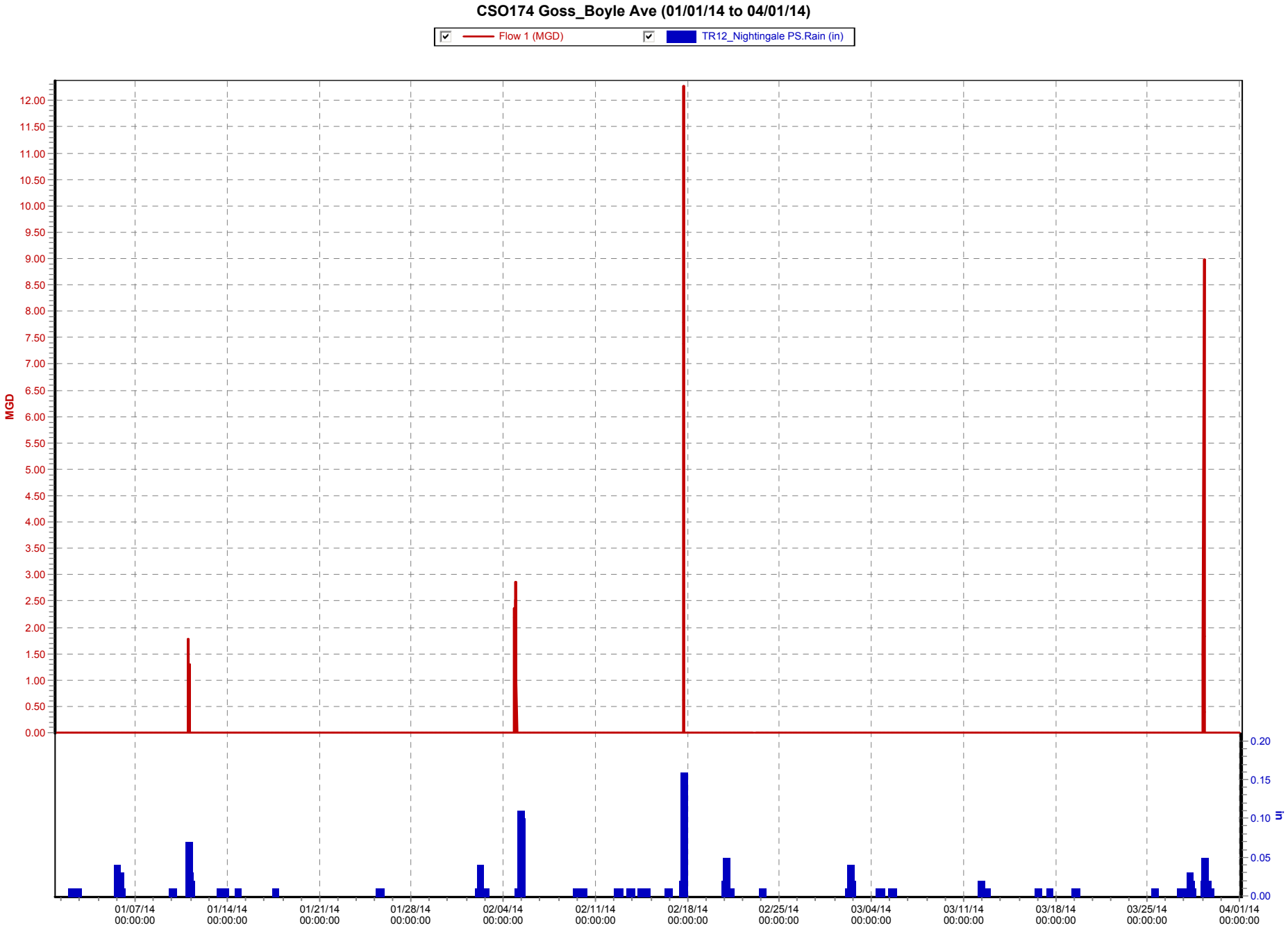
CSO161 1st and Market St (01/01/14 to 04/01/14)

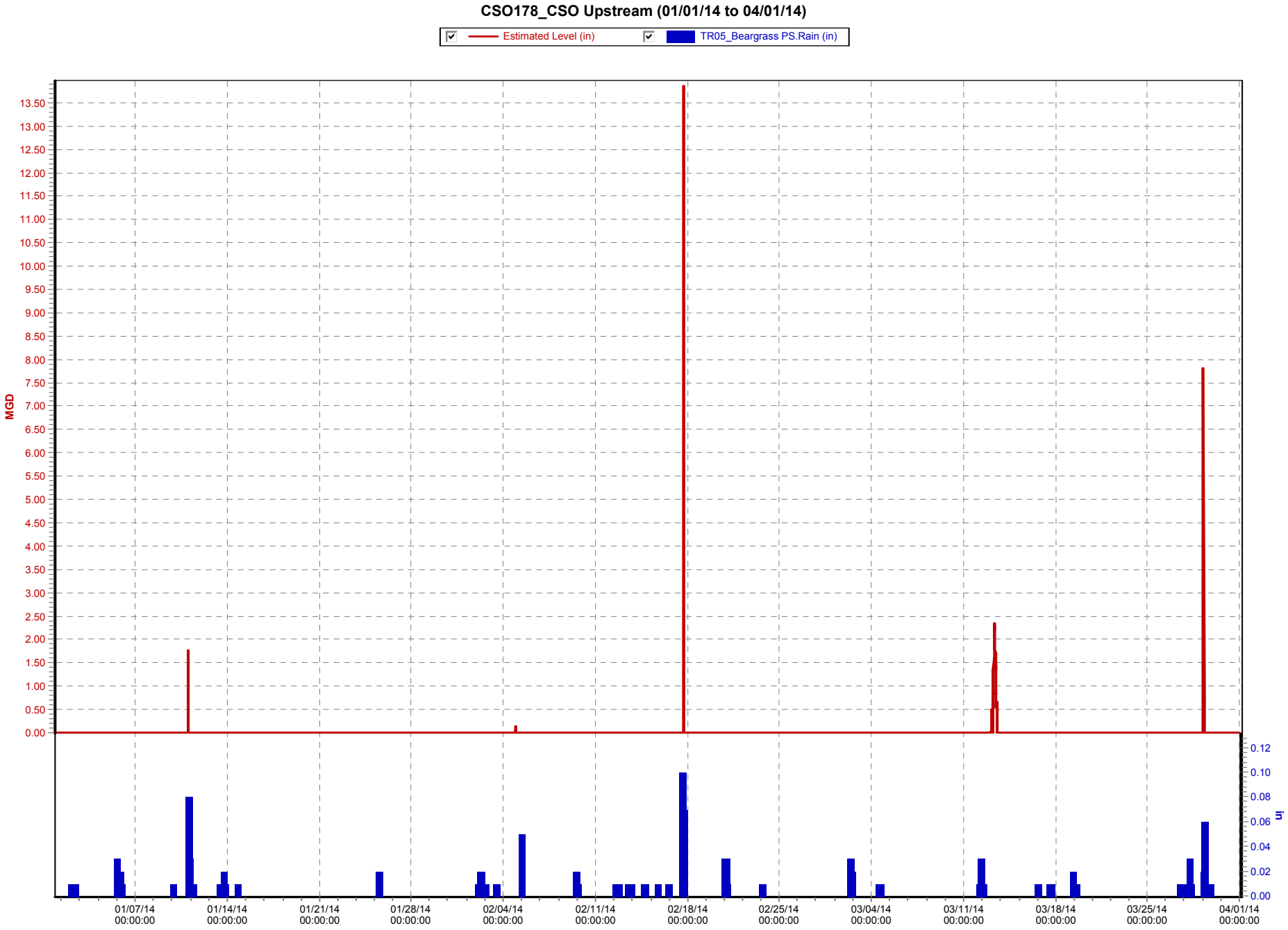


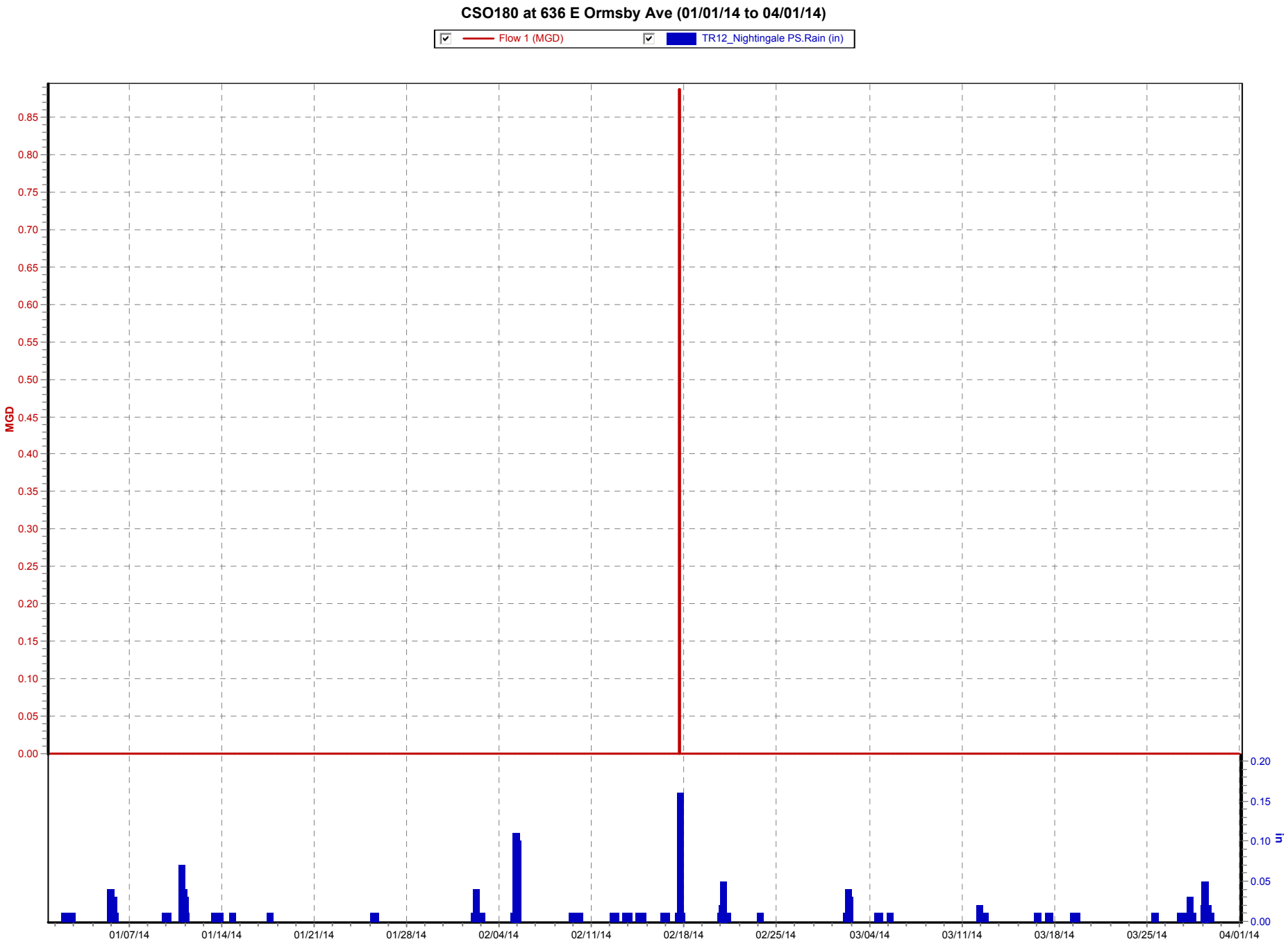

CSO166 Lex Rd (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
28.00
27.00
26.00
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

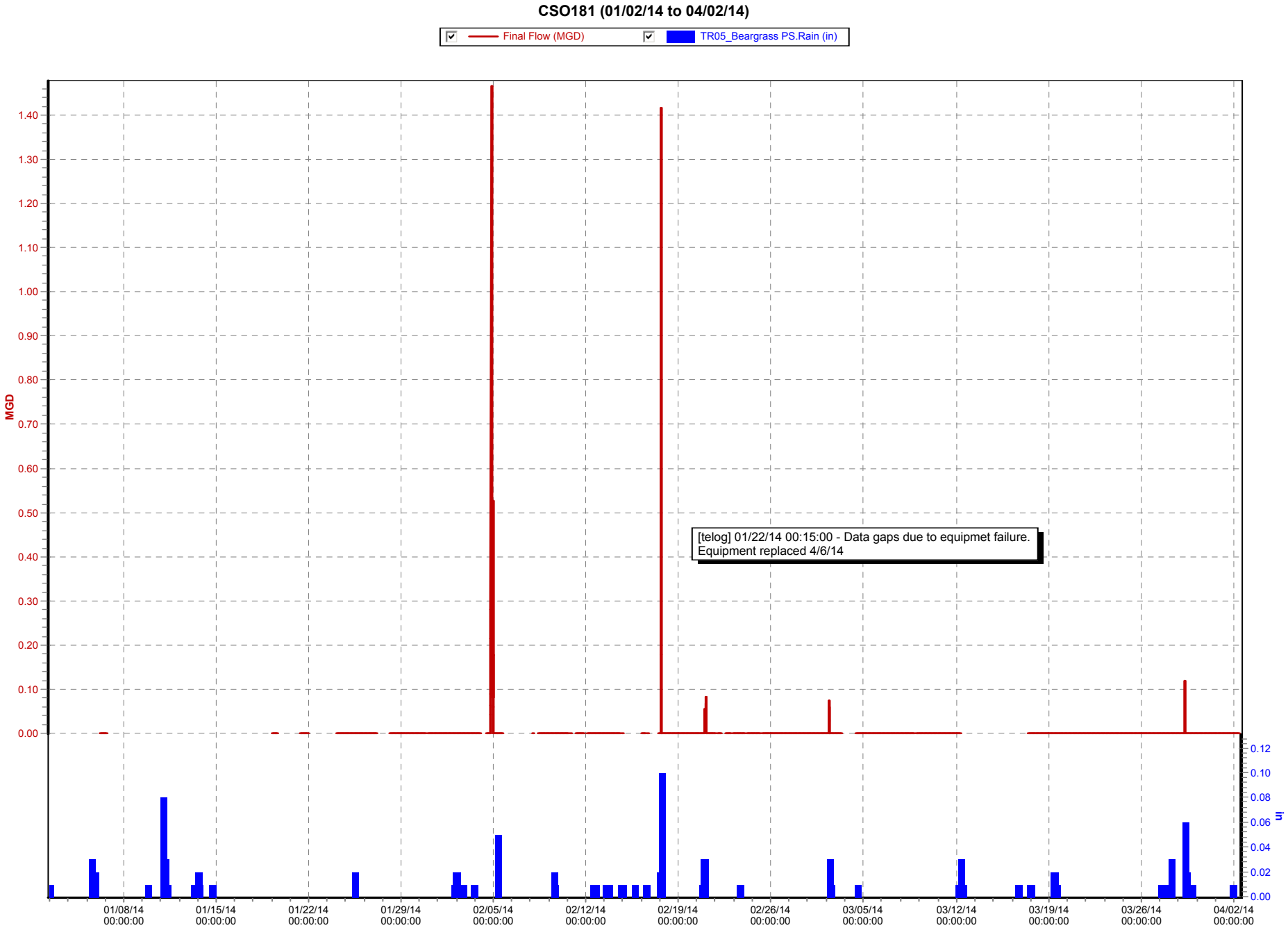

CSO167 Brownsboro Rd (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
[telog] 02/26/14 11:00:00 - Equipment battery depleted.
Battery replaced 2/28.
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

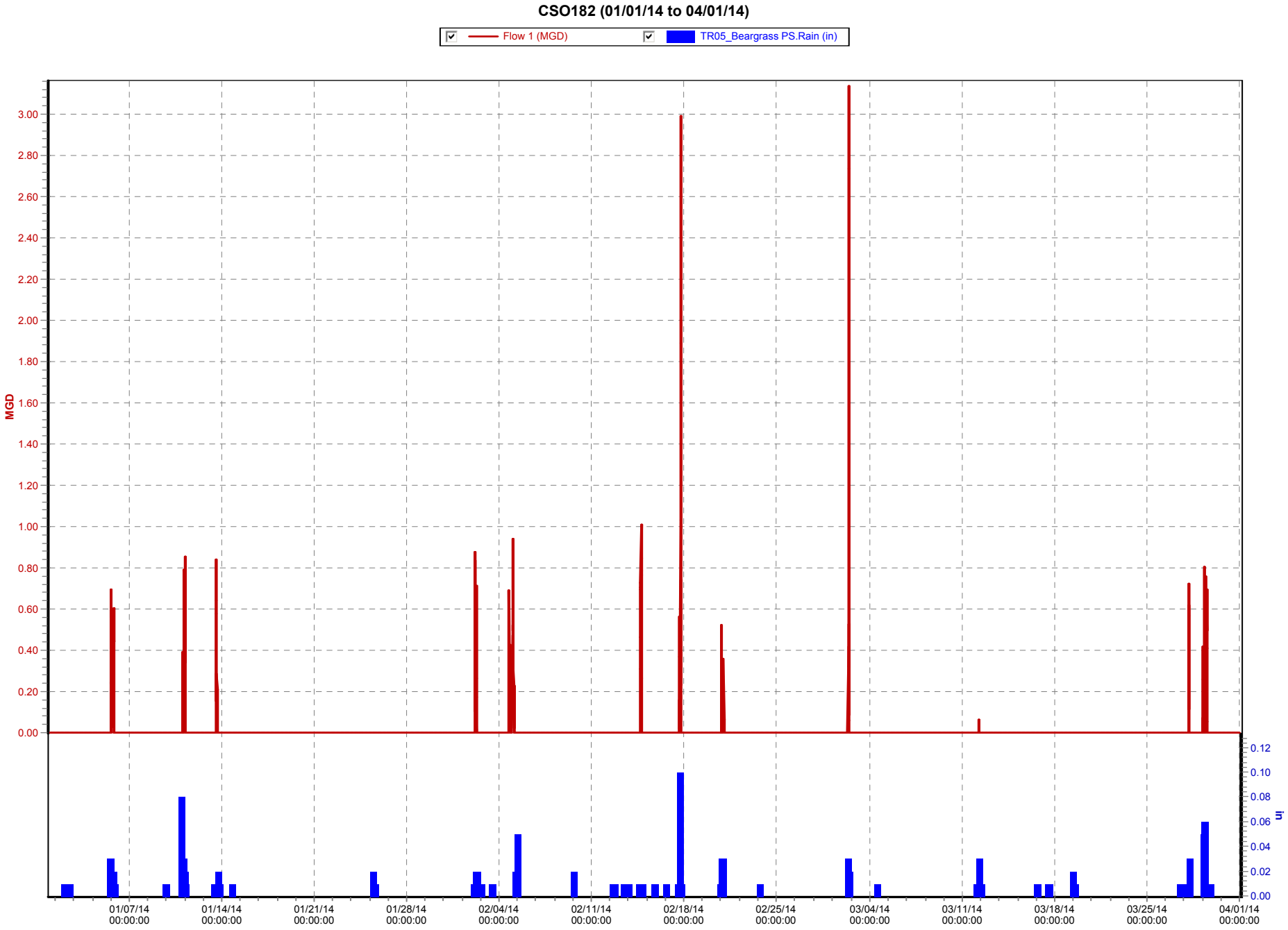

CSO172 River Road (01/01/14 to 04/01/14)
Discharge Level (in)
TR05_Beargrass PS.Rain (in)
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

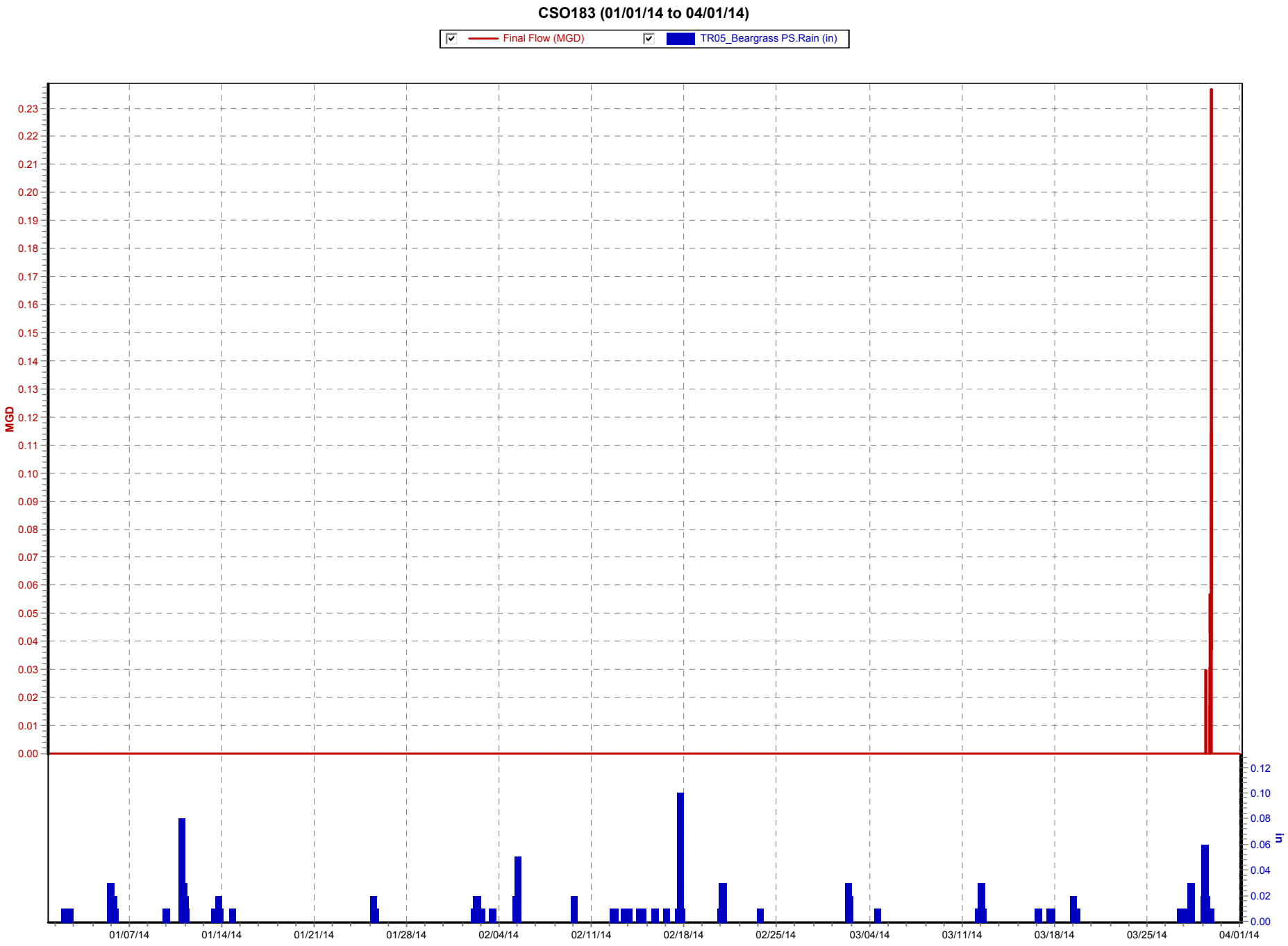

CSO174 Goss_Boyle Ave (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR12_Nightingale PS.Rain (in)
MGD
IN
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.20
0.15
0.10
0.05
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

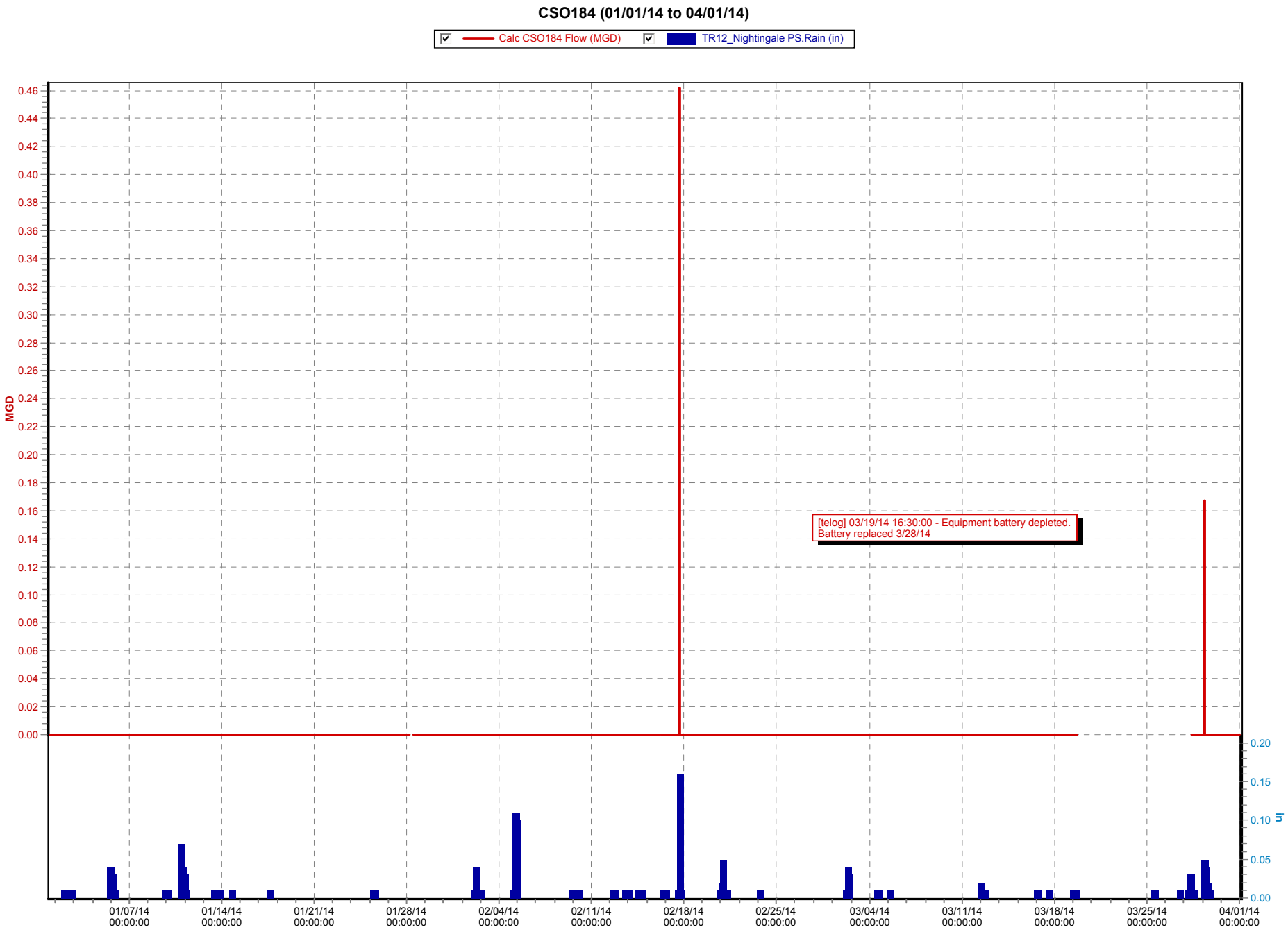

CSO178_CSO Upstream (01/01/14 to 04/01/14)
Estimated Level (in)
TR05_Beargrass PS.Rain (in)
MGD
in
13.50
13.00
12.50
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO180 at 636 E Ormsby Ave (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR12_Nightingale PS.Rain (in)
MGD
in
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.20
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

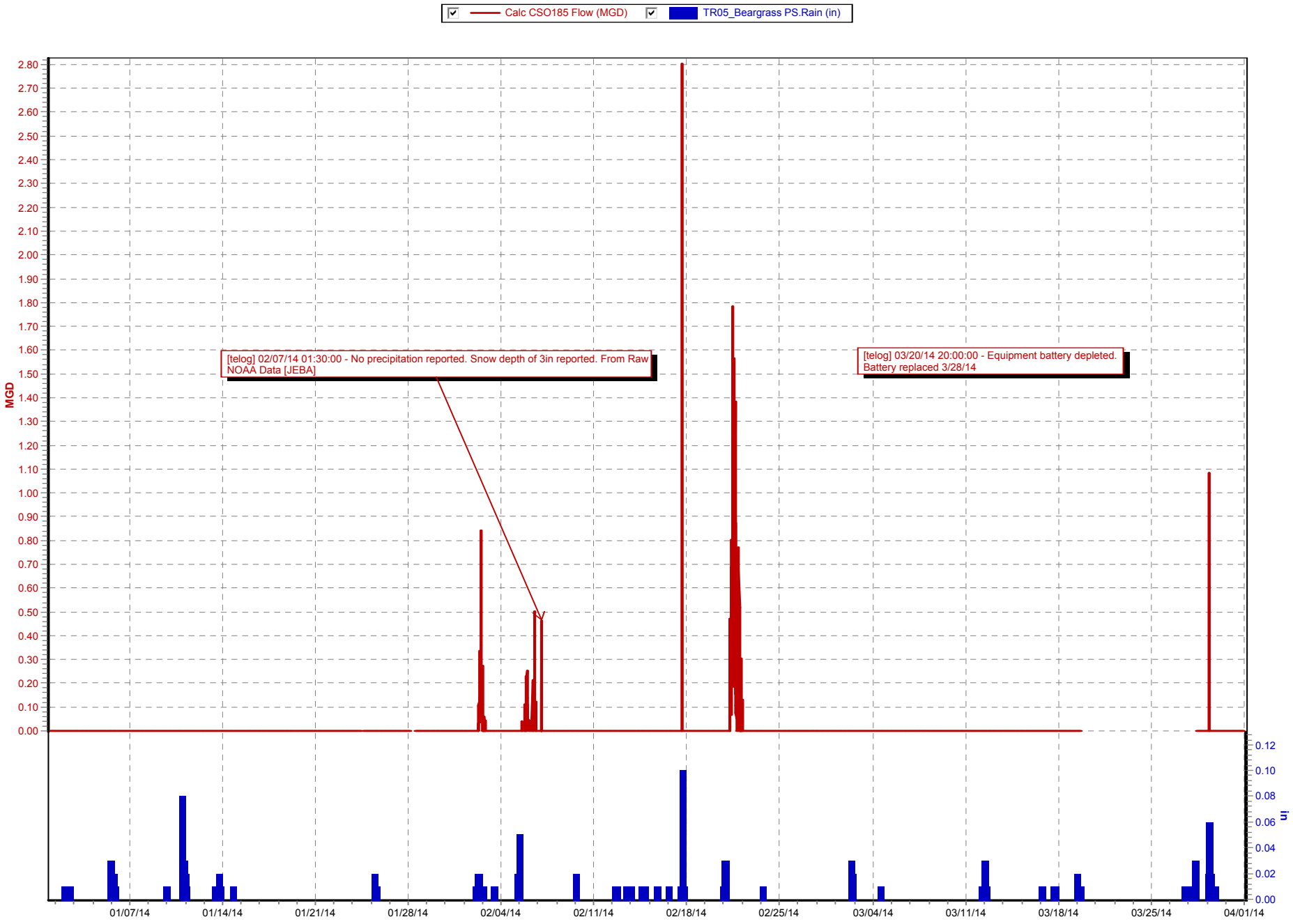

CSO181 (01/02/14 to 04/02/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
[telog] 01/22/14 00:15:00 - Data gaps due to equipmet failure.
Equipment replaced 4/6/14
01/08/14 00:00:00
01/15/14 00:00:00
01/22/14 00:00:00
01/29/14 00:00:00
02/05/14 00:00:00
02/12/14 00:00:00
02/19/14 00:00:00
02/26/14 00:00:00
03/05/14 00:00:00
03/12/14 00:00:00
03/19/14 00:00:00
03/26/14 00:00:00
04/02/14 00:00:00

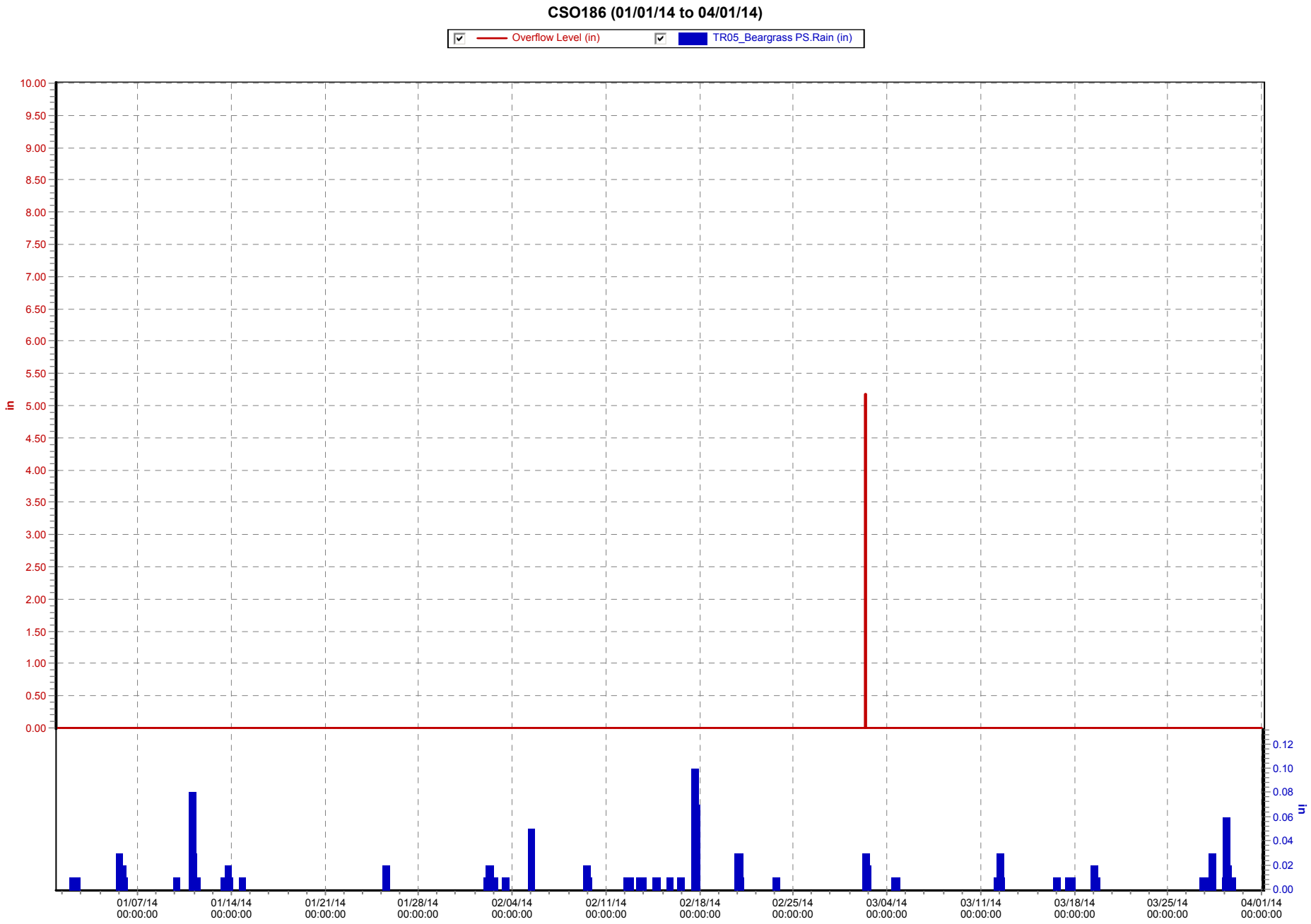

CSO182 (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

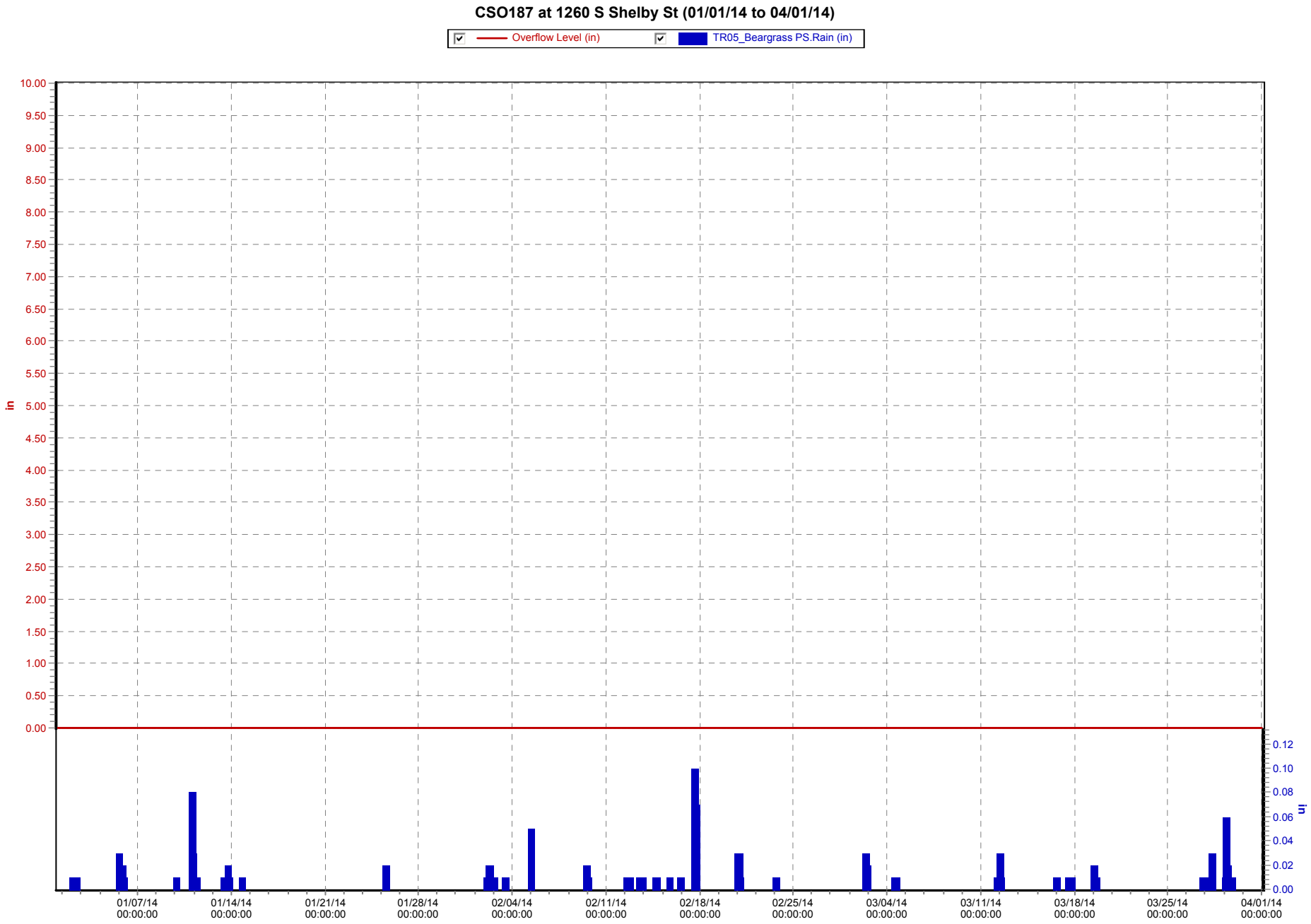

CSO183 (01/01/14 to 04/01/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
0.23
0.22
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

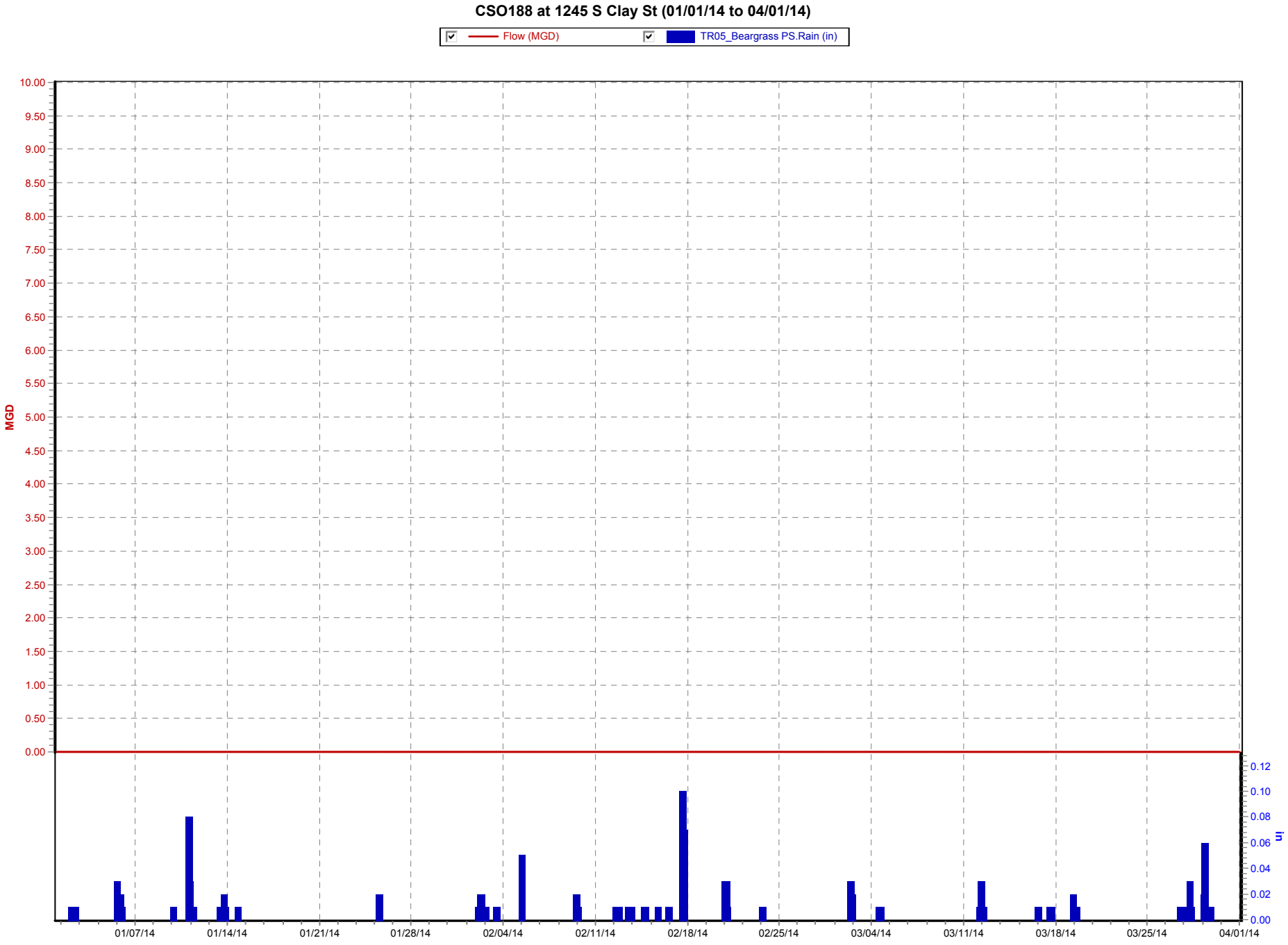

CSO184 (01/01/14 to 04/01/14)
Calc CSO184 Flow (MGD)
TR12_Nightingale PS.Rain (in)
MGD
IN
0.46
0.44
0.42
0.40
0.38
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.20
0.15
0.10
0.05
0.00
[telog] 03/19/14 16:30:00 - Equipment battery depleted.
Battery replaced 3/28/14
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

CSO185 (01/01/14 to 04/01/14)

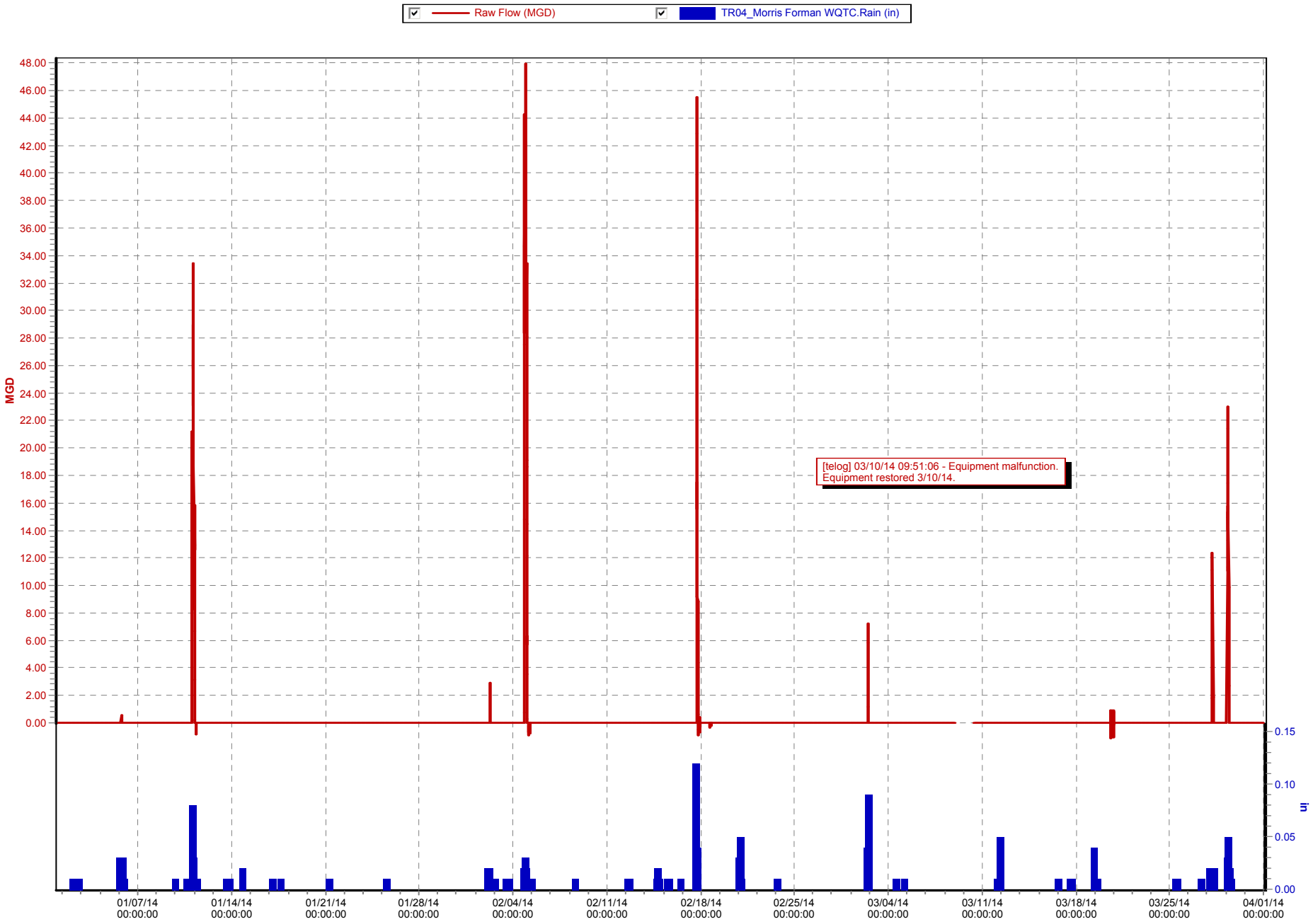


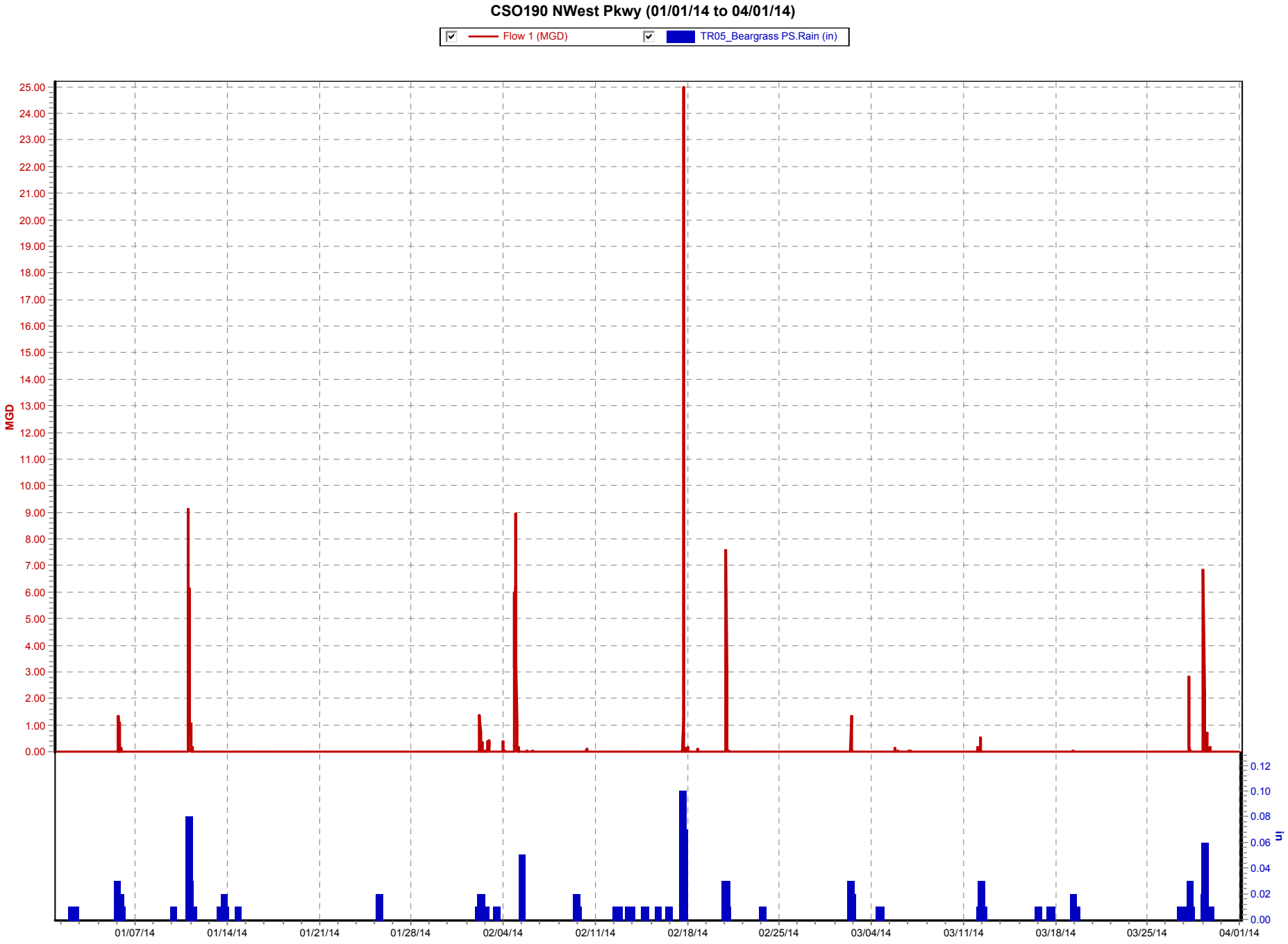

CSO186 (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

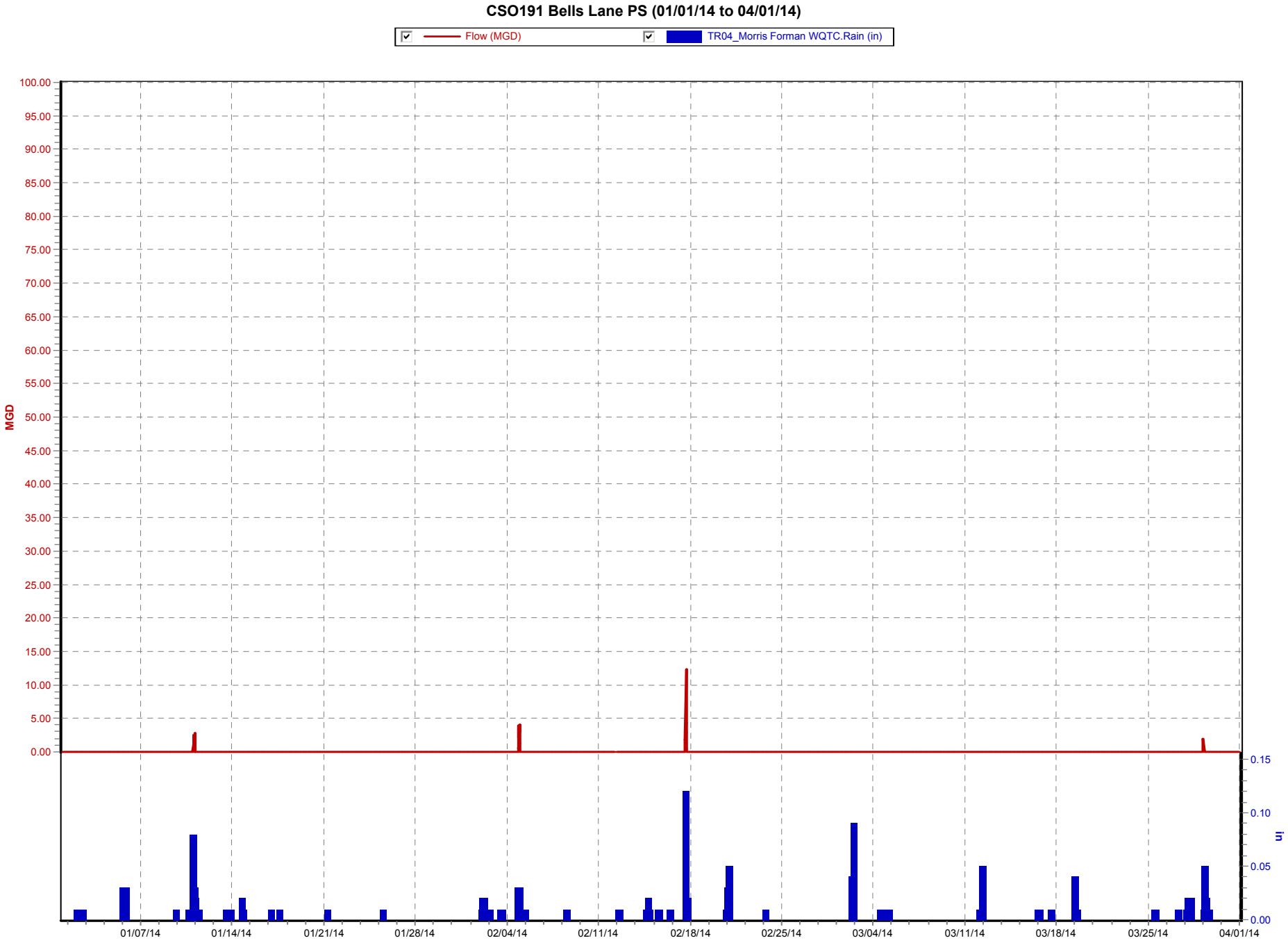

CSO187 at 1260 S Shelby St (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

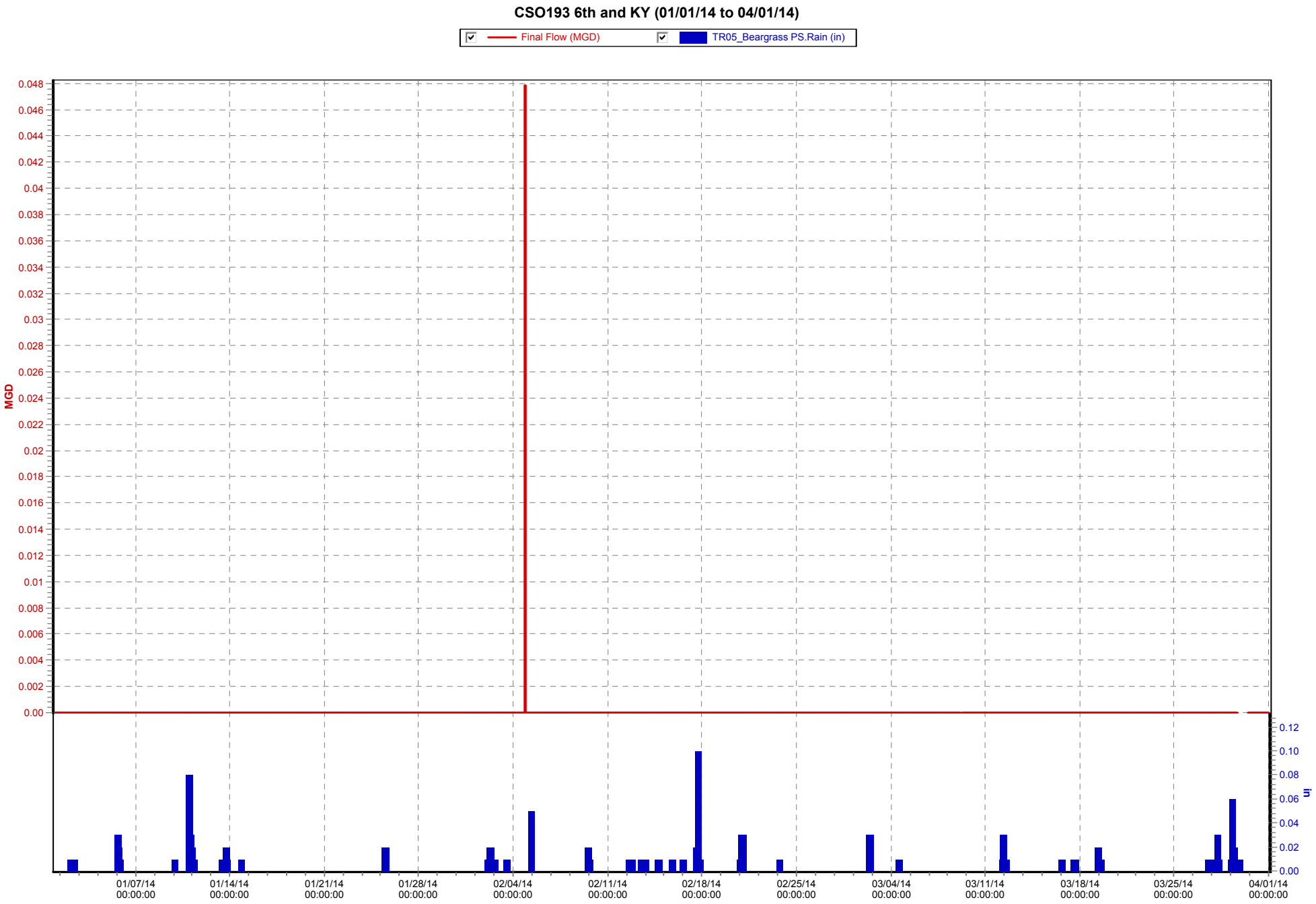

CSO188 at 1245 S Clay St (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

CSO189 Shawnee PK PS (01/01/14 to 04/01/14)

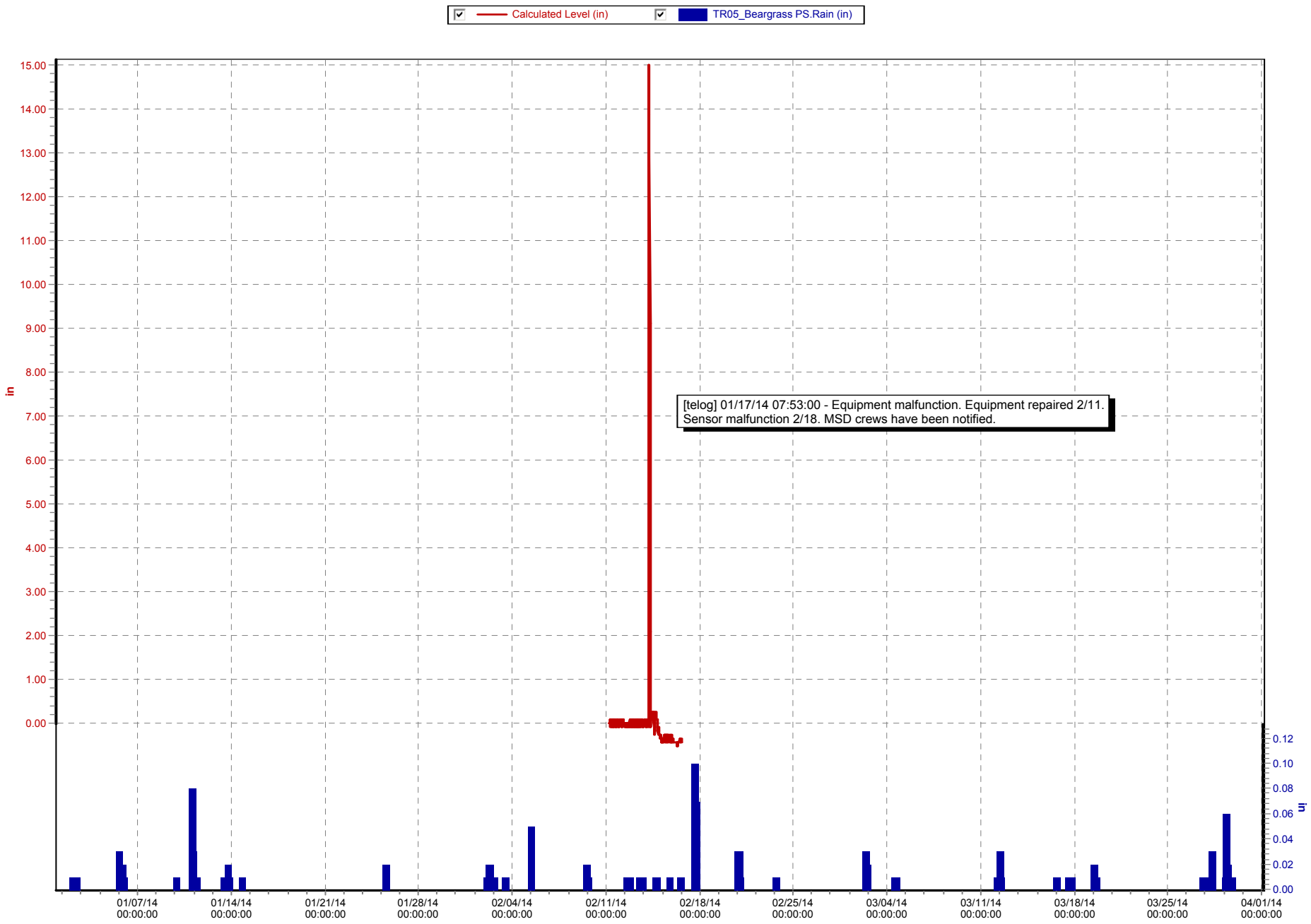


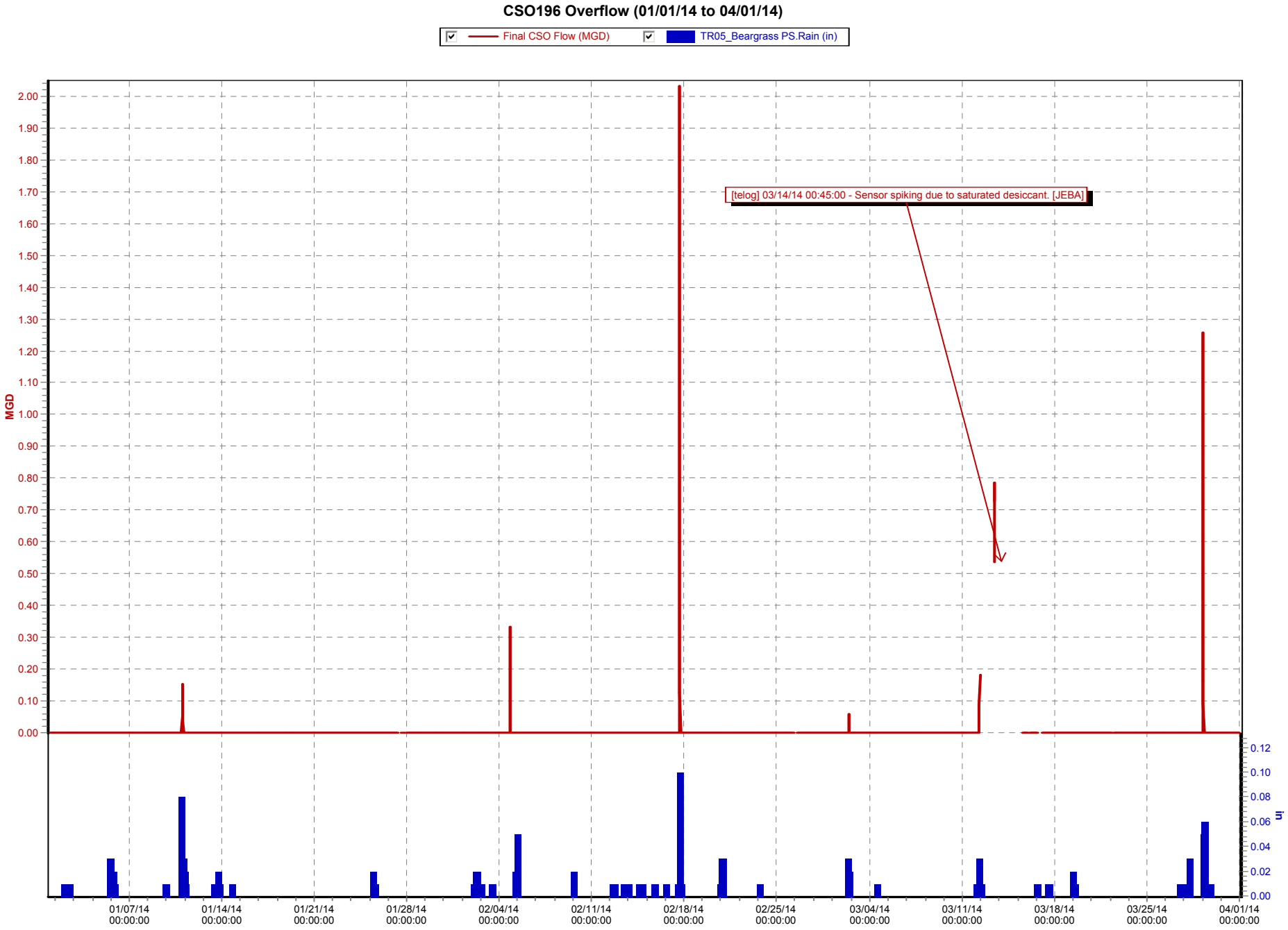

CSO190 NWest Pkwy (01/01/14 to 04/01/14)
Flow 1 (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

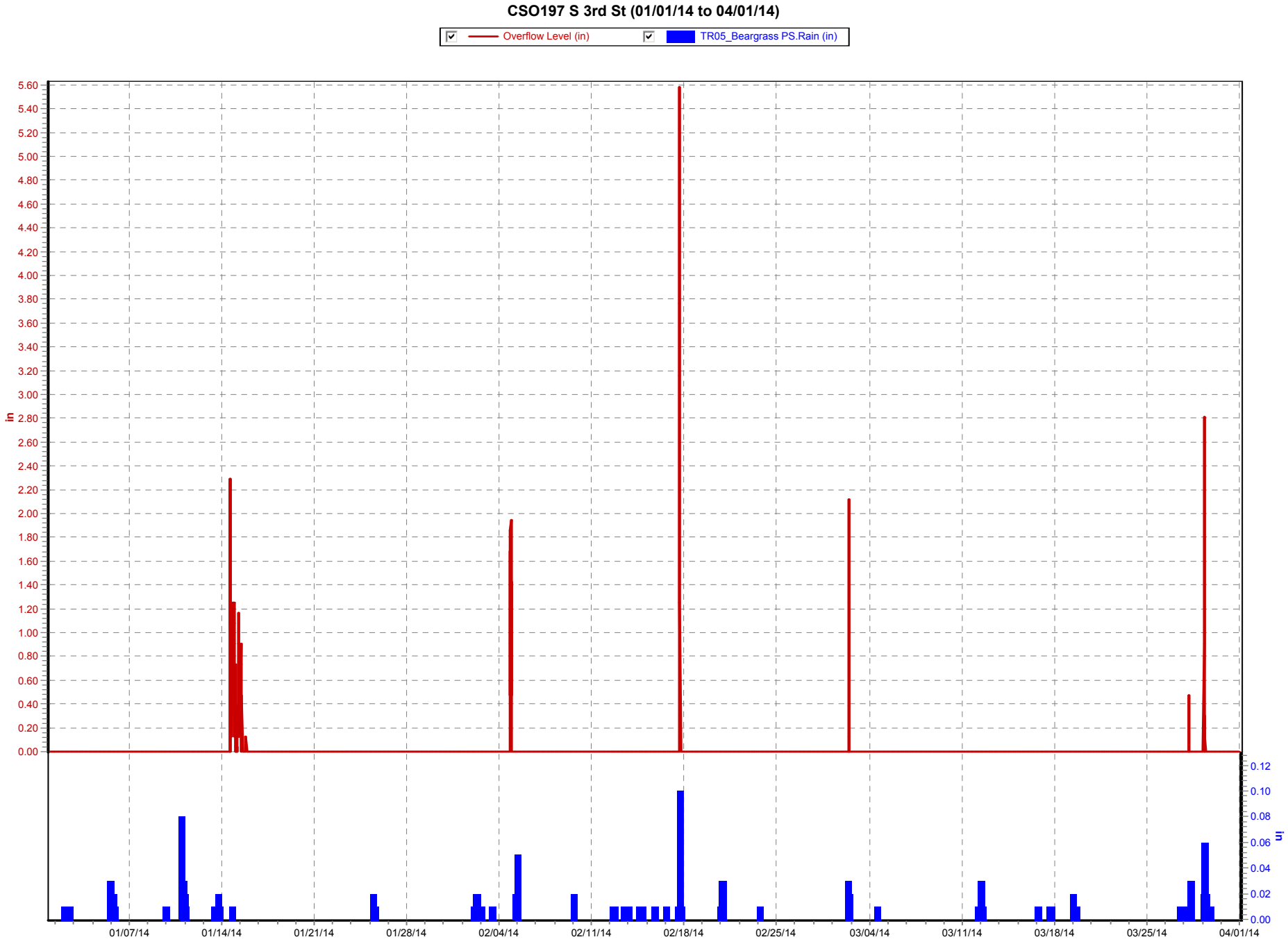

CSO191 Bells Lane PS (01/01/14 to 04/01/14)
Flow (MGD)
TR04_Morris Forman WQTC.Rain (in)
MGD
in
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.15
0.10
0.05
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

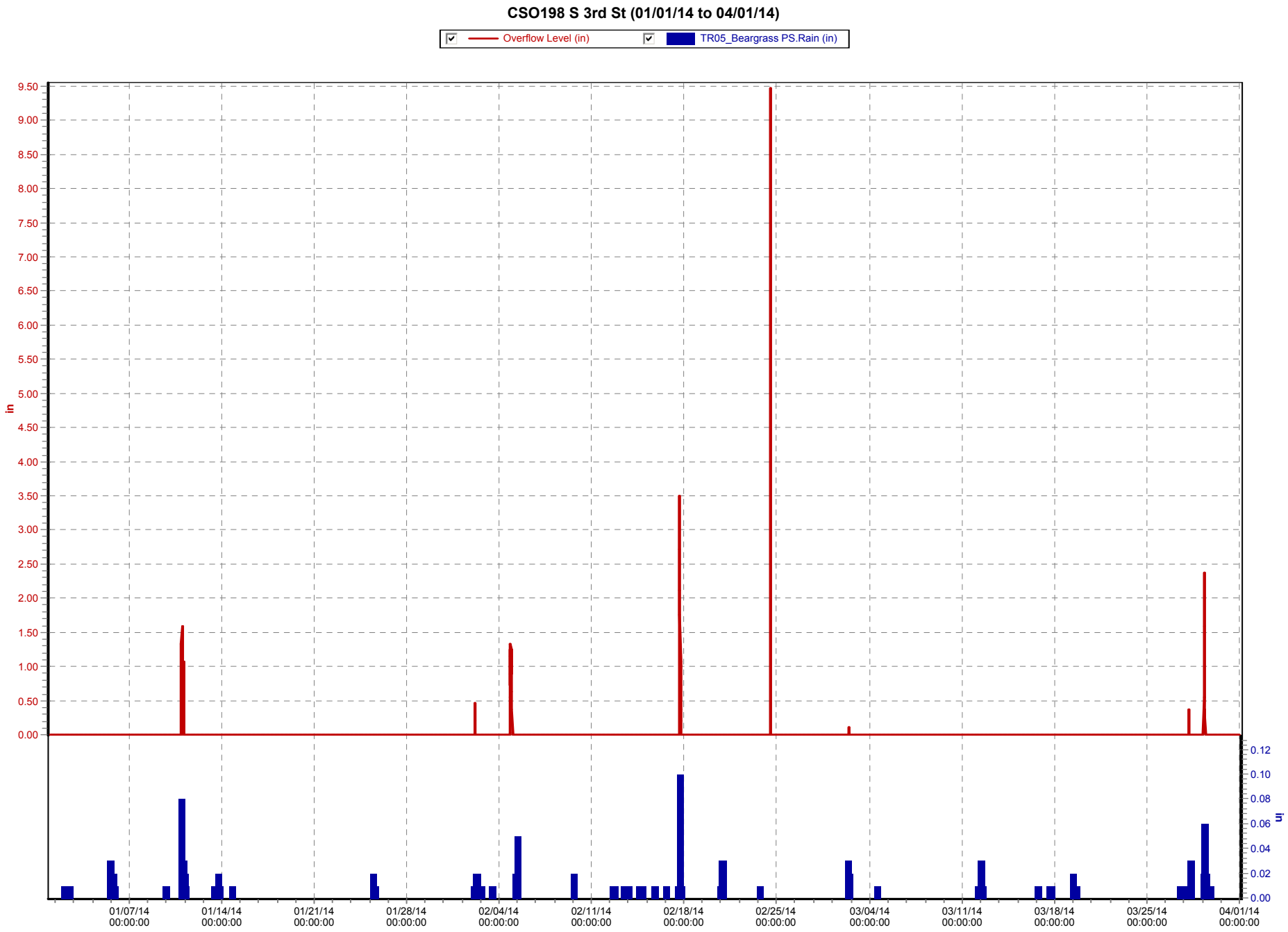

CSO193 6th and KY (01/01/14 to 04/01/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
0.048
0.046
0.044
0.042
0.04
0.038
0.036
0.034
0.032
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

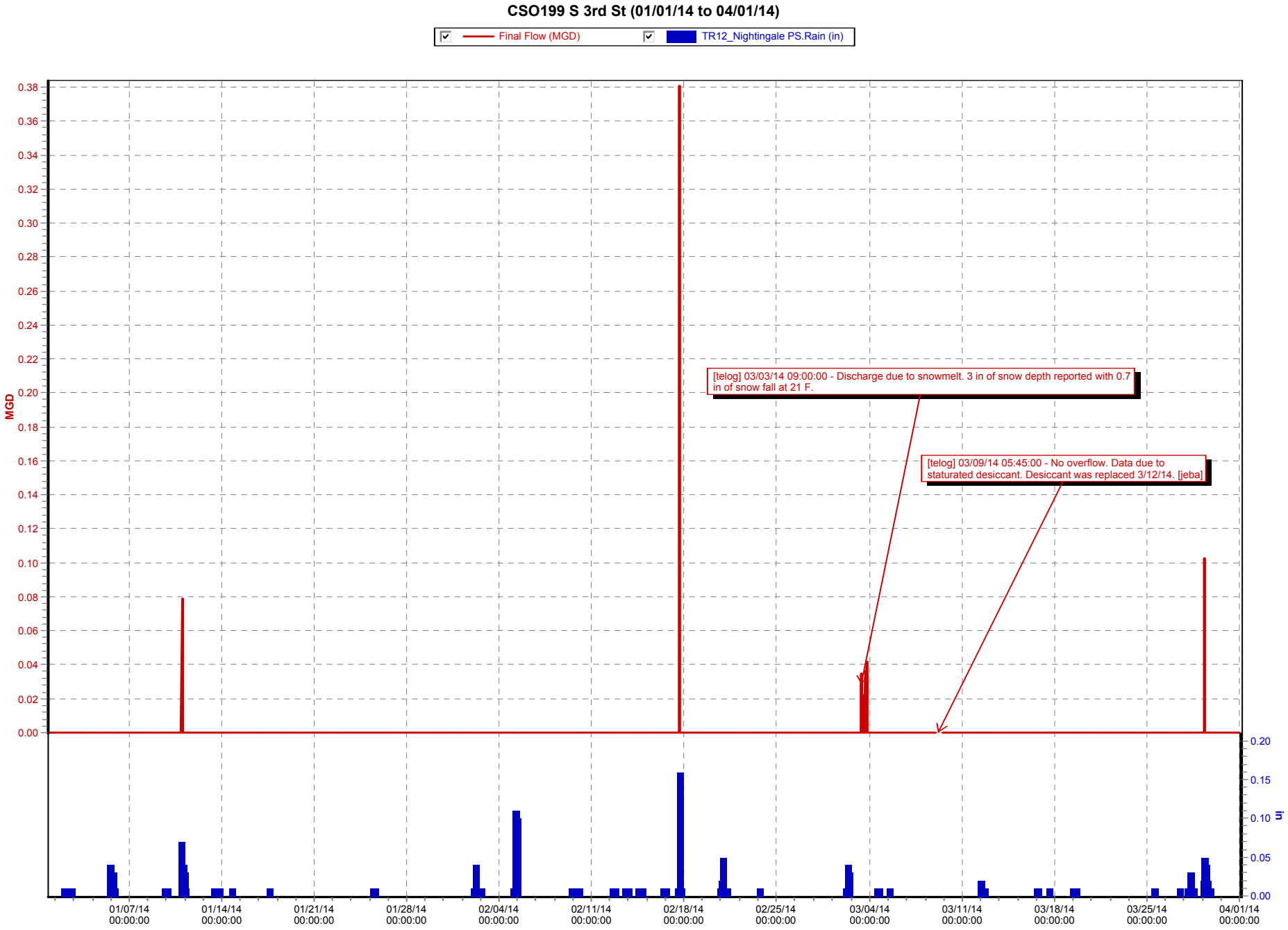
CSO195 Overflow (01/01/14 to 04/01/14)

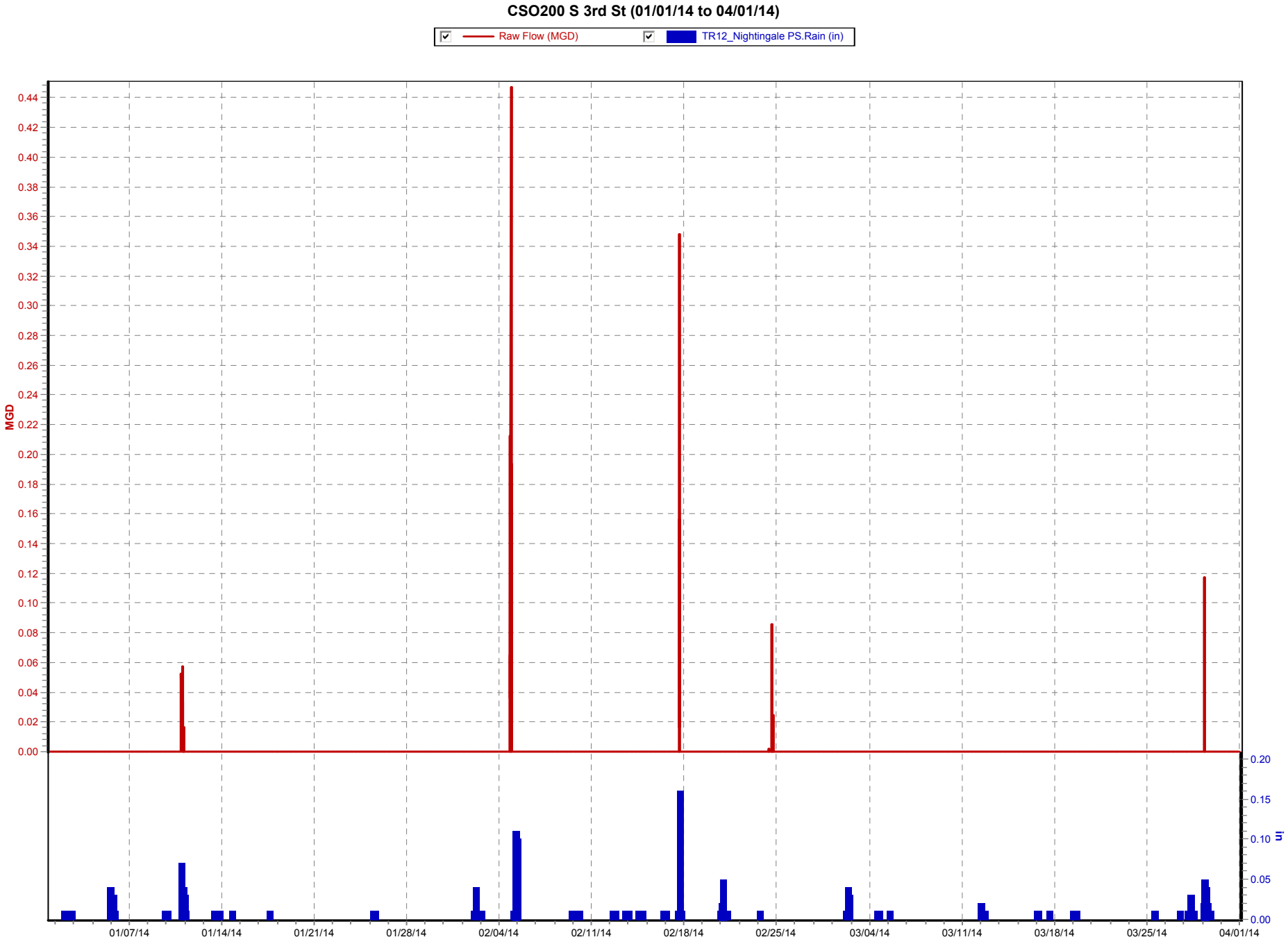



CSO196 Overflow (01/01/14 to 04/01/14)
Final CSO Flow (MGD)
TR05_Beargrass PS.Rain (in)
[telog] 03/14/14 00:45:00 - Sensor spiking due to saturated desiccant. [JEBA]
MGD
in
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

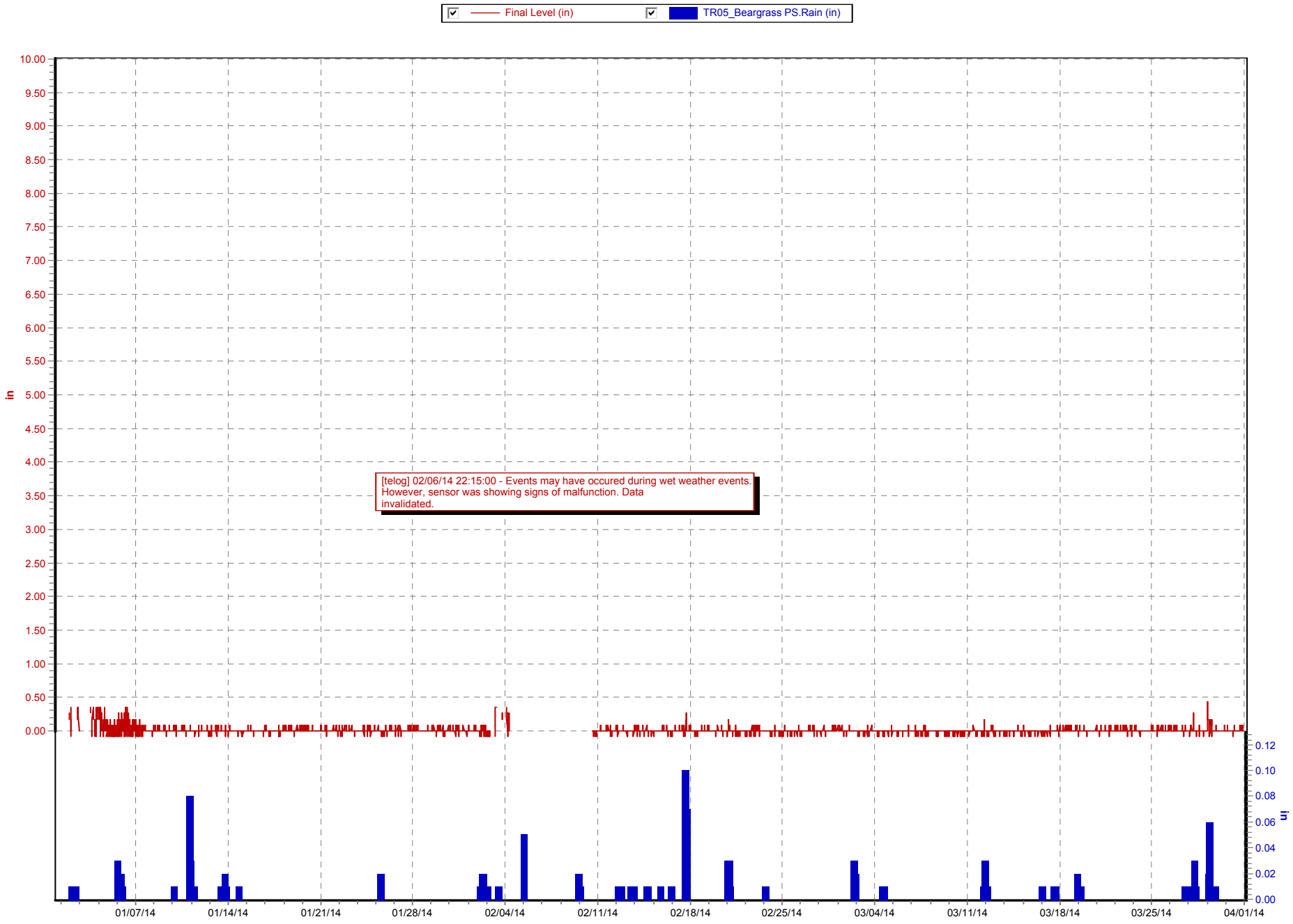

CSO197 S 3rd St (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
5.60
5.40
5.20
5.00
4.80
4.60
4.40
4.20
4.00
3.80
3.60
3.40
3.20
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

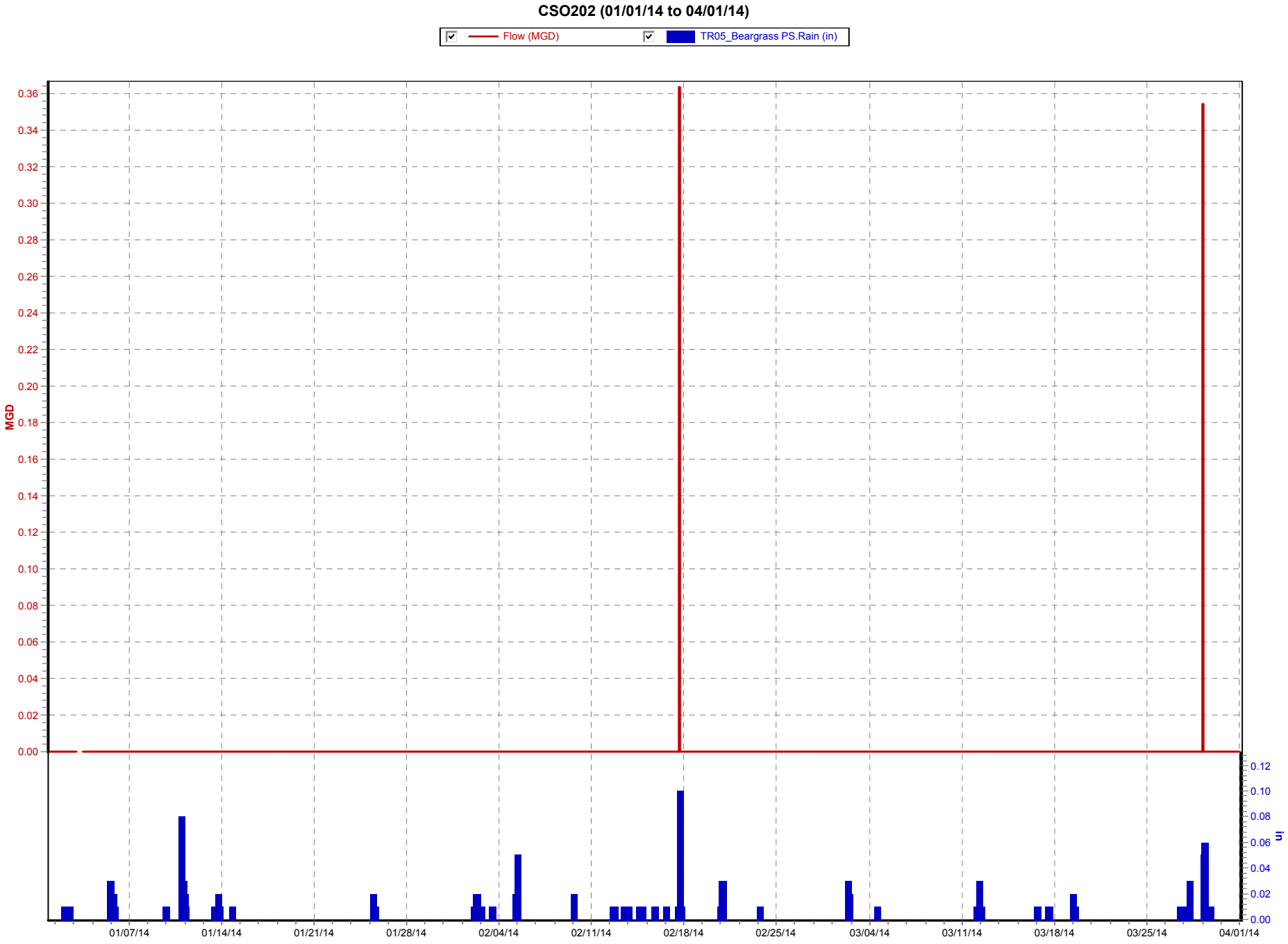

CSO198 S 3rd St (01/01/14 to 04/01/14)
Overflow Level (in)
TR05_Beargrass PS.Rain (in)
in
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00

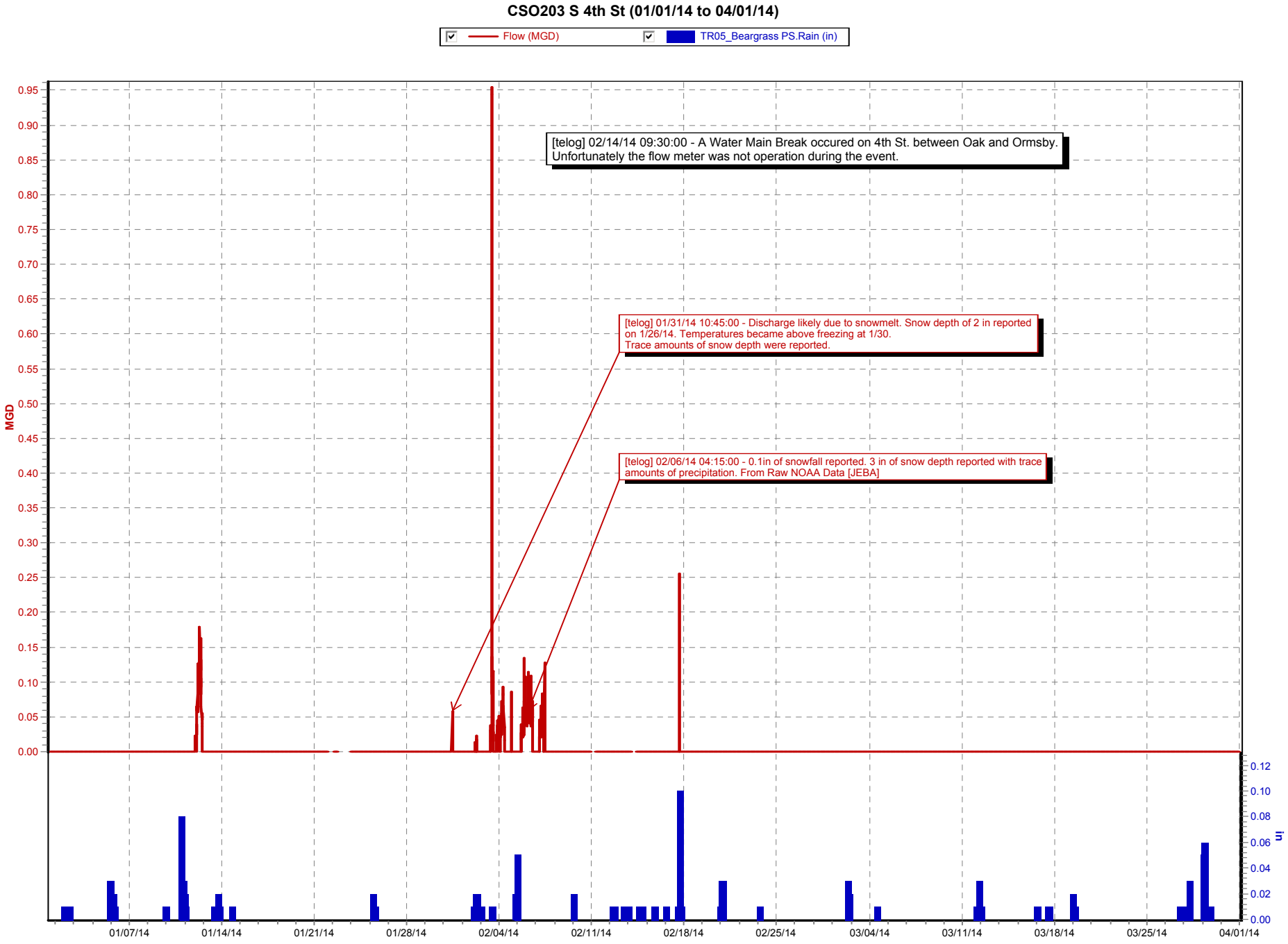

CSO199 S 3rd St (01/01/14 to 04/01/14)
Final Flow (MGD)
TR12_Nightingale PS.Rain (in)
MGD
IN
[telog] 03/03/14 09:00:00 - Discharge due to snowmelt. 3 in of snow depth reported with 0.7 in of snow fall at 21 F.
[telog] 03/09/14 05:45:00 - No overflow. Data due to staturated desiccant. Desiccant was replaced 3/12/14. [jeba]
0.38
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.20
0.15
0.10
0.05
0.00
01/07/14 00:00:00
01/14/14 00:00:00
01/21/14 00:00:00
01/28/14 00:00:00
02/04/14 00:00:00
02/11/14 00:00:00
02/18/14 00:00:00
02/25/14 00:00:00
03/04/14 00:00:00
03/11/14 00:00:00
03/18/14 00:00:00
03/25/14 00:00:00
04/01/14 00:00:00


CSO200 S 3rd St (01/01/14 to 04/01/14)
Raw Flow (MGD)
TR12_Nightingale PS.Rain (in)
MGD
0.44
0.42
0.40
0.38
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.20
0.15
0.10
0.05
0.00
in
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

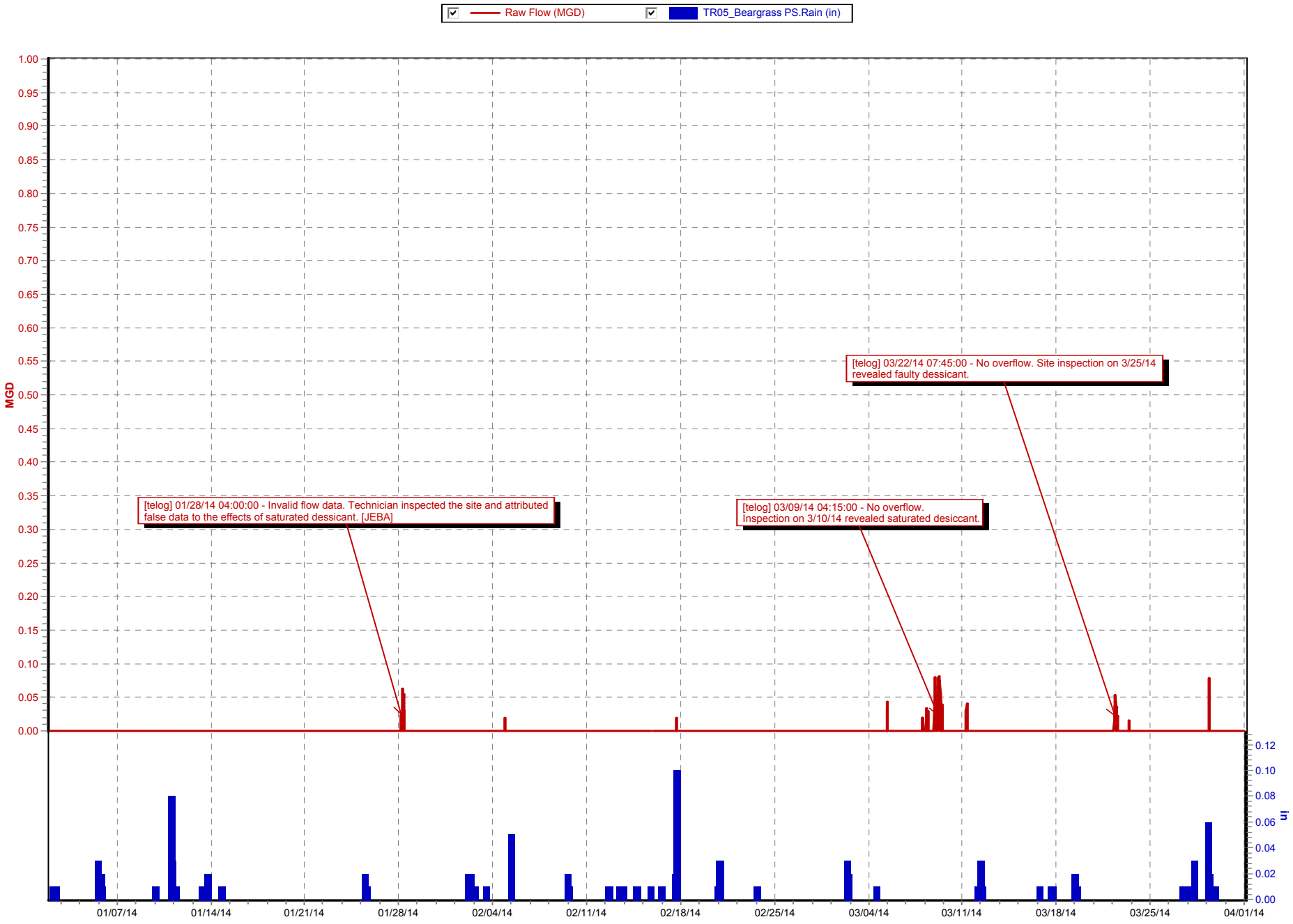
CSO201 Upstream of Dam (01/01/14 to 04/01/14)



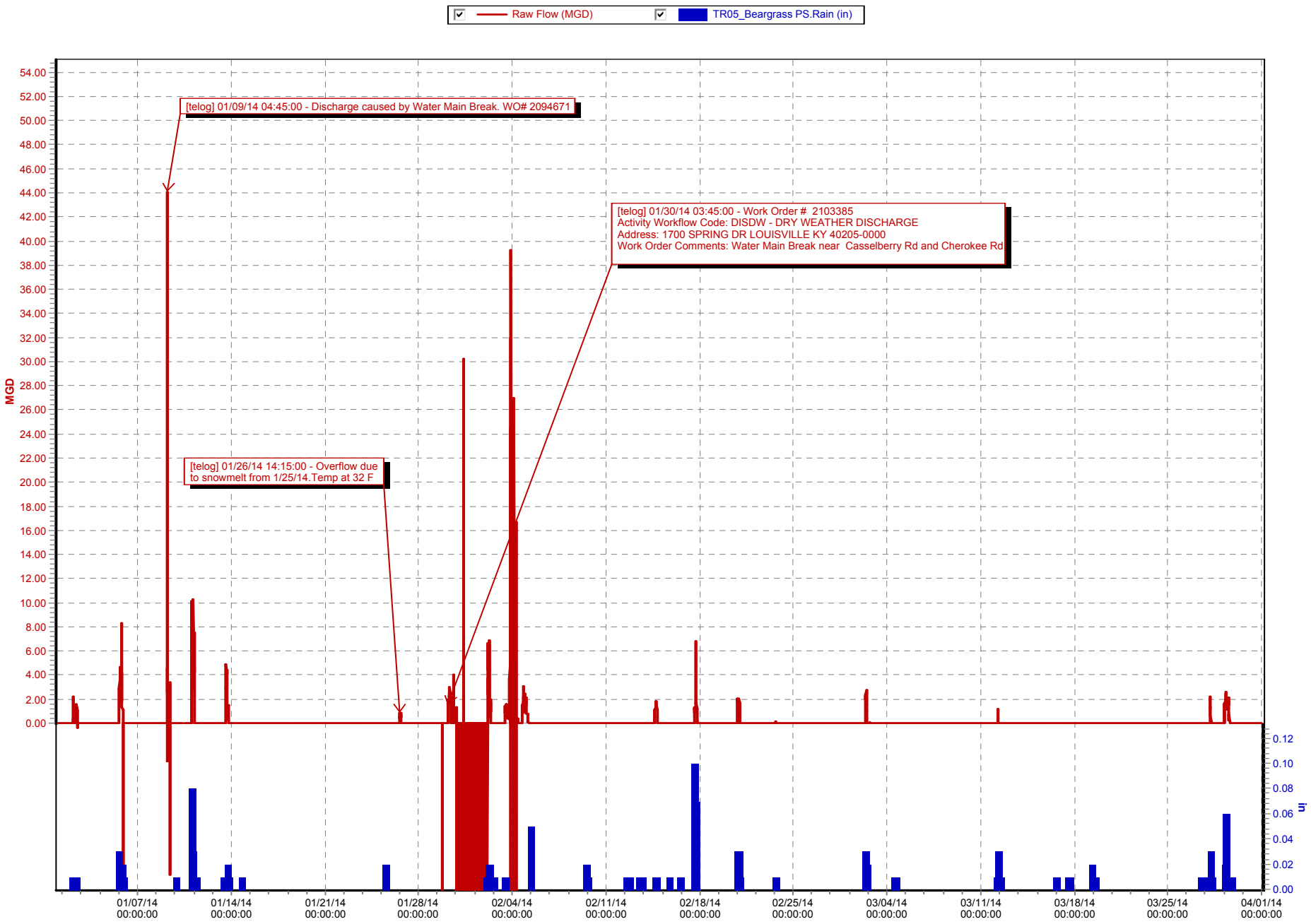

CSO202 (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14


CSO203 S 4th St (01/01/14 to 04/01/14)
Flow (MGD)
TR05_Beargrass PS.Rain (in)
[telog] 02/14/14 09:30:00 - A Water Main Break occured on 4th St. between Oak and Ormsby. Unfortunately the flow meter was not operation during the event.
[telog] 01/31/14 10:45:00 - Discharge likely due to snowmelt. Snow depth of 2 in reported on 1/26/14. Temperatures became above freezing at 1/30. Trace amounts of snow depth were reported.
[telog] 02/06/14 04:15:00 - 0.1in of snowfall reported. 3 in of snow depth reported with trace amounts of precipitation. From Raw NOAA Data [JEBA]
MGD
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
in
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

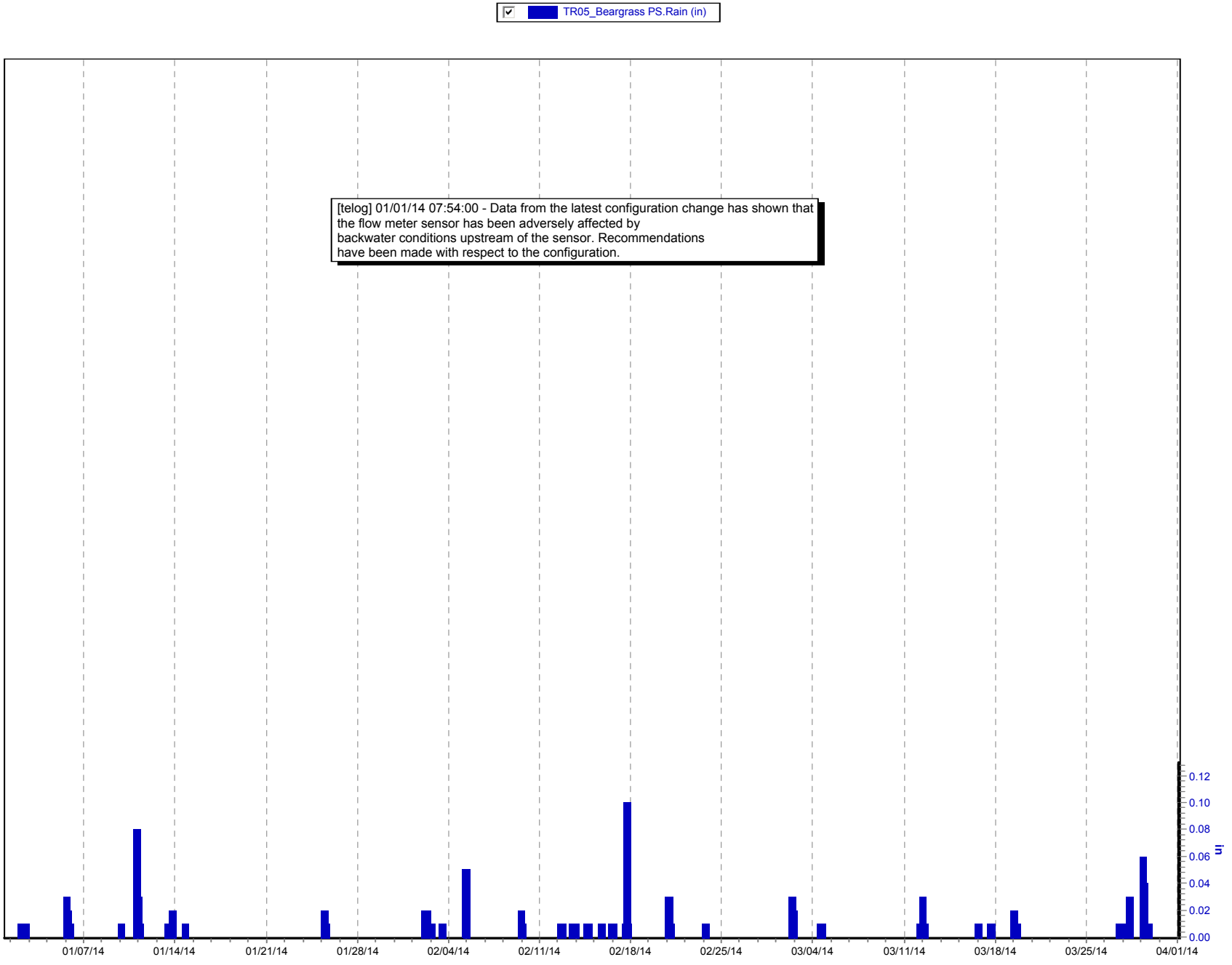
CSO205 Morgan St (01/02/14 to 04/01/14)

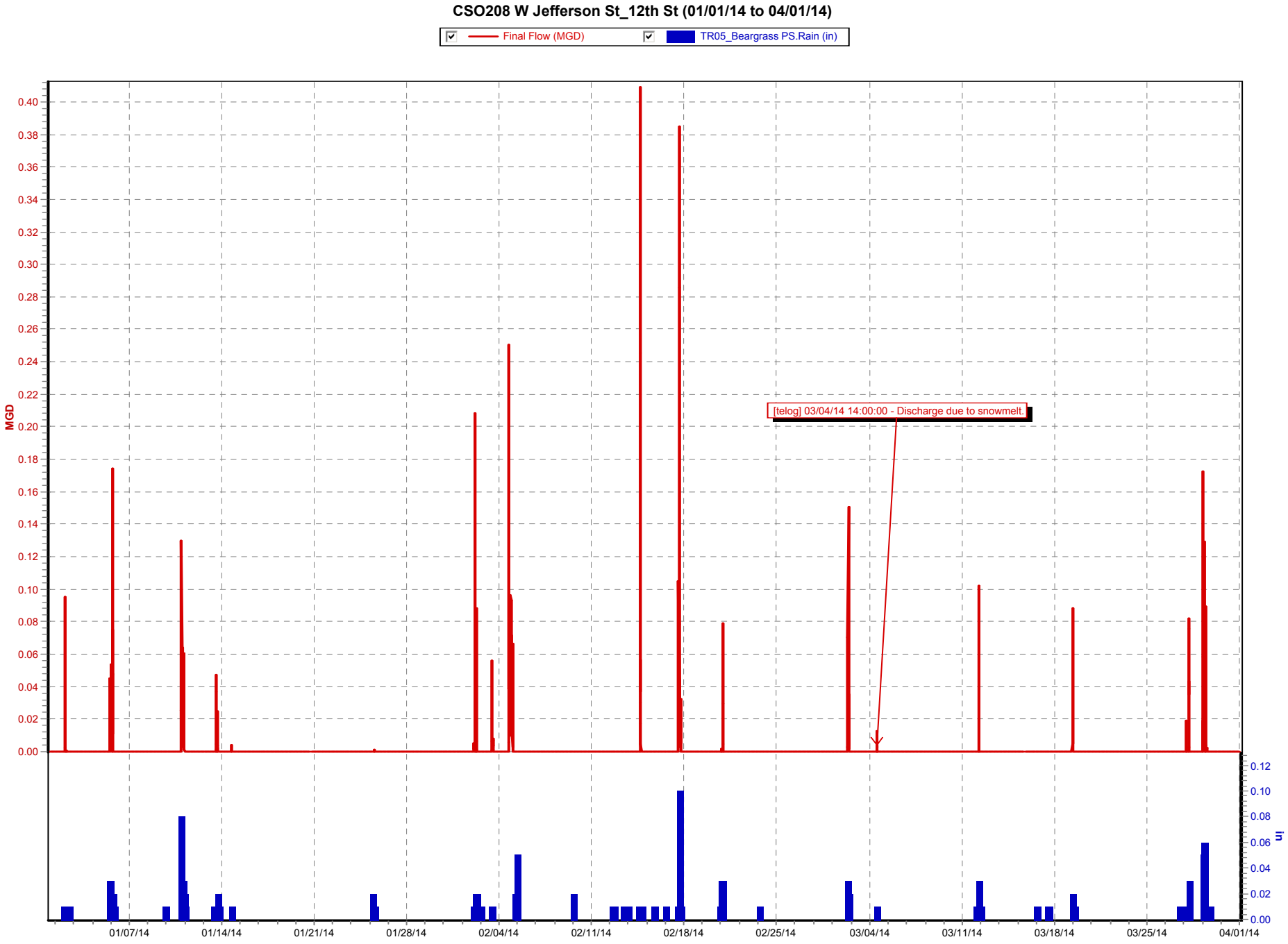


CSO206 Cherokee Park_String St (01/01/14 to 04/01/14)

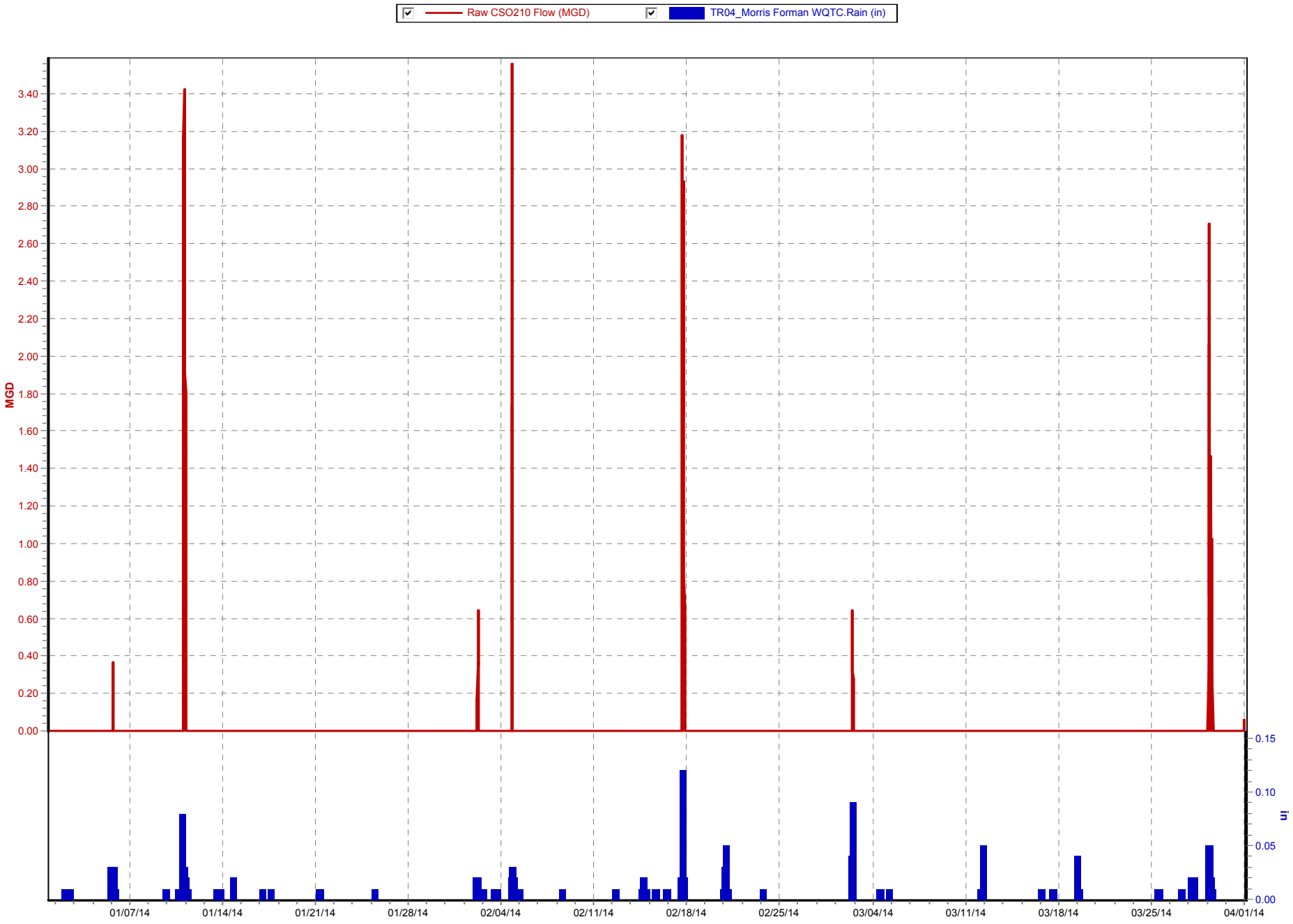


CSO207 W Jefferson St_2nd St (01/01/14 to 04/01/14)

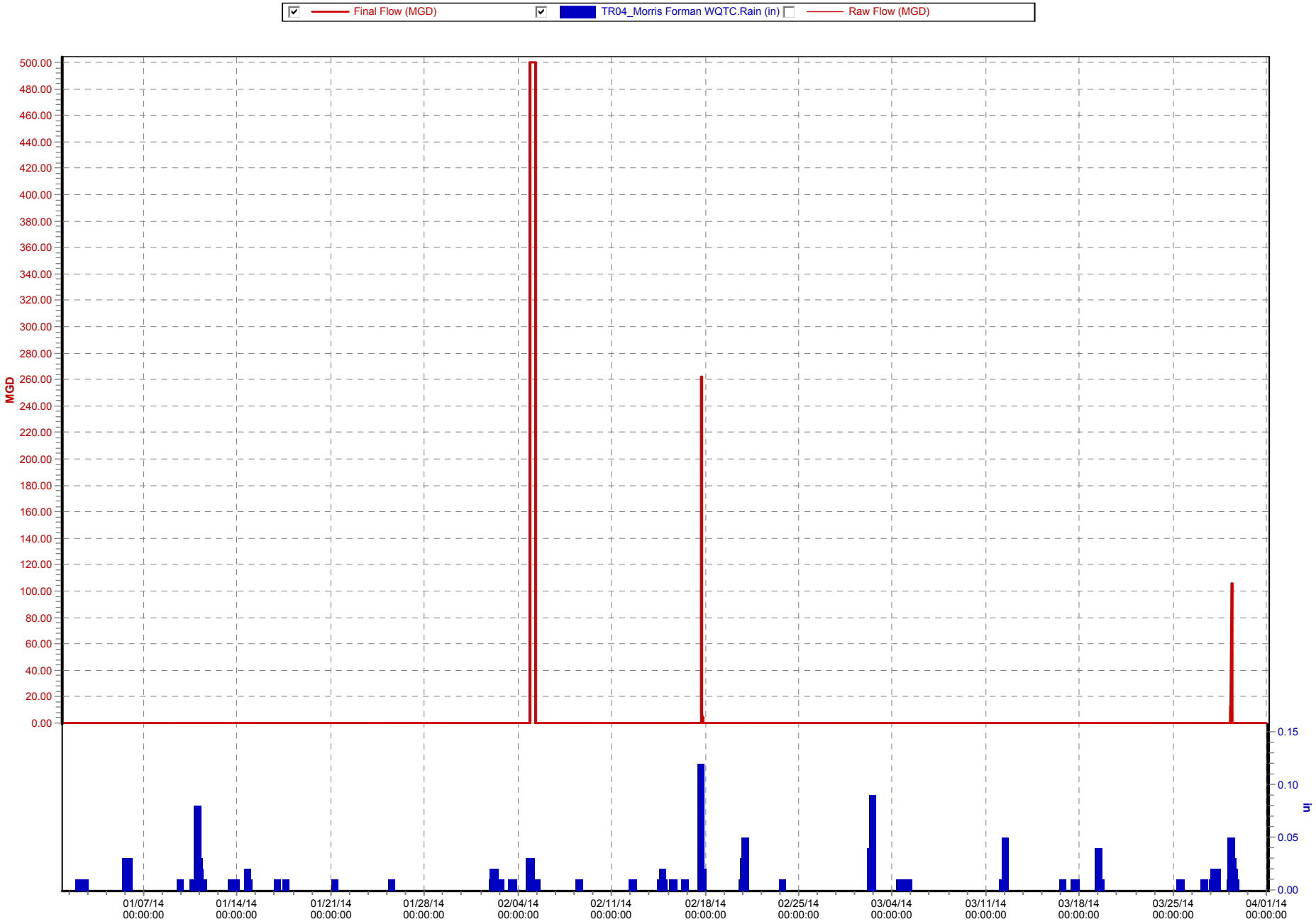



CSO208 W Jefferson St_12th St (01/01/14 to 04/01/14)
Final Flow (MGD)
TR05_Beargrass PS.Rain (in)
MGD
in
[telog] 03/04/14 14:00:00 - Discharge due to snowmelt.
0.40
0.38
0.36
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.12
0.10
0.08
0.06
0.04
0.02
0.00
01/07/14
01/14/14
01/21/14
01/28/14
02/04/14
02/11/14
02/18/14
02/25/14
03/04/14
03/11/14
03/18/14
03/25/14
04/01/14

CSO210 Whayne Supply (01/01/14 to 04/01/14)



CSO211 Whayne Supply (01/01/14 to 04/01/14)



Appendix C – Acronyms

Appendix C - Acronyms for Project WIN Quarterly Report

AAM	Advanced Asset Management
AAOV	Annual Average Overflow Volume
ADAPS	Automated Data Processing System
BGC	Beargrass Creek
BMP	Best Management Practices
CCP	Composite Correction Plan
CD	Consent Decree
CMF	Central Maintenance Facility
CMMS	Computerized Maintenance Management System
CMOM	Capacity Management Operations and Maintenance
CPE	Comprehensive Performance Evaluations
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
CSSA	Continuing Sewer System Assessment
DAP	Discharge Abetement Plan (DAP)
DMR	Discharge Monitoring Report
eB	Enterprise Bridge (Spescom scanning software for document management)
EMC	Event Mean Concentration
EPA	Environmental Protection Agency
ERP	Enforcement Response Plan
FM	Force Main
FOG	Fats, Oil & Grease
FPS	Flood Pump Station
FSE	Food Service Establishment
FY	Fiscal Year
GCE	Grease Control Equipment
GIS	Geographical Information System
GLPM	Gravity Line Preventive Maintenance
HMI	Human Machine Interface
I&FP	Infrastructure & Flood Protection (MSD Division)
ICA	Interceptor Condition Assessment
ID	Identification
I&I	Inflow and Infiltration
IMS	Information Management System
IOAP	Integrated Overflow Abatement Plan
ISSDP	Interim Sanitary Sewer Discharge Plan
IT	Information Technology
IWD	Industrial Waste Department
JCPS	Jefferson County Public Schools
KDEP	Kentucky Department of Environmental Protection
KPDES	Kentucky Pollutant Discharge Elimination System
KY	Kentucky
LE	Lateral Extension
LID	Low Impact Development
LIMS	Laboratory Information Management System
LTC	Long Term Control
LTCP	Long Term Control Plan
LOJIC	Louisville and Jefferson County Information Consortium
MDS	Main Diversion Structure
MEB	Main Equipment Building

Appendix C - Acronyms for Project WIN Quarterly Report

MFWTP	Morris Forman Wastewater Treatment Plant
MG	Million Gallons
MGD	Million Gallons Per Day
MLK	Martin Luther King
MO	Metro Operations
MOA	Memorandum of Agreement
MOR	Monthly Operating Report
MOU	Memorandum of Understanding
MSD	Metropolitan Sewer District (Louisville and Jefferson County)
NDD	Non-Domestic Dischargers
NMC	Nine Minimum Controls
NPR	National Public Radio
ORSANCO	Ohio River Valley Water Sanitation Commission
PACP	Pipeline Assessment and Certification Program
PCM	Post Construction Monitoring
PI	Plant Information System
PM	Preventive Maintenance
POC	Pollutants of Concern
PP	Pumping Package
PS	Pump Station
PSC	Property Service Connection
RDII	Rainfall-Derived Infiltration and Inflow
RS	Regulatory Services
RTC	Real Time Control
SCADA	Supervisory Control And Data Acquisition
SCAP	System Capacity Assurance Plan
SIU	Significant Industrial User
SOP	Standard Operating Procedure
SORP	Sewer Overflow Response Protocol
SSDP	Sanitary Sewer Discharge Plan
SSES	Sanitary Sewer Evaluation Study
SSO	Sanitary Sewer Overflow
SSOP	Sanitary Sewer Overflow Plan
SWOR2	Southwestern Outfall Relief - Phase 2
SWPS	Southwestern Pump Station
TM	Technical Memorandum
TMDL	Total Maximum Daily Load
TV	Television
UIM	Utility Information Management
UK	University of Kentucky
USACE	US Army Corps of Engineers
USF&W	United States Fish and Wildlife
USGS	United States Geological Survey
WDR	Wastewater Discharge Regulators
WIN	Waterway Improvements Now
WQT	Water Quality Tool
WQTC	Water Quality Treatment Center
WW	Wet Weather
WWT	Wet Weather Team

Appendix D – SCAP Balance

MSD
Metropolitan Sewer District

Capacity Credit Balance Sheet per Credit Basin

APNO	APNAME	APTYPE	FLOW	Approval Date	Planned Credit Required/ Flow Reduction	Running Total	Released/ Completed	Actual Credit Required/ Flow Reduction	Running Total
CCREEK									
235533	CEDAR CK IFP WORK AUG05-NOV08	SCAPCREDIT			6,521.00	6,521.00	11/1/08	6,521.00	6,521.00
236380	FAIRMOUNT ROAD MH REHAB	SCAPCREDIT			10,734.00	17,255.00	6/5/09	10,734.00	17,255.00
362688	CCRK IFP ACTIVITY NOV08-MAY12	SCAPCREDIT		5/1/12	2,161.00	19,416.00	5/1/12	2,161.00	19,416.00
362689	CCRK IFP ACTIVITY JUN12-AUG12	SCAPCREDIT		8/31/12	2,047.00	21,463.00	8/31/12	2,047.00	21,463.00
320989	LITTLE CEDAR CREEK I/I REHABIL	SCAPCREDIT		9/27/12	652,907.00	674,370.00	9/27/12	652,907.00	674,370.00
263934	ST JAMES CROSSINGS	LAT EXT	9,000.00	7/21/11	-19,575.00	654,795.00	11/30/12	-19,575.00	654,795.00
196927	SONIC SPRINGS	LAT EXT	3,600.00	1/26/12	-7,830.00	646,965.00	12/5/12	0.00	654,795.00
239030	POPLAR LAKES PH 1	LAT EXT	18,000.00	6/6/13	-39,150.00	607,815.00			654,795.00
13LE1003	Bardstown Woods Sec 6	LAT EXT	5,200.00	6/6/13	-11,310.00	596,505.00			654,795.00
14SC1000	FY13 IFP ACTIVITY FIRST HALF - CEDAR CREEK	SCAPCREDIT		12/31/13	2,048.00	598,553.00	12/31/13	2,048.00	656,843.00
14LE1013	LONG SEATONVILLE DEVELOPMENT	LAT EXT	12,000.00	1/30/14	-26,100.00	572,453.00			656,843.00
COMBSYST									
359368	CALENDAR 2005 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/05	148,000.00	148,000.00	12/31/05	148,000.00	148,000.00
359370	CALENDAR 2006 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/06	288,000.00	436,000.00	12/31/06	288,000.00	436,000.00
359371	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/07	2,560,000.00	2,996,000.00	12/31/07	2,560,000.00	2,996,000.00
359308	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		12/31/07	20,000.00	3,016,000.00	12/31/07	20,000.00	3,016,000.00
236304	PARK BOUNDARY RD EMRGNCY REHAB	SCAPCREDIT			29,264.00	3,045,264.00	10/25/08	29,264.00	3,045,264.00
235576	CSO AREA IFP WORK AUG05-NOV08	SCAPCREDIT			97,061.00	3,142,325.00	11/1/08	97,061.00	3,142,325.00
236299	BEARGRASS INT REHAB PH1 COMBIN	SCAPCREDIT			8,640.00	3,150,965.00	12/22/08	8,640.00	3,150,965.00
359372	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/08	1,144,000.00	4,294,965.00	12/31/08	1,144,000.00	4,294,965.00
359312	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12/31/09	40,000.00	4,334,965.00	12/31/09	40,000.00	4,334,965.00
359373	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/09	692,000.00	5,026,965.00	12/31/09	692,000.00	5,026,965.00
267827	ATTEBERRY SMITH	LAT EXT	570.00	6/9/10	-1,239.75	5,025,725.25			5,026,965.00
281513	NEW MEDICAL OFFICE BUILDING	LAT EXT	2,500.00	10/28/10	-5,437.50	5,020,287.75			5,026,965.00
320977	BEARGRASS CREEK PHASE II - FY1	SCAPCREDIT		12/14/10	8,640.00	5,028,927.75	12/14/10	8,640.00	5,035,605.00
359314	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12/31/10	56,000.00	5,084,927.75	12/31/10	56,000.00	5,091,605.00
359374	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/10	2,324,000.00	7,408,927.75	12/31/10	2,324,000.00	7,415,605.00
320912	HAZELWOOD REHABILITATION - FY1	SCAPCREDIT		6/30/11	38,700.00	7,447,627.75	6/30/11	38,700.00	7,454,305.00
359315	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	88,000.00	7,535,627.75	12/31/11	88,000.00	7,542,305.00
359377	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/11	1,204,000.00	8,739,627.75	12/31/11	1,204,000.00	8,746,305.00
267824	MASONIC HOMES MIRALEA INDEPEND	LAT EXT	29,400.00	6/9/10	-63,945.00	8,675,682.75	10/16/12	0.00	8,746,305.00
320985	CAMP TAYLOR AREA 5 I/I REHABIL	SCAPCREDIT		11/1/12	3,291.00	8,678,973.75	11/1/12	3,291.00	8,749,596.00
359317	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	112,000.00	8,790,973.75	12/31/12	112,000.00	8,861,596.00

APNO	APNAME	APTYPE	FLOW	Approval Date	Planned Credit Required/ Flow Reduction	Running Total	Released/ Completed	Actual Credit Required/ Flow Reduction	Running Total
359378	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/12	492,000.00	9,282,973.75	12/31/12	492,000.00	9,353,596.00
350320	KENWOOD BUSINESS CENTER LOT 1	LAT EXT	6,710.00	1/11/13	-14,594.25	9,268,379.50	12/3/13	0.00	9,353,596.00
14SC1001	FY13 IFP ACTIVITY FIRST HALF - COMBINED SE	SCAPCREDIT		12/31/13	14,901.00	9,283,280.50	12/31/13	14,901.00	9,368,497.00
14LE1054	Mellow Mushroom	LAT EXT	3,200.00	4/3/14	-6,960.00	9,276,320.50			9,368,497.00
FFORK									
361689	LAKE FOREST REHAB PH1	SCAPCREDIT			174,769.00	174,769.00		29,710.73	29,710.73
235557	FLOYDSFRK IFP WORK AUG05-NOV08	SCAPCREDIT			14,540.00	189,309.00	11/1/08	14,540.00	44,250.73
362638	FY09 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/08	1.00	189,310.00	12/31/08	1.00	44,251.73
362647	FY09 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/09	4.00	189,314.00	6/30/09	4.00	44,255.73
238873	OAKLAWN SENIOR LIVING FACILITY	LAT EXT	8,250.00	8/20/09	-17,943.75	171,370.25			44,255.73
362651	FY10 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/09	524.00	171,894.25	12/31/09	524.00	44,779.73
230379	SHAKES RUN SECTION 4	LAT EXT	3,770.00	4/22/09	-8,199.75	163,694.50	1/5/10	-8,199.75	36,579.98
362655	FY10 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/10	81.00	163,775.50	6/30/10	81.00	36,660.98
362661	FY11 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/10	14,155.00	177,930.50	12/31/10	14,155.00	50,815.98
362669	FY11 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/11	22,707.00	200,637.50	6/30/11	22,707.00	73,522.98
309608	BLANKENBAKER TRAIL OFFICE LN-B	LAT EXT	2,880.00	9/30/11	-6,264.00	194,373.50			73,522.98
242480	CLAIBOURNE CROSSINGS PHASE 2	LAT EXT	0.00	9/3/09	0.00	194,373.50	10/17/11	0.00	73,522.98
359320	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	4,000.00	198,373.50	12/31/11	4,000.00	77,522.98
362674	FY12 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/11	2.00	198,375.50	12/31/11	2.00	77,524.98
362678	FY12 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/12	331.00	198,706.50	6/30/12	331.00	77,855.98
341050	FLAT ROCK RIDGE SEC 3	LAT EXT	26,400.00	9/25/12	-57,420.00	141,286.50			77,855.98
315945	BROOKFIELD SEC 3	LAT EXT	12,800.00	12/8/11	-27,840.00	113,446.50	10/26/12	-27,004.80	50,851.18
362683	FY13 IFP ACTIVITY FIRST HALF - FFORK	SCAPCREDIT		12/31/12	3.00	113,449.50	12/31/12	3.00	50,854.18
359854	BROOKFIELD SEC 5A	LAT EXT	13,600.00	4/25/13	-29,580.00	83,869.50			50,854.18
331397	BROOKFIELD SEC 2A	LAT EXT	14,400.00	6/14/12	-31,320.00	52,549.50	5/8/13	0.00	50,854.18
13LE1011	BROOKFIELD SEC 4	LAT EXT	16,800.00	6/13/13	-36,540.00	16,009.50			50,854.18
309600	CLAIBOURNE CROSSINGS MULTI-FAM	LAT EXT	71,400.00	3/15/12	-155,295.00	-139,285.50	10/4/13	0.00	50,854.18
13LE1000	The Enclave at Glen Lakes Sec 2	LAT EXT	6,800.00	5/30/13	-14,790.00	-154,075.50	1/10/14	0.00	50,854.18
353011	BROOKFIELD SEC 2B	LAT EXT	7,600.00	2/7/13	-16,530.00	-170,605.50	3/4/14	0.00	50,854.18
337398	GLEN LAKES SEC 4 PH1	LAT EXT	8,000.00	8/10/12	-17,400.00	-188,005.50	4/7/14	0.00	50,854.18
HCREEK									
235561	HITE CK IFP WORK AUG05-NOV08	SCAPCREDIT			6,404.00	6,404.00	11/1/08	6,404.00	6,404.00
362641	FY09 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/08	2.00	6,406.00	12/31/08	2.00	6,406.00
362648	FY09 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/09	8.00	6,414.00	6/30/09	8.00	6,414.00
362652	FY10 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/09	8.00	6,422.00	12/31/09	8.00	6,422.00

APNO	APNAME	APTYPE	FLOW	Approval Date	Planned Credit Required/ Flow Reduction	Running Total	Released/ Completed	Actual Credit Required/ Flow Reduction	Running Total
362657	FY10 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/10	329.00	6,751.00	6/30/10	329.00	6,751.00
295322	FLOYDSBURG RD I/I INVEST/REHAB	SCAPCREDIT			28,437.00	35,188.00	12/17/10	28,437.00	35,188.00
320906	FLOYDSBURG ROAD I/I REHABILITA	SCAPCREDIT		12/17/10	28,437.00	63,625.00	12/17/10	28,437.00	63,625.00
362662	FY11 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/10	3.00	63,628.00	12/31/10	3.00	63,628.00
362670	FY11 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/11	5.00	63,633.00	6/30/11	5.00	63,633.00
304536	MAGNOLIA SPRINGS EAST PRIV P/S	LAT EXT	9,500.00	7/28/11	-20,662.50	42,970.50			63,633.00
246638	CHAPMAN COURT S/S	LAT EXT	800.00	10/21/09	-1,740.00	41,230.50	9/28/11	-870.00	62,763.00
362675	FY12 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/11	332.00	41,562.50	12/31/11	332.00	63,095.00
362679	FY12 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/12	5,002.00	46,564.50	6/30/12	5,002.00	68,097.00
290181	CAMDEN WOOD APARTMENTS	LAT EXT	12,400.00	10/26/11	-26,970.00	19,594.50	8/31/12	0.00	68,097.00
335610	ROCK SPRINGS FARM SEC 4B	LAT EXT	6,400.00	7/26/12	-13,920.00	5,674.50	12/7/12	-8,769.60	59,327.40
362684	FY13 IFP ACTIVITY FIRST HALF - HCREEK	SCAPCREDIT		12/31/12	3.00	5,677.50	12/31/12	3.00	59,330.40
241173	INDEPENDENCE PARK @APPLE PATCH	LAT EXT	21,600.00	9/28/12	-46,980.00	-41,302.50	10/4/13	0.00	59,330.40
JTOWN									
235563	J-TOWN IFP WORK AUG05-NOV08	SCAPCREDIT		11/1/08	6,203.00	6,203.00	11/1/08	6,203.00	6,203.00
359323	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		12/31/08	4,000.00	10,203.00	12/31/08	4,000.00	10,203.00
254871	LAKESIDE BAPT CHURCH PRIV PS	LAT EXT	2,500.00	1/7/10	-5,437.50	4,765.50	8/10/10	-5,437.50	4,765.50
340213	JEFFERSONTOWN ENG REHAB	SCAPCREDIT		8/11/11	997,448.00	1,002,213.50	8/11/11	997,448.00	1,002,213.50
359324	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	4,000.00	1,006,213.50	12/31/11	4,000.00	1,006,213.50
326360	WATTERSON TRAIL CENTER	LAT EXT	2,745.00	4/19/12	-5,970.38	1,000,243.13			1,006,213.50
14SC1002	FY13 IFP ACTIVITY FIRST HALF - JEFFERSONTC	SCAPCREDIT		12/31/13	3,458.00	1,003,701.13	12/31/13	3,458.00	1,009,671.50
14LE1003	ELECTRON DRIVE INDUSTRIAL PARK LOT 1A	LAT EXT	540.00	1/16/14	-1,174.50	1,002,526.63			1,009,671.50
14LE1025	GRAND AVE PUMP STATION TEMP TRAILERS	LAT EXT	400.00	3/13/14	-870.00	1,001,656.63			1,009,671.50
MCREEK									
359380	CALENDAR 2005 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/05	12,000.00	12,000.00	12/31/05	12,000.00	12,000.00
359381	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/07	24,000.00	36,000.00	12/31/07	24,000.00	36,000.00
235568	MILL CK IFP WORK AUG05-NOV08	SCAPCREDIT			51,530.00	87,530.00	11/1/08	51,530.00	87,530.00
359382	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/08	16,000.00	103,530.00	12/31/08	16,000.00	103,530.00
362642	FY09 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/08	93.00	103,623.00	12/31/08	93.00	103,623.00
362649	FY09 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/09	1,507.00	105,130.00	6/30/09	1,507.00	105,130.00
253586	KINGSFORD RETAIL CENTER	LAT EXT	400.00	12/17/09	-870.00	104,260.00			105,130.00
362653	FY10 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/09	25,272.00	129,532.00	12/31/09	25,272.00	130,402.00
359383	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/09	32,000.00	161,532.00	12/31/09	32,000.00	162,402.00
255156	RIVERVIEW PARK	LAT EXT	750.00	1/7/10	-1,631.25	159,900.75			162,402.00
238421	6840 DIXIE HWY OUTLOT	LAT EXT	2,100.00	7/23/09	-4,567.50	155,333.25	4/28/10	-4,567.50	157,834.50

APNO	APNAME	APTYPE	FLOW	Approval Date	Planned Credit Required/ Flow Reduction	Running Total	Released/ Completed	Actual Credit Required/ Flow Reduction	Running Total
265944	RIVERPORT PHASE 4A - MICHELIN	LAT EXT	400.00	5/20/10	-870.00	154,463.25			157,834.50
362658	FY10 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/10	6,213.00	160,676.25	6/30/10	6,213.00	164,047.50
276215	FAMILY DOLLAR - KRISTIN WAY	LAT EXT	400.00	9/1/10	-870.00	159,806.25			164,047.50
362664	FY11 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/10	22,740.00	182,546.25	12/31/10	22,740.00	186,787.50
359384	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/10	4,000.00	186,546.25	12/31/10	4,000.00	190,787.50
359325	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12/31/10	8,000.00	194,546.25	12/31/10	8,000.00	198,787.50
320916	SONNE AVE PS REHABILITATION -	SCAPCREDIT		6/30/11	120,800.00	315,346.25	6/30/11	120,800.00	319,587.50
362671	FY11 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/11	11,615.00	326,961.25	6/30/11	11,615.00	331,202.50
359385	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/11	12,000.00	338,961.25	12/31/11	12,000.00	343,202.50
362676	FY12 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/11	3,245.00	342,206.25	12/31/11	3,245.00	346,447.50
359326	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	12,000.00	354,206.25	12/31/11	12,000.00	358,447.50
362680	FY12 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/12	2,807.00	357,013.25	6/30/12	2,807.00	361,254.50
361693	FY12 MILL CREEK REHAB	SCAPCREDIT		6/30/12	81,675.00	438,688.25	6/30/12	81,675.00	442,929.50
231800	PIONEER MOBILE HOME PARK	LAT EXT	11,200.00	5/14/09	-24,360.00	414,328.25	7/24/12	-24,360.00	418,569.50
237457	WAVERLY HILLS	LAT EXT	400.00	8/28/09	-870.00	413,458.25	9/18/12	-870.00	417,699.50
343763	SOUTHEAST CHRISTIAN CHURCH SW	LAT EXT	6,000.00	10/22/12	-13,050.00	400,408.25			417,699.50
359327	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	148,000.00	548,408.25	12/31/12	148,000.00	565,699.50
362685	FY13 IFP ACTIVITY FIRST HALF - MCREEK	SCAPCREDIT		12/31/12	3,458.00	551,866.25	12/31/12	3,458.00	569,157.50
359386	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/12	4,000.00	555,866.25	12/31/12	4,000.00	573,157.50
224875	ASHBY GREEN APARTMENT HOMES	LAT EXT	36,400.00	2/3/11	-79,170.00	476,696.25	3/20/13	-19,792.50	553,365.00
14LE1004	SINGLE FAMILY 6190 ANIWA ROAD	LAT EXT	400.00	1/16/14	-870.00	475,826.25			553,365.00
14LE1016	CORK N BOTTLE	LAT EXT	400.00	1/30/14	-870.00	474,956.25			553,365.00
219525	VERUS DISTRIBUTION	LAT EXT	3,780.00	3/20/14	-8,221.50	466,734.75			553,365.00
MFORK									
359400	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/07	84,000.00	84,000.00	12/31/07	84,000.00	84,000.00
359328	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		12/31/07	20,000.00	104,000.00	12/31/07	20,000.00	104,000.00
235566	MID FORK IFP WORK AUG05-NOV08	SCAPCREDIT			43,779.00	147,779.00	11/1/08	43,779.00	147,779.00
359329	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		12/31/08	8,000.00	155,779.00	12/31/08	8,000.00	155,779.00
236517	ANCHOR ESTATES MH REHAB	SCAPCREDIT			15,552.00	171,331.00	1/16/09	15,552.00	171,331.00
217235	SINKING FORK ICA PHASE I REHAB	SCAPCREDIT		3/30/09	437,967.00	609,298.00	3/30/09	437,967.00	609,298.00
235376	MIDDLE FORK INT REHAB PH1	SCAPCREDIT		5/15/09	487,744.00	1,097,042.00	5/15/09	487,744.00	1,097,042.00
179246	SHADY GLEN OF LYNDON PERSONAL	LAT EXT	-500.00	1/28/10	1,087.50	1,098,129.50	5/26/09	1,087.50	1,098,129.50
250572	1316 WITAWANGA AVE	LAT EXT	400.00	11/12/09	-870.00	1,097,259.50			1,098,129.50
359331	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12/31/09	24,000.00	1,121,259.50	12/31/09	24,000.00	1,122,129.50
359401	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/09	4,000.00	1,125,259.50	12/31/09	4,000.00	1,126,129.50
197432	ALMOST HOME KENNELS - ALL PET	LAT EXT	3,700.00	1/7/10	-8,047.50	1,117,212.00			1,126,129.50

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229834	THE BROOK HOS- DUPONT ADDITION	LAT EXT	1,763.00	7/2/09	-3,834.53	1,113,377.48	4/27/10	-3,834.53	1,122,294.98
265723	Z-XPRESS CAR WASH	LAT EXT	5,449.00	5/20/10	-11,851.58	1,101,525.90			1,122,294.98
359402	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/10	8,000.00	1,109,525.90	12/31/10	8,000.00	1,130,294.98
359333	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12/31/10	12,000.00	1,121,525.90	12/31/10	12,000.00	1,142,294.98
285637	SHELBYHURST OFFICE BUILDING 1	LAT EXT	6,600.00	1/6/11	-14,355.00	1,107,170.90			1,142,294.98
330019	FY11 ANCHOR ESTATES REHAB	SCAPCREDIT		8/11/11	1,359.00	1,108,529.90	8/11/11	1,359.00	1,143,653.98
310046	EL NAPEL - MCMAHAN CENTER	LAT EXT	3,100.00	9/30/11	-6,742.50	1,101,787.40			1,143,653.98
320983	HURSTBOURNE I/I INVESTIGATION	SCAPCREDIT		12/27/11	1,408,279.00	2,510,066.40	12/27/11	1,408,279.00	2,551,932.98
359335	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	16,000.00	2,526,066.40	12/31/11	16,000.00	2,567,932.98
328074	SINGLE FAMILY-703 FOUNTAIN AVE	LAT EXT	400.00	5/11/12	-870.00	2,525,196.40			2,567,932.98
328652	CINEMARK THEATER AT MALL ST.MA	LAT EXT	0.00	5/18/12	0.00	2,525,196.40			2,567,932.98
166053	616 & 618 FOUNTAIN AVE S/S	LAT EXT	1,600.00	6/4/12	-3,480.00	2,521,716.40			2,567,932.98
320923	ST MATTHEWS I/I REHABILITATION	SCAPCREDIT			20,841.00	2,542,557.40	8/23/12	20,841.00	2,588,773.98
359336	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	92,000.00	2,634,557.40	12/31/12	92,000.00	2,680,773.98
13SC1000	FY14 STARVIEW REHABILITATION	SCAPCREDIT		6/30/13	14,183.00	2,648,740.40	6/30/13	14,183.00	2,694,956.98
319292	WATERMARK ON HURSTBOURNE	LAT EXT	71,600.00	5/18/12	-155,730.00	2,493,010.40	10/22/13	0.00	2,694,956.98
14SC1003	FY13 IFP ACTIVITY FIRST HALF - MIDDLE FORK	SCAPCREDIT		12/31/13	3,230.00	2,496,240.40	12/31/13	3,230.00	2,698,186.98
352026	MCMAHAN PLAZA PHASE II BLDG B	LAT EXT	766.00	1/24/13	-1,666.05	2,494,574.35	12/31/13	0.00	2,698,186.98
14LE1001	MIRANDA LAGRANGE RD	LAT EXT	400.00	1/9/14	-870.00	2,493,704.35			2,698,186.98
13LE1094	SINGLE FAMILY 7610 NORWOOD DR	LAT EXT	400.00	1/16/14	-870.00	2,492,834.35			2,698,186.98
333353	OLD WESTPORT RD APTS	LAT EXT	60,400.00	1/23/14	-131,370.00	2,361,464.35			2,698,186.98
14LE1012	1600 ALPHA AVE SINGLE FAMILY	LAT EXT	400.00	1/30/14	-870.00	2,360,594.35			2,698,186.98
14LE1021	KODA KENTUCKY ORGAN DONOR AFFILIATES	LAT EXT	400.00	2/13/14	-870.00	2,359,724.35			2,698,186.98
14LE1026	HIGHLANDS LATIN SCHOOL GYM ADDITION	LAT EXT	2,925.00	2/20/14	-6,361.88	2,353,362.48			2,698,186.98
13LE1117	THE VININGS	LAT EXT	850.00	2/27/14	-1,848.75	2,351,513.73			2,698,186.98
14LE1040	SFU-206 Wood Road	LAT EXT	400.00	3/20/14	-870.00	2,350,643.73			2,698,186.98
14LE1043	Single Family Home - 11818 Wetherby Ave	LAT EXT	400.00	3/20/14	-870.00	2,349,773.73			2,698,186.98
13LE1163	FIRSTWATCH RESTAURANT	LAT EXT	925.00	4/10/14	-2,011.88	2,347,761.85			2,698,186.98
NDITCH									
359404	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/07	28,000.00	28,000.00	12/31/07	28,000.00	28,000.00
235569	N.DITCH IFP WORK AUG05-NOV08	SCAPCREDIT			11,147.00	39,147.00	11/1/08	11,147.00	39,147.00
236363	NORTHERN DITCH INT REHAB PH1	SCAPCREDIT			108,760.00	147,907.00	11/25/08	108,760.00	147,907.00
234678	THE LIGHTHOUSE PROMISE COMPLEX	LAT EXT	2,825.00	10/8/09	-6,144.38	141,762.63			147,907.00
359339	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12/31/09	4,000.00	145,762.63	12/31/09	4,000.00	151,907.00
284728	SUBWAY - NEW CUT RD	LAT EXT	1,314.00	12/2/10	-2,857.95	142,904.68			151,907.00
359340	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12/31/10	4,000.00	146,904.68	12/31/10	4,000.00	155,907.00

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320908	PARKVIEW ESTATES REHABILITATIO	SCAPCREDIT		6/28/11	36.00	146,940.68	6/28/11	36.00	155,943.00
359341	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	24,000.00	170,940.68	12/31/11	24,000.00	179,943.00
359405	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/11	12,000.00	182,940.68	12/31/11	12,000.00	191,943.00
359343	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	24,000.00	206,940.68	12/31/12	24,000.00	215,943.00
14SC1004	FY13 IFP ACTIVITY FIRST HALF - NORTHERN DI	SCAPCREDIT		12/31/13	329.00	207,269.68	12/31/13	329.00	216,272.00
14LE1029	Trei Louisville LLC	LAT EXT	400.00	2/27/14	-870.00	206,399.68			216,272.00
ORFM									
359433	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/07	56,000.00	56,000.00	12/31/07	56,000.00	56,000.00
359344	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		12/31/07	4,000.00	60,000.00	12/31/07	4,000.00	60,000.00
235572	ORFM IFP WORK AUG05-NOV08	SCAPCREDIT			19,826.00	79,826.00	11/1/08	19,826.00	79,826.00
362643	FY09 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/08	2.00	79,828.00	12/31/08	2.00	79,828.00
362650	FY09 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/09	3,836.00	83,664.00	6/30/09	3,836.00	83,664.00
362654	FY10 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/09	7,322.00	90,986.00	12/31/09	7,322.00	90,986.00
254919	TRILOGY HEALTH SERVICES, LLC	LAT EXT	8,200.00	1/7/10	-17,835.00	73,151.00			90,986.00
263548	SINGLE FAMILY CONNECTION	LAT EXT	400.00	4/29/10	-870.00	72,281.00			90,986.00
362660	FY10 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/10	6,630.00	78,911.00	6/30/10	6,630.00	97,616.00
362665	FY11 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/10	165.00	79,076.00	12/31/10	165.00	97,781.00
362672	FY11 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/11	4,124.00	83,200.00	6/30/11	4,124.00	101,905.00
280837	SPRINGHURST TOWNE CTR LOT C	LAT EXT	400.00	9/8/11	-870.00	82,330.00			101,905.00
320920	SHADOW WOOD I/I REHABILITATION	SCAPCREDIT			14,279.00	96,609.00	9/30/11	14,279.00	116,184.00
359345	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	16,000.00	112,609.00	12/31/11	16,000.00	132,184.00
359434	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/11	16,000.00	128,609.00	12/31/11	16,000.00	148,184.00
362677	FY12 IFP ACTIVITY FIRST HALF	SCAPCREDIT		12/31/11	7,258.00	135,867.00	12/31/11	7,258.00	155,442.00
320921	DERINGTON COURT I/I REHABILITA	SCAPCREDIT		3/1/12	56,208.00	192,075.00	3/1/12	56,208.00	211,650.00
187028	GLENVIEW PARK SUBD SECTION 1	LAT EXT	4,400.00	11/18/10	-9,570.00	182,505.00	3/5/12	-2,871.00	208,779.00
213450	GLENVIEW PARK SUB, SEC 2	LAT EXT	5,600.00	11/18/10	-12,180.00	170,325.00	3/5/12	-2,557.80	206,221.20
322458	KROGER L-707 STORE EXPANSION	LAT EXT	400.00	3/8/12	-870.00	169,455.00			206,221.20
362681	FY12 IFP ACTIVITY SECOND HALF	SCAPCREDIT		6/30/12	18,220.00	187,675.00	6/30/12	18,220.00	224,441.20
292239	SPRINGHURST RESTAURANT/ RETAIL	LAT EXT	3,440.00	3/24/11	-7,482.00	180,193.00	7/5/12	-7,482.00	216,959.20
363238	FY13 PROSPECT MANHOLE REHAB	SCAPCREDIT		12/18/12	72,703.00	252,896.00	12/18/12	72,703.00	289,662.20
359346	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	24,000.00	276,896.00	12/31/12	24,000.00	313,662.20
363235	FY13 MUDDY FORK MH REHAB	SCAPCREDIT		12/31/12	41,653.00	318,549.00	12/31/12	41,653.00	355,315.20
362686	FY13 IFP ACTIVITY FIRST HALF - ORFM	SCAPCREDIT		12/31/12	1,148.00	319,697.00	12/31/12	1,148.00	356,463.20
352634	BAUER PROPERTY	LAT EXT	2,920.00	5/29/13	-6,351.00	313,346.00			356,463.20
343729	RETAIL & RESTAURANT	LAT EXT	3,500.00	10/18/12	-7,612.50	305,733.50	6/21/13	0.00	356,463.20
177756	SUMMIT GARDENS PHASE 1	LAT EXT	32,000.00	7/15/13	-69,600.00	236,133.50			356,463.20

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334154	GLENVIEW PARK SUBD SEC 4	LAT EXT	3,600.00	7/20/12	-7,830.00	228,303.50	11/7/13	0.00	356,463.20
13LE1024	Overlook at Beech Spring Farm Sec 4	LAT EXT	5,600.00	6/27/13	-12,180.00	216,123.50	12/31/13	0.00	356,463.20
14LE1005	KFC 11	LAT EXT	1,600.00	1/16/14	-3,480.00	212,643.50			356,463.20
352090	DRURY INN	LAT EXT	11,508.00	3/25/14	-25,029.90	187,613.60			356,463.20
PCREEK									
320924	LEA ANN WAY INTERCEPTOR I&I RE	SCAPCREDIT			1,017,423.00	1,017,423.00		1,017,423.00	1,017,423.00
235574	POND CRK IFP WORK AUG05-NOV08	SCAPCREDIT			71,782.00	1,089,205.00	11/1/08	71,782.00	1,089,205.00
359347	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		12/31/08	4,000.00	1,093,205.00	12/31/08	4,000.00	1,093,205.00
359438	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/08	4,000.00	1,097,205.00	12/31/08	4,000.00	1,097,205.00
192513	BANNON CROSSINGS SECTION 3A-1	LAT EXT	800.00	1/14/09	-1,740.00	1,095,465.00			1,097,205.00
219734	DSL LIFE LONG LEARNING CENTER	LAT EXT	900.00	1/15/09	-1,957.50	1,093,507.50			1,097,205.00
359439	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/09	12,000.00	1,105,507.50	12/31/09	12,000.00	1,109,205.00
359348	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12/31/09	4,000.00	1,109,507.50	12/31/09	4,000.00	1,113,205.00
261115	EMERGENCY RESTORATION	LAT EXT	400.00	4/1/10	-870.00	1,108,637.50			1,113,205.00
284215	HURSTBOURNE POINTE APTS	LAT EXT	9,600.00	12/2/10	-20,880.00	1,087,757.50			1,113,205.00
359350	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12/31/10	12,000.00	1,099,757.50	12/31/10	12,000.00	1,125,205.00
187739	GLENGARRY INDUSTRIAL PARK	LAT EXT	4,300.00	5/14/09	-9,352.50	1,090,405.00	1/13/11	-9,352.50	1,115,852.50
320918	EDSEL I/I REHABILITATION - FY1	SCAPCREDIT		9/27/11	106,700.00	1,197,105.00	9/27/11	106,700.00	1,222,552.50
320919	LANTANA I/I REHABILITATION - F	SCAPCREDIT		12/29/11	5,000.00	1,202,105.00	12/29/11	5,000.00	1,227,552.50
359351	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	20,000.00	1,222,105.00	12/31/11	20,000.00	1,247,552.50
234102	ETHOS AT VALLEY FARM SR LIVING	LAT EXT	7,050.00	9/7/10	-15,333.75	1,206,771.25	6/19/12	-7,666.88	1,239,885.63
279860	BANNON CROSSINGS SEC 3B-2	LAT EXT	9,600.00	10/6/10	-20,880.00	1,185,891.25	8/10/12	-19,209.60	1,220,676.03
312053	DOLLAR GENERAL - CLEARWATER FA	LAT EXT	400.00	10/21/11	-870.00	1,185,021.25	8/13/12	-870.00	1,219,806.03
243109	OVERBROOK APARTMENTS	LAT EXT	41,200.00	9/17/09	-89,610.00	1,095,411.25	11/9/12	-44,805.00	1,175,001.03
359354	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	56,000.00	1,151,411.25	12/31/12	56,000.00	1,231,001.03
348014	ASHTON PARK TOWN HOMES	LAT EXT	30,000.00	4/18/13	-65,250.00	1,086,161.25			1,231,001.03
280180	LOUISVILLE INDUSTRIAL CTR F	LAT EXT	2,480.00	5/9/13	-5,394.00	1,080,767.25			1,231,001.03
335385	HARRISON LOW PRESSURE S/S	LAT EXT	1,600.00	7/19/12	-3,480.00	1,077,287.25	7/2/13	0.00	1,231,001.03
320940	4 RESIDENCE SFU 7821 MANSLICK	LAT EXT	400.00	2/16/12	-870.00	1,076,417.25	8/16/13	0.00	1,231,001.03
324886	PNC BANK	LAT EXT	400.00	4/5/12	-870.00	1,075,547.25	9/6/13	0.00	1,231,001.03
341439	PRESTON GARDENS APTS	LAT EXT	22,200.00	12/13/12	-48,285.00	1,027,262.25	12/10/13	0.00	1,231,001.03
308206	APPLEGATE FARMS	LAT EXT	57,200.00	5/18/12	-124,410.00	902,852.25	12/10/13	0.00	1,231,001.03
14SC1005	FY13 IFP ACTIVITY FIRST HALF - POND CREEK	SCAPCREDIT		12/31/13	21,344.00	924,196.25	12/31/13	21,344.00	1,252,345.03
14LE1006	OKOLONA CARWASH	LAT EXT	4,830.00	1/16/14	-10,505.25	913,691.00			1,252,345.03
13LE1140	JEFFERSON POST APARTMENTS	LAT EXT	28,800.00	1/23/14	-62,640.00	851,051.00			1,252,345.03
13LE1056	MORNING POINTE AT HURSTBOURNE	LAT EXT	13,000.00	2/13/14	-28,275.00	822,776.00			1,252,345.03

APNO	APNAME	APTYPE	FLOW	Approval Date	Planned Credit Required/ Flow Reduction	Running Total	Released/ Completed	Actual Credit Required/ Flow Reduction	Running Total
14LE1028	SFU-9501 Watterson Trail	LAT EXT	400.00	2/27/14	-870.00	821,906.00			1,252,345.03
14LE1036	Mower Shop Building	LAT EXT	400.00	3/13/14	-870.00	821,036.00			1,252,345.03
13LE1115	VERIZON-OUTER LOOP	LAT EXT	400.00	3/27/14	-870.00	820,166.00			1,252,345.03
14LE1052	Stor-All Fairdale	LAT EXT	400.00	3/27/14	-870.00	819,296.00			1,252,345.03
13LE1025	WILDWOOD GREEN	LAT EXT	142,800.00	4/10/14	-310,590.00	508,706.00			1,252,345.03
SEDIV									
359355	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		12/31/07	8,000.00	8,000.00	12/31/07	8,000.00	8,000.00
359440	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/07	128,000.00	136,000.00	12/31/07	128,000.00	136,000.00
235575	SE DIV IFP WORK AUG05-NOV08	SCAPCREDIT			71,472.00	207,472.00	11/1/08	71,472.00	207,472.00
236214	GOLDSMITH BUECHB ICA PHI REHAB	SCAPCREDIT			314,808.00	522,280.00	12/22/08	314,808.00	522,280.00
236296	BEARGRASS INT REHAB PH1 SEDIV	SCAPCREDIT			122,688.00	644,968.00	12/22/08	122,688.00	644,968.00
359441	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/08	16,000.00	660,968.00	12/31/08	16,000.00	660,968.00
359356	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		12/31/08	4,000.00	664,968.00	12/31/08	4,000.00	664,968.00
229854	TINY HANDS DAYCARE	LAT EXT	1,225.00	4/22/09	-2,664.38	662,303.63			664,968.00
238328	LOUISVILLE COLLEGIATE SPORTS	LAT EXT	400.00	7/23/09	-870.00	661,433.63			664,968.00
241759	FRISCHS BIG BOY RESTAURANT	LAT EXT	2,400.00	10/8/09	-5,220.00	656,213.63			664,968.00
359357	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12/31/09	12,000.00	668,213.63	12/31/09	12,000.00	676,968.00
359443	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/09	8,000.00	676,213.63	12/31/09	8,000.00	684,968.00
235291	SULLIVAN COLLEGE OF TECHNOLOGY	LAT EXT	900.00	6/25/09	-1,957.50	674,256.13	2/11/10	-1,957.50	683,010.50
320993	BEARGRASS CREEK PHASE II - FY1	SCAPCREDIT		12/14/10	10,368.00	684,624.13	12/14/10	10,368.00	693,378.50
359358	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12/31/10	4,000.00	688,624.13	12/31/10	4,000.00	697,378.50
359444	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/10	24,000.00	712,624.13	12/31/10	24,000.00	721,378.50
286513	GARDINER POINT RESIDENCE HALL	LAT EXT	10,800.00	1/6/11	-23,490.00	689,134.13			721,378.50
276378	TIRE DISCOUNTERS - BARDSTOWN	LAT EXT	1,500.00	9/1/10	-3,262.50	685,871.63	5/6/11	-3,262.50	718,116.00
359445	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/11	8,000.00	693,871.63	12/31/11	8,000.00	726,116.00
359359	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12/31/11	64,000.00	757,871.63	12/31/11	64,000.00	790,116.00
307018	HOOK PROPERTY FAMILY DOLLAR	LAT EXT	400.00	3/8/12	-870.00	757,001.63	8/10/12	-870.00	789,246.00
359361	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		12/31/12	68,000.00	825,001.63	12/31/12	68,000.00	857,246.00
359446	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		12/31/12	4,000.00	829,001.63	12/31/12	4,000.00	861,246.00
187741	BROOKSTONE SENIOR APARTMENTS	LAT EXT	16,800.00	8/5/10	-36,540.00	792,461.63	3/11/13	-36,540.00	824,706.00
232601	RAINTREE/MARIAN CT P/S ELIM	LAT EXT	105,800.00	6/15/09	-230,115.00	562,346.63	6/14/13	-161,080.50	663,625.50
330437	COLLEGIATE ATHLETIC FIELD	LAT EXT	800.00	6/4/12	-1,740.00	560,606.63	11/26/13	-1,740.00	661,885.50
14SC1006	FY13 IFP ACTIVITY FIRST HALF - SE DIVERSION	SCAPCREDIT		12/31/13	20,623.00	581,229.63	12/31/13	20,623.00	682,508.50
14LE1048	Lot 2B Flynn-Hook Property	LAT EXT	2,860.00	3/27/14	-6,220.50	575,009.13			682,508.50
14LE1049	Lot 2C Flynn-Hook Property	LAT EXT	2,140.00	3/27/14	-4,654.50	570,354.63			682,508.50
14LE1045	Lot 2A Flynn-Hook Property	LAT EXT	2,540.00	3/27/14	-5,524.50	564,830.13			682,508.50

Capacity Credit Balance Sheet per Credit Basin

APNO	APNAME	APTYPE	FLOW	Approval Date	Planned Credit Required/ Flow Reduction	Running Total	Released/ Completed	Actual Credit Required/ Flow Reduction	Running Total
14LE1055	Kosair Shrine Center - Louisville	LAT EXT	3,500.00	4/3/14	-7,612.50	557,217.63			682,508.50

Appendix E – CSO Storm Frequency Data

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO183	3/29/14 10:00 AM	3/29/14 8:30 PM	0.44	10,071	1.09	9,240	1.42	0.51	6 hr	CloudBurst
CSO184	2/17/14 4:30 PM	2/17/14 4:30 PM	0.00	4,809	0.41	11,730	1.05	0.25	3 hr	CloudBurst
CSO184	3/29/14 7:00 AM	3/29/14 7:00 AM	0.00	1,745	1.09	1,601	0.78	0.51	6 hr	CloudBurst
CSO185	2/2/14 6:30 AM	2/2/14 7:45 PM	0.55	51,994	0.2	259,969	0.26	0.10	6 hr	CloudBurst
CSO185	2/17/14 4:30 PM	2/17/14 4:30 PM	0.00	29,204	0.41	71,229	1.05	0.25	3 hr	CloudBurst
CSO185	2/21/14 5:30 AM	2/22/14 5:45 AM	1.01	365,913	0.28	1,306,833	1.40	0.15	6 hr	CloudBurst
CSO185	3/29/14 7:00 AM	3/29/14 7:00 AM	0.00	11,287	1.09	10,355	0.78	0.51	6 hr	CloudBurst
CSO018	1/11/14 3:15 AM	1/11/14 3:30 AM	0.01	3,836	1.21	3,170	1.58	0.66	6 hr	CloudBurst
CSO018	2/4/14 10:30 PM	2/5/14 2:45 PM	0.68	1,126,036	0.58	1,941,441	1.03	0.27	6 hr	CloudBurst
CSO108	2/4/14 11:15 PM	2/5/14 3:00 AM	0.16	235,118	0.57	412,487	1.05	0.27	6 hr	CloudBurst
CSO108	2/17/14 4:30 PM	2/17/14 4:45 PM	0.01	89,035	0.57	156,202	1.20	0.37	1 hr	CloudBurst
CSO015	1/5/14 7:00 PM	1/5/14 9:00 PM	0.08	551,695	0.48	1,149,365	0.75	0.24	3 hr	CloudBurst
CSO015	1/11/14 2:00 AM	1/11/14 7:15 AM	0.22	1,799,373	0.85	2,116,910	1.35	0.45	6 hr	CloudBurst
CSO015	2/2/14 4:45 AM	2/2/14 4:45 AM	0.00	9,621	0.62	15,518	0.17	0.23	24 hr	CloudBurst
CSO015	2/4/14 8:45 PM	2/5/14 2:15 PM	0.73	4,285,297	0.67	6,395,965	1.29	0.33	6 hr	CloudBurst
CSO015	2/17/14 4:45 PM	2/18/14 1:00 AM	0.34	1,463,329	0.62	2,360,207	0.89	0.38	3 hr	CloudBurst
CSO015	2/18/14 6:30 PM	2/18/14 7:15 PM	0.03	46,443	1.56	29,771	0.89	0.38	3 hr	CloudBurst
CSO015	3/2/14 11:45 AM	3/2/14 12:30 PM	0.03	222,738	0.51	436,741	0.28	0.19	24 hr	CloudBurst
CSO015	3/29/14 8:00 AM	3/29/14 2:00 PM	0.25	943,500	0.89	1,060,112	1.22	0.41	12 hr	CloudBurst
CSO191	1/11/14 12:15 AM	1/11/14 4:00 AM	0.16	139,611	0.85	164,249	1.27	0.45	6 hr	CloudBurst
CSO191	2/4/14 8:45 PM	2/4/14 11:45 PM	0.13	318,981	0.67	476,092	1.27	0.33	6 hr	CloudBurst
CSO191	2/17/14 4:00 PM	2/17/14 5:00 PM	0.04	226,793	0.62	365,795	0.86	0.38	3 hr	CloudBurst
CSO191	3/29/14 6:30 AM	3/29/14 6:45 AM	0.01	22,847	0.89	25,671	0.70	0.41	12 hr	CloudBurst
CSO182	1/5/14 3:15 PM	1/5/14 8:15 PM	0.21	73,541	0.5	147,081	0.73	0.25	3 hr	Atlas14
CSO182	1/11/14 12:30 AM	1/11/14 5:45 AM	0.22	39,410	1.04	37,894	1.55	0.56	6 hr	CloudBurst
CSO182	1/13/14 2:30 PM	1/13/14 3:45 PM	0.05	28,206	0.18	156,700	1.18	0.09	6 hr	CloudBurst
CSO182	2/2/14 4:00 AM	2/2/14 7:45 AM	0.16	54,561	0.2	272,805	0.20	0.10	6 hr	CloudBurst
CSO182	2/4/14 6:45 PM	2/5/14 4:00 AM	0.39	78,099	0.51	153,135	0.96	0.25	6 hr	CloudBurst
CSO182	2/14/14 4:30 PM	2/14/14 6:45 PM	0.09	68,451	0.54	126,761	0.56	0.29	6 hr	CloudBurst
CSO182	2/17/14 3:00 PM	2/17/14 6:45 PM	0.16	92,726	0.4	231,816	1.01	0.25	3 hr	Atlas14
CSO182	2/20/14 8:30 PM	2/20/14 11:45 PM	0.14	17,111	0.23	74,394	1.24	0.13	6 hr	CloudBurst
CSO182	3/2/14 9:45 AM	3/2/14 11:45 AM	0.08	83,082	0.65	127,819	0.33	0.25	24 hr	CloudBurst
CSO182	3/12/14 7:30 AM	3/12/14 7:30 AM	0.00	655	0.11	5,957	0.09	0.05	1 hr	CloudBurst
CSO182	3/28/14 4:15 AM	3/28/14 5:00 AM	0.03	21,131	0.26	81,274	0.31	0.12	1 hr	CloudBurst
CSO182	3/29/14 5:15 AM	3/29/14 1:15 PM	0.33	76,372	0.88	86,786	1.17	0.43	6 hr	CloudBurst
CSO205	2/4/14 11:00 PM	2/4/14 11:00 PM	0.00	198	0.51	389	0.91	0.25	6 hr	CloudBurst
CSO205	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	205	0.4	512	0.92	0.25	3 hr	Atlas14
CSO205	3/29/14 8:30 AM	3/29/14 8:30 AM	0.00	815	0.88	926	0.87	0.43	6 hr	CloudBurst
CSO110	1/5/14 3:30 PM	1/5/14 8:45 PM	0.22	632,690	0.51	1,240,569	0.76	0.25	6 hr	CloudBurst
CSO110	1/11/14 12:45 AM	1/11/14 6:45 AM	0.25	1,329,519	1.08	1,231,037	1.60	0.59	6 hr	CloudBurst
CSO110	1/13/14 3:00 PM	1/13/14 4:30 PM	0.06	117,110	0.2	585,549	1.24	0.09	12 hr	CloudBurst
CSO110	2/2/14 5:15 AM	2/2/14 8:15 AM	0.13	221,297	0.43	514,644	0.18	0.16	24 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO110	2/4/14 7:30 PM	2/5/14 6:15 AM	0.45	1,908,862	0.54	3,534,930	0.97	0.26	6 hr	CloudBurst
CSO110	2/14/14 5:15 PM	2/14/14 7:30 PM	0.09	225,691	0.52	434,021	0.55	0.28	6 hr	CloudBurst
CSO110	2/17/14 3:45 PM	2/17/14 7:45 PM	0.17	772,636	0.43	1,796,828	1.01	0.26	3 hr	CloudBurst
CSO110	2/20/14 11:15 PM	2/21/14 12:30 AM	0.05	126,312	0.24	526,301	1.25	0.13	6 hr	CloudBurst
CSO110	3/2/14 10:15 AM	3/2/14 12:30 PM	0.09	352,006	0.66	533,343	0.34	0.25	24 hr	CloudBurst
CSO110	3/29/14 7:15 AM	3/29/14 2:00 PM	0.28	1,161,170	1	1,161,170	1.29	0.48	6 hr	CloudBurst
CSO111	1/5/14 5:45 PM	1/6/14 5:00 AM	0.47	2,058,999	0.51	4,037,253	0.78	0.25	6 hr	CloudBurst
CSO111	1/11/14 12:45 AM	1/11/14 5:15 AM	0.19	329,961	1.08	305,520	1.60	0.59	6 hr	CloudBurst
CSO111	2/2/14 5:15 AM	2/2/14 5:30 AM	0.01	6,768	0.43	15,739	0.13	0.16	24 hr	CloudBurst
CSO111	2/4/14 8:00 PM	2/5/14 1:00 AM	0.21	844,019	0.54	1,562,998	0.96	0.26	6 hr	CloudBurst
CSO111	2/17/14 4:15 PM	2/17/14 5:45 PM	0.06	141,211	0.43	328,398	1.01	0.26	3 hr	CloudBurst
CSO111	2/20/14 11:15 PM	2/20/14 11:15 PM	0.00	1,167	0.24	4,861	1.24	0.13	6 hr	CloudBurst
CSO111	3/2/14 10:30 AM	3/2/14 11:30 AM	0.04	42,740	0.66	64,757	0.34	0.25	24 hr	CloudBurst
CSO111	3/29/14 7:00 AM	3/29/14 9:00 AM	0.08	12,780	1	12,780	0.96	0.48	6 hr	CloudBurst
CSO097	1/11/14 12:45 AM	1/11/14 6:30 AM	0.24	89,539	1.08	82,907	1.61	0.59	6 hr	CloudBurst
CSO097	1/13/14 3:00 PM	1/13/14 4:15 PM	0.05	1,780	0.21	8,477	1.25	0.10	12 hr	CloudBurst
CSO097	2/17/14 4:00 PM	2/17/14 7:30 PM	0.15	54,638	0.39	140,098	0.84	0.23	3 hr	CloudBurst
CSO097	2/20/14 11:15 PM	2/21/14 12:15 AM	0.04	317	0.24	1,323	1.08	0.13	6 hr	CloudBurst
CSO097	3/13/14 5:30 AM	3/13/14 7:30 AM	0.08	70,444	0.01	7,044,396	0.08	0.01	6 hr	CloudBurst
CSO097	3/29/14 7:00 AM	3/29/14 12:30 PM	0.23	36,549	1.21	30,205	1.42	0.56	6 hr	CloudBurst
CSO106	1/11/14 12:15 AM	1/11/14 5:00 AM	0.20	7,107	1.08	6,580	1.60	0.59	6 hr	CloudBurst
CSO106	2/4/14 7:45 PM	2/5/14 3:00 AM	0.30	9,292	0.48	19,359	0.88	0.23	6 hr	CloudBurst
CSO106	2/17/14 4:00 PM	2/17/14 5:15 PM	0.05	14,155	0.39	36,295	0.82	0.23	3 hr	CloudBurst
CSO106	2/20/14 10:45 PM	2/20/14 10:45 PM	0.00	906	0.24	3,774	1.04	0.13	6 hr	CloudBurst
CSO106	3/2/14 10:15 AM	3/2/14 10:30 AM	0.01	1,529	0.64	2,389	0.24	0.24	24 hr	CloudBurst
CSO106	3/29/14 6:45 AM	3/29/14 8:30 AM	0.07	5,146	1.21	4,253	1.07	0.56	6 hr	CloudBurst
CSO137	1/5/14 3:15 PM	1/5/14 7:15 PM	0.17	17,934	0.51	35,165	0.71	0.26	6 hr	CloudBurst
CSO137	1/11/14 12:30 AM	1/11/14 5:30 AM	0.21	304,378	1.08	281,831	1.61	0.59	6 hr	CloudBurst
CSO137	2/2/14 4:15 AM	2/2/14 5:45 AM	0.06	24,704	0.16	154,399	0.12	0.09	6 hr	CloudBurst
CSO137	2/4/14 7:15 PM	2/5/14 1:15 AM	0.25	493,975	0.48	1,029,115	0.88	0.23	6 hr	CloudBurst
CSO137	2/14/14 5:15 PM	2/14/14 6:00 PM	0.03	5,913	0.39	15,161	0.36	0.21	6 hr	CloudBurst
CSO137	2/17/14 4:30 PM	2/18/14 10:00 AM	0.73	695,295	0.39	1,782,808	0.84	0.23	3 hr	CloudBurst
CSO137	2/20/14 11:15 PM	2/20/14 11:30 PM	0.01	9,531	0.24	39,711	1.08	0.13	6 hr	CloudBurst
CSO137	3/2/14 9:45 AM	3/2/14 11:30 AM	0.07	125,982	0.64	196,848	0.33	0.24	24 hr	CloudBurst
CSO137	3/28/14 4:45 AM	3/28/14 5:00 AM	0.01	21,771	0.24	90,713	0.28	0.12	6 hr	CloudBurst
CSO137	3/29/14 7:00 AM	3/29/14 12:30 PM	0.23	239,140	1.21	197,636	1.42	0.56	6 hr	CloudBurst
CSO148	1/5/14 2:45 PM	1/5/14 6:45 PM	0.17	16,408	0.51	32,173	0.69	0.26	6 hr	CloudBurst
CSO148	1/11/14 12:15 AM	1/11/14 5:15 AM	0.21	101,490	1.08	93,972	1.60	0.59	6 hr	CloudBurst
CSO148	1/13/14 2:45 PM	1/13/14 2:45 PM	0.00	206	0.21	982	1.21	0.10	12 hr	CloudBurst
CSO148	2/2/14 3:00 AM	2/2/14 7:15 AM	0.18	17,404	0.16	108,774	0.15	0.09	6 hr	CloudBurst
CSO148	2/4/14 6:45 PM	2/5/14 12:45 AM	0.25	126,087	0.48	262,682	0.88	0.23	6 hr	CloudBurst
CSO148	2/14/14 4:45 PM	2/14/14 6:30 PM	0.07	9,709	0.39	24,894	0.40	0.21	6 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO148	2/17/14 3:00 PM	2/17/14 6:00 PM	0.13	122,990	0.39	315,358	0.84	0.23	3 hr	CloudBurst
CSO148	2/20/14 11:00 PM	2/20/14 11:15 PM	0.01	2,290	0.24	9,541	1.07	0.13	6 hr	CloudBurst
CSO148	3/2/14 9:30 AM	3/2/14 11:30 AM	0.08	39,233	0.64	61,302	0.33	0.24	24 hr	CloudBurst
CSO148	3/28/14 4:15 AM	3/28/14 4:45 AM	0.02	21,725	0.24	90,523	0.28	0.12	6 hr	CloudBurst
CSO148	3/29/14 5:00 AM	3/29/14 12:15 PM	0.30	67,610	1.21	55,876	1.39	0.56	6 hr	CloudBurst
CSO016	1/11/14 1:15 AM	1/11/14 6:00 AM	0.20	1,491,657	0.97	1,537,791	1.44	0.52	6 hr	CloudBurst
CSO016	2/2/14 6:00 AM	2/2/14 6:45 AM	0.03	4,708	0.62	7,593	0.24	0.24	24 hr	CloudBurst
CSO016	2/4/14 8:30 PM	2/5/14 7:30 AM	0.46	15,849,921	0.62	25,564,389	1.24	0.30	6 hr	CloudBurst
CSO016	2/17/14 4:30 PM	2/17/14 8:45 PM	0.18	3,519,418	0.57	6,174,417	0.84	0.34	3 hr	CloudBurst
CSO016	3/2/14 11:30 AM	3/2/14 1:00 PM	0.06	312,082	0.49	636,901	0.28	0.18	24 hr	CloudBurst
CSO016	3/29/14 7:30 AM	3/29/14 2:30 PM	0.29	1,918,145	0.96	1,998,067	1.30	0.45	6 hr	CloudBurst
CSO210	1/5/14 5:30 PM	1/5/14 7:15 PM	0.07	21,319	0.46	46,345	0.62	0.23	3 hr	Atlas14
CSO210	1/11/14 1:00 AM	1/11/14 6:30 AM	0.23	482,723	0.97	497,652	1.44	0.52	6 hr	CloudBurst
CSO210	2/2/14 5:45 AM	2/2/14 7:15 AM	0.06	27,534	0.62	44,409	0.25	0.24	24 hr	CloudBurst
CSO210	2/4/14 8:00 PM	2/4/14 8:45 PM	0.03	56,181	0.62	90,614	1.00	0.30	6 hr	CloudBurst
CSO210	2/17/14 4:15 PM	2/17/14 8:45 PM	0.19	274,001	0.57	480,704	0.84	0.34	3 hr	CloudBurst
CSO210	3/2/14 11:15 AM	3/2/14 1:15 PM	0.08	29,603	0.49	60,414	0.28	0.18	24 hr	CloudBurst
CSO210	3/29/14 7:15 AM	3/29/14 2:45 PM	0.31	264,515	0.96	275,536	1.30	0.45	6 hr	CloudBurst
CSO210	3/31/14 11:15 PM	3/31/14 11:45 PM	0.02	1,875	0.01	187,500	1.31	0.01	6 hr	CloudBurst
CSO211	2/4/14 9:00 PM	2/5/14 7:30 AM	0.44	223,958,362	0.62	361,223,164	1.24	0.30	6 hr	CloudBurst
CSO211	2/17/14 4:15 PM	2/17/14 7:45 PM	0.15	12,384,748	0.57	21,727,628	0.84	0.34	3 hr	CloudBurst
CSO211	3/29/14 7:30 AM	3/29/14 10:30 AM	0.13	3,584,334	0.96	3,733,681	1.10	0.45	6 hr	CloudBurst
CSO196	1/11/14 12:15 AM	1/11/14 2:30 AM	0.09	3,507	0.95	3,691	1.14	0.52	6 hr	CloudBurst
CSO196	2/4/14 8:00 PM	2/4/14 8:00 PM	0.00	3,460	0.51	6,785	0.79	0.25	6 hr	CloudBurst
CSO196	2/17/14 4:15 PM	2/17/14 4:45 PM	0.02	28,726	0.4	71,816	0.95	0.24	3 hr	CloudBurst
CSO196	3/2/14 10:45 AM	3/2/14 10:45 AM	0.00	618	0.62	997	0.29	0.24	24 hr	CloudBurst
CSO196	3/12/14 8:15 AM	3/12/14 8:45 AM	0.02	3,496	0.09	38,843	0.07	0.04	1 hr	CloudBurst
CSO196	3/29/14 6:30 AM	3/29/14 7:00 AM	0.02	15,732	1.01	15,576	0.82	0.49	6 hr	CloudBurst
CSO199	1/11/14 12:15 AM	1/11/14 12:30 AM	0.01	1,239	0.95	1,304	0.79	0.52	6 hr	CloudBurst
CSO199	2/17/14 4:15 PM	2/17/14 4:30 PM	0.01	4,417	0.4	11,042	0.94	0.24	3 hr	CloudBurst
CSO199	3/3/14 9:00 AM	3/3/14 8:15 PM	0.47	4,325	0.62	6,976	0.63	0.24	24 hr	CloudBurst
CSO199	3/29/14 6:45 AM	3/29/14 6:45 AM	0.00	1,067	1.01	1,056	0.76	0.49	6 hr	CloudBurst
CSO200	1/11/14 12:00 AM	1/11/14 3:00 AM	0.13	1,717	0.95	1,807	1.27	0.52	6 hr	CloudBurst
CSO200	2/4/14 7:45 PM	2/4/14 11:15 PM	0.15	13,538	0.51	26,544	1.04	0.25	6 hr	CloudBurst
CSO200	2/17/14 4:00 PM	2/17/14 4:30 PM	0.02	5,424	0.4	13,561	0.94	0.24	3 hr	CloudBurst
CSO200	3/29/14 6:30 AM	3/29/14 6:45 AM	0.01	1,275	1.01	1,262	0.76	0.49	6 hr	CloudBurst
CSO202	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	3,790	0.4	9,475	0.91	0.24	3 hr	CloudBurst
CSO202	3/29/14 6:45 AM	3/29/14 6:45 AM	0.00	3,692	1.01	3,656	0.76	0.49	6 hr	CloudBurst
CSO203	2/2/14 5:30 AM	2/2/14 8:00 AM	0.10	561	0.56	1,001	0.26	0.21	24 hr	CloudBurst
CSO203	2/3/14 8:30 AM	2/4/14 9:00 AM	1.02	57,292	0.56	102,308	0.56	0.21	24 hr	CloudBurst
CSO203	2/4/14 11:15 PM	2/4/14 11:15 PM	0.00	892	0.51	1,750	1.04	0.25	6 hr	CloudBurst
CSO203	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	2,663	0.4	6,657	0.91	0.24	3 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO146	1/5/14 3:15 PM	1/5/14 8:15 PM	0.21	415,330	0.48	865,270	0.69	0.24	6 hr	CloudBurst
CSO146	1/11/14 12:30 AM	1/11/14 6:00 AM	0.23	698,801	1.03	678,447	1.52	0.55	6 hr	CloudBurst
CSO146	1/13/14 3:00 PM	1/13/14 3:45 PM	0.03	54,832	0.2	274,160	1.18	0.09	12 hr	CloudBurst
CSO146	2/2/14 4:00 AM	2/2/14 7:45 AM	0.16	278,474	0.47	592,498	0.21	0.18	24 hr	CloudBurst
CSO146	2/4/14 7:00 PM	2/5/14 3:00 AM	0.33	1,489,385	0.51	2,920,363	0.98	0.25	6 hr	CloudBurst
CSO146	2/14/14 4:45 PM	2/14/14 7:00 PM	0.09	162,743	0.5	325,487	0.53	0.27	6 hr	CloudBurst
CSO146	2/17/14 3:30 PM	2/17/14 7:00 PM	0.15	1,014,771	0.56	1,812,090	1.12	0.34	3 hr	CloudBurst
CSO146	2/20/14 8:45 PM	2/21/14 12:00 AM	0.14	165,236	0.18	917,980	1.30	0.10	6 hr	CloudBurst
CSO146	3/2/14 9:45 AM	3/2/14 12:00 PM	0.09	337,072	0.62	543,664	0.34	0.24	24 hr	CloudBurst
CSO146	3/28/14 4:30 AM	3/28/14 5:15 AM	0.03	140,641	0.25	562,565	0.31	0.12	6 hr	CloudBurst
CSO146	3/29/14 6:30 AM	3/29/14 1:45 PM	0.30	1,093,177	1.05	1,041,121	1.35	0.49	12 hr	CloudBurst
CSO149	1/5/14 3:15 PM	1/5/14 6:15 PM	0.13	77,262	0.48	160,962	0.65	0.24	6 hr	CloudBurst
CSO149	1/11/14 12:15 AM	1/11/14 5:30 AM	0.22	1,719,195	1.03	1,669,121	1.51	0.55	6 hr	CloudBurst
CSO149	2/2/14 4:00 AM	2/2/14 5:45 AM	0.07	132,327	0.47	281,548	0.16	0.18	24 hr	CloudBurst
CSO149	2/4/14 7:00 PM	2/5/14 1:15 AM	0.26	1,999,625	0.51	3,920,832	0.98	0.25	6 hr	CloudBurst
CSO149	2/14/14 5:00 PM	2/14/14 6:15 PM	0.05	18,748	0.5	37,496	0.48	0.27	6 hr	CloudBurst
CSO149	2/17/14 4:15 PM	2/17/14 6:15 PM	0.08	862,153	0.56	1,539,559	1.12	0.34	3 hr	CloudBurst
CSO149	2/20/14 11:15 PM	2/20/14 11:30 PM	0.01	19,654	0.18	109,191	1.30	0.10	6 hr	CloudBurst
CSO149	3/2/14 9:45 AM	3/2/14 11:30 AM	0.07	387,778	0.62	625,449	0.34	0.24	24 hr	CloudBurst
CSO149	3/28/14 4:30 AM	3/28/14 5:15 AM	0.03	92,366	0.25	369,465	0.31	0.12	6 hr	CloudBurst
CSO149	3/29/14 6:15 AM	3/29/14 12:45 PM	0.27	1,020,590	1.05	971,990	1.32	0.49	12 hr	CloudBurst
CSO174	1/11/14 12:45 AM	1/11/14 3:30 AM	0.11	41,411	1.03	40,205	1.37	0.55	6 hr	CloudBurst
CSO174	2/4/14 8:15 PM	2/4/14 11:45 PM	0.15	173,366	0.51	339,933	0.97	0.25	6 hr	CloudBurst
CSO174	2/17/14 4:15 PM	2/17/14 5:00 PM	0.03	292,355	0.56	522,063	1.08	0.34	3 hr	CloudBurst
CSO174	3/2/14 11:00 AM	3/2/14 11:00 AM	0.00	60	0.62	97	0.33	0.24	24 hr	CloudBurst
CSO174	3/29/14 6:45 AM	3/29/14 7:30 AM	0.03	131,947	1.05	125,664	0.87	0.49	12 hr	CloudBurst
CSO180	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	9,246	0.56	16,511	1.04	0.34	3 hr	CloudBurst
CSO091	1/11/14 12:15 AM	1/11/14 4:00 AM	0.16	9,749	0.99	9,847	1.39	0.54	6 hr	CloudBurst
CSO091	2/2/14 4:45 AM	2/2/14 4:45 AM	0.00	1,223	0.2	6,115	0.12	0.10	6 hr	CloudBurst
CSO091	2/4/14 7:30 PM	2/4/14 11:15 PM	0.16	9,754	0.51	19,126	0.93	0.24	6 hr	CloudBurst
CSO091	2/17/14 4:00 PM	2/17/14 4:30 PM	0.02	23,507	0.51	46,093	1.02	0.31	3 hr	CloudBurst
CSO091	3/2/14 10:15 AM	3/2/14 10:30 AM	0.01	555	0.61	909	0.22	0.23	24 hr	CloudBurst
CSO091	3/28/14 4:15 AM	3/28/14 4:15 AM	0.00	241	0.26	926	0.24	0.12	12 hr	CloudBurst
CSO091	3/29/14 6:00 AM	3/29/14 7:15 AM	0.05	34,846	1	34,846	0.79	0.46	12 hr	CloudBurst
CSO092	1/5/14 2:30 PM	1/5/14 6:45 PM	0.18	1,004	0.48	2,091	0.67	0.24	6 hr	CloudBurst
CSO092	1/11/14 12:00 AM	1/11/14 5:00 AM	0.21	10,504	0.99	10,610	1.47	0.54	6 hr	CloudBurst
CSO092	2/2/14 2:45 AM	2/2/14 5:15 AM	0.10	309	0.2	1,546	0.15	0.10	6 hr	CloudBurst
CSO092	2/4/14 6:15 PM	2/5/14 1:45 AM	0.31	31,702	0.51	62,161	0.96	0.24	6 hr	CloudBurst
CSO092	2/14/14 5:00 PM	2/14/14 5:00 PM	0.00	2	0.5	4	0.34	0.27	6 hr	CloudBurst
CSO092	2/17/14 3:15 PM	2/17/14 5:15 PM	0.08	14,387	0.51	28,209	1.05	0.31	3 hr	CloudBurst
CSO092	3/2/14 9:15 AM	3/2/14 11:00 AM	0.07	8,544	0.61	14,007	0.30	0.23	24 hr	CloudBurst
CSO092	3/12/14 7:00 AM	3/12/14 7:15 AM	0.01	197	0.08	2,467	0.07	0.04	1 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO092	3/28/14 4:15 AM	3/28/14 5:00 AM	0.03	2,634	0.26	10,131	0.31	0.12	12 hr	CloudBurst
CSO092	3/29/14 6:00 AM	3/29/14 12:00 PM	0.25	18,191	1	18,191	1.20	0.46	12 hr	CloudBurst
CSO113	1/11/14 12:45 AM	1/11/14 4:15 AM	0.15	36,069	0.99	36,433	1.41	0.54	6 hr	CloudBurst
CSO113	2/4/14 8:00 PM	2/4/14 11:45 PM	0.16	31,284	0.51	61,342	0.94	0.24	6 hr	CloudBurst
CSO113	2/17/14 4:15 PM	2/17/14 5:45 PM	0.06	56,646	0.51	111,071	1.06	0.31	3 hr	CloudBurst
CSO113	3/2/14 10:00 AM	3/2/14 11:15 AM	0.05	13,686	0.61	22,436	0.31	0.23	24 hr	CloudBurst
CSO113	3/28/14 4:45 AM	3/28/14 5:00 AM	0.01	7,373	0.26	28,358	0.31	0.12	12 hr	CloudBurst
CSO113	3/29/14 6:30 AM	3/29/14 1:00 PM	0.27	78,307	1	78,307	1.29	0.46	12 hr	CloudBurst
CSO152	1/5/14 3:15 PM	1/5/14 8:30 PM	0.22	304,001	0.48	633,336	0.70	0.24	6 hr	CloudBurst
CSO152	1/11/14 12:30 AM	1/11/14 6:00 AM	0.23	1,163,470	0.99	1,175,223	1.48	0.54	6 hr	CloudBurst
CSO152	1/13/14 3:00 PM	1/13/14 4:15 PM	0.05	31,342	0.2	156,708	1.14	0.09	12 hr	CloudBurst
CSO152	2/2/14 4:15 AM	2/2/14 8:00 AM	0.16	243,360	0.2	1,216,798	0.20	0.10	6 hr	CloudBurst
CSO152	2/4/14 7:00 PM	2/5/14 3:30 AM	0.35	1,760,292	0.51	3,451,553	0.96	0.24	6 hr	CloudBurst
CSO152	2/14/14 4:45 PM	2/14/14 7:00 PM	0.09	153,557	0.5	307,113	0.52	0.27	6 hr	CloudBurst
CSO152	2/17/14 3:15 PM	2/17/14 7:00 PM	0.16	235,425	0.51	461,618	1.07	0.31	3 hr	CloudBurst
CSO152	2/20/14 8:45 PM	2/21/14 12:15 AM	0.15	60,437	0.2	302,186	1.27	0.11	6 hr	CloudBurst
CSO152	3/2/14 9:45 AM	3/2/14 12:00 PM	0.09	310,004	0.61	508,203	0.32	0.23	24 hr	CloudBurst
CSO152	3/12/14 7:45 AM	3/12/14 7:45 AM	0.00	6,060	0.08	75,753	0.07	0.04	1 hr	CloudBurst
CSO152	3/28/14 4:45 AM	3/28/14 5:30 AM	0.03	107,808	0.26	414,646	0.31	0.12	12 hr	CloudBurst
CSO152	3/29/14 6:45 AM	3/29/14 1:45 PM	0.29	353,871	1	353,871	1.31	0.46	12 hr	CloudBurst
CSO151	1/2/14 4:00 AM	1/2/14 11:30 AM	0.31	4,110	0.25	16,439	0.80	0.13	3 hr	CloudBurst
CSO151	1/5/14 3:00 PM	1/5/14 9:45 PM	0.28	327,378	0.44	744,040	0.69	0.22	6 hr	CloudBurst
CSO151	1/11/14 12:30 AM	1/11/14 7:45 PM	0.80	423,293	1	423,293	1.45	0.54	6 hr	CloudBurst
CSO151	1/13/14 2:30 PM	1/13/14 9:00 PM	0.27	126,474	0.2	632,370	1.21	0.09	12 hr	CloudBurst
CSO151	2/2/14 3:15 AM	2/2/14 8:45 AM	0.23	115,034	0.16	718,964	0.16	0.09	6 hr	CloudBurst
CSO151	2/4/14 6:45 PM	2/5/14 11:00 PM	1.18	548,536	0.46	1,192,469	0.85	0.23	6 hr	CloudBurst
CSO151	2/14/14 4:00 PM	2/14/14 10:00 PM	0.25	7,700,048	0.36	21,389,022	0.40	0.19	6 hr	CloudBurst
CSO151	2/17/14 2:45 PM	2/19/14 2:45 PM	2.00	22,370,341	0.35	63,915,260	0.77	0.22	3 hr	CloudBurst
CSO151	2/20/14 7:15 PM	2/21/14 1:00 AM	0.24	163,296	0.19	859,450	0.96	0.10	6 hr	CloudBurst
CSO151	3/2/14 9:45 AM	3/2/14 1:45 PM	0.17	324,162	0.58	558,901	0.30	0.22	24 hr	CloudBurst
CSO151	3/12/14 7:30 AM	3/12/14 8:00 AM	0.02	9,435	0.07	134,792	0.07	0.03	24 hr	CloudBurst
CSO151	3/19/14 9:00 AM	3/19/14 9:15 AM	0.01	1,568	0.17	9,221	0.25	0.13	1 hr	CloudBurst
CSO151	3/28/14 4:30 AM	3/28/14 6:00 AM	0.06	105,530	0.25	422,120	0.30	0.12	12 hr	CloudBurst
CSO151	3/29/14 5:15 AM	3/29/14 5:15 PM	0.50	919,477	1.07	859,325	1.37	0.50	12 hr	CloudBurst
CSO206	1/2/14 4:00 AM	1/2/14 10:45 AM	0.28	96,325	0.27	356,760	0.79	0.14	3 hr	CloudBurst
CSO206	1/5/14 3:00 PM	1/5/14 8:30 PM	0.23	745,983	0.53	1,407,514	0.76	0.27	6 hr	CloudBurst
CSO206	1/11/14 12:15 AM	1/11/14 6:15 AM	0.25	1,455,197	1.08	1,347,405	1.63	0.59	6 hr	CloudBurst
CSO206	1/13/14 2:30 PM	1/13/14 6:00 PM	0.15	348,656	0.24	1,452,734	1.34	0.11	12 hr	CloudBurst
CSO206	2/2/14 3:00 AM	2/2/14 8:30 AM	0.23	874,855	0.44	1,988,307	0.17	0.17	24 hr	CloudBurst
CSO206	2/3/14 11:30 AM	2/5/14 4:45 AM	1.72	2,710,443	0.94	2,883,450	0.94	0.12	12 hr	CloudBurst
CSO206	2/14/14 4:00 PM	2/14/14 7:30 PM	0.15	197,173	0.45	438,163	0.48	0.24	6 hr	CloudBurst
CSO206	2/17/14 2:45 PM	2/17/14 11:30 PM	0.36	328,369	0.52	631,479	1.02	0.32	3 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO206	2/20/14 8:00 PM	2/21/14 1:15 AM	0.22	161,169	0.22	732,588	1.25	0.12	6 hr	CloudBurst
CSO206	2/23/14 5:00 PM	2/23/14 5:30 PM	0.02	4,035	0.02	201,770	0.77	0.01	48 hr	CloudBurst
CSO206	3/2/14 9:30 AM	3/2/14 4:45 PM	0.30	219,534	0.63	348,467	0.34	0.24	24 hr	CloudBurst
CSO206	3/12/14 7:15 AM	3/12/14 7:45 AM	0.02	23,979	0.08	299,735	0.07	0.03	48 hr	CloudBurst
CSO206	3/19/14 1:15 PM	3/19/14 6:45 PM	0.23	560	0.21	2,668	0.34	0.16	1 hr	CloudBurst
CSO206	3/28/14 4:15 AM	3/28/14 5:15 AM	0.04	77,909	0.22	354,130	0.26	0.10	12 hr	CloudBurst
CSO206	3/29/14 5:15 AM	3/29/14 2:15 PM	0.38	590,250	1.31	450,573	1.57	0.61	12 hr	CloudBurst
CSO029	1/11/14 12:15 AM	1/11/14 12:15 AM	0.00	13,095	0.97	13,500	0.84	0.52	6 hr	CloudBurst
CSO029	2/4/14 8:15 PM	2/4/14 8:15 PM	0.00	541	0.47	1,151	0.74	0.24	6 hr	CloudBurst
CSO029	2/17/14 4:00 PM	2/17/14 4:15 PM	0.01	10,364	0.48	21,591	0.79	0.28	3 hr	CloudBurst
CSO029	3/29/14 6:30 AM	3/29/14 6:45 AM	0.01	22,125	0.84	26,339	0.66	0.39	6 hr	CloudBurst
CSO038	2/4/14 7:30 PM	2/5/14 3:30 AM	0.33	440,890	0.47	938,063	0.96	0.24	6 hr	CloudBurst
CSO038	2/17/14 8:30 PM	2/17/14 10:45 PM	0.09	40,070	0.48	83,479	0.90	0.28	3 hr	CloudBurst
CSO038	2/20/14 7:15 PM	2/20/14 10:30 PM	0.14	15,750	0.16	98,438	1.00	0.09	6 hr	CloudBurst
CSO193	2/4/14 9:30 PM	2/4/14 9:30 PM	0.00	498	0.47	1,060	0.83	0.24	6 hr	CloudBurst
CSO036	1/5/14 4:45 PM	1/5/14 4:45 PM	0.00	1,324	0.51	2,597	0.59	0.26	6 hr	CloudBurst
CSO036	1/11/14 12:15 AM	1/11/14 4:00 AM	0.16	37,890	1.01	37,515	1.43	0.55	6 hr	CloudBurst
CSO036	2/2/14 4:00 AM	2/2/14 5:15 AM	0.05	6,301	0.24	26,255	0.17	0.13	6 hr	CloudBurst
CSO036	2/4/14 7:00 PM	2/4/14 11:30 PM	0.19	38,488	0.5	76,975	1.00	0.25	6 hr	CloudBurst
CSO036	2/17/14 4:00 PM	2/17/14 4:45 PM	0.03	14,490	0.63	23,000	1.13	0.37	3 hr	CloudBurst
CSO036	2/21/14 6:45 AM	2/21/14 6:45 AM	0.00	33,092	0.18	183,842	1.38	0.10	6 hr	CloudBurst
CSO036	3/12/14 7:15 AM	3/12/14 7:15 AM	0.00	732	0.08	9,156	0.08	0.04	1 hr	CloudBurst
CSO036	3/28/14 4:30 AM	3/28/14 4:45 AM	0.01	5,002	0.26	19,237	0.31	0.12	12 hr	CloudBurst
CSO036	3/29/14 6:15 AM	3/29/14 8:30 AM	0.09	7,679	0.86	8,929	0.91	0.40	6 hr	CloudBurst
CSO181	2/4/14 6:45 PM	2/4/14 11:45 PM	0.21	56,849	0.5	113,698	1.00	0.25	6 hr	CloudBurst
CSO181	2/17/14 4:15 PM	2/17/14 4:30 PM	0.01	16,601	0.63	26,351	1.11	0.37	3 hr	CloudBurst
CSO181	2/21/14 12:30 AM	2/21/14 2:15 AM	0.07	4,549	0.18	25,272	1.38	0.10	6 hr	CloudBurst
CSO181	3/2/14 9:45 AM	3/2/14 10:45 AM	0.04	1,989	0.59	3,371	0.26	0.22	24 hr	CloudBurst
CSO181	3/29/14 6:45 AM	3/29/14 6:45 AM	0.00	1,234	0.86	1,435	0.64	0.40	6 hr	CloudBurst
CSO117	1/5/14 3:30 PM	1/5/14 8:00 PM	0.19	538,843	0.51	1,056,555	0.71	0.25	3 hr	Atlas14
CSO117	1/11/14 12:30 AM	1/11/14 6:15 AM	0.24	2,201,386	1.01	2,179,590	1.53	0.55	6 hr	CloudBurst
CSO117	2/2/14 4:30 AM	2/2/14 6:15 AM	0.07	282,476	0.23	1,228,155	0.18	0.12	6 hr	CloudBurst
CSO117	2/4/14 7:30 PM	2/5/14 2:15 AM	0.28	2,905,434	0.52	5,587,372	1.00	0.25	6 hr	CloudBurst
CSO117	2/14/14 5:15 PM	2/14/14 6:45 PM	0.06	155,389	0.53	293,186	0.54	0.28	6 hr	CloudBurst
CSO117	2/17/14 4:15 PM	2/17/14 7:00 PM	0.11	1,157,738	0.63	1,837,680	1.22	0.37	3 hr	CloudBurst
CSO117	2/20/14 11:30 PM	2/21/14 12:15 AM	0.03	82,741	0.18	459,674	1.40	0.10	6 hr	CloudBurst
CSO117	3/2/14 10:15 AM	3/2/14 12:15 PM	0.08	602,051	0.59	1,020,425	0.30	0.22	24 hr	CloudBurst
CSO117	3/28/14 4:45 AM	3/28/14 5:30 AM	0.03	146,762	0.25	587,046	0.30	0.12	6 hr	CloudBurst
CSO117	3/29/14 6:30 AM	3/29/14 1:30 PM	0.29	1,815,160	0.89	2,039,505	1.18	0.41	12 hr	CloudBurst
CSO083	2/17/14 4:00 PM	2/17/14 4:00 PM	0.00	17,873	0.55	32,496	0.95	0.33	3 hr	CloudBurst
CSO083	3/29/14 6:30 AM	3/29/14 6:30 AM	0.00	4,804	0.94	5,110	0.60	0.44	12 hr	CloudBurst
CSO084	1/11/14 12:30 AM	1/11/14 3:30 AM	0.13	10,509	0.95	11,062	1.26	0.52	6 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO084	2/4/14 8:00 PM	2/4/14 11:30 PM	0.15	20,151	0.51	39,513	0.95	0.26	6 hr	CloudBurst
CSO084	2/17/14 4:45 PM	2/17/14 4:45 PM	0.00	921	0.55	1,675	1.05	0.33	3 hr	CloudBurst
CSO084	3/2/14 10:45 AM	3/2/14 11:15 AM	0.02	6,317	0.57	11,083	0.28	0.22	24 hr	CloudBurst
CSO084	3/28/14 4:45 AM	3/28/14 4:45 AM	0.00	523	0.25	2,090	0.30	0.12	6 hr	CloudBurst
CSO084	3/29/14 6:30 AM	3/29/14 8:30 AM	0.08	2,387	0.94	2,540	0.93	0.44	12 hr	CloudBurst
CSO118	1/2/14 3:15 AM	1/2/14 10:15 AM	0.29	325	0.24	1,356	0.73	0.13	3 hr	Atlas14
CSO118	1/5/14 2:30 PM	1/5/14 7:30 PM	0.21	237,167	0.47	504,611	0.66	0.24	6 hr	CloudBurst
CSO118	1/10/14 11:45 PM	1/11/14 5:30 AM	0.24	2,196,586	0.95	2,312,196	1.43	0.52	6 hr	CloudBurst
CSO118	1/13/14 2:00 PM	1/13/14 5:30 PM	0.15	857	0.2	4,284	1.16	0.09	12 hr	CloudBurst
CSO118	1/21/14 1:00 PM	1/21/14 1:15 PM	0.01	103	0.15	685	0.17	0.07	12 hr	CloudBurst
CSO118	1/25/14 11:45 AM	1/25/14 1:30 PM	0.07	203	0.05	4,070	0.22	0.03	6 hr	CloudBurst
CSO118	2/2/14 2:45 AM	2/2/14 7:00 AM	0.18	220,890	0.21	1,051,857	0.20	0.11	6 hr	CloudBurst
CSO118	2/2/14 4:30 PM	2/2/14 4:45 PM	0.01	110	0.25	439	0.23	0.12	12 hr	CloudBurst
CSO118	2/3/14 9:45 AM	2/3/14 2:45 PM	0.21	1,145	0.25	4,581	0.46	0.12	12 hr	CloudBurst
CSO118	2/4/14 6:00 PM	2/5/14 3:15 AM	0.39	3,089,699	0.51	6,058,233	0.97	0.26	6 hr	CloudBurst
CSO118	2/14/14 3:45 PM	2/14/14 7:45 PM	0.17	5,392	0.5	10,785	0.52	0.27	6 hr	CloudBurst
CSO118	2/17/14 2:15 PM	2/17/14 6:30 PM	0.18	1,342,702	0.55	2,441,276	1.11	0.33	3 hr	CloudBurst
CSO118	2/20/14 7:00 PM	2/20/14 11:45 PM	0.20	60,219	0.17	354,231	1.27	0.09	6 hr	CloudBurst
CSO118	3/2/14 9:15 AM	3/2/14 6:45 PM	0.40	467,947	0.57	820,959	0.34	0.22	24 hr	CloudBurst
CSO118	3/3/14 1:30 PM	3/3/14 4:00 PM	0.10	603	0.57	1,057	0.58	0.22	24 hr	CloudBurst
CSO118	3/12/14 7:15 AM	3/12/14 7:30 AM	0.01	379	0.06	6,321	0.06	0.03	1 hr	CloudBurst
CSO118	3/16/14 5:30 PM	3/16/14 7:30 PM	0.08	247	0.08	3,093	0.15	0.05	3 hr	CloudBurst
CSO118	3/19/14 8:00 AM	3/19/14 8:30 AM	0.02	287	0.07	4,100	0.15	0.04	6 hr	CloudBurst
CSO118	3/28/14 4:30 AM	3/28/14 5:30 AM	0.04	159,573	0.25	638,291	0.30	0.12	6 hr	CloudBurst
CSO118	3/29/14 5:15 AM	3/29/14 1:15 PM	0.33	2,038,194	0.94	2,168,292	1.22	0.44	12 hr	CloudBurst
CSO127	1/5/14 3:00 PM	1/5/14 8:15 PM	0.22	131,450	0.47	279,680	0.70	0.24	6 hr	CloudBurst
CSO127	1/11/14 12:30 AM	1/11/14 5:45 AM	0.22	402,330	1.03	390,611	1.51	0.56	6 hr	CloudBurst
CSO127	1/13/14 3:00 PM	1/13/14 3:00 PM	0.00	75	0.23	328	1.19	0.11	12 hr	CloudBurst
CSO127	2/2/14 4:00 AM	2/2/14 7:45 AM	0.16	187,294	0.41	456,815	0.16	0.16	24 hr	CloudBurst
CSO127	2/4/14 7:00 PM	2/5/14 2:15 AM	0.30	706,147	0.46	1,535,102	0.87	0.22	6 hr	CloudBurst
CSO127	2/14/14 4:45 PM	2/14/14 6:45 PM	0.08	95,343	0.39	244,470	0.40	0.20	6 hr	CloudBurst
CSO127	2/17/14 4:15 PM	2/17/14 6:30 PM	0.09	87,064	0.44	197,873	0.88	0.27	3 hr	CloudBurst
CSO127	2/20/14 8:45 PM	2/21/14 12:00 AM	0.14	36,796	0.22	167,253	1.10	0.12	6 hr	CloudBurst
CSO127	3/2/14 10:00 AM	3/2/14 11:30 AM	0.06	133,575	0.59	226,399	0.31	0.22	24 hr	CloudBurst
CSO127	3/28/14 4:30 AM	3/28/14 5:00 AM	0.02	13,770	0.19	72,475	0.23	0.09	12 hr	CloudBurst
CSO127	3/29/14 5:30 AM	3/29/14 1:00 PM	0.31	386,316	1.44	268,275	1.64	0.67	12 hr	CloudBurst
CSO166	1/5/14 6:00 PM	1/5/14 6:15 PM	0.01	76,230	0.47	162,192	0.67	0.24	6 hr	CloudBurst
CSO166	1/11/14 12:45 AM	1/11/14 6:15 AM	0.23	2,734,042	1.03	2,654,409	1.51	0.56	6 hr	CloudBurst
CSO166	2/2/14 5:30 AM	2/2/14 5:45 AM	0.01	33,661	0.41	82,101	0.13	0.16	24 hr	CloudBurst
CSO166	2/4/14 8:00 PM	2/5/14 4:15 AM	0.34	3,084,410	0.46	6,705,240	0.87	0.22	6 hr	CloudBurst
CSO166	2/17/14 4:30 PM	2/17/14 7:00 PM	0.10	621,404	0.44	1,412,282	0.88	0.27	3 hr	CloudBurst
CSO166	2/20/14 11:30 PM	2/21/14 12:00 AM	0.02	60,624	0.22	275,561	1.10	0.12	6 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO166	3/2/14 10:15 AM	3/2/14 11:45 AM	0.06	184,135	0.59	312,094	0.31	0.22	24 hr	CloudBurst
CSO166	3/28/14 4:45 AM	3/28/14 5:15 AM	0.02	29,132	0.19	153,327	0.23	0.09	12 hr	CloudBurst
CSO166	3/29/14 7:15 AM	3/29/14 1:45 PM	0.27	1,249,139	1.44	867,458	1.67	0.67	12 hr	CloudBurst
CSO104	2/17/14 4:45 PM	2/17/14 4:45 PM	0.00	1,445	0.56	2,580	0.75	0.32	3 hr	CloudBurst
CSO105	1/11/14 12:00 AM	1/11/14 7:30 AM	0.31	6,258,047	0.91	6,876,975	1.40	0.49	6 hr	CloudBurst
CSO105	1/13/14 2:15 PM	1/13/14 6:15 PM	0.17	4,249	0.28	15,176	1.20	0.13	3 hr	Atlas14
CSO105	1/14/14 6:30 PM	1/14/14 6:45 PM	0.01	380	0.02	18,998	1.23	0.02	1 hr	CloudBurst
CSO105	1/21/14 3:30 AM	1/21/14 4:00 PM	0.52	2,665	0.15	17,763	0.20	0.07	12 hr	CloudBurst
CSO105	1/25/14 12:00 PM	1/25/14 4:00 PM	0.17	3,116	0.04	77,902	0.22	0.02	24 hr	CloudBurst
CSO105	2/2/14 2:30 AM	2/2/14 7:45 AM	0.22	369,160	0.58	636,483	0.25	0.22	24 hr	CloudBurst
CSO105	2/4/14 6:15 PM	2/5/14 8:00 AM	0.57	9,961,968	0.67	14,868,609	1.25	0.33	6 hr	CloudBurst
CSO105	2/14/14 3:45 PM	2/14/14 11:00 PM	0.30	4,600	0.23	19,999	0.29	0.13	6 hr	CloudBurst
CSO105	2/17/14 2:30 PM	2/17/14 9:15 PM	0.28	4,532,004	0.56	8,092,863	0.82	0.32	3 hr	CloudBurst
CSO105	2/20/14 8:15 PM	2/21/14 12:45 AM	0.19	146,764	0.24	611,516	1.06	0.13	3 hr	Atlas14
CSO105	3/2/14 9:30 AM	3/2/14 1:00 PM	0.15	815,232	0.47	1,734,537	0.28	0.18	24 hr	CloudBurst
CSO105	3/12/14 7:15 AM	3/12/14 11:45 AM	0.19	2,092	0.11	19,017	0.11	0.06	1 hr	CloudBurst
CSO105	3/16/14 5:30 PM	3/16/14 8:15 PM	0.11	1,499	0.04	37,470	0.17	0.03	3 hr	CloudBurst
CSO105	3/19/14 8:45 AM	3/19/14 8:45 AM	0.00	90	0.06	1,503	0.12	0.04	3 hr	CloudBurst
CSO105	3/27/14 11:15 PM	3/28/14 6:15 AM	0.29	299,875	0.26	1,153,364	0.35	0.14	6 hr	CloudBurst
CSO105	3/29/14 4:30 AM	3/29/14 2:15 PM	0.41	3,510,550	0.84	4,179,226	1.19	0.39	12 hr	CloudBurst
CSO189	1/5/14 6:00 PM	1/5/14 6:15 PM	0.01	8,615	0.47	18,330	0.58	0.23	6 hr	CloudBurst
CSO189	1/11/14 12:30 AM	1/11/14 5:45 AM	0.22	3,756,973	0.91	4,128,542	1.40	0.49	6 hr	CloudBurst
CSO189	2/2/14 5:45 AM	2/2/14 5:45 AM	0.00	30,117	0.58	51,926	0.21	0.22	24 hr	CloudBurst
CSO189	2/4/14 7:45 PM	2/5/14 2:15 AM	0.27	7,069,862	0.67	10,552,033	1.25	0.33	6 hr	CloudBurst
CSO189	2/17/14 4:15 PM	2/17/14 9:30 PM	0.22	2,986,569	0.56	5,333,160	0.82	0.32	3 hr	CloudBurst
CSO189	3/2/14 11:00 AM	3/2/14 12:00 PM	0.04	148,395	0.47	315,733	0.28	0.18	24 hr	CloudBurst
CSO189	3/28/14 4:45 AM	3/28/14 5:30 AM	0.03	283,018	0.26	1,088,533	0.35	0.14	6 hr	CloudBurst
CSO189	3/29/14 7:00 AM	3/29/14 9:45 AM	0.11	1,772,238	0.84	2,109,807	0.96	0.39	12 hr	CloudBurst
CSO208	1/2/14 3:45 AM	1/2/14 6:00 AM	0.09	1,018	0.2	5,089	0.66	0.09	6 hr	CloudBurst
CSO208	1/5/14 2:30 PM	1/5/14 6:45 PM	0.18	5,833	0.47	12,410	0.61	0.24	3 hr	CloudBurst
CSO208	1/10/14 11:45 PM	1/11/14 5:00 AM	0.22	8,322	0.84	9,908	1.30	0.45	6 hr	CloudBurst
CSO208	1/13/14 2:00 PM	1/13/14 5:15 PM	0.14	1,352	0.2	6,761	1.05	0.09	12 hr	CloudBurst
CSO208	1/14/14 6:15 PM	1/14/14 6:15 PM	0.00	41	0.02	2,066	1.07	0.02	1 hr	CloudBurst
CSO208	1/25/14 2:00 PM	1/25/14 2:00 PM	0.00	11	0.06	180	0.21	0.03	12 hr	CloudBurst
CSO208	2/2/14 2:30 AM	2/2/14 7:15 AM	0.20	5,148	0.25	20,592	0.24	0.13	6 hr	CloudBurst
CSO208	2/4/14 6:15 PM	2/5/14 1:00 AM	0.28	14,665	0.58	25,285	1.13	0.29	6 hr	CloudBurst
CSO208	2/14/14 3:30 PM	2/14/14 5:30 PM	0.08	10,809	0.28	38,602	0.26	0.15	6 hr	CloudBurst
CSO208	2/17/14 2:15 PM	2/17/14 5:45 PM	0.15	11,474	0.61	18,810	0.93	0.36	3 hr	CloudBurst
CSO208	2/20/14 8:15 PM	2/20/14 11:00 PM	0.11	1,195	0.19	6,289	1.11	0.10	6 hr	CloudBurst
CSO208	3/2/14 9:15 AM	3/2/14 11:15 AM	0.08	3,395	0.52	6,529	0.26	0.20	24 hr	CloudBurst
CSO208	3/12/14 7:00 AM	3/12/14 7:15 AM	0.01	1,746	0.08	21,822	0.07	0.04	1 hr	CloudBurst
CSO208	3/19/14 8:30 AM	3/19/14 8:45 AM	0.01	974	0.08	12,174	0.13	0.05	3 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO208	3/27/14 11:45 PM	3/28/14 5:00 AM	0.22	2,719	0.31	8,771	0.36	0.16	1 hr	CloudBurst
CSO208	3/29/14 5:00 AM	3/29/14 12:30 PM	0.31	7,835	0.75	10,447	1.05	0.35	12 hr	CloudBurst
CSO057	1/11/14 12:15 AM	1/11/14 12:15 AM	0.00	3	0.87	4	0.79	0.47	6 hr	CloudBurst
CSO057	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	2	0.71	2	1.06	0.42	3 hr	CloudBurst
CSO057	3/2/14 9:30 AM	3/2/14 9:30 AM	0.00	3	0.55	6	0.08	0.21	24 hr	CloudBurst
CSO057	3/29/14 6:15 AM	3/29/14 6:30 AM	0.01	341	1.15	296	0.91	0.56	3 hr	Atlas14
CSO160	1/2/14 3:00 AM	1/2/14 9:30 AM	0.27	715	0.23	3,108	0.71	0.11	3 hr	CloudBurst
CSO160	1/5/14 2:30 PM	1/5/14 9:45 PM	0.30	10,571	0.59	17,917	0.82	0.30	6 hr	CloudBurst
CSO160	1/10/14 11:45 PM	1/11/14 6:00 AM	0.26	8,539	0.87	9,815	1.47	0.47	6 hr	CloudBurst
CSO160	1/13/14 8:15 AM	1/13/14 5:15 PM	0.38	1,700	0.19	8,949	1.07	0.09	3 hr	CloudBurst
CSO160	1/14/14 6:15 PM	1/14/14 6:45 PM	0.02	114	0.01	11,422	1.08	0.01	6 hr	CloudBurst
CSO160	1/21/14 3:00 AM	1/21/14 2:30 PM	0.48	914	0.16	5,711	0.18	0.07	12 hr	CloudBurst
CSO160	1/25/14 12:15 PM	1/25/14 2:00 PM	0.07	270	0.06	4,501	0.24	0.03	12 hr	CloudBurst
CSO160	2/2/14 1:45 AM	2/2/14 8:15 AM	0.27	2,597	0.51	5,092	0.22	0.19	24 hr	CloudBurst
CSO160	2/2/14 4:45 PM	2/2/14 8:45 PM	0.17	149	0.51	292	0.32	0.19	24 hr	CloudBurst
CSO160	2/3/14 9:45 AM	2/3/14 3:00 PM	0.22	421	0.51	825	0.51	0.19	24 hr	CloudBurst
CSO160	2/4/14 6:30 PM	2/5/14 12:45 AM	0.26	6,064	0.53	11,441	1.04	0.26	6 hr	CloudBurst
CSO160	2/14/14 4:15 PM	2/14/14 6:00 PM	0.07	578	0.44	1,314	0.40	0.24	6 hr	CloudBurst
CSO160	2/17/14 2:15 PM	2/17/14 6:00 PM	0.16	1,871	0.71	2,635	1.21	0.42	3 hr	CloudBurst
CSO160	2/20/14 6:45 PM	2/21/14 12:30 AM	0.24	3,586	0.16	22,410	1.37	0.09	6 hr	CloudBurst
CSO160	3/2/14 9:15 AM	3/2/14 11:45 AM	0.10	1,138	0.55	2,069	0.27	0.21	24 hr	CloudBurst
CSO160	3/3/14 1:00 PM	3/3/14 2:45 PM	0.07	138	0.55	251	0.56	0.21	24 hr	CloudBurst
CSO160	3/12/14 7:00 AM	3/12/14 7:45 AM	0.03	569	0.08	7,111	0.08	0.04	1 hr	CloudBurst
CSO160	3/16/14 5:15 PM	3/16/14 7:15 PM	0.08	202	0.08	2,530	0.17	0.05	3 hr	CloudBurst
CSO160	3/19/14 8:00 AM	3/19/14 9:00 AM	0.04	380	0.07	5,431	0.17	0.05	3 hr	CloudBurst
CSO160	3/27/14 11:15 PM	3/28/14 5:30 AM	0.26	2,902	0.33	8,793	0.39	0.17	1 hr	CloudBurst
CSO160	3/29/14 5:00 AM	3/29/14 2:15 PM	0.39	7,350	1.15	6,391	1.54	0.56	3 hr	Atlas14
CSO161	2/17/14 3:45 PM	2/17/14 3:45 PM	0.00	428	0.71	603	0.73	0.42	3 hr	CloudBurst
CSO058	1/11/14 12:00 AM	1/11/14 12:00 AM	0.00	162	0.85	190	0.71	0.46	6 hr	CloudBurst
CSO058	2/17/14 4:00 PM	2/17/14 4:00 PM	0.00	668	0.72	928	1.05	0.42	3 hr	CloudBurst
CSO058	3/29/14 6:30 AM	3/29/14 6:30 AM	0.00	245	1.07	229	0.83	0.51	6 hr	CloudBurst
CSO120	1/10/14 11:45 PM	1/11/14 3:45 AM	0.17	132,714	0.81	163,844	1.21	0.44	6 hr	CloudBurst
CSO120	2/2/14 5:00 AM	2/2/14 5:00 AM	0.00	16,929	0.22	76,948	0.15	0.12	6 hr	CloudBurst
CSO120	2/4/14 7:30 PM	2/4/14 11:30 PM	0.17	336,700	0.51	660,195	0.96	0.25	6 hr	CloudBurst
CSO120	2/17/14 4:00 PM	2/17/14 4:45 PM	0.03	170,651	0.65	262,540	1.13	0.38	3 hr	CloudBurst
CSO120	2/20/14 11:00 PM	2/20/14 11:00 PM	0.00	3,479	0.17	20,465	1.36	0.09	6 hr	CloudBurst
CSO120	3/2/14 9:45 AM	3/2/14 11:00 AM	0.05	42,593	0.53	80,365	0.25	0.20	24 hr	CloudBurst
CSO120	3/28/14 4:30 AM	3/28/14 4:30 AM	0.00	24,355	0.32	76,109	0.34	0.17	1 hr	CloudBurst
CSO120	3/29/14 6:30 AM	3/29/14 8:45 AM	0.09	180,134	0.94	191,632	1.05	0.44	6 hr	CloudBurst
CSO121	1/11/14 12:15 AM	1/11/14 3:15 AM	0.13	124,981	0.81	154,298	1.16	0.44	6 hr	CloudBurst
CSO121	2/4/14 8:00 PM	2/4/14 11:45 PM	0.16	221,106	0.51	433,541	0.96	0.25	6 hr	CloudBurst
CSO121	2/14/14 4:00 PM	2/14/14 5:15 PM	0.05	1,662	0.49	3,392	0.36	0.26	6 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO121	2/17/14 4:00 PM	2/17/14 4:45 PM	0.03	53,927	0.65	82,965	1.13	0.38	3 hr	CloudBurst
CSO121	3/19/14 8:30 AM	3/19/14 8:30 AM	0.00	1,003	0.06	16,717	0.14	0.03	12 hr	CloudBurst
CSO121	3/28/14 4:30 AM	3/28/14 4:30 AM	0.00	3,566	0.32	11,144	0.34	0.17	1 hr	CloudBurst
CSO121	3/29/14 6:15 AM	3/29/14 8:15 AM	0.08	63,488	0.94	67,541	1.02	0.44	6 hr	CloudBurst
CSO141	1/5/14 3:00 PM	1/5/14 5:45 PM	0.11	1,027	0.49	2,097	0.62	0.25	3 hr	CloudBurst
CSO141	1/11/14 12:00 AM	1/11/14 3:15 PM	0.64	60,451	0.81	74,631	1.32	0.44	6 hr	CloudBurst
CSO141	1/13/14 2:15 PM	1/13/14 5:15 PM	0.13	10,938	0.21	52,087	1.02	0.10	12 hr	CloudBurst
CSO141	2/2/14 2:30 AM	2/2/14 8:45 AM	0.26	59,142	0.22	268,829	0.22	0.12	6 hr	CloudBurst
CSO141	2/4/14 6:45 PM	2/5/14 7:15 AM	0.52	75,423	0.51	147,887	0.98	0.25	6 hr	CloudBurst
CSO141	2/14/14 4:00 PM	2/14/14 5:45 PM	0.07	1,000	0.49	2,041	0.40	0.26	6 hr	CloudBurst
CSO141	2/17/14 2:45 PM	2/17/14 4:45 PM	0.08	5,173	0.65	7,958	1.13	0.38	3 hr	CloudBurst
CSO141	2/20/14 8:15 PM	2/20/14 8:15 PM	0.00	8	0.17	44	1.26	0.09	6 hr	CloudBurst
CSO141	3/12/14 7:15 AM	3/12/14 7:15 AM	0.00	176	0.1	1,761	0.09	0.05	1 hr	CloudBurst
CSO141	3/19/14 8:30 AM	3/19/14 8:30 AM	0.00	13	0.06	214	0.14	0.03	12 hr	CloudBurst
CSO141	3/28/14 1:15 AM	3/28/14 7:15 AM	0.25	14,650	0.32	45,781	0.37	0.17	1 hr	CloudBurst
CSO141	3/29/14 5:00 AM	3/29/14 12:15 PM	0.30	35,705	0.94	37,985	1.25	0.44	6 hr	CloudBurst
CSO153	1/5/14 2:45 PM	1/5/14 8:00 PM	0.22	162,650	0.49	331,938	0.67	0.25	3 hr	CloudBurst
CSO153	1/11/14 12:00 AM	1/11/14 5:15 AM	0.22	408,244	0.81	504,005	1.31	0.44	6 hr	CloudBurst
CSO153	2/2/14 4:00 AM	2/2/14 7:30 AM	0.15	87,703	0.22	398,650	0.21	0.12	6 hr	CloudBurst
CSO153	2/4/14 7:00 PM	2/5/14 12:45 AM	0.24	655,470	0.51	1,285,235	0.98	0.25	6 hr	CloudBurst
CSO153	2/14/14 5:00 PM	2/14/14 6:15 PM	0.05	33,589	0.49	68,549	0.44	0.26	6 hr	CloudBurst
CSO153	2/17/14 3:30 PM	2/17/14 7:15 PM	0.16	289,279	0.65	445,045	1.20	0.38	3 hr	CloudBurst
CSO153	2/20/14 11:00 PM	2/21/14 12:15 AM	0.05	62,042	0.17	364,956	1.38	0.09	6 hr	CloudBurst
CSO153	3/2/14 9:30 AM	3/2/14 11:15 AM	0.07	113,495	0.53	214,141	0.25	0.20	24 hr	CloudBurst
CSO153	3/12/14 7:15 AM	3/12/14 7:15 AM	0.00	11,550	0.1	115,498	0.09	0.05	1 hr	CloudBurst
CSO153	3/28/14 4:30 AM	3/28/14 4:45 AM	0.01	35,540	0.32	111,061	0.37	0.17	1 hr	CloudBurst
CSO153	3/29/14 6:15 AM	3/29/14 1:15 PM	0.29	460,057	0.94	489,422	1.30	0.44	6 hr	CloudBurst
CSO140	1/11/14 12:15 AM	1/11/14 3:15 AM	0.13	60,938	0.84	72,545	1.13	0.45	6 hr	CloudBurst
CSO140	2/4/14 7:45 PM	2/5/14 11:45 AM	0.67	285,701	0.5	571,402	0.94	0.25	6 hr	CloudBurst
CSO140	2/17/14 4:00 PM	2/17/14 4:30 PM	0.02	81,222	0.57	142,494	1.04	0.35	3 hr	CloudBurst
CSO140	3/12/14 7:15 AM	3/12/14 7:15 AM	0.00	334	0.07	4,774	0.06	0.03	1 hr	CloudBurst
CSO140	3/29/14 6:15 AM	3/29/14 6:45 AM	0.02	78,699	1.03	76,407	0.77	0.48	12 hr	CloudBurst
CSO144	2/17/14 4:00 PM	2/17/14 4:00 PM	0.00	110	0.52	212	0.90	0.32	3 hr	CloudBurst
CSO125	1/11/14 12:45 AM	1/11/14 5:30 AM	0.20	817,626	1.07	764,137	1.53	0.59	6 hr	CloudBurst
CSO125	2/2/14 5:30 AM	2/2/14 5:30 AM	0.00	5,423	0.37	14,656	0.12	0.14	24 hr	CloudBurst
CSO125	2/4/14 8:00 PM	2/5/14 1:45 AM	0.24	1,180,808	0.4	2,952,020	0.76	0.20	6 hr	CloudBurst
CSO125	2/17/14 4:30 PM	2/17/14 6:15 PM	0.07	387,309	0.38	1,019,233	0.78	0.23	3 hr	CloudBurst
CSO125	2/20/14 11:30 PM	2/20/14 11:30 PM	0.00	30,022	0.2	150,111	0.99	0.11	6 hr	CloudBurst
CSO125	3/2/14 10:15 AM	3/2/14 11:30 AM	0.05	139,032	0.53	262,324	0.29	0.20	24 hr	CloudBurst
CSO125	3/28/14 4:45 AM	3/28/14 5:00 AM	0.01	67,696	0.27	250,727	0.32	0.14	1 hr	CloudBurst
CSO125	3/29/14 7:00 AM	3/29/14 12:30 PM	0.23	588,963	1.23	478,832	1.48	0.57	6 hr	CloudBurst
CSO126	2/4/14 11:30 PM	2/5/14 12:30 AM	0.04	33,976	0.4	84,940	0.76	0.20	6 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO126	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	4,818	0.38	12,678	0.69	0.23	3 hr	CloudBurst
CSO050	1/5/14 2:45 PM	1/5/14 7:00 PM	0.18	40,494	0.52	77,874	0.66	0.27	3 hr	CloudBurst
CSO050	1/11/14 12:00 AM	1/11/14 5:15 AM	0.22	186,265	0.77	241,903	1.29	0.41	6 hr	CloudBurst
CSO050	1/13/14 2:30 PM	1/13/14 5:15 PM	0.11	3,931	0.22	17,868	1.00	0.10	12 hr	CloudBurst
CSO050	1/14/14 6:30 PM	1/14/14 6:30 PM	0.00	312	0.03	10,399	1.03	0.03	1 hr	CloudBurst
CSO050	2/2/14 3:00 AM	2/2/14 7:15 AM	0.18	30,258	0.52	58,188	0.22	0.20	24 hr	CloudBurst
CSO050	2/4/14 6:45 PM	2/5/14 1:15 AM	0.27	215,590	0.62	347,726	1.13	0.30	6 hr	CloudBurst
CSO050	2/14/14 4:15 PM	2/14/14 5:30 PM	0.05	4,447	0.28	15,883	0.26	0.15	6 hr	CloudBurst
CSO050	2/17/14 3:30 PM	2/17/14 6:15 PM	0.11	125,992	0.52	242,291	0.85	0.30	3 hr	CloudBurst
CSO050	3/2/14 9:30 AM	3/2/14 11:30 AM	0.08	46,345	0.45	102,989	0.22	0.17	24 hr	CloudBurst
CSO050	3/12/14 7:15 AM	3/12/14 7:30 AM	0.01	12,993	0.1	129,932	0.08	0.04	1 hr	CloudBurst
CSO050	3/19/14 8:45 AM	3/19/14 8:45 AM	0.00	874	0.07	12,485	0.14	0.04	6 hr	CloudBurst
CSO050	3/27/14 9:45 AM	3/27/14 9:45 AM	0.00	503	0.03	16,760	0.06	0.02	6 hr	CloudBurst
CSO050	3/28/14 4:00 AM	3/28/14 5:00 AM	0.04	33,200	0.34	97,647	0.40	0.18	6 hr	CloudBurst
CSO050	3/29/14 5:15 AM	3/29/14 1:00 PM	0.32	142,055	0.82	173,238	1.19	0.38	12 hr	CloudBurst
CSO051	1/11/14 12:30 AM	1/11/14 10:45 PM	0.93	892	0.77	1,158	1.30	0.41	6 hr	CloudBurst
CSO051	2/17/14 4:00 PM	2/17/14 4:00 PM	0.00	5,503	0.52	10,583	0.71	0.30	3 hr	CloudBurst
CSO051	2/20/14 10:45 PM	2/20/14 10:45 PM	0.00	84	0.18	466	1.00	0.09	6 hr	CloudBurst
CSO051	3/29/14 6:30 AM	3/29/14 6:30 AM	0.00	63	0.82	77	0.66	0.38	12 hr	CloudBurst
CSO155	1/10/14 11:45 PM	1/11/14 12:00 AM	0.01	1,888	0.77	2,452	0.64	0.41	6 hr	CloudBurst
CSO155	2/4/14 9:30 PM	2/4/14 11:00 PM	0.06	346	0.62	559	1.09	0.30	6 hr	CloudBurst
CSO155	2/17/14 2:30 PM	2/17/14 4:30 PM	0.08	23,470	0.52	45,134	0.77	0.30	3 hr	CloudBurst
CSO155	2/20/14 10:45 PM	2/20/14 11:00 PM	0.01	1,610	0.18	8,944	1.02	0.09	6 hr	CloudBurst
CSO155	3/28/14 4:00 AM	3/28/14 4:00 AM	0.00	15	0.34	44	0.33	0.18	6 hr	CloudBurst
CSO155	3/29/14 6:15 AM	3/29/14 6:30 AM	0.01	160	0.82	195	0.66	0.38	12 hr	CloudBurst
CSO190	1/5/14 2:45 PM	1/6/14 2:30 AM	0.49	59,732	0.52	114,870	0.71	0.27	3 hr	CloudBurst
CSO190	1/11/14 12:15 AM	1/11/14 7:45 AM	0.31	535,487	0.77	695,437	1.30	0.41	6 hr	CloudBurst
CSO190	2/2/14 3:00 AM	2/2/14 11:30 PM	0.85	79,675	0.52	153,221	0.44	0.20	24 hr	CloudBurst
CSO190	2/4/14 6:45 PM	2/5/14 1:45 AM	0.29	868,746	0.62	1,401,203	1.13	0.30	6 hr	CloudBurst
CSO190	2/17/14 3:30 PM	2/17/14 7:45 PM	0.18	541,914	0.52	1,042,143	0.85	0.30	3 hr	CloudBurst
CSO190	2/20/14 10:45 PM	2/21/14 12:00 AM	0.05	114,294	0.18	634,964	1.02	0.09	6 hr	CloudBurst
CSO190	3/2/14 10:30 AM	3/2/14 12:45 PM	0.09	37,414	0.45	83,142	0.22	0.17	24 hr	CloudBurst
CSO190	3/11/14 11:00 PM	3/12/14 7:30 AM	0.35	8,851	0.1	88,510	0.08	0.04	1 hr	CloudBurst
CSO190	3/28/14 4:15 AM	3/28/14 7:15 AM	0.13	55,703	0.34	163,833	0.40	0.18	6 hr	CloudBurst
CSO190	3/29/14 6:15 AM	3/29/14 10:45 PM	0.69	227,156	0.82	277,020	1.22	0.38	12 hr	CloudBurst
CSO053	1/5/14 3:00 PM	1/5/14 5:45 PM	0.11	7,497	0.48	15,618	0.59	0.25	3 hr	CloudBurst
CSO053	1/11/14 12:15 AM	1/11/14 4:00 AM	0.16	115,045	0.75	153,394	1.17	0.40	6 hr	CloudBurst
CSO053	2/2/14 3:00 AM	2/2/14 5:15 AM	0.09	18,028	0.21	85,847	0.16	0.11	6 hr	CloudBurst
CSO053	2/4/14 7:00 PM	2/4/14 11:45 PM	0.20	168,403	0.53	317,741	1.00	0.26	6 hr	CloudBurst
CSO053	2/17/14 4:15 PM	2/17/14 4:45 PM	0.02	90,564	0.49	184,824	0.80	0.28	3 hr	CloudBurst
CSO053	2/20/14 11:00 PM	2/20/14 11:15 PM	0.01	30,833	0.2	154,166	1.05	0.11	6 hr	CloudBurst
CSO053	3/2/14 9:45 AM	3/2/14 11:15 AM	0.06	30,358	0.45	67,463	0.22	0.17	24 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO053	3/12/14 7:30 AM	3/12/14 7:30 AM	0.00	884	0.1	8,840	0.10	0.05	1 hr	CloudBurst
CSO053	3/28/14 4:15 AM	3/28/14 4:45 AM	0.02	16,397	0.29	56,542	0.35	0.15	3 hr	Atlas14
CSO053	3/29/14 5:15 AM	3/29/14 8:30 AM	0.14	80,855	0.79	102,348	0.84	0.37	12 hr	CloudBurst
CSO054	1/5/14 2:30 PM	1/5/14 6:45 PM	0.18	3,356	0.48	6,991	0.61	0.25	3 hr	CloudBurst
CSO054	1/10/14 11:45 PM	1/11/14 5:45 AM	0.25	9,217	0.75	12,290	1.24	0.40	6 hr	CloudBurst
CSO054	1/13/14 2:00 PM	1/13/14 5:00 PM	0.13	1,135	0.2	5,674	0.96	0.09	12 hr	CloudBurst
CSO054	1/14/14 6:15 PM	1/14/14 6:15 PM	0.00	416	0.02	20,779	0.98	0.02	1 hr	CloudBurst
CSO054	2/2/14 2:30 AM	2/2/14 8:00 AM	0.23	4,403	0.21	20,966	0.22	0.11	6 hr	CloudBurst
CSO054	2/4/14 6:45 PM	2/5/14 12:15 AM	0.23	6,776	0.53	12,785	1.02	0.26	6 hr	CloudBurst
CSO054	2/14/14 3:45 PM	2/14/14 5:45 PM	0.08	1,435	0.32	4,486	0.30	0.17	6 hr	CloudBurst
CSO054	2/17/14 2:15 PM	2/17/14 5:15 PM	0.13	6,247	0.49	12,749	0.83	0.28	3 hr	CloudBurst
CSO054	2/20/14 10:30 PM	2/20/14 11:30 PM	0.04	788	0.2	3,940	1.06	0.11	6 hr	CloudBurst
CSO054	3/2/14 9:15 AM	3/2/14 12:00 PM	0.11	2,752	0.45	6,115	0.23	0.17	24 hr	CloudBurst
CSO054	3/12/14 7:00 AM	3/12/14 7:15 AM	0.01	910	0.1	9,099	0.10	0.05	1 hr	CloudBurst
CSO054	3/28/14 3:45 AM	3/28/14 5:45 AM	0.08	3,027	0.29	10,437	0.35	0.15	3 hr	Atlas14
CSO054	3/29/14 5:00 AM	3/29/14 12:15 PM	0.30	8,198	0.79	10,377	1.06	0.37	12 hr	CloudBurst
CSO055	1/11/14 12:15 AM	1/11/14 12:15 AM	0.00	372	0.75	497	0.69	0.40	6 hr	CloudBurst
CSO055	2/4/14 10:45 PM	2/4/14 11:30 PM	0.03	9,367	0.53	17,674	1.00	0.26	6 hr	CloudBurst
CSO055	2/17/14 4:15 PM	2/17/14 4:15 PM	0.00	3,071	0.49	6,268	0.76	0.28	3 hr	CloudBurst
CSO055	3/12/14 9:00 AM	3/12/14 9:00 AM	0.00	2,165	0.1	21,654	0.10	0.05	1 hr	CloudBurst
CSO055	3/29/14 6:30 AM	3/29/14 6:45 AM	0.01	4,162	0.79	5,268	0.67	0.37	12 hr	CloudBurst
CSO150	2/4/14 10:15 PM	2/4/14 11:15 PM	0.04	18,513	0.53	34,930	0.99	0.26	6 hr	CloudBurst
CSO150	2/17/14 3:45 PM	2/17/14 3:45 PM	0.00	1,915	0.49	3,909	0.57	0.28	3 hr	CloudBurst
CSO020	1/5/14 4:00 PM	1/5/14 10:45 PM	0.28	11,330,962	0.52	21,790,311	0.72	0.26	6 hr	CloudBurst
CSO020	1/11/14 12:45 AM	1/11/14 2:45 PM	0.58	18,362,822	0.79	23,244,078	1.32	0.43	6 hr	CloudBurst
CSO020	1/13/14 3:30 PM	1/13/14 7:30 PM	0.17	2,718,036	0.21	12,943,029	1.01	0.10	12 hr	CloudBurst
CSO020	2/2/14 4:45 AM	2/2/14 10:45 AM	0.25	8,353,218	0.48	17,402,537	0.21	0.18	24 hr	CloudBurst
CSO020	2/4/14 7:45 PM	2/7/14 1:30 AM	2.24	74,145,206	0.5	148,290,413	0.99	0.25	6 hr	CloudBurst
CSO020	2/14/14 5:30 PM	2/14/14 9:00 PM	0.15	2,871,280	0.48	5,981,833	0.52	0.25	6 hr	CloudBurst
CSO020	2/17/14 4:00 PM	2/19/14 4:30 PM	2.02	27,193,633	0.64	42,490,052	1.19	0.39	3 hr	CloudBurst
CSO020	2/20/14 8:45 PM	2/21/14 11:15 PM	1.10	13,133,438	0.17	77,255,517	1.36	0.09	6 hr	CloudBurst
CSO020	3/2/14 10:45 AM	3/2/14 12:30 PM	0.07	1,525,495	0.48	3,178,114	0.22	0.18	24 hr	CloudBurst
CSO020	3/28/14 3:30 AM	3/28/14 6:45 AM	0.14	86,746,436	0.31	279,827,212	0.37	0.16	6 hr	CloudBurst
CSO020	3/29/14 6:30 AM	3/29/14 4:00 PM	0.40	22,957,116	0.92	24,953,387	1.29	0.43	6 hr	CloudBurst
CSO088	1/11/14 12:15 AM	1/11/14 4:15 AM	0.17	22,510	0.8	28,137	1.22	0.43	6 hr	CloudBurst
CSO088	2/4/14 7:45 PM	2/5/14 12:30 AM	0.20	25,969	0.51	50,920	0.95	0.25	6 hr	CloudBurst
CSO088	2/17/14 4:00 PM	2/17/14 5:00 PM	0.04	120,998	0.55	219,996	1.04	0.33	3 hr	CloudBurst
CSO130	1/5/14 6:00 PM	1/5/14 9:00 PM	0.13	15,226	0.47	32,396	0.66	0.24	6 hr	CloudBurst
CSO130	1/11/14 1:15 AM	1/11/14 7:15 AM	0.25	210,718	0.8	263,398	1.28	0.43	6 hr	CloudBurst
CSO130	2/4/14 8:00 PM	2/5/14 9:30 AM	0.56	774,866	0.51	1,519,345	0.95	0.25	6 hr	CloudBurst
CSO130	2/17/14 4:15 PM	2/17/14 9:15 PM	0.21	359,401	0.55	653,456	1.08	0.33	3 hr	CloudBurst
CSO130	2/20/14 11:15 PM	2/21/14 1:15 AM	0.08	51,839	0.19	272,835	1.27	0.10	1 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO130	3/2/14 11:15 AM	3/2/14 12:00 PM	0.03	2,951	0.48	6,147	0.23	0.19	24 hr	CloudBurst
CSO130	3/29/14 6:30 AM	3/29/14 2:30 PM	0.33	278,038	0.98	283,713	1.31	0.46	6 hr	CloudBurst
CSO132	1/5/14 3:00 PM	1/5/14 8:30 PM	0.23	274,240	0.45	609,422	0.62	0.23	6 hr	CloudBurst
CSO132	1/11/14 12:15 AM	1/11/14 9:15 AM	0.38	397,406	0.91	436,710	1.37	0.50	6 hr	CloudBurst
CSO132	1/13/14 3:00 PM	1/13/14 5:45 PM	0.11	22,584	0.22	102,656	1.14	0.11	3 hr	CloudBurst
CSO132	2/2/14 4:15 AM	2/2/14 7:45 AM	0.15	111,738	0.43	259,855	0.18	0.16	24 hr	CloudBurst
CSO132	2/4/14 7:00 PM	2/5/14 10:30 AM	0.65	422,734	0.51	828,889	0.94	0.25	6 hr	CloudBurst
CSO132	2/14/14 5:00 PM	2/14/14 6:00 PM	0.04	14,623	0.46	31,789	0.39	0.24	6 hr	CloudBurst
CSO132	2/17/14 4:30 PM	2/17/14 7:15 PM	0.11	125,776	0.47	267,610	0.99	0.28	3 hr	CloudBurst
CSO132	2/20/14 8:45 PM	2/21/14 12:00 AM	0.14	86,383	0.21	411,349	1.20	0.11	6 hr	CloudBurst
CSO132	3/2/14 9:45 AM	3/2/14 11:45 AM	0.08	104,079	0.47	221,445	0.24	0.18	24 hr	CloudBurst
CSO132	3/12/14 7:30 AM	3/12/14 7:45 AM	0.01	4,497	0.09	49,965	0.08	0.04	12 hr	CloudBurst
CSO132	3/28/14 4:45 AM	3/28/14 5:15 AM	0.02	424,229	0.23	1,844,473	0.29	0.12	6 hr	CloudBurst
CSO132	3/29/14 6:30 AM	3/29/14 1:45 PM	0.30	1,144,354	1	1,144,354	1.29	0.47	6 hr	CloudBurst
CSO154	1/11/14 2:30 AM	1/11/14 3:30 AM	0.04	11,247	0.91	12,359	1.23	0.50	6 hr	CloudBurst
CSO154	2/4/14 8:15 PM	2/5/14 1:30 AM	0.22	133,832	0.51	262,416	0.94	0.25	6 hr	CloudBurst
CSO154	2/17/14 4:15 PM	2/17/14 5:00 PM	0.03	20,396	0.47	43,395	0.96	0.28	3 hr	CloudBurst
CSO154	3/29/14 6:45 AM	3/29/14 8:45 AM	0.08	25,290	1	25,290	1.03	0.47	6 hr	CloudBurst
CSO167	1/5/14 3:00 PM	1/5/14 7:45 PM	0.20	42,474	0.45	94,387	0.61	0.23	6 hr	CloudBurst
CSO167	1/11/14 12:15 AM	1/11/14 9:00 AM	0.36	401,825	0.91	441,565	1.37	0.50	6 hr	CloudBurst
CSO167	2/2/14 4:30 AM	2/2/14 5:30 AM	0.04	31,347	0.43	72,901	0.14	0.16	24 hr	CloudBurst
CSO167	2/4/14 7:00 PM	2/5/14 3:45 AM	0.36	559,443	0.51	1,096,947	0.94	0.25	6 hr	CloudBurst
CSO167	2/14/14 5:15 PM	2/14/14 6:00 PM	0.03	2,711	0.46	5,893	0.39	0.24	6 hr	CloudBurst
CSO167	2/17/14 4:00 PM	2/17/14 6:15 PM	0.09	289,273	0.47	615,474	0.99	0.28	3 hr	CloudBurst
CSO167	2/20/14 11:00 PM	2/20/14 11:45 PM	0.03	17,847	0.21	84,985	1.20	0.11	6 hr	CloudBurst
CSO167	3/2/14 9:45 AM	3/2/14 11:30 AM	0.07	78,240	0.47	166,468	0.23	0.18	24 hr	CloudBurst
CSO167	3/28/14 4:15 AM	3/28/14 5:00 AM	0.03	31,954	0.23	138,930	0.29	0.12	6 hr	CloudBurst
CSO167	3/29/14 6:15 AM	3/29/14 1:00 PM	0.28	335,799	1	335,799	1.27	0.47	6 hr	CloudBurst
CSO019	1/2/14 3:30 AM	1/2/14 12:45 PM	0.39	75,023	0.22	341,015	0.72	0.10	6 hr	CloudBurst
CSO019	1/5/14 2:45 PM	1/6/14 2:45 AM	0.50	1,681,757	0.46	3,655,993	0.68	0.22	6 hr	CloudBurst
CSO019	1/11/14 12:00 AM	1/11/14 4:15 PM	0.68	4,379,269	0.87	5,033,642	1.34	0.48	6 hr	CloudBurst
CSO019	1/13/14 2:30 PM	1/14/14 3:00 AM	0.52	184,928	0.25	739,712	1.13	0.12	6 hr	CloudBurst
CSO019	1/17/14 8:30 AM	1/17/14 8:30 AM	0.00	1,065	0.01	106,503	1.16	0.01	6 hr	CloudBurst
CSO019	1/25/14 2:30 PM	1/25/14 3:00 PM	0.02	8,868	0.05	177,364	0.23	0.02	48 hr	CloudBurst
CSO019	2/2/14 3:00 AM	2/2/14 9:45 PM	0.78	898,721	0.55	1,634,038	0.38	0.21	24 hr	CloudBurst
CSO019	2/3/14 7:15 AM	2/3/14 8:45 PM	0.56	84,351	0.55	153,366	0.55	0.21	24 hr	CloudBurst
CSO019	2/4/14 7:15 PM	2/5/14 8:30 PM	1.05	6,574,705	0.67	9,812,993	1.23	0.34	6 hr	CloudBurst
CSO019	2/14/14 4:00 PM	2/15/14 3:00 AM	0.46	63,336	0.2	316,679	0.25	0.11	3 hr	CloudBurst
CSO019	2/17/14 3:00 PM	2/18/14 1:30 AM	0.44	3,538,023	0.57	6,207,057	0.80	0.34	3 hr	CloudBurst
CSO019	2/20/14 7:30 PM	2/21/14 4:15 AM	0.36	338,797	0.26	1,303,067	1.07	0.14	6 hr	CloudBurst
CSO019	3/2/14 10:30 AM	3/2/14 4:15 PM	0.24	852,948	0.39	2,187,045	0.21	0.15	24 hr	CloudBurst
CSO019	3/12/14 7:15 AM	3/12/14 8:30 AM	0.05	32,704	0.1	327,038	0.10	0.05	1 hr	CloudBurst

CSO	Overflow Start Date-Time	Overflow End Date-Time	Overflow Duration (Days)	Total Volume (Gallons)	Overflow Event Rain Total (Inch)	Overflow Volume per Inch	Overflow Antecedent Rain	Storm Frequency (Years)	Period	Standard
CSO019	3/28/14 4:00 AM	3/28/14 7:15 AM	0.14	897,432	0.35	2,564,093	0.42	0.18	6 hr	CloudBurst
CSO019	3/29/14 6:15 AM	3/29/14 4:30 PM	0.43	2,976,723	0.75	3,968,964	1.17	0.35	12 hr	CloudBurst
CSO105	3/4/14 12:45 PM	3/4/14 4:30 PM	0.16	9,574	0.05	191,480	0.47	1.98	24 hr	CloudBurst
CSO092	3/4/14 1:00 PM	3/4/14 1:30 PM	0.02	2	0.08	25	0.62	1.63	24 hr	CloudBurst
CSO118	3/4/14 1:00 PM	3/4/14 2:00 PM	0.04	60	0.08	750	0.58	1.63	24 hr	CloudBurst