

Louisville and Jefferson County Wet Weather Consent Decree Quarterly Report #31



Reporting Period:

April 1, 2013 through June 30, 2013

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

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TABLE OF CONTENTS

INTRODUCTION 4

SECTION 1: Program Activities for Nine Minimum Controls 5

 1.1 Nine Minimum Controls Program Background 5

 1.2 NMC 2: Maximization of Storage in the Collection System 5

 1.3 NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC) 5

SECTION 2: Program Activities for Sewer Overflow Response Protocol 16

 2.1 SORP Program Background 16

 2.2 Overflow Management and Field Documentation..... 16

 2.3 Staff Training and Communication 17

SECTION 3: Program Activities for Discharge Abatement Plans 18

 3.1 Integrated Overflow Abatement Plan (IOAP)..... 18

 3.2 Sanitary Sewer Discharge Plan (SSDP)..... 18

 3.2.1 Updated Sanitary Sewer Overflow Plan Implementation 18

 3.2.2 Interim Sanitary Sewer Discharge Plan..... 18

 3.2.3 Final Sanitary Sewer Discharge Plan 18

 3.3 CSO Long Term Control Plan 19

 3.3.1 Interim CSO Long Term Control Plan 19

 3.3.2 Final CSO Long Term Control Plan..... 19

 3.3.3 Green Program Update 20

 3.4 Activity Progress Chart 20

SECTION 4: Program Activities for Public Outreach, Education, Notification and Participation 26

 4.1 Public Notification Program 26

 4.2 Public Education Programs 26

 4.3 Public Outreach Programs..... 26

 4.3.1 IOAP Project and Program Meetings 26

SECTION 5: Capacity Management Operations and Maintenance Report..... 27

 5.1 Management Programs 27

 5.2 Operations Programs 27

 5.3 Comprehensive Performance Evaluations and Composite Correction Plans

(CPE/CCP)	27
5.3.1 Hite Creek Water Quality Treatment Center	28
5.3.2 Floyds Fork Water Quality Treatment Center.....	28
5.3.3 Derek R. Guthrie Water Quality Treatment Center	28
5.3.4 Cedar Creek Water Quality Treatment Center	28
5.3.5 Prospect Area Water Quality Treatment Center Updates	28
5.3.5.1 Timberlake Water Quality Treatment Center.....	29
5.3.5.2 Hunting Creek North Water Quality Treatment Center.....	29
5.3.5.3 Hunting Creek South Water Quality Treatment Center	29
5.3.5.4 Ken Carla Water Quality Treatment Center	29
5.3.5.5 Shadow Wood Water Quality Treatment Center	29
5.3.6 Jeffersontown Water Quality Treatment Center	29
5.3.7 Starview Water Quality Treatment Center.....	29
5.3.8 Berrytown Water Quality Treatment Center	29
5.3.9 Chenoweth Hills Water Quality Treatment Center	29
5.3.10 Other Water Quality Treatment Centers.....	29
5.4 CMOM Activity Schedule	30
SECTION 6: Project WIN Performance Overview	36
6.1 Rainfall	36
6.2 Collection System Unauthorized Discharges.....	36
6.2.1 Collection System Overflows to Waters of the United States (WUS).....	36
6.2.2 Overflows to Ground (EXT)	37
6.2.3 Overflows to Interior (INT)	37
6.2.4 Dry Weather CSOs.....	37
6.3 CSO Reductions	38
6.4 SSO Reductions	38
6.5 Gravity Line Preventive Maintenance	38
6.6 Water Quality Treatment Center Bypasses	39
6.6.1 Bypass Events.....	39
6.6.2 Bypass Corrective Actions	39
6.6.3 Jeffersontown Water Quality Treatment Center	41
43	
6.7 Phosphorus Monitoring at the Prospect WQTCs.....	45

ATTACHMENTS

APPENDIX A-1 DISCHARGE WORK ORDERS-DRY WEATHER CSOS

APPENDIX A-2 DISCHARGE WORK ORDERS-BYPASS

APPENDIX A-3 DISCHARGE WORK ORDERS-BLENDING

APPENDIX B-CSO FLOW MONITORING DATA

APPENDIX C-ACRONYMS

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-first Quarterly Report submitted in accordance with Paragraph 29 of the Amended Consent Decree. This report covers the time period from April 1, 2013, through June 30, 2013. **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 (April 1, 2013, through June 30, 2013).

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 (April 1, 2013, through June 30, 2013).

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 (April 1, 2013, through June 30, 2013).

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 (April 1, 2013, through June 30, 2013), and include the schedule for activities planned for the next two reporting periods (July 1, 2013, through December 31, 2013), 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.msprojectwin.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 311 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 reporting period, but the problem was not resolved due to the gate-closed proximity switches being diagnosed as defective. Weather permitting, these switches will be replaced in the next reporting period.

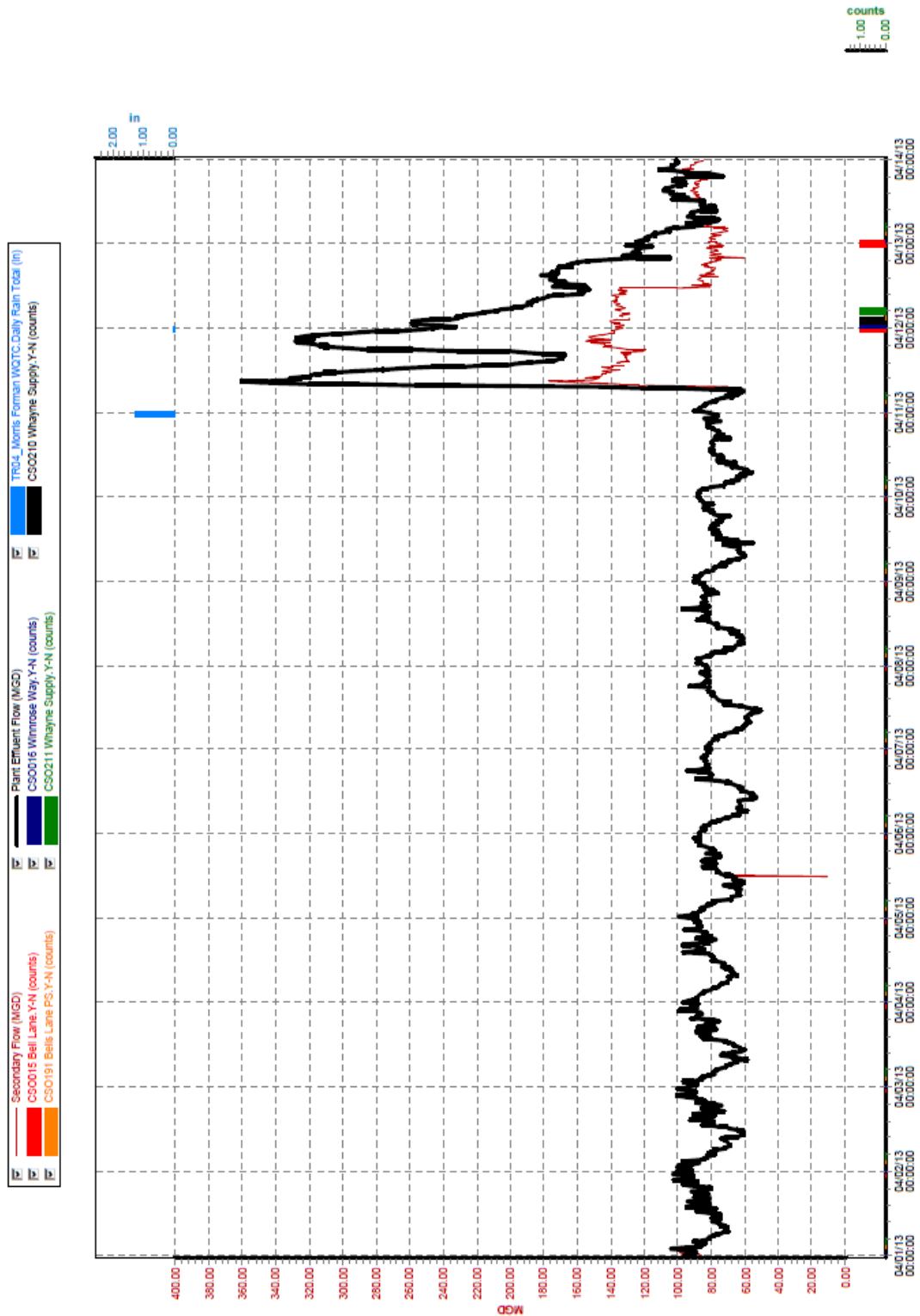
1.3 NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC)

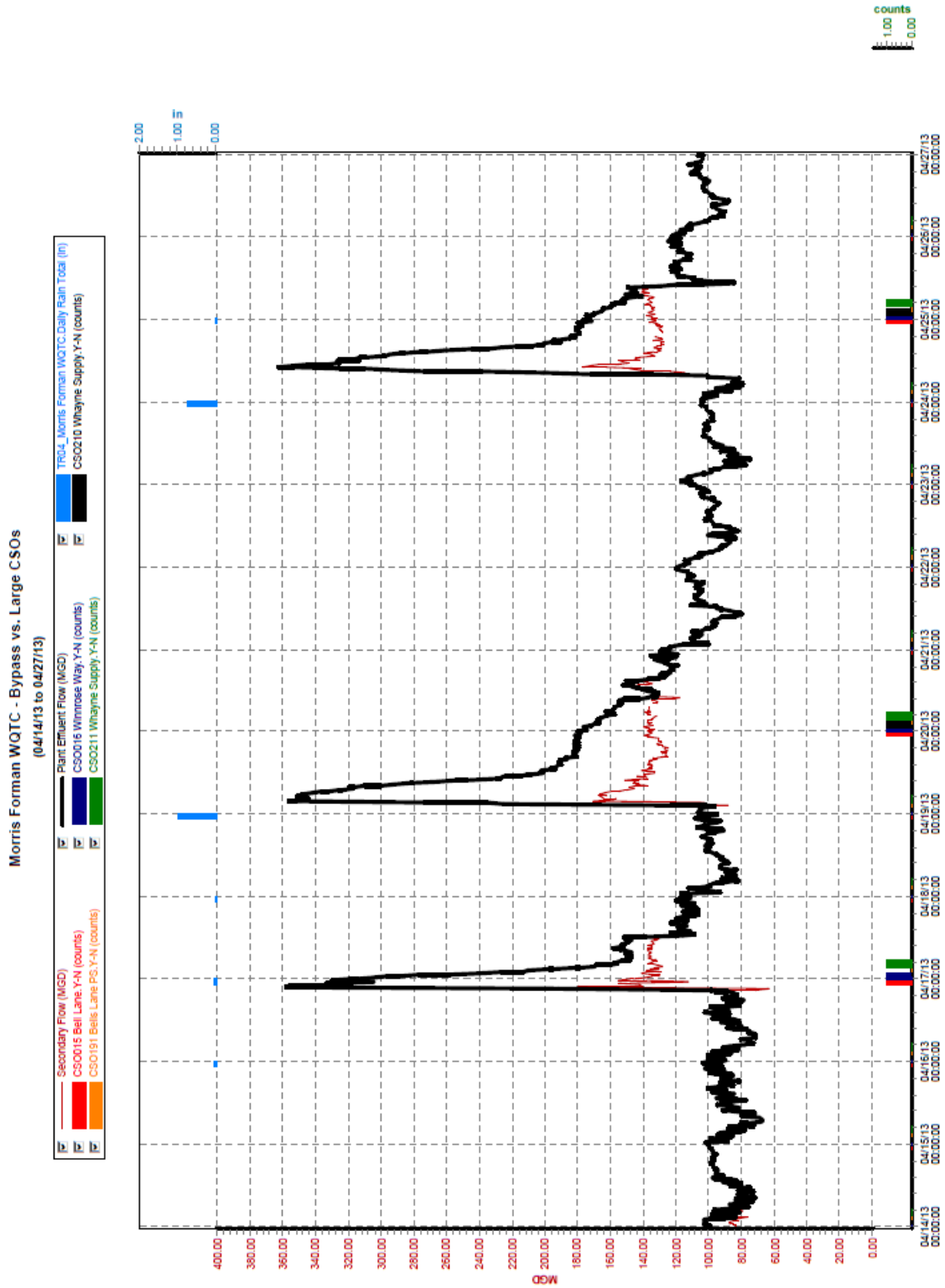
The following charts illustrate performance in maximizing flow to the Morris Forman WQTC. The top of the chart shows rainfall inches per day. The middle part of the chart shows Morris Forman WQTC effluent flow, and secondary treatment flow. The difference between these is the secondary bypass flow. The 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 the East Headworks grit chambers No. 2 and No. 3 were each taken out of service several times for short periods of time. These maintenance activities occurred during dry weather, and did not impact CSOs during the reporting period. In the West Headworks, a ten-day outage of bar screen No. 3 occurred, but other available facilities provided adequate capacity during the one wet weather event during that time period, and the bar screen outage did not impact CSOs during the reporting period. Primary sedimentation basins No. 2 and No. 3 were each out of service for 3 – 4 days in April, but these maintenance outages occurred during dry weather and did not impact CSOs during the reporting period.

An engineer was selected to begin the design of upgrades to improve headworks performance and reliability as defined in the preliminary engineering report completed in the previous reporting period. A contract will be negotiated during the next reporting period and it is expected that final design for the headworks improvements will be started during the next reporting period.

Morris Forman WQTC - Bypass vs. Large CSOs
 (04/01/13 to 04/14/13)

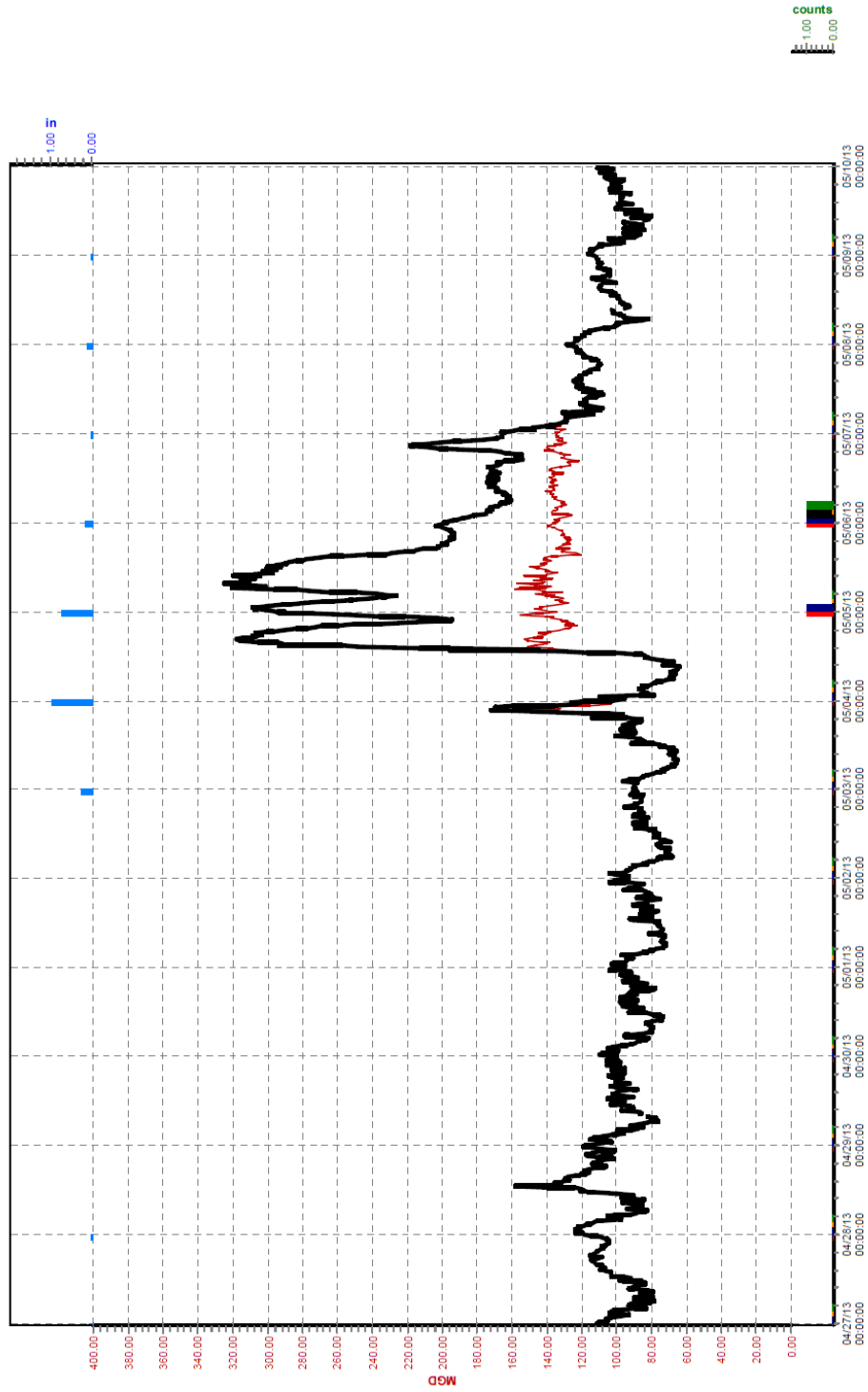




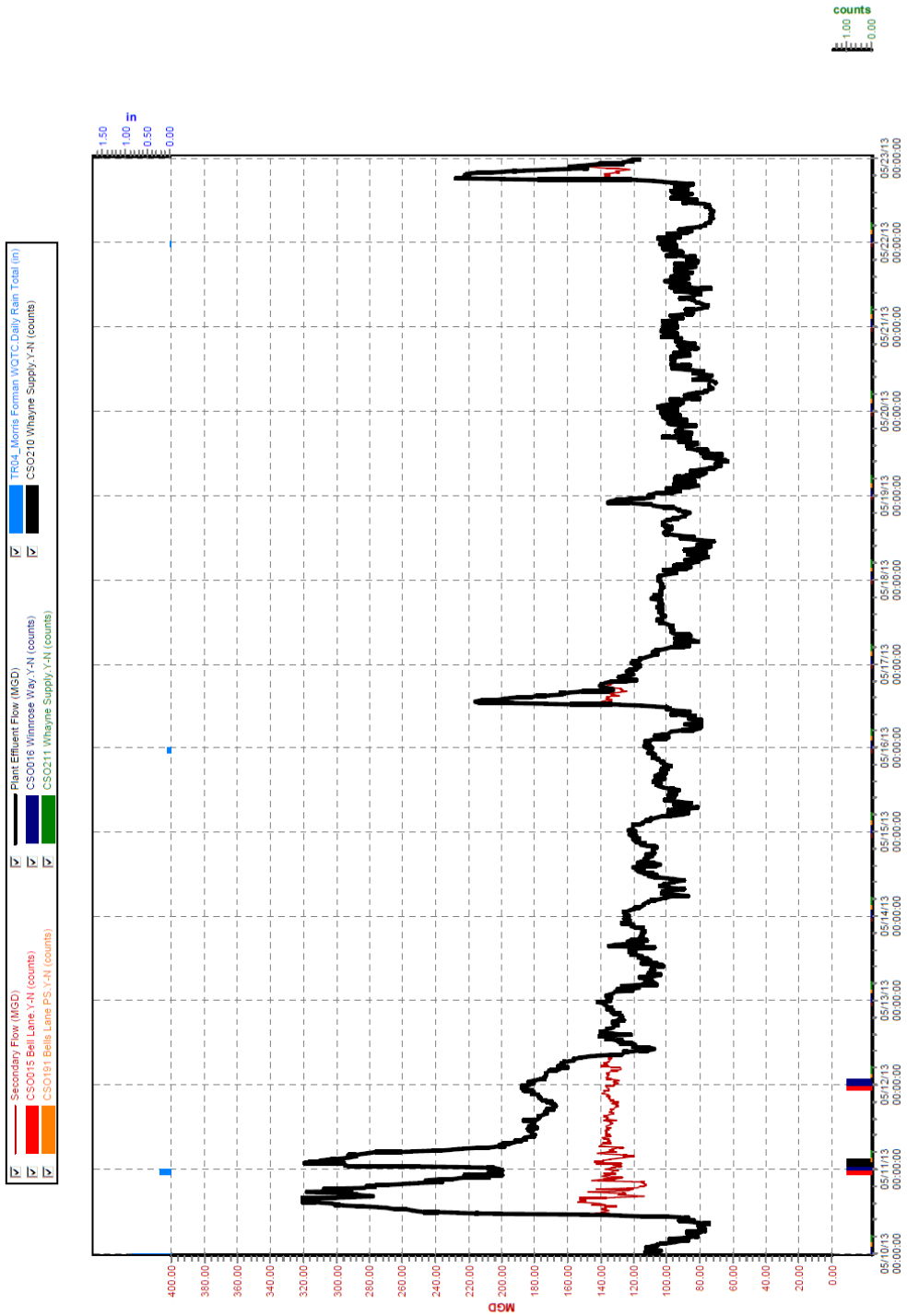
Morris Forman WQTC - Bypass vs. Large CSOs

(04/27/13 to 05/10/13)

- Secondary Flow (MGD)
- CS0015 Bell Lane Y-N (counts)
- CS0187 Bells Lane PS Y-N (counts)
- Plant Effluent Flow (MGD)
- CS0016 Winnese Way Y-N (counts)
- CS0211 Whayne Supply Y-N (counts)
- TR04 Morris Forman WQTC Daily Rain Total (in)
- CS0210 Whayne Supply Y-N (counts)

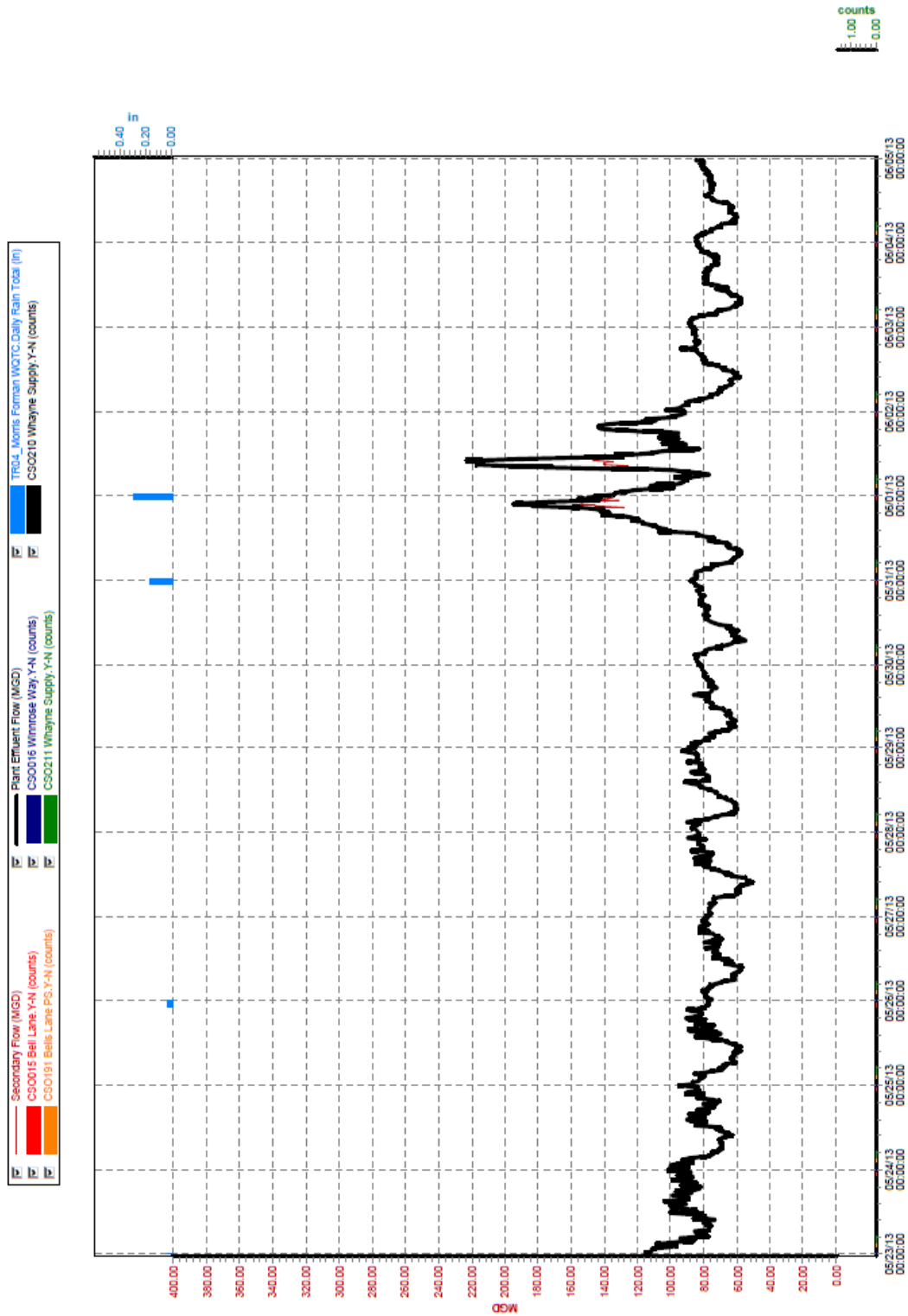


Morris Forman WQTC - Bypass vs. Large CSOs
 (05/10/13 to 05/23/13)

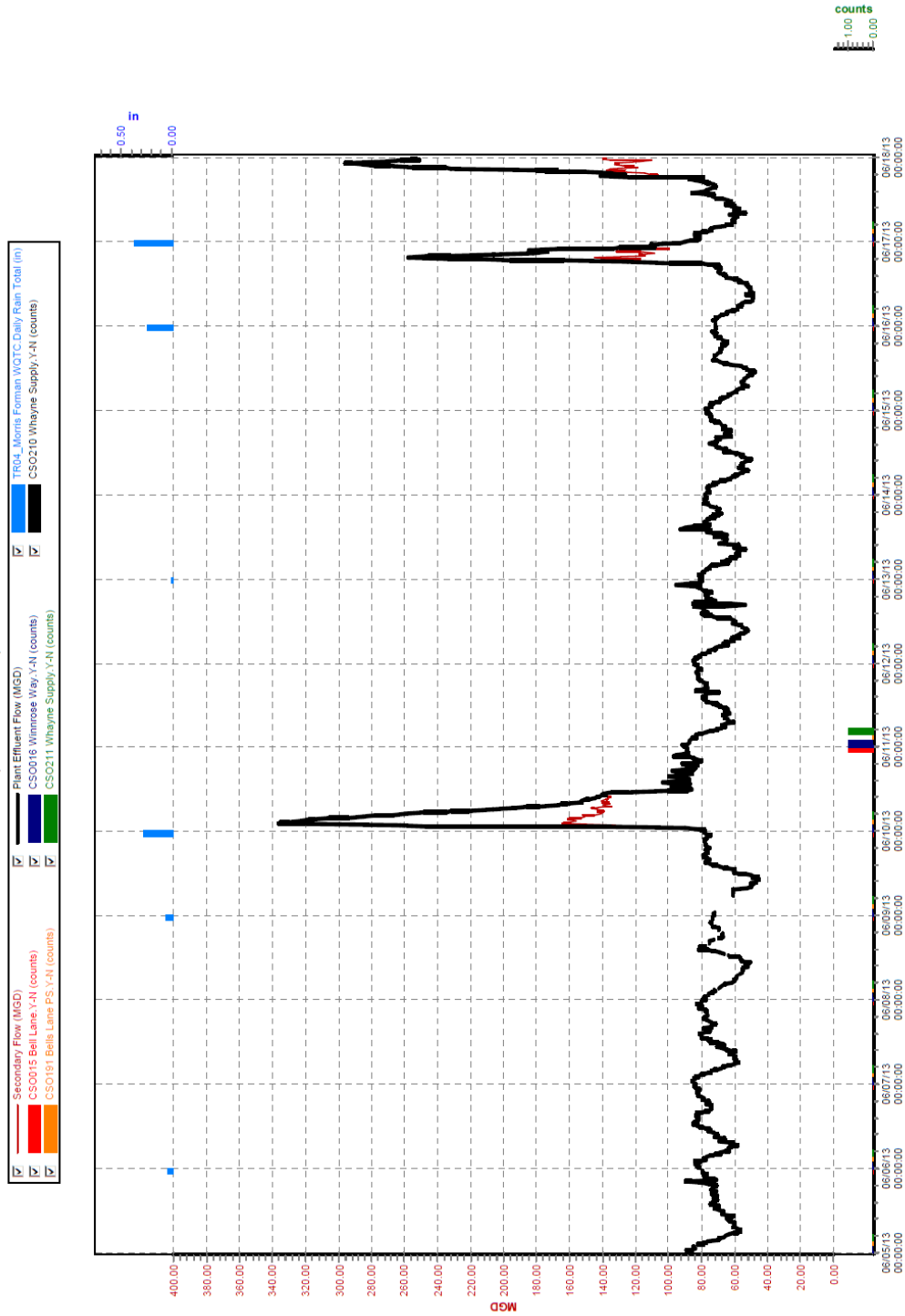


Morris Forman WQTC - Bypass vs. Large CSOs

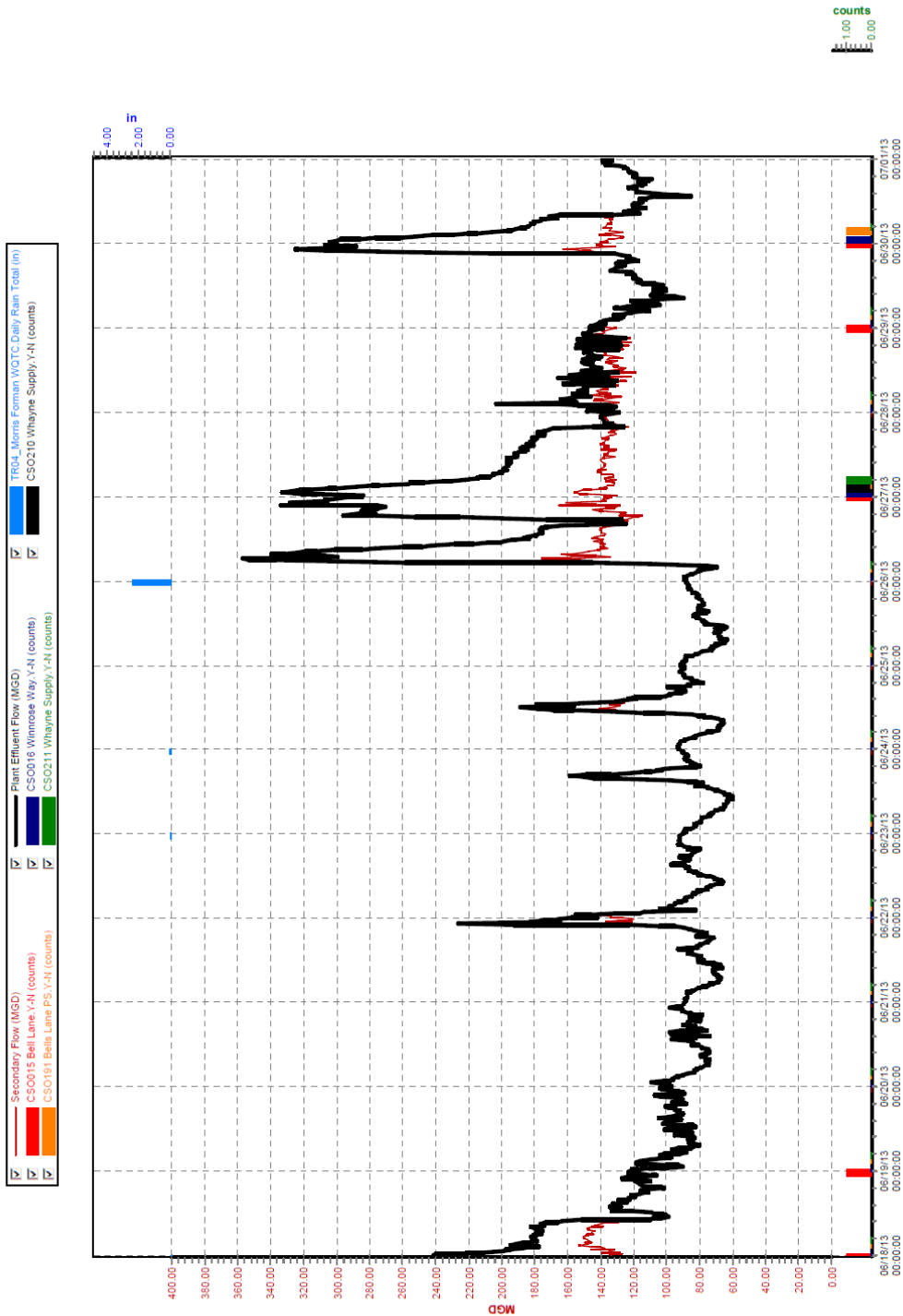
(05/23/13 to 06/05/13)



Morris Forman WQTC - Bypass vs. Large CSOs
 (06/05/13 to 06/18/13)



Morris Forman WQTC - Bypass vs. Large CSOs
 (06/18/13 to 07/01/13)



There were no KPDES permit violations at Morris Forman WQTC during April, May or June, 2013.

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

- Secondary Clarifier Flow Meter Replacement – A project to replace all 20 secondary clarifier influent flow meters was completed. All 20 flow meters have been installed and are in service. Performance testing was completed and MSD has accepted the project.
- Wet Weather Operational Plan – Now that the secondary clarifier flow meter replacement project is complete, during the next reporting period, Wet weather SOP training and revisions to the Morris Forman WQTC Capacity Calculator will be completed by December 31, 2013.
- RTC System-Wide Optimization Project – Staff developed draft control algorithms for integrating the Northern Ditch Diversion into the RTC system. In addition, staff continued to review the control algorithms for the Southeast Diversion Structure. The RTC optimization effort was expanded to include the Derek R Guthrie WQTC high rate treatment facility. It is expected that full integration in an automated mode will be delayed until operations staff have completed a period of manual operation to validate the control assumptions. Active control of these systems is required now that the new Southeast Diversion and the Highgate Springs Pump Station have both been taken off line and the Southeast Interceptor Relief project is completed, in accordance with the Interim Sanitary Sewer Discharge Plan. A plan has been created to have the control strategy for integrating all these sites developed by December 2013, for implementation during calendar year 2014.

Louisville/Jefferson County
Metropolitan Sewer District



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

Period	
From :	04/01/2013
To :	06/30/2013

Event Number	Wet Weather Event			Rainfall			Wet Weather Storage Volume (MG)							High River Levels	Comments
	Start Date	End Date	Duration	Average* TRFD (in)	Max** TRFD (in)	Rain Gauge	SWPS SG Chamber	SWOR2	Brady Lake and Executive Inn Storage	Southern Outfall	Ohio River Interceptor	Sneads Branch	Total		
2013-023	4-11-13 5:30	4-12-13 19:20	37:50:00	1,22	1,27	TR4	17,6	1,4	3,0	9,2	6,6	0,8	38,6	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Large intensity storm cells homogeneously distributed over the service area.
2013-024	4-16-13 20:55	4-17-13 13:20	16:25:00	0,45	0,73	TR14	15,2	0,0	1,2	4,7	3,9	0,6	25,5	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Moderate rain event homogeneously distributed over the service area.
2013-025	4-19-13 1:25	4-20-13 15:45	38:20:00	1,00	1,23	TR15	11,9	3,6	4,6	4,0	3,5	2,2	29,8	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Large intensity storm cells homogeneously distributed over the service area. Brady lake and SWGC manually operated during this event.
2013-026	4-24-13 6:45	4-25-13 21:35	38:50:00	0,76	0,85	TR15	14,0	0,7	3,6	4,7	4,0	0,7	27,7	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Moderate intensity storm cells homogeneously distributed over the service area. Brady lake manually operated.
2013-029/030	5-3-13 17:25	5-7-13 4:35	83:10:00	1,63	2,08	TR4	17,3	0,0	5,9	10,9	7,4	0,3	41,8	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Long lasting and large event with storm cells homogeneously distributed over the service area with dewatering of storage sites between cells. Brady lake manually operated.
2013-032/033	5-10-13 10:05	5-12-13 9:05	47:00:00	1,19	1,48	TR16	15,0	0,2	3,4	8,3	6,4	0,3	33,6	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Long lasting and large event with storm cells homogeneously distributed over the service area with dewatering of storage sites between cells. Brady lake manually operated.
2013-034	5-16-13 10:40	5-16-13 19:35	8:55:00	0,21	0,48	TR15	3,3	0,6	0,8	0,4	0,9	0,0	6,0	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Small event with storm cells occurring predominately in eastern reaches of the service area. Brady lake manually operated.
2013-036	5-22-13 15:55	5-23-13 4:35	12:40:00	0,22	0,42	TR13	2,5	1,2	0,0	1,5	1,1	0,8	7,0	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Small intensity storm cells occurring predominately in southwestern reaches of collection system. Brady lake manually operated.
2013-038	5-31-13 12:35	6-2-13 1:05	36:30:00	0,57	1,05	TR14	4,2	0,3	0,6	0,4	2,0	0,0	7,4	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Moderate event with storm cells heterogeneously distributed over the service area with dewatering of storage sites between cells. Brady lake manually operated.
2013-041	6-9-13 23:40	6-10-13 12:25	12:45:00	0,40	0,52	TR14	11,9	1,9	1,3	4,2	2,8	0,1	22,2	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Moderate event with storm cells heterogeneously distributed over the service area with dewatering of storage sites between cells. Brady lake manually operated.
2013-043	6-16-13 8:25	6-17-13 2:20	17:55:00	0,29	0,68	TR5	1,1	0,0	0,1	0,3	1,1	0,0	2,6	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Brady lake manually operated.
2013-044	6-17-13 17:05	6-18-13 12:20	19:15:00	1,80	3,30	TR13	12,9	0,1	2,3	3,9	2,1	0,3	21,6	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Very large event with high intensity storm cells heterogeneously distributed over the service area. Brady lake manually operated.
2013-045/046	6-21-13 19:35	6-24-13 9:05	61:30:00	0,30	1,08	TR12	1,6	0,0	0,3	0,1	1,6	1,3	4,8	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Small intensity storm cells occurring predominately in northeast reaches of the service area with dewatering of storage sites between cells. Brady lake manually operated.
2013-048	6-26-13 3:55	6-29-13 19:00	87:05:00	3,14	4,41	TR13	25,7	0,4	4,1	5,9	4,1	1,8	42,1	no	SWOR2 manually controlled with gates in open position and minimal available storage utilization. Very large event with high intensity storm cells homogeneously distributed over the service area with dewatering between cells. Brady lake and SWSG manually operated.
TOTAL							154,0	10,3	31,1	58,5	47,5	9,2	310,6		

* Average Total Rainfall Depth Based on Rain Gauge TR04, TR05, TR11, TR12, TR13, TR14 and TR15
 ** Maximum Total Rainfall Depth Measurement and its Location during the Wet Weather Event
 *** MDS is always manually controlled by operator

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.msprojectwin.org.

The current approved SORP document is now dated February 21, 2012, and can be viewed on the MSD Project WIN website www.msprojectwin.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 54 suspected or unauthorized discharges through route reconnaissance. Inspection routes were run during rain events as described in the following table:

Route Description	04/19/13	05/05/13	05/10/13	05/10/13	05/10/13	06/17/13	06/17/13	06/26/13	06/26/13	06/26/13
ENGINEERING RAIN EVENT SSO INSPECTION ROUTE	X				X			X		
RS HIKES POINT RAIN EVENT SSO INSPECTION ROUTE		X	X			X	X			X
RS JEFFERSONTOWN SIPHON RAIN EVENT SSO INSPECTION ROUTE					X	X				X
RS JEFFERSONTOWN/FERN CREEK RAIN EVENT SSO INSPECTION ROUTE					X	X				X
RS MIDDLE/MUDDY FORK RAIN EVENT SSO INSPECTION ROUTE				X			X		X	

- Due to Capacity related issues, during this reporting period, MSD Metro Operations staff hauled 400,300 gallons of sewage. MSD also hauled due to other issues as indicated in the following table:

MSD Hauled Volumes In Gallons (April 1, 2013 - June 30, 2013)				
Problem	April	May	June	Total
LACK OF SYSTEM CAPACITY	58,400	218,300	123,600	400,300
STRUCTURAL FAILURE	0	17,200	54,500	71,700
Total	58,400	235,500	178,100	472,000

2.3 Staff Training and Communication

- Reviewed and updated the training documentation for the 2013 second quarter SORP training that included overflow assessment, establishing control zones, overflow mitigation and documentation.
- Commenced planning for the 2013 third quarter SORP training that will focus on public notification and overflow clean up.
- Conducted the following SORP Quarterly training sessions which were attended by 255 employees.

Staff Training Participation - April 1, 2013 - June 30, 2013			
Date	Dept./Area	Module(s)	Attendees
06/07/13	I&FP Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	18
06/12/13	Morris Forman Operations & Maintenance Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	13
06/12/13	Morris Forman Operations & Maintenance Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	39
06/12/13	Metro Operations Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	12
06/13/13	Eng/RS Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	38
06/14/13	I&FP Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	13
06/19/13	Morris Forman Operations & Maintenance Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	11
06/19/13	Metro Operations Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	22
06/20/13	Eng/RS Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	28
06/26/13	Morris Forman Operations & Maintenance Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	5
06/26/13	Metro Operations Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	33
06/26/13	Morris Forman Operations & Maintenance Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	12
06/27/13	Morris Forman Operations & Maintenance Staff	Overflow Assessment, Control Zones, Mitigation & Documentation	11
Total:			255

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 to EPA/KDEP on June 14, 2013.

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.msprojectwin.org.

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.

-
- Prospect WQTC Elimination Projects Easement Status - A total of 54 easements have been identified. Final design alignments increased the easement number from the previously reported 53.
 - Acquired 30 of these Prospect easements to-date. Details on the easement progress and status:
 - River Road Interceptor- 18 Easements acquired – project under construction.
 - River Road Interceptor Phase 1A- 2 Easements acquired – project under construction.
 - HC Pump Station- 2 Easements acquired – project under construction.
 - HC Interceptor and FM Phase 1- 1 Easements acquired – project under construction.
 - HC Interceptor and FM Phase 2- 3 Easements acquired – project under construction.
 - HC FM Phase 3A- 1 Easements acquired – project under construction.
 - HC FM Phase 3B- 3 Easements acquired with and additional 19 Easements in process. Offer letters sent out and under negotiations. Project will bid in the Fall of 2013.
 - Shadow Wood- 2 Easements in process.
 - Hunting Creek North- 3 Easements in process.

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.msdpwin.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.

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 reviewed to reflect the values of green projects in CSO areas or regions based on the latest modeling results. The goal is to eventually tie incentives directly to overflow reductions in various CSO regions to promote green projects in the areas that provide the most value, and prioritize project opportunities to optimize available funding. Revised program literature and documentation during the reporting period and scheduled a presentation to the MSD Board on possible programmatic changes in April.

Continued to develop a green infrastructure website for distribution of information on the programs, incentives, and value to customers. Completion of the green website will be contingent upon the completion and publishing of the MS4 website in August.

A green infrastructure tracking mechanism in the HANSEN system was utilized during the reporting period. HANSEN allows for scheduling of construction inspections, follow-up for correction of issues, and on-going long term inspections as required by the MS4 permit.

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	2009				2010				2011				2012				2013				2014				2015				2016				2017				2018				2019				2020				2021				2022				2023				2024			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4												
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 PROJECTS	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 I	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 CONTROL	31-Dec-14	31-Dec-14	31-Dec-14																																																																
CSO 058 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROL	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	31-Dec-20																																																																
13TH STREET AND ROWAN STREET STORAGE BASIN	31-Dec-20	31-Dec-20	31-Dec-20																																																																
CENTRAL RELIEF DRAIN IN-LINE STORAGE, GREEN INFRASTRUCTURE AND DISTRIBUTED STORAGE	01-Jan-21	31-Dec-18	31-Dec-18																																																																
CENTRAL RELIEF DRAIN IN-LINE STORAGE, GREEN INFRASTRUCTURE AND DISTRIBUTED STORAGE	01-Jan-21	31-Dec-18	31-Dec-18																																																																
CSO 160 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROL	31-Dec-15	31-Dec-15	31-Dec-15																																																																
CSO 160 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROL	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	31-Dec-18																																																																
SOUTHERN OUTFALL IN-LINE STORAGE (SOR 1)	31-Dec-18	31-Dec-18	31-Dec-18																																																																
SOUTHERN OUTFALL IN-LINE STORAGE AT 43RD ST.	31-Dec-18	31-Dec-18	31-Dec-18																																																																
SOUTHERN OUTFALL IN-LINE RETENTION (SOR 2)	01-Jan-19	31-Dec-18	31-Dec-18																																																																
SOUTHERN OUTFALL IN-LINE RETENTION AT 13TH AND WILSON AVE. (SOR 2)	01-Jan-19	31-Dec-18	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 BASIN	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 BASIN	31-Dec-17	31-Dec-17	31-Dec-17																																																																
CSO 088 STRUCTURAL MODIFICATIONS AND GREEN INFRASTRUCTURE CONTROL	31-Dec-15	31-Dec-15	31-Dec-15																																																																
CSO 093 STRUCTURAL MODIFICATIONS AND GREEN INFRASTRUCTURE CONTROL	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 CONTROL	31-Dec-16	31-Dec-16	31-Dec-16																																																																
STORY AVENUE AND SPRING STREET GREEN INFRASTRUCTURE CONTROL	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

1 of 5

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	2009		2010			2011			2012			2013			2014			2015			2016			2017			2018			2019			2020			2021			2022			2023			2024		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
34TH STREET FLOOD PUMP STATION	31-Dec-12	31-Dec-12	31-Dec-12	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4]																																														
4TH STREET FLOOD PUMP STATION	31-Dec-12	31-Dec-12	31-Dec-12	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4]																																														
8 HAWNEE FLOOD PUMP STATION	30-Jun-13	30-Jun-13	30-Jun-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q2]																																														
17TH STREET FLOOD PUMP STATION	31-Dec-14	31-Dec-14	31-Dec-14	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4]																																														
SANITARY SEWER DISCHARGE PLAN	31-Dec-24	31-Dec-24	31-Dec-24	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
BEARGRASS CREEK MIDDLE FORK AREA	31-Dec-24	31-Dec-24	31-Dec-24	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
GOOSE CREEK PUMP STATION	31-Dec-24	31-Dec-24	31-Dec-24	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
GOOSE CREEK PS PH1 - DEVONDALE PS WW STORAGE	31-Dec-24	31-Dec-24	31-Dec-24	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
GOOSE CRK PS PH2 - PS & WET WEATHER STORAGE	31-Dec-24	31-Dec-24	31-Dec-24	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
ANCHOR ESTATES-ANCHOR ESTS PS 1 & 2 PS ELIMINATIONS	31-Dec-16	31-Dec-16	31-Dec-16	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
ANCHOR ESTATES-VANNAH PS ELIMINATION	15-Oct-11 A	31-Dec-13	31-Dec-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
HURSTBOURNE I&I INVESTIGATION & REHABILITATION	27-Dec-11 A	31-Dec-11	31-Dec-11	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AND UMFLS DIVERSION 1 - BUECHEL BASIN	31-Dec-13	31-Dec-13	31-Dec-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AND UMFLS DIVERSION 2 PS & WET WEATHER STORAGE	31-Dec-23	31-Dec-23	31-Dec-23	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
LITTLE CEDAR CREEK INTRECEPTOR IMPROVEMENTS	31-Dec-24	31-Dec-24	31-Dec-24	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
IDLEWOOD INLINE STORAGE	31-Dec-23	31-Dec-23	31-Dec-23	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
BARDSTOWN RD PS IMPROVEMENTS	31-Dec-21	31-Dec-21	31-Dec-21	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
FAIRMOUNT RD PS IMPROVEMENTS	31-Dec-14	31-Dec-23	31-Dec-23	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
FAIRMOUNT STORAGE BASIN	01-Jan-15	31-Dec-15	31-Dec-15	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
HAZELWOOD PS I&I INVESTIGATION & REHABILITATION	30-Jun-11 A	30-Jun-11	30-Jun-11	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
SONNE PUMP STATION I&I INVESTIGATION & REHABILITATION	30-Jun-11 A	30-Jun-11	30-Jun-11	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
CAMP TAYLOR SSES	08-Jul-11 A	31-Dec-11	31-Dec-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
CAMP TAYLOR SANITARY SEWER #1A	31-Dec-12	31-Dec-13	31-Dec-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
CAMP TAYLOR SANITARY SEWER #1B	31-Dec-13	31-Dec-13	31-Dec-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
CAMP TAYLOR SANITARY SEWER #2	31-Dec-13	31-Dec-13	31-Dec-13	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
CAMP TAYLOR #3- SEWER REHABILITATION	31-Dec-17	31-Dec-17	31-Dec-17	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
CAMP TAYLOR #4-SEWER REHABILITATION & REPLACEMENT	31-Dec-23	31-Dec-23	31-Dec-23	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
FLOYDS FORK AREA	01-Apr-10 A	31-Dec-21	01-Apr-10	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
WOODLAND HILL PS DIVERSION	01-Apr-10 A	30-Jun-11	01-Apr-10	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														
ASHBURTON PS IMPROVEMENTS AND DIVERSION	22-Jan-10 A	31-Dec-21	22-Jan-10	[Gantt bar: 2009 Q1-Q4, 2010 Q1-Q4, 2011 Q1-Q4, 2012 Q1-Q4, 2013 Q1-Q4, 2014 Q1-Q4, 2015 Q1-Q4, 2016 Q1-Q4, 2017 Q1-Q4, 2018 Q1-Q4, 2019 Q1-Q4, 2020 Q1-Q4, 2021 Q1-Q4, 2022 Q1-Q4, 2023 Q1-Q4, 2024 Q1-Q4]																																														

Approved 2009 IOAP
 Remaining Work
 Completed Work

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.

In April 2013, MSD completed the annual assessment and documentation of the overflow and water quality advisory signs. As part of this project, 1230 signs were inspected, 276 were cleaned, 133 repaired and 297 replaced.

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 May 14, 2013, at Fern Creek High School (9115 Fern Creek Road) to discuss the proposed IOAP 2012 Modification, general project updates and updates to the Jeffersontown WQTC elimination, Fairmount Road Basin, and Chenoweth Hills WQTC Elimination/Storage.
- Planned public meetings in September and November to discuss and receive comments on upcoming projects in the IOAP 2012 Modification and upcoming project planning efforts.

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.msdpowerwin.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**.

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 received information that provided direction on the areas beyond the Jefferson County boundary and work began again on the completing the draft of the Facilities Plan Update. During the next reporting period, the alternative analysis for both the collection and treatment systems will be finalized and MSD will begin scheduling public outreach meetings.

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

Construction of the Phase 2 Expansion of the Floyds Fork WQTC continued in this reporting period with the chemical feed system installation completed along with the instrumentation and controls systems implemented. Training for the operations and maintenance staff was provided. During the next reporting period, MSD expects that the project will reach substantial completion and the final site restoration activities will be complete. 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. During the next reporting period, the draft document will be reviewed by MSD staff and project schedule 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

During this reporting period, staff set up portable generator on site and completed the wiring and transfer switch for full operations.

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 – MSD has final construction drawings for the gravity elimination of the plant. The plant flows will be diverted to the existing Washington Green Pump Station which will require expansion. The pump station expansion and plant elimination costs are not currently in the approved MSD budget. Discussions continue with a developer

proposing to expand this pump station as part of a future development project. If the development does not occur, MSD will review the current budget for funds to eliminate the plant. During the next reporting period, MSD will continue discussions with the developer and continue to monitor the structural condition of the plant and perform remedial activities as needed coordinating with the proposed elimination schedule of December 31, 2014.

- Silver Heights WQTC – Completed design of the gravity solution alternative to eliminate the plant. The project scope was expanded to eliminate the Caven Avenue Pump Station. During the next reporting period, MSD will advertise and award the contract for the elimination project. MSD anticipates elimination will be completed by December 31, 2014.

5.4 CMOM Activity Schedule

CMOM capital project milestones for the period of April 1, 2013, through June 30, 2013, as well as a look-ahead for the period of July 1, 2013, through December 31, 2013, are provided in the schedule below.

MSD CMOM FY12 Annual Commitments Schedule (01 July 2013 - 30 December 2013)					2013								
Activity ID	Activity Name	Physical % Complete	Start	Finish	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MSD CMOM FY12 Annual Commitments Schedule (01 July 2013 - 30 December 2013)													
M-E-9 Infrastructure Rehabilitation													
Annual I/I FY 12 Project (H09205)													
A5070	Contract Administration	100%	22-Nov-11 A	15-Feb-13 A									
A4540	Camp Taylor 5	100%	15-Feb-12 A	01-Nov-12 A									
A4530	Camp Taylor 4	100%	04-Apr-12 A	01-Nov-12 A									
A4550	Dolphin Rd	100%	01-Aug-12 A	31-Aug-12 A									
A4560	Heller St	100%	01-Aug-12 A	01-Sep-12 A									
A4580	Fegenbush Ln	100%	01-Aug-12 A	01-Sep-12 A									
A4590	Jenlee	100%	01-Aug-12 A	01-Sep-12 A									
A4600	Edgehill Rd	100%	01-Sep-12 A	01-Oct-12 A									
A4930	Penn Station	100%	01-Sep-12 A	08-Feb-13 A									
A4660	JCTMS MH	100%	01-Dec-12 A	01-Feb-13 A									
A4570	Macon Rd	100%	10-Dec-12 A	31-Jan-13 A									
A5080	Warranty	0%	01-Mar-13 A	01-Mar-14									
Annual I/I FY13 Project (H09206)													
A5090	Contract Administration	30%	19-Nov-12 A	31-Dec-13									
A4860	Muddy Fork MH	100%	01-Dec-12 A	31-Dec-12 A									
A4870	Prospect MH	100%	01-Dec-12 A	31-Dec-12 A									
A4880	Macon MH	100%	10-Dec-12 A	30-Apr-13 A									
A5100	Warranty	0%	02-Jan-14*	02-Jan-15									
Lea Ann Way Interceptor I/I Rehabilitation Project (H12064)													
A3010	Construction	100%	15-Feb-12 A	31-May-13 A									
A3040	Warranty	10%	04-Jun-13 A	04-Jun-14									
Lea Ann Way East - Stonybrook Rehabilitation Project (C08433)													
A3920	Design	100%	16-Jan-12 A	30-Sep-12 A									
A3910	Construction	60%	15-Dec-12 A	01-Sep-13									
Lake Forest Sanitary Sewer Rehabilitation Project (H11303)													
A3350	Design	100%	16-Jan-12 A	30-Jun-12 A									
A3160	Ad	100%	31-Aug-12 A										
A3170	Bid Open	100%	25-Sep-12 A										
A3180	Award	100%	22-Oct-12 A										
A3190	Construction	80%	01-Nov-12 A	30-Aug-13									
Camp Taylor SSR Phase I Project (H09407)													
A3680	Warranty	75%	21-Sep-12 A	21-Sep-13									
Prospect Phase I Sanitary Sewer Rehabilitation Project (H11311)													
A3360	Design	100%	02-Apr-12 A	30-Jun-13 A									
A3210	Ad	0%	25-Jul-13*										
A3220	Bid Open	0%	26-Aug-13*										
A3230	Award	0%	23-Sep-13*										
A3240	Construction	0%	01-Oct-13*	30-Sep-14									
Meadow Stream Sanitary Sewer Rehabilitation Project (H11305)													
A4940	Design	100%	02-Apr-12 A	15-Jun-13 A									
A4890	Ad	0%	26-Aug-13*										
A4900	Bid Open	0%	23-Sep-13*										
A4920	Award	0%	21-Oct-13*										
A4910	Construction	0%	01-Nov-13*	30-Apr-14									
Lea Ann Way East - Fegenbush Rehabilitation Project (C08433)													
			16-Jan-12 A	31-Aug-13									

MSD CMOM FY12 Annual Commitments Schedule (01 July 2013 - 30 December 2013)											Date: 11-Jul-13					
Activity ID	Activity Name	Physical % Complete	Start	Finish	2013											
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
A3970	Design	100%	16-Jan-12 A	30-Jun-12 A												
A3980	Ad	100%	24-Sep-12 A													
A3990	Bid Open	100%	24-Oct-12 A													
A4000	Award	100%	12-Nov-12 A													
A3960	Construction	60%	01-Dec-12 A	31-Aug-13												
Lea Ann Way East - Fern Creek Rehabilitation Project (C08433)			16-Jan-12 A	31-Aug-13												
A4170	Design	100%	16-Jan-12 A	30-May-12 A												
A4180	Ad	100%	30-Jul-12 A													
A4190	Bid Open	100%	30-Aug-12 A													
A4200	Award	100%	10-Sep-12 A													
A4160	Construction	75%	05-Oct-12 A	31-Aug-13												
Lea Ann Way East - Picadilly Rehabilitation Project (C08433)			16-Jan-12 A	31-Aug-13												
A4270	Design	100%	16-Jan-12 A	30-Sep-12 A												
A4260	Construction	20%	15-Dec-12 A	31-Aug-13												
4th and Oak CIPP Project (H09205)			01-Apr-12 A	01-Jan-13 A												
A4360	Design	100%	01-Apr-12 A	01-May-12 A												
A4370	Ad	100%	13-Jun-12 A													
A4380	Bid Open	100%	10-Jul-12 A													
A4390	Award	100%	01-Aug-12 A													
A4400	Construction	100%	01-Aug-12 A	01-Jan-13 A												
Caven Avenue Rehab Project (H11304)			01-Jan-13 A	31-Jan-14												
A5250	Design	100%	01-Jan-13 A	30-Apr-13 A												
A5260	Ad	100%	09-May-13 A													
A5270	Bid Open	100%	18-May-13 A													
A5280	Award	0%	22-Jul-13*													
A5290	Construction	0%	22-Aug-13*	31-Jan-14												
Beargrass Interceptor Rehab Project (H09207)			01-May-13 A	01-Nov-14												
A5360	Design	60%	01-May-13 A	31-Aug-13												
A5370	Ad	0%	15-Sep-13*													
A5380	Bid Open	0%	15-Oct-13*													
A5390	Award	0%	14-Nov-13*													
A5400	Construction	0%	14-Dec-13*	01-Nov-14												
Berrytown Rehab Project (H11299)			01-Apr-13 A	01-Nov-14												
A5460	Design	80%	01-Apr-13 A	31-Jul-13												
A5470	Ad	0%	15-Aug-13*													
A5480	Bid Open	0%	15-Sep-13*													
A5490	Award	0%	01-Oct-13*													
A5500	Construction	0%	01-Nov-13*	01-Nov-14												
Starview Rehab Project (H11312)			01-Apr-13 A	01-Nov-14												
A5510	Design	80%	01-Apr-13 A	31-Jul-13												
A5520	Ad	0%	15-Aug-13*													
A5530	Bid Open	0%	15-Sep-13*													
A5540	Award	0%	01-Oct-13*													
A5550	Construction	0%	01-Nov-13*	01-Nov-14												
Camp Taylor Area 3 Rehab Project (H09218)			15-Apr-13 A	31-Dec-14												
A5410	Design	100%	15-Apr-13 A	20-Jun-13 A												
A5420	Ad	0%	15-Sep-13*													
A5430	Bid Open	0%	15-Oct-13*													

MSD CMOM FY12 Annual Commitments Schedule (01 July 2013 - 30 December 2013)										Date: 11-Jul-13										
Activity ID	Activity Name	Physical % Complete	Start	Finish	2013															
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec							
A5440	Award	0%	14-Nov-13*																	
A5450	Construction	0%	14-Dec-13*	31-Dec-14																
FY13 ICA Project																				
A4410	Planning	85%	01-Jun-12 A	01-Aug-13																
Goose Creek PS SSES (H11407)																				
A4950	Planning	50%	01-Oct-12 A	30-Jun-14																
Nightingale PS SSES (H11313)																				
A5110	Planning	20%	01-Feb-13 A	30-Jun-14																
Pump Station Operations Programs																				
O-A-2 Emergency Operation Programs																				
Trinity Homes Pump Station Emergency Generator & Access Road (H11440)																				
A2020	Design	100%	23-Mar-11 A	01-Dec-12 A																
A2030	Ad	100%	24-Apr-12 A																	
A2300	Bid Open	100%	08-May-12 A																	
A2040	Award	100%	09-Aug-12 A																	
A2050	Construction	100%	09-Aug-12 A	16-Jan-13 A																
A2310	Warranty	50%	17-Jan-13 A	14-Jan-14																
Trinity Homes Pump Station Roof Hatch (H11440)																				
A4610	Design	100%	25-Jul-12 A	15-Oct-12 A																
A4620	Ad	100%	21-Mar-13 A																	
A4650	Bid Open	100%	17-Apr-13 A																	
A4630	Award	100%	24-Apr-13 A																	
A4640	Construction	75%	24-Apr-13 A	15-Aug-13																
Northern Ditch Diversion Structure Flow Meter Manhole Project (H13033)																				
A4670	Ad	100%	07-Sep-12 A																	
A4700	Bid Open	100%	21-Sep-12 A																	
A4680	Award	100%	05-Oct-12 A																	
A4690	Construction	100%	15-Oct-12 A	16-Apr-13 A																
A5120	Warranty	0%	16-Apr-13 A	16-Apr-14																
34th Street FPS Gate Actuator Replacement Project (H09352)																				
A4800	Design	100%	01-Jan-12 A	30-May-12 A																
A4760	Ad	100%	15-Jun-12 A																	
A4790	Bid Open	100%	29-Jun-12 A																	
A4770	Award	100%	26-Jul-12 A																	
A4780	Construction	100%	26-Jul-12 A	13-Nov-12 A																
A5130	Warranty	0%	19-Nov-12 A	30-Nov-13																
Royster Basin Access Road Project (H09365)																				
A4310	Design	100%	26-Mar-12 A	31-May-13 A																
A4320	Ad	100%	15-Jul-12 A																	
A4350	Bid Open	100%	15-Aug-12 A																	
A4330	Award	100%	01-Sep-12 A																	
A4340	Construction	100%	18-Sep-12 A	16-Jan-13 A																
A5200	Warranty	0%	16-Jan-13 A	16-Jan-14																
Royster Basin Generator Project (H09365)																				
A4810	Design	75%	26-Mar-12 A	31-Jul-13																
A4820	Ad	0%	01-Aug-13*																	
A4850	Bid Open	0%	15-Aug-13*																	
A4830	Award	0%	25-Aug-13*																	

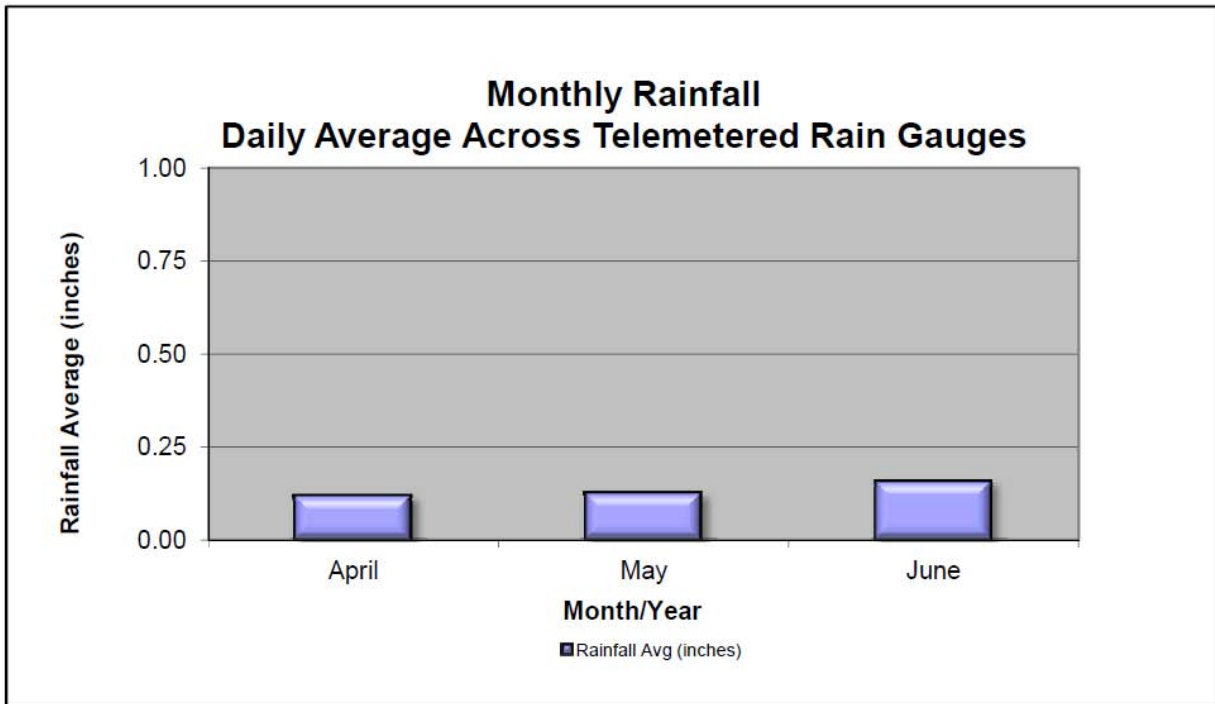
MSD CMOM FY12 Annual Commitments Schedule (01 July 2013 - 30 December 2013)						2013								
Activity ID	Activity Name	Physical % Complete	Start	Finish		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
A4840	Construction	0%	01-Sep-13*	31-Dec-13										
Prospect Point Pump Station Access Road (H13084)														
A4420	Design	100%	16-Jul-12 A	26-Nov-12 A										
A4430	Ad	100%	08-Jan-13 A											
A4440	Bid Open	100%	01-Feb-13 A											
A4450	Award	100%	05-Feb-13 A											
A4460	Construction	100%	05-Feb-13 A	16-Apr-13 A										
A5140	Warranty	0%	16-Apr-13 A	16-Apr-14										
Brandies FPS Ventilation Modifications (H09352)														
A5010	Design	100%	01-Jun-12 A	31-Mar-13 A										
A5020	Ad	0%	15-Aug-13*							◆				
A5030	Bid Open	0%	01-Sep-13*								◆			
A5040	Award	0%	01-Oct-13*									◆		
A5050	Construction	0%	15-Nov-13*	01-Mar-14										
Valley Village PS Header Piping Improvements Project (H09352)														
A4960	Design	100%	01-Jun-12 A	31-Oct-12 A										
A4970	Ad	100%	23-Jan-13 A											
A4980	Bid Open	100%	01-Feb-13 A											
A4990	Award	100%	13-Mar-13 A											
A5000	Construction	80%	13-Mar-13 A	31-Jul-13										
4th Street FPS Gate and Switch Gear Replacement Project (F12095)														
A5150	Design	90%	04-Jan-13 A	31-Jul-13										
A5160	Ad	0%	01-Sep-13*								◆			
A5170	Bid Open	0%	01-Oct-13*									◆		
A5180	Award	0%	01-Nov-13*										◆	
A5190	Construction	0%	15-Dec-13*	30-Apr-14										
Shannon Run PS Elimination Project (B13132)														
A5210	Ad	100%	16-Jan-13 A											
A5220	Bid Open	100%	31-Jan-13 A											
A5230	Award	100%	11-Feb-13 A											
A5240	Construction	100%	15-Feb-13 A	31-May-13 A										
A5300	Warranty	0%	01-Jun-13 A	01-Jun-14										
CPE/CPE Treatment Plant Activities														
CMOM CPE/CCP FY11 - CL2 and SO2 Flow Pacing (H09360)														
A3440	Design	100%	01-Jun-12 A	30-Oct-12 A										
A3400	Ad	0%	15-Jul-13*											
A3410	Bid Open	0%	15-Aug-13*											
A3430	Award	0%	15-Oct-13*											
A3420	Construction	0%	15-Nov-13*	30-Jun-14										
Morris Forman WWTP Sampling Manholes (H09374)														
A4750	Design	90%	01-Sep-12 A	15-Aug-13										
A4710	Ad	0%	01-Sep-13*											
A4740	Bid Open	0%	15-Sep-13*											
A4720	Award	0%	01-Oct-13*											
A4730	Construction	0%	15-Oct-13*	31-Dec-13										
Morris Forman Secondary Flume Replacement (H12047)														
A3250	Design	100%	01-Mar-12 A	01-Jun-12 A										
A3290	Ad	100%	14-Jul-12 A											

MSD CMOM FY12 Annual Commitments Schedule (01 July 2013 - 30 December 2013)										Date: 11-Jul-13						
Activity ID	Activity Name	Physical % Complete	Start	Finish	2013											
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
A3260	Bid Open	100%	14-Aug-12 A													
A3270	Construction	90%	12-Sep-12 A	01-Sep-13	█				█							
A3280	Award	100%	12-Sep-12 A													
Morris Forman Secondary Flow Meters (H12046)			01-Mar-12 A	30-May-13 A												
A3340	Design	100%	01-Mar-12 A	07-Jul-12 A												
A3300	Ad	100%	04-Aug-12 A													
A3310	Bid Open	100%	14-Sep-12 A													
A3330	Award	100%	11-Oct-12 A													
A3320	Construction	100%	21-Oct-12 A	30-May-13 A	█											
Berrytown Tank Rehabilitation (H09374)			01-Mar-13 A	31-Dec-13												
A5350	Design	5%	01-Mar-13 A	15-Aug-13	█				█							
A5310	Ad	0%	15-Sep-13*									◆				
A5320	Bid Open	0%	01-Oct-13*										◆			
A5340	Award	0%	15-Oct-13*											◆		
A5330	Construction	0%	01-Nov-13*	31-Dec-13											█	

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.



6.2 Collection System Unauthorized Discharges

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

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, 2012, through June 30, 2013, and will be posted on the Project WIN website. During this quarter, 92 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	6	6
Bypass At WQTC	4	1	5
Electrical Problems	0	1	1
Lack of System Capacity	0	76	76
Mechanical Failure	0	0	0
Obstruction-Not Grease or Root	2	0	2
Pumped Overflow	0	0	0
Roots	0	0	0
Structural Failure	2	0	2
Utility Damage	0	0	0
WQTC Process Upset	0	0	0
Total	8	84	92

6.2.2 Overflows to Ground (EXT)

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, 2012, through June 30, 2013.

6.2.3 Overflows to Interior (INT)

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, 2012, through June 30, 2013.

6.2.4 Dry Weather CSOs

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, 2012, through June 30, 2013. 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 - April 1, 2013 - June 30, 2013					
CSO	Type of Discharge	Date/Time	Problem	Cause	Volume (GAL)
CSO113	DISDW	05/22/2013	OBSTRUCTION-NOT GREASE / ROOTS	OBSTRUCTION IN MAIN SEWER	35
CSO153	DISDW	05/03/2013	OBSTRUCTION-NOT GREASE / ROOTS	OBSTRUCTION IN THE SIPHON CAUSING OVERFLOW FROM CSO	24,000

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.

- Shawnee FPS DWO Elimination – Completed June 18, 2013 – Eliminated the following dry weather CSOs: CSO104, CSO105, and CSO189.
- 27th Street FPS DWO Elimination – Completed June 28, 2013 – Eliminated the following dry weather CSOs: CSO019.

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 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 April 1, 2013, through June 30, 2013. 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							
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Total	Target/ qtr	% of Annual Target
Combined Sewer Area							
Catch Basins Cleaned CSO Area - PM	7,535	5,347	7,358	9,499	29,739	4,460	53%
CSO Inspections	1,326	1,324	1,310	1,319	5,279	1,272	26%
Sanitary Sewer Area							
Catch Basins Cleaned SSO Area - PM	86	2,726	1,400	2,329	6,541	1,144	51%
County Wide							
Sewer Main Inspections MSD Crews (LF)	190,495	218,158	81,148	260,951	750,752	198,000	33%
Sewer Main Inspections Contractor (LF)	691,776	391,938	98,656	0	1,182,370	198,000	0%
Total Inspections (LF)	882,271	610,096	179,804	260,951	1,933,122	396,000	16%

Rolling Quarterly GLPM Performance					
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Total
Combined Sewer Area					
Catch Basins Cleaned CSO Area - UM	493	352	85	238	1,168
CSO Debris Removal WO	134	108	112	99	453
Chemical Root Treatment CSO Area (LF)	0	20,264	7,894	797	28,954
Root Cutting CSO Area (LF)	462	11,965	815	40	13,282
Flushing and Cleaning of Sewer Mains CSO Area (LF)	9,033	12,375	4,224	5,586	31,218
Sanitary Sewer Area					
Catch Basins Cleaned SSO Area - UM	67	83	91	83	324
Chemical Root Treatment SSO Area (LF)	0	70,548	208,106	86,669	365,324
Root Cutting SSO Area (LF)	43,350	53,122	34,368	13,919	144,759
Flushing and Cleaning of Sewer Mains SSO Area (LF)	21,691	25,077	21,544	32,037	100,348

6.6 Water Quality Treatment Center Bypasses

6.6.1 Bypass Events

Included in **Appendix A-2** is a report that lists the details of the five bypasses that occurred at water quality treatment centers (WQTC) during this reporting period. Bypasses were reported for the following WQTCs:

Bypass Events - April 1, 2013 - June 30, 2013			
Type of Bypass	Date	ID	Facility Name
Wet Weather	05/11/13	MSD0209	BERRYTOWN
Dry Weather	06/16/13	MSD0251	LAKE OF THE WOODS
Dry Weather	05/16/13	MSD0263	CHENOWETH HILLS
Dry Weather	06/04/13	MSD0293	TIMBERLAKE
Dry Weather	06/13/13	MSD0293	TIMBERLAKE

6.6.2 Bypass Corrective Actions

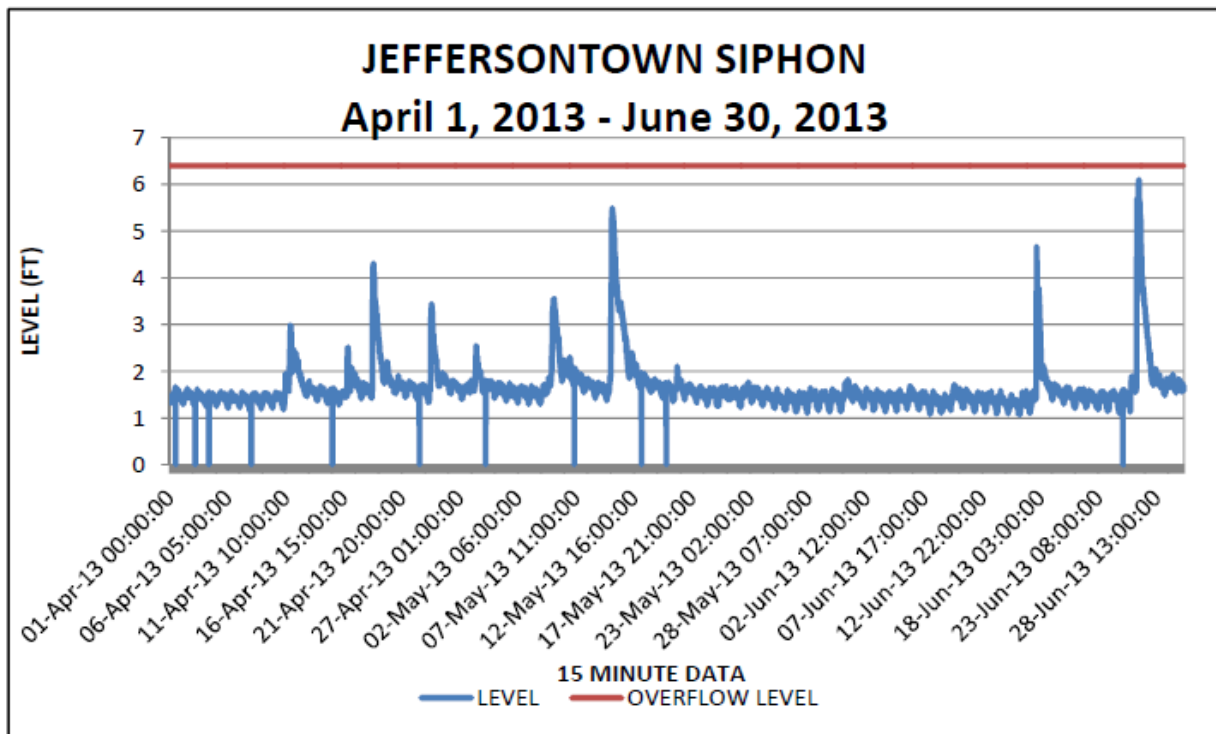
Each quarter, an assessment of bypasses will occur to determine the root cause of the bypass, the failure category, corrective actions to be taken, possible programmatic solutions, and corrective action completion date. Refer to the table below for causes of bypasses and respective corrective actions that occurred April 1, 2013, through June 30, 2013.

Bypass Summary - April 1, 2013 to June 30, 2013		
DATE/TIME	BYPASS DESCRIPTION	FAILURE RESOLUTION
Capacity (CAP)		
5/11/13 8:51 AM	BERRYTOWN - WO# 1907786 - OVERFLOW - CAPACITY - RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY – SECONDARY CLARIFIER WEIR (CAP)	LACK OF SYSTEM CAPACITY DURING RAIN EVENT. APPROXIMATELY 143,100 GALLONS BYPASSED SECONDARY TREATMENT. BYPASSED FLOW RECEIVED PRIMARY TREATMENT. RAIN SUBSIDED, FLOW DECREASED AND BYPASS STOPPED. IF OPERATIONAL NEEDS FOR RESOURCES ALLOW, MSD WILL HAUL WASTEWATER FROM THIS WQTC DURING SIGNIFICANT RAIN EVENTS.
Facility Failure (Mechanical - MCH, Electrical - ELE, Structural - SRT)		
5/16/13 6:40 AM	CHENOWETH HILLS - WO# 1909417 - OVERFLOW – ELECTRICAL ISSUE PREVENTED GENERATOR FROM STARTING (ELE)	CONTRACTOR INSTALLED A NEW TRANSFER SWITCH SENSOR FOR SINGLE PHASE ELECTRIC ON 5/19/2013.
6/16/13 9:00 AM	LAKE OF THE WOODS - WO# 1931518 - OVERFLOW - MECHANICAL – SO2 REGULATOR FAILURE (MCH)	SO2 REGULATOR WAS REPLACED ON 6/16/2013.
External Power failures (LGE Related-PWR)		
	No bypasses of this category occurred during the reporting period.	N/A
Human Error (OPN)		
6/4/13 4:15 PM	TIMBERLAKE - WO# 1928851 - OVERFLOW - HUMAN ERROR - OPERATOR ERROR. PUMP SELECTOR SWITCH LEFT IN OFF POSITION. (OPN)	OPERATIONS PERSONNEL TO BE RE-TRAINED TO PREVENT REOCCURRENCE. TRAINING TO BE COMPLETED BY 7/31/2013.
6/13/13 10:25 AM	TIMBERLAKE - WO# 1930971 - OVERFLOW - HUMAN ERROR - OPERATOR ERROR. CONTRACTOR PUMPING LAGOON BACK INTO PLANT AT HIGH RATE. (OPN)	CONTRACTOR WAS IMMEDIATELY INFORMED TO CEASE PUMPING OPERATIONS. PUMPING ACTIVITY WAS REDIRECTED TO A LOCATION THAT EVENLY DISTRIBUTED FLOW TO PREVENT FURTHER BYPASS ON 6/13/2013. THE CONTRACTOR WAS SUBSEQUENTLY CENSURED.

Utility Damage		
	No bypasses of this category occurred during the reporting period.	N/A

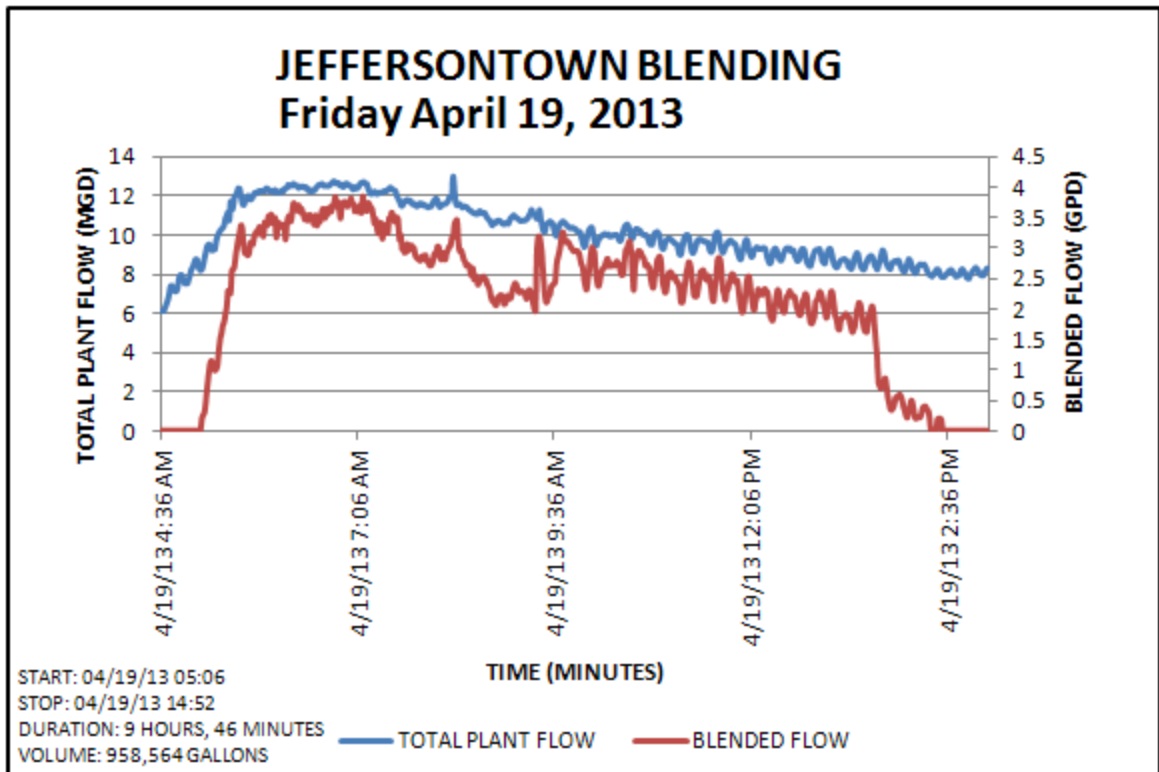
6.6.3 Jeffersontown Water Quality Treatment Center

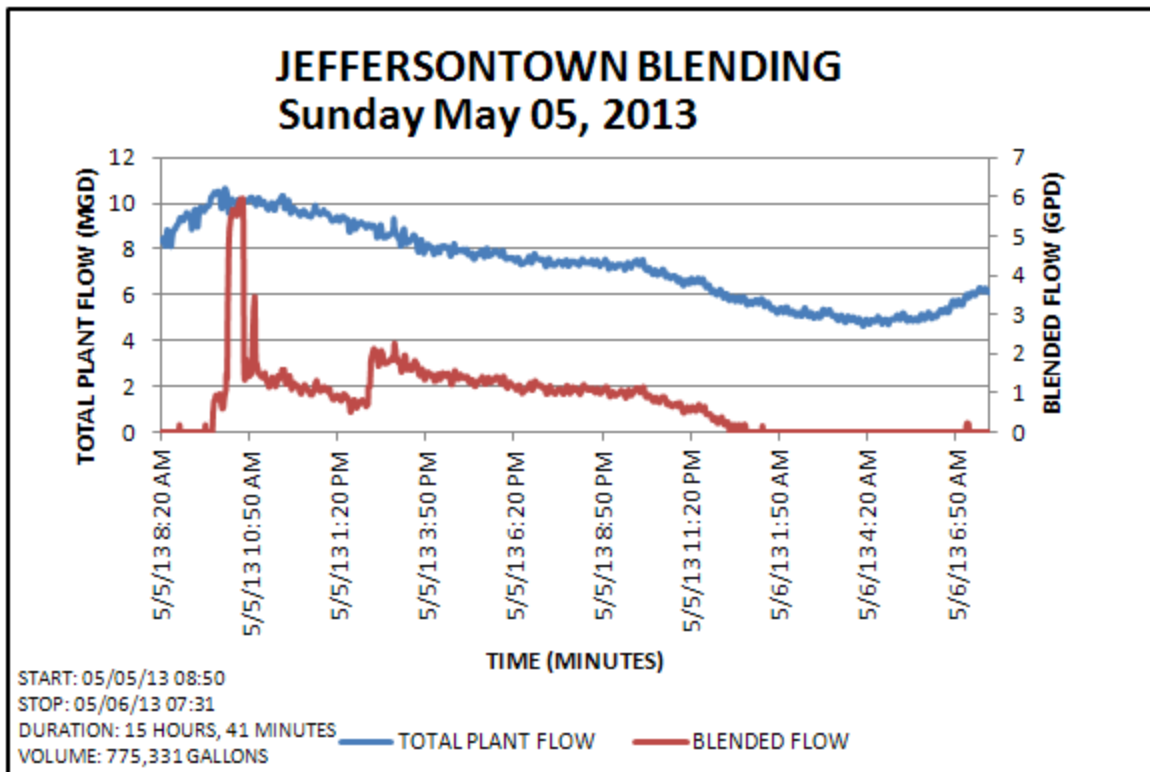
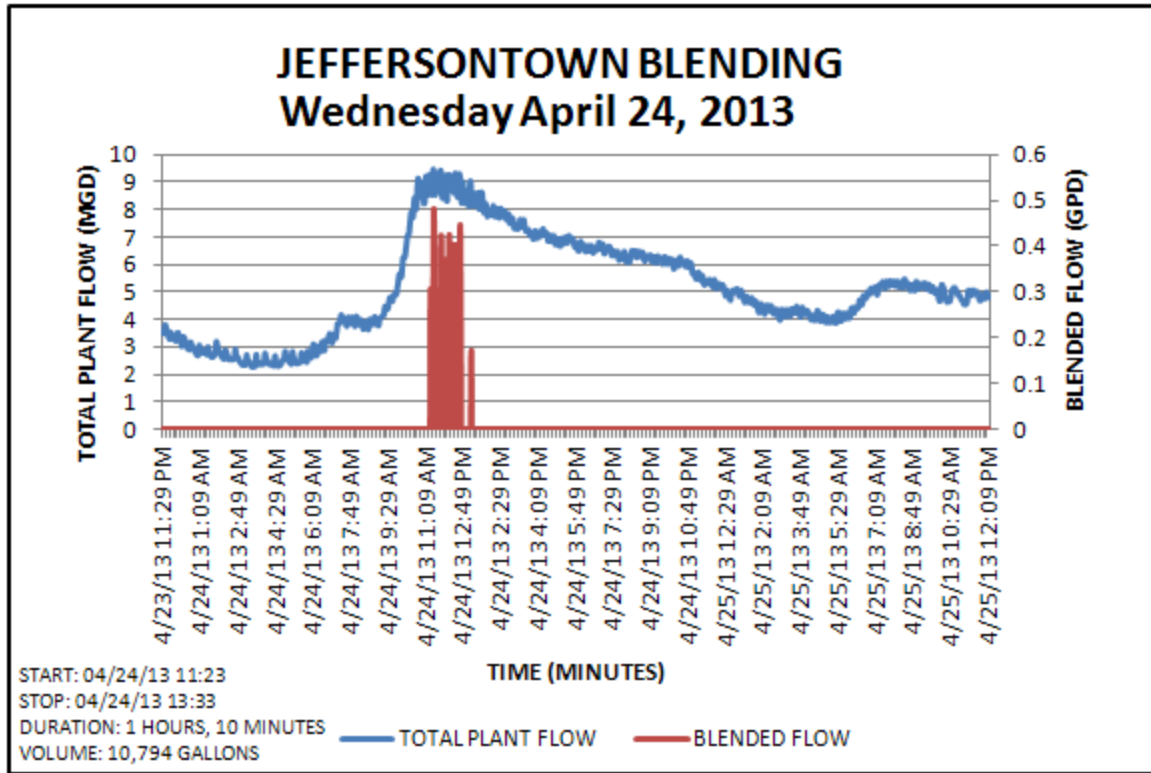
MSD submitted a Jeffersontown WQTC Process Control Plan on October 31, 2008, as required by paragraph 26.a of the Amended Consent Decree. MSD received comments on December 12, 2008, and resubmitted the plan January 16, 2009, and again on February 20, 2009. MSD received conditional approval of this document 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.

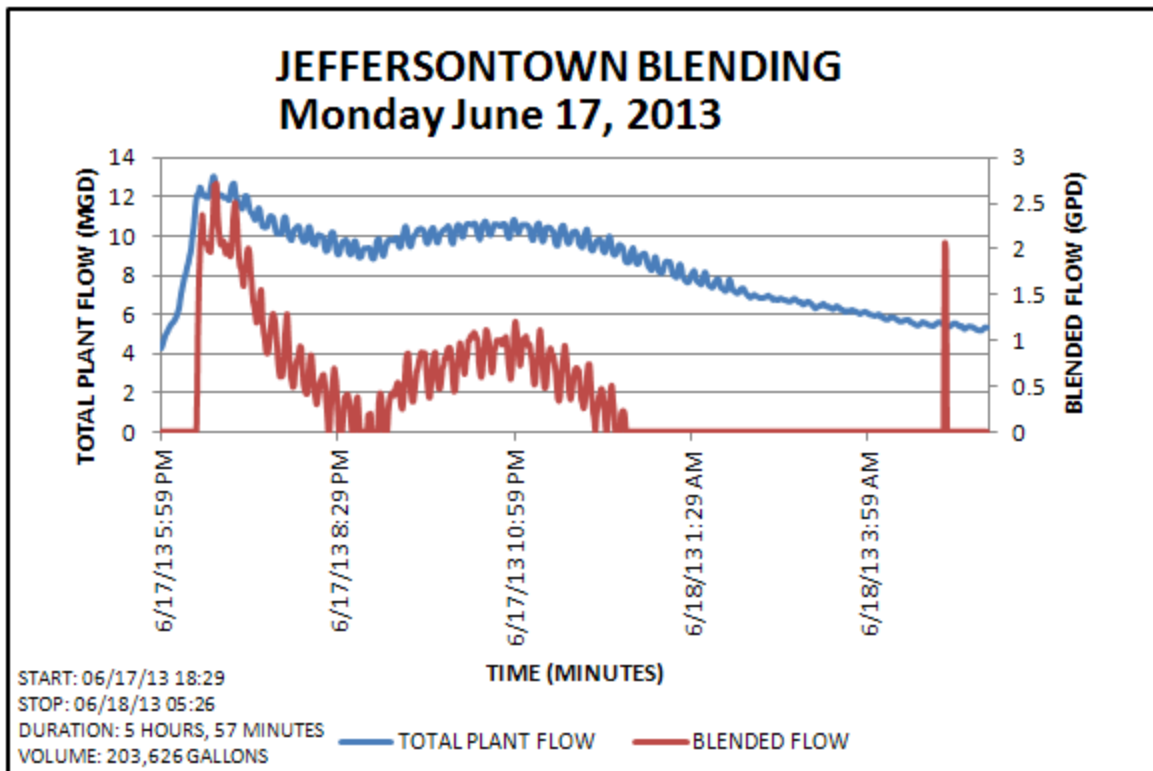
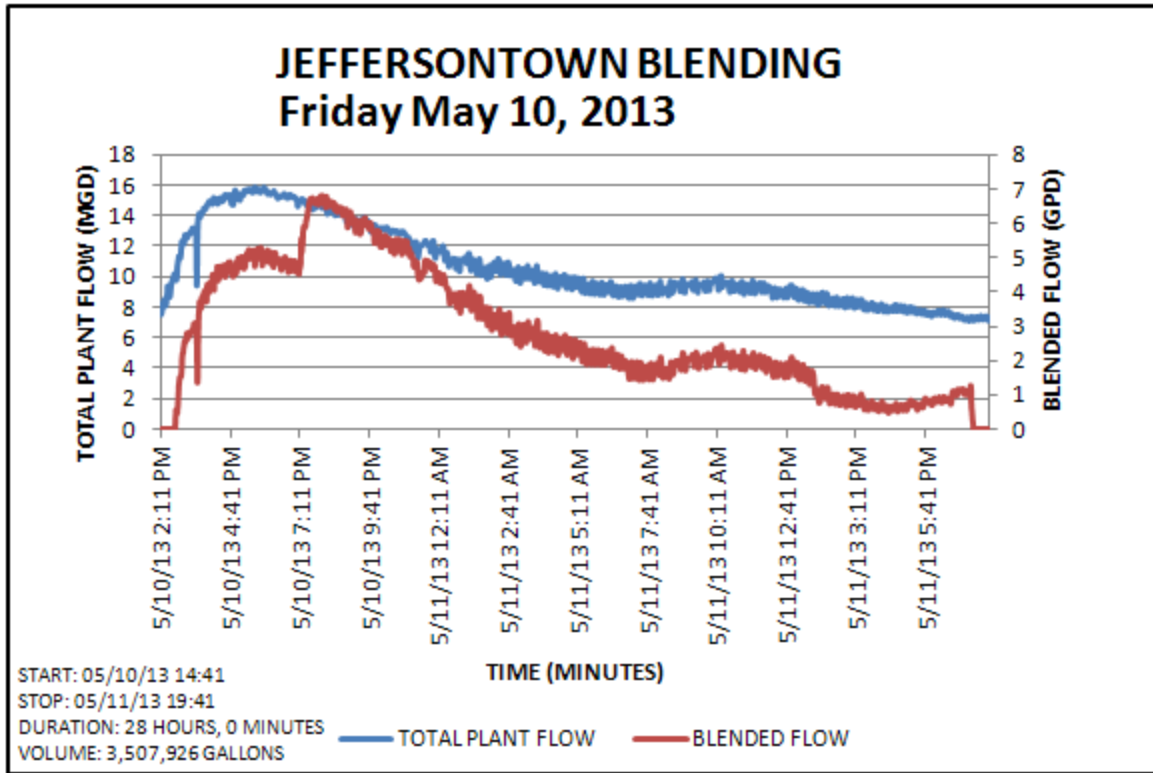


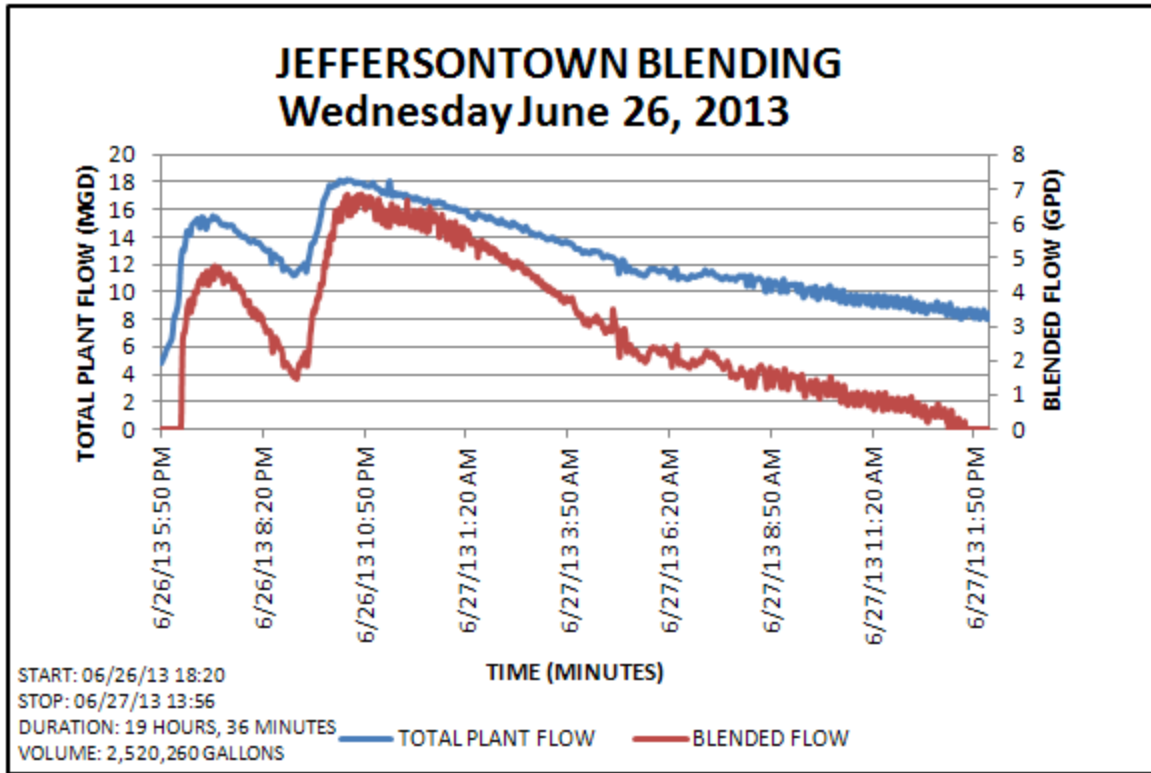
The following activities occurred at the Jeffersontown WQTC during the reporting period:

- Inspections were conducted upstream of the Jeffersontown WQTC Headworks three times (May 10, 2013, June 17, 2013 & June 26, 2013). Three overflows were reported as a result of the inspections. All three overflows occurred at manhole 28173 (not associated with the siphon).
- There were six blending events during the reporting period. Below are charts for each blending event that show total plant flow during the blending event.







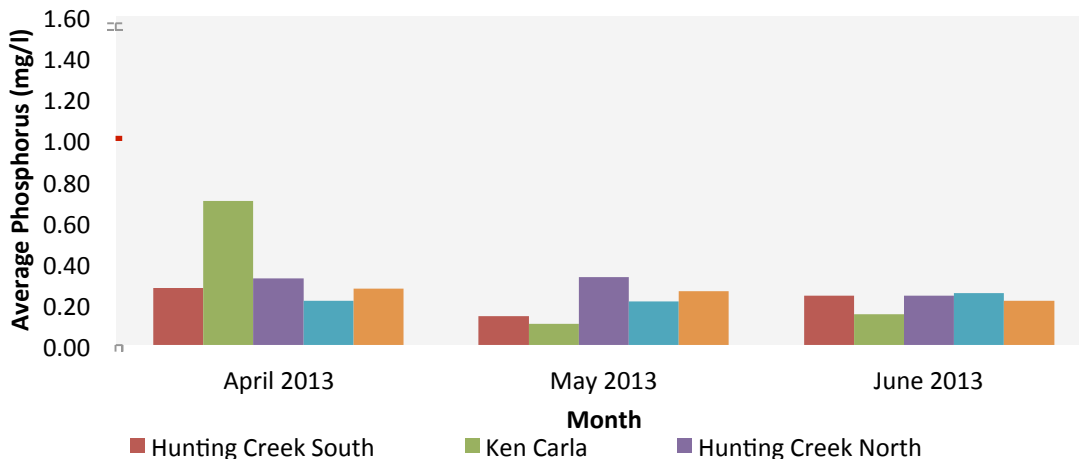


6.7 Phosphorus Monitoring at the Prospect WQTCs

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.

□

MONTHLY PHOSPHORUS



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

APPENDIX A-1
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	05/22/13 1:12: PM	05/22/13 01:47 PM	35	Sewer Manhole	CSO113	WEST	OHIO RIVER	OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE / ROOTS	1925362	NO CLEAN UP PERFORMED- PIPE DISCHARGES DIRECTLY INTO STREAM	FLUSHED/ACTORED THE OBSTRUCTION/DEBRIS FROM SEWER
MORRIS FORMAN	KY0022411	1201 LEXINGTON RD	05/03/13 6:45: AM	05/03/13 12:05 PM	24000	Sewer Manhole	CSO153	WEST	OHIO RIVER	OBSTRUCTION IN THE SIPHON CAUSING OVERFLOW FROM CSO	OBSTRUCTION-NOT GREASE / ROOTS	1903654	NO CLEANUP PERFORMED, PIPE DISCHARGES DIRECTLY TO IMPROVED CHANNEL	FLUSHED SIPHON TO REMOVE UNKNOWN OBSTRUCTION FLUSH WORK ORDER # 1686162

Appendix A-2 - Discharge Work Orders – Bypass

APPENDIX A-2
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	05/11/13 8:51: AM	05/12/13 08:00 AM	136200	Sewer Treatment Plant	MSD0209	CENT	FLOYDS FORK	PLANT BYPASS REPORTE OF 100GPM FLOW RATE AT 08:51 HRS FROM AERATION TANK AT PLANT DUE TO HIGH FLOW RATE FROM RAIN EVENT	BYPASS AT WQTC	1907786	MSD CLEANED & SANITIZED THE AREA	MSD MAINTENANCE WILL REAPAIR TANK
LAKE OF THE WOODS	KY0044342	11006 WALBRIDGE CT	06/16/13 9:00: AM	06/16/13 10:04 AM	888	Sewer Treatment Plant	MSD0251	CENT	CHENOWETH RUN	bad regulator on SO2	BYPASS AT WQTC	1931518	no clean up required	replaced bad regulator
CHENOWETH HILLS	KY0029459	4305 ST RENE CT	05/16/13 6:40: AM	05/16/13 06:49 AM	958	Sewer Treatment Plant	MSD0263	CENT	CHENOWETH RUN	LG&E POWER FAIL & THE GENERATOR FAILED TO START	BYPASS AT WQTC	1909417	NO DEBRIS	LG&E RESTORED POWER.
TIMBERLAKE	KY0043087	5504 TIMBER RIDGE DR	06/04/13 4:15: PM	06/04/13 05:15 PM	900	Sewer Treatment Plant	MSD0293	EAST	HARRODS CREEK	WASTE WAS LEFT ON BY OPERATOR.CAUSING SOLIDS TO GET IN #2 PLANT.	BYPASS AT WQTC	1928851	NO CLEAN UP SUBMERGED DISCHARGE.	TURNED OFF RETURNS.
TIMBERLAKE	KY0043087	5504 TIMBER RIDGE DR	06/13/13 10:25: AM	06/13/13 10:35 AM	500	Sewer Treatment Plant	MSD0293	EAST	HARRODS CREEK	CONTRACTOR PUMPING LAGOON BACK INTO PLANT CAUSED PLANT TO DISCHARGE	BYPASS AT WQTC	1930971	NO CLEANUP	CONTRACTOR ORDERED TO CEASE OPERATIONS

Appendix A-3 - Discharge Work Orders – Blending

APPENDIX A-3
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	04/19/13 5:06: AM	04/19/13 02:52 PM	958564	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF CAPACITY DUE TO RAIN EVENT IN THE AREA	BLENDING AT JTOWN WQTC	1895856	PIPE DISCHARGE SUBMERGED- NO CLEAN UP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	04/24/13 11:23: AM	04/24/13 01:33 PM	10794	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1897510	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/05/13 8:50: AM	05/06/13 07:31 AM	775331	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1904082	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/10/13 2:41: PM	05/11/13 07:41 PM	3507926	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1907656	PIPE DISCHARGE SUBMERGED- NO CLEANUP	THIS SITE IS IN NEGOTIATIONS TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	06/17/13 6:29: PM	06/18/13 05:26 AM	203626	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY CAUSED By Storm	BLENDING AT JTOWN WQTC	1932006	NO CLEAN UP REQUIRED	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	06/26/13 6:20: PM	06/27/13 01:56 PM	2520260	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	HEAVY RAIN - LACK OF SYSTEM CAPACITY	BLENDING AT JTOWN WQTC	1939730	NO CLEANUP OCCURRED - PIPE DISCHARGE SUBMERGED	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
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	05/11/13 8:51: AM	05/12/13 08:00 AM	136200	Sewer Treatment Plant	MSD0209	CENT	FLOYDS FORK	PLANT BYPASS REPORTE OF 100GPM FLOW RATE AT 08:51 HRS FROM AERATION TANK AT PLANT DUE TO HIGH FLOW RATE FROM RAIN EVENT	BYPASS AT WQTC	1907786	MSD CLEANED & SANITIZED THE AREA	MSD MAINTENANCE WILL REAPIR TANK
LAKE OF THE WOODS	KY0044342	11006 WALBRIDGE CT	06/16/13 9:00: AM	06/16/13 10:04 AM	888	Sewer Treatment Plant	MSD0251	CENT	CHENOWETH RUN	bad regulator on SO2	BYPASS AT WQTC	1931518	no clean up required	replaced bad regulator
JEFFERSONTOWN	KY0025194	3258 RUCKRIEGEL PKY	05/10/13 3:53: PM	05/11/13 08:30 AM	44000	Sewer Manhole	28173	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907742	DISCLN WO# 1690134	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3258 RUCKRIEGEL PKY	06/26/13 7:53: PM	06/27/13 07:57 AM	72000	Sewer Manhole	28173	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939739	DISCLN WO# 1940375	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	9707 WILLOWWOOD WAY	05/10/13 5:05: PM	05/11/13 09:10 AM	18000	Sewer Manhole	28336	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907758	DISCLN WO# 1690139	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	9707 WILLOWWOOD WAY	06/26/13 11:15: PM	06/27/13 08:15 AM	36000	Sewer Manhole	28336	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939871	DISCLN WO# 1940752	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3620 CHARLANE PKY	05/10/13 5:04: PM	05/11/13 08:50 AM	16500	Sewer Manhole	28340	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907751	DISCLN WO# 1690138	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3620 CHARLANE PKY	06/26/13 11:19: PM	06/27/13 08:15 AM	72000	Sewer Manhole	28340	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939869	DISCLN WO# 1940749	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	2901 LIVINGSTON AVE	05/10/13 5:14: PM	05/11/13 09:20 AM	32000	Sewer Manhole	28395	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907760	DISCLN WO# 1690141	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	2901 LIVINGSTON AVE	06/26/13 11:30: PM	06/27/13 08:19 AM	27000	Sewer Manhole	28395	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939877	DISCLN WO# 1940754	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3406 DELL RD	06/26/13 12:15: AM	06/27/13 12:23 AM	40500	Sewer Manhole	28415	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939867	DISCLN WO# 1940734	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3406 CHARLANE PKY	05/10/13 6:54: PM	05/11/13 10:00 AM	17000	Sewer Manhole	28451	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907774	DISCLN WO# 1690144	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11401 GRAND AVE	05/10/13 5:42: PM	05/11/13 08:25 AM	64000	Sewer Manhole	28551	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907749	DISCLN WO# 1690134	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11401 GRAND AVE	06/26/13 9:56: PM	06/27/13 08:04 AM	144000	Sewer Manhole	28551	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939865	DISCLN WO# 1940691	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	2711 GRASSLAND DR	05/10/13 5:25: PM	05/11/13 09:35 AM	19500	Sewer Manhole	31733	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907761	DISCLN WO# 1690142	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3200 RUCKRIEGEL PKY	05/10/13 3:51: PM	05/11/13 08:40 AM	16200	Sewer Manhole	64505	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907744	DISCLN WO# 1690137	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3200 RUCKRIEGEL PKY	06/26/13 7:52: PM	06/27/13 08:08 AM	54000	Sewer Manhole	64505	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939742	DISCLN WO# 1940654	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	04/19/13 5:06: AM	04/19/13 02:52 PM	958564	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF CAPACITY DUE TO RAIN EVENT IN THE AREA	BLENDING AT JTOWN WQTC	1895856	PIPE DISCHARGE SUBMERGED- NO CLEAN UP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	04/24/13 11:23: AM	04/24/13 01:33 PM	10794	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1897510	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/05/13 8:50: AM	05/06/13 07:31 AM	775331	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1904082	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.

APPENDIX A-4
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	05/10/13 2:41: PM	05/11/13 07:41 PM	3507926	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1907656	PIPE DISCHARGE SUBMERGED- NO CLEANUP	THIS SITE IS IN NEGOTIATIONS TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	06/17/13 6:29: PM	06/18/13 05:26 AM	203626	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	LACK OF SYSTEM CAPACITY CAUSED By Storm	BLENDING AT JTOWN WQTC	1932006	NO CLEAN UP REQUIRED	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	06/26/13 6:20: PM	06/27/13 01:56 PM	2520260	Sewer Treatment Plant	MSD0255	CENT	CHENOWETH RUN	HEAVY RAIN - LACK OF SYSTEM CAPACITY	BLENDING AT JTOWN WQTC	1939730	NO CLEANUP OCCURRED - PIPE DISCHARGE SUBMERGED	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
CHENOWETH HILLS	KY0029459	4305 ST RENE CT	05/16/13 6:40: AM	05/16/13 06:49 AM	958	Sewer Treatment Plant	MSD0263	CENT	CHENOWETH RUN	LG&E POWER FAIL & THE GENERATOR FAILED TO START	BYPASS AT WQTC	1909417	NO DEBRIS	LG&E RESTORED POWER.
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	05/05/13 6:50: AM	05/05/13 10:00 PM	91000	Sewer Manhole	27116	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY RAIN EVENT	LACK OF SYSTEM CAPACITY	1904075	CREATED DISCHARGE CLEAN UP WORK ORDER #1686366.	THIS LOCATION IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	05/10/13 6:20: PM	05/10/13 11:30 PM	60000	Sewer Manhole	27116	WEST	OHIO RIVER	DUE TO HEAVY RAIN --LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1907715	CREATED CLEAN UP WO#1690025	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.
DEREK R. GUTHRIE	KY0078956	6810 SANDSTONE BLVD	06/26/13 10:40: PM	06/27/13 12:30 AM	5250	Sewer Manhole	29948	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY- HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939776	CREATED CLEAN UP WO#1939794	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	06/26/13 10:50: PM	06/27/13 12:20 AM	4250	Sewer Manhole	31073	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939777	CREATED DISCLN WO#1939790	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	06/26/13 10:55: PM	06/27/13 12:20 AM	4500	Sewer Manhole	31074	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939779	CREATED DISCLN WO#1939792	A SOLUTION FOR THIS LOCATION INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	4005 KIRBY LN	06/27/13 12:55: AM	06/27/13 11:00 AM	750	Sewer Manhole	61266	WEST	OHIO RIVER	lighting strike blew 3 fuses in panel	ELECTRICAL PROBLEMS AT MSD	1939793	no debris	replaced fuses in panel
DEREK R. GUTHRIE	KY0078956	4005 KIRBY LN	05/10/13 2:35: PM	05/11/13 12:15 AM	39000	Sewer Lift Station	MSD1203-PS	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	LACK OF SYSTEM CAPACITY	1907659	NO DEBRIS; NO CLEANUP	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	804 N ARBOR DR	06/26/13 11:40: PM	06/27/13 02:00 PM	21500	Sewer Manhole	00056-W	WEST	OHIO RIVER	rain event caused lack of system capacity	LACK OF SYSTEM CAPACITY	1939795	no debris	site found during rain event recon; will monitor & evaluate for repair
MORRIS FORMAN	KY0022411	806 PINE WAY	05/10/13 4:20: PM	05/11/13 08:00 AM	23500	Sewer Manhole	0057-W	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	LACK OF SYSTEM CAPACITY	1907702	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	806 PINE WAY	06/27/13 12:05: AM	06/27/13 03:30 AM	5125	Sewer Manhole	0057-W	WEST	OHIO RIVER	rain event caused a lack of system capacity	LACK OF SYSTEM CAPACITY	1939796	no debris	site found during rain event recon; will monitor & evaluate for repair
MORRIS FORMAN	KY0022411	7900 SHELBYVILLE RD	06/26/13 9:06: PM	06/27/13 11:00 AM	19500	Sewer Manhole	02933	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939809	DISCLN WO# 1940821	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3726 FINCASTLE RD	05/10/13 3:39: PM	05/13/13 02:53 PM	6300	Sewer Manhole	08717	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907766	DISCLN WO# 1690045	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3726 FINCASTLE RD	06/26/13 6:51: PM	06/27/13 12:29 AM	18000	Sewer Manhole	08717	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939892	DISCLN WO# 1940582	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	05/10/13 5:15: PM	05/10/13 10:30 PM	10741	Sewer Manhole	08935-SM	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907739	NO CLEAN UP POSSIBLE DISCHARGE PIPE SUBMERGED	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	06/17/13 6:58: PM	06/18/13 01:47 AM	372637	Sewer Manhole	08935-SM	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1931969	NO CLEANUP REQUIRED, DISCHARGE PIPE SUBMERGED	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	06/26/13 6:33: PM	06/27/13 09:25 PM	6639301	Sewer Manhole	08935-SM	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939757	NO CLEANUP - PIPE DISCHARGE SUBMERGED	LOCATION INCLUDED IN THE IOAP

APPENDIX A-4
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	4119 LEE AVE	05/05/13 7:18: AM	05/07/13 06:46 PM	7200	Sewer Manhole	104231	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1904127	DISCLN WO# 1686483	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/10/13 2:30: PM	05/13/13 02:54 PM	10800	Sewer Manhole	104231	WEST	OHIO RIVER	LACK OF SYSTE CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907770	DISCLN WO# 1690047	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	06/26/13 6:47: PM	06/27/13 12:11 AM	6000	Sewer Manhole	104231	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939981	DISCLN WO# 1940575	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7713 WESTPORT RD	06/26/13 10:47: PM	06/27/13 11:38 AM	122000	Sewer Manhole	105936	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940257	DISCLN WO# 1940732	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7713 WESTPORT RD	06/27/13 12:50: AM	06/27/13 05:30 AM	26000	Sewer Manhole	105936	WEST	OHIO RIVER	RAIN EVENT CAUSED LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1939816	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON; WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/10/13 2:31: PM	05/14/13 02:24 PM	900	Sewer Manhole	13943	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907771	DISCLN WO# 1690049	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	06/26/13 10:16: PM	06/27/13 12:15 AM	1500	Sewer Manhole	13943	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939983	DISCLN WO# 1940577	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1726 FRASER DR	06/26/13 6:00: PM	06/27/13 01:15 AM	3500	Sewer Manhole	16649	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940655	DISCLN WO# 1940835	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7404 ARROWWOOD RD	06/26/13 8:15: PM	06/26/13 08:40 PM	625	Sewer Manhole	21628-W	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1939791	MSD CLEANED & SANITIZED AREA	HAULED TO PREVENT DISCHARGE
MORRIS FORMAN	KY0022411	3302 TROUT CREEK DR	06/27/13 12:20: AM	06/20/13 12:39 PM	84000	Sewer Manhole	23211	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940016	DISCLN WO# 1940607	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1910 CHARBDIN PL	06/26/13 10:30: PM	06/27/13 11:53 AM	90000	Sewer Manhole	24155	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939822	DISCLN WO# 1940823	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3317 BROWNSBORO RD	06/26/13 9:35: PM	06/27/13 06:45 AM	6500	Sewer Manhole	26752	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939805	DISCLN WO# 1940838	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	05/10/13 4:49: PM	05/11/13 08:59 AM	10000	Sewer Manhole	27005	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907736	DISCLN WO# 1690055	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	06/17/13 9:40: PM	06/18/13 05:40 AM	50	Sewer Manhole	27005	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1932014	DISCLN WO# 1932144	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	06/26/13 8:20: PM	06/27/13 09:51 AM	165000	Sewer Manhole	27005	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939753	DISCLN WO#1940797	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	8111 SHELBYVILLE RD	06/27/13 1:45: AM	06/27/13 11:29 AM	45000	Sewer Manhole	30376	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940028	DISCLN WO# 1940785	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3530 FINCASTLE RD	06/26/13 6:54: PM	06/27/13 12:25 AM	4500	Sewer Manhole	36763	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939894	DISCLN WO# 1940590	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	06/26/13 8:10: PM	06/27/13 06:34 AM	30000	Sewer Manhole	40559	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939755	DISCLN WO# 1940682	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	5 RIO VISTA DR	06/27/13 7:07: AM	06/27/13 04:17 PM	43000	Sewer Manhole	40879	WEST	OHIO RIVER	LACK OF CAPACITY DUE TO RAIN EVENT	LACK OF SYSTEM CAPACITY	1940005	MSD CLEANED & SANITIZED THE AREA	RESET MANHOLE
MORRIS FORMAN	KY0022411	2 RIO VISTA DR	06/27/13 7:05: AM	06/27/13 04:17 PM	2760	Sewer Manhole	40880	WEST	OHIO RIVER	LACK OF CAPACITY DUE TO RAIN EVENT	LACK OF SYSTEM CAPACITY	1940012	MSD CLEANED & SANITIZED THE AREA	CONTACTED I&FP FOR REPAIRS

APPENDIX A-4
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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MORRIS FORMAN	KY0022411	300 MOCKINGBIRD VALLEY RD	06/27/13 12:15: AM	06/27/13 06:30 AM	7500	Sewer Manhole	41374	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939825	DISCLN WO# 1940831	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1108 DUPONT CIR	06/27/13 1:25: AM	06/27/13 12:31 PM	55000	Sewer Manhole	43726	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940021	DISCLN WO# 1940761	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2002 MILLVALE RD	06/26/13 8:21: PM	06/27/13 06:19 AM	15000	Sewer Manhole	45829	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939748	DISCLN WO# 1940677	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1132 ROSTREVOR CIR	06/17/13 9:45: PM	06/18/13 05:45 AM	50	Sewer Manhole	45835	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1932018	DISCLN WO# 1932163	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1132 ROSTREVOR CIR	06/26/13 8:23: PM	06/27/13 10:31 AM	165000	Sewer Manhole	45835	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939745	DISCLN WO# 1940658	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	201 BULLITT LN	05/10/13 5:17: PM	05/11/13 09:26 AM	18250	Sewer Manhole	47582	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907762	DISCLN WO# 1690057	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	202 OXMOOR LN	05/10/13 5:17: PM	05/11/13 09:26 AM	205000	Sewer Manhole	47583	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907764	DISCLN WO# 1690057	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	202 OXMOOR LN	06/27/13 1:15: AM	06/27/13 10:58 AM	64000	Sewer Manhole	47583	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940023	DISCLN WO#	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	8021 CHRISTIAN CT	06/26/13 9:52: PM	06/27/13 11:14 AM	112500	Sewer Manhole	47593	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939813	DISCLN WO# 1940799	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3305 INDIAN CREEK CT	06/26/13 6:25: PM	06/27/13 12:44 PM	126000	Sewer Manhole	51180	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940011	DISCLN WO# 1940605	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2011 TERRIL LN	06/27/13 12:28: AM	06/27/13 01:47 PM	3000	Sewer Manhole	51180	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939896	DISCLN WO# 4196021	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	04/16/13 9:40: PM	04/16/13 10:25 PM	3750	Sewer Manhole	51594	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1895008	DISCLN WO# 1677266	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	05/05/13 7:53: AM	05/05/13 01:18 PM	21600	Sewer Manhole	51594	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1904126	DISCLN WO# 1686495	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	05/10/13 2:40: PM	05/10/13 06:03 PM	9000	Sewer Manhole	51594	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907768	DISCLN WO# 1690046	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	06/17/13 7:20: PM	06/17/13 09:05 PM	3000	Sewer Manhole	51594	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1932020	DISCLN WO# 1932042	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1418 TREVILIAN WAY	06/26/13 6:39: PM	06/27/13 12:50 AM	15000	Sewer Manhole	51594	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939954	DISCLN WO# 1940598	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3726 FINCASTLE RD	05/10/13 3:38: PM	05/13/13 02:52 PM	1800	Sewer Manhole	66349	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907765	DISCLN WO# 1690039	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7913 SHELBYVILLE RD	05/10/13 9:40: PM	05/11/13 08:55 AM	20500	Sewer Manhole	84155	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907773	DISCLN WO# 1690143	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7913 SHELBYVILLE RD	06/26/13 9:47: PM	06/27/13 11:19 AM	120000	Sewer Manhole	84155	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939818	DISCLN WO# 1940559	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	37 ARROWHEAD RD	06/26/13 10:47: PM	06/27/13 01:05 AM	24000	Sewer Manhole	89791	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939824	DISCLN WO# 1940828	LOCATION INCLUDED IN THE IOAP

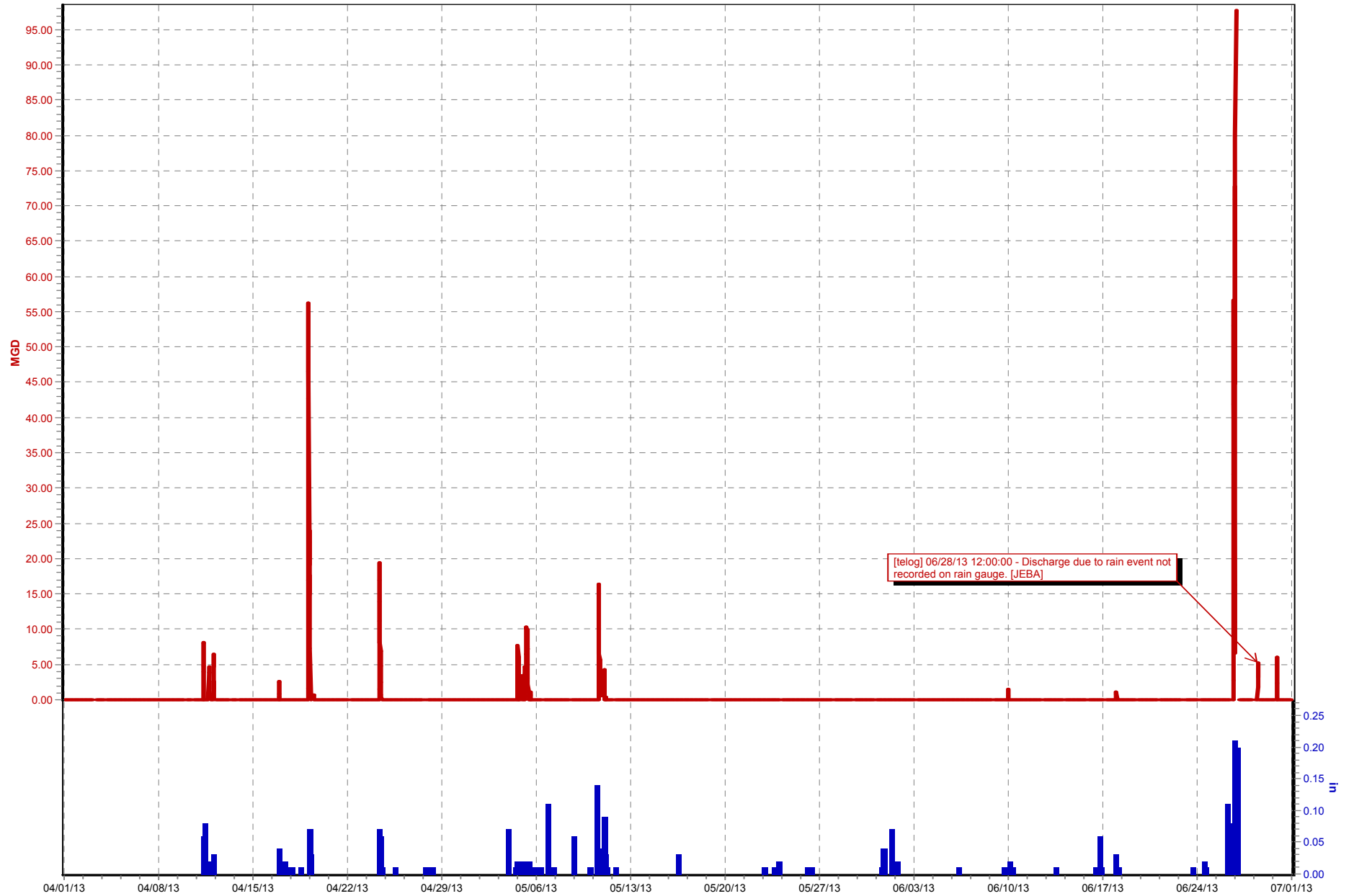
APPENDIX A-4
UNAUTHORIZED DISCHARGES
TO WATERS OF UNITED STATES
APRIL 1, 2013 THROUGH JUNE 30, 2013

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	8021 CHRISTIAN CT	06/26/13 8:51: PM	06/27/13 11:11 AM	75000	Sewer Manhole	90700	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939811	DISCLN WO# 1940563	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3305 BENT CREEK CT	06/27/13 12:25: AM	06/27/13 12:41 PM	84000	Sewer Service Line	BU05074039	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1940019	DISCLN WO# 1940610	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1215 ELLISON AVE	05/22/13 1:12: PM	05/22/13 01:47 PM	35	Sewer Manhole	CSO113	WEST	OHIO RIVER	OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE / ROOTS	1925362	NO CLEAN UP PERFORMED- PIPE DISCHARGES DIRECTLY INTO STREAM	FLUSHED/VACTORED THE OBSTRUCTION/DEBRIS FROM SEWER
MORRIS FORMAN	KY0022411	1201 LEXINGTON RD	05/03/13 6:45: AM	05/03/13 12:05 PM	24000	Sewer Manhole	CSO153	WEST	OHIO RIVER	OBSTRUCTION IN THE SIPHON CAUSING OVERFLOW FROM CSO	OBSTRUCTION-NOT GREASE / ROOTS	1903654	NO CLEANUP PERFORMED, PIPE DISCHARGES DIRECTLY TO IMPROVED CHANNEL	FLUSHED SIPHON TO REMOVE UNKNOWN OBSTRUCTION FLUSH WORK ORDER # 1686162
MORRIS FORMAN	KY0022411	4108 LEE AVE	05/05/13 7:21: AM	05/07/13 06:47 PM	300	Sewer Service Line	KK14815019	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1904128	DISCLN WO# 1686479	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4108 LEE AVE	05/10/13 2:32: PM	05/13/13 02:55 PM	360	Sewer Service Line	KK14815019	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1907772	DISCLN WO# 1690051	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4108 LEE AVE	06/26/13 10:17: PM	06/27/13 12:16 AM	1000	Sewer Service Line	KK14815019	WEST	OHIO RIVER	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1939984	DISCLN WO# 1940602	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2120 INDIAN HILLS TRL	06/27/13 12:30: AM	06/27/13 04:17 PM	14205	Sewer Lift Station	MSD0186-PS	WEST	OHIO RIVER	RAIN EVENT CAUSED LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1939820	NO DEBRIS	SITE FOUND DURING RAIN EVENT RECON; WILL MONITOR & EVALUATE FOR REPAIR
HUNTING CREEK SOUTH	KY0029114	6407 DEEP CREEK DR	06/07/13 10:20: AM	06/07/13 03:00 PM	250	Sewer Main	66932	EAST	HARRODS CREEK	STRUCTURAL FAILURE OF MAIN SEWER	STRUCTURAL FAILURE	1929639	MSD CLEANED AND SANITIZE THE IMPACTED AREA.	WORK ORDER 1929692; WATER PLUG THE LEAK; PERMANENT REPAIR WILL BE MADE
TIMBERLAKE	KY0043087	5504 TIMBER RIDGE DR	06/04/13 4:15: PM	06/04/13 05:15 PM	900	Sewer Treatment Plant	MSD0293	EAST	HARRODS CREEK	WASTE WAS LEFT ON BY OPERATOR.CAUSING SOLIDS TO GET IN #2 PLANT.	BYPASS AT WQTC	1928851	NO CLEAN UP SUBMERGED DISCHARGE.	TURNT OFF RETURNS.
TIMBERLAKE	KY0043087	5504 TIMBER RIDGE DR	06/13/13 10:25: AM	06/13/13 10:35 AM	500	Sewer Treatment Plant	MSD0293	EAST	HARRODS CREEK	CONTRACTOR PUMPING LAGOON BACK INTO PLANT CAUSED PLANT TO DISCHARGE	BYPASS AT WQTC	1930971	NO CLEANUP	CONTRACTOR ORDERED TO CEASE OPERATIONS
FLOYDS FORK	KY0102784	14310 LAKE FOREST DR	05/27/13 2:45: PM	05/27/13 05:00 PM	4050	Sewer Main	80351B-AG	EAST	FLOYDS FORK	Force Main Break	STRUCTURAL FAILURE	1925729	MSD personnel will clean and sanitize the area	Maintenance will repair the force main

Appendix B – CSO Flow Monitoring Data

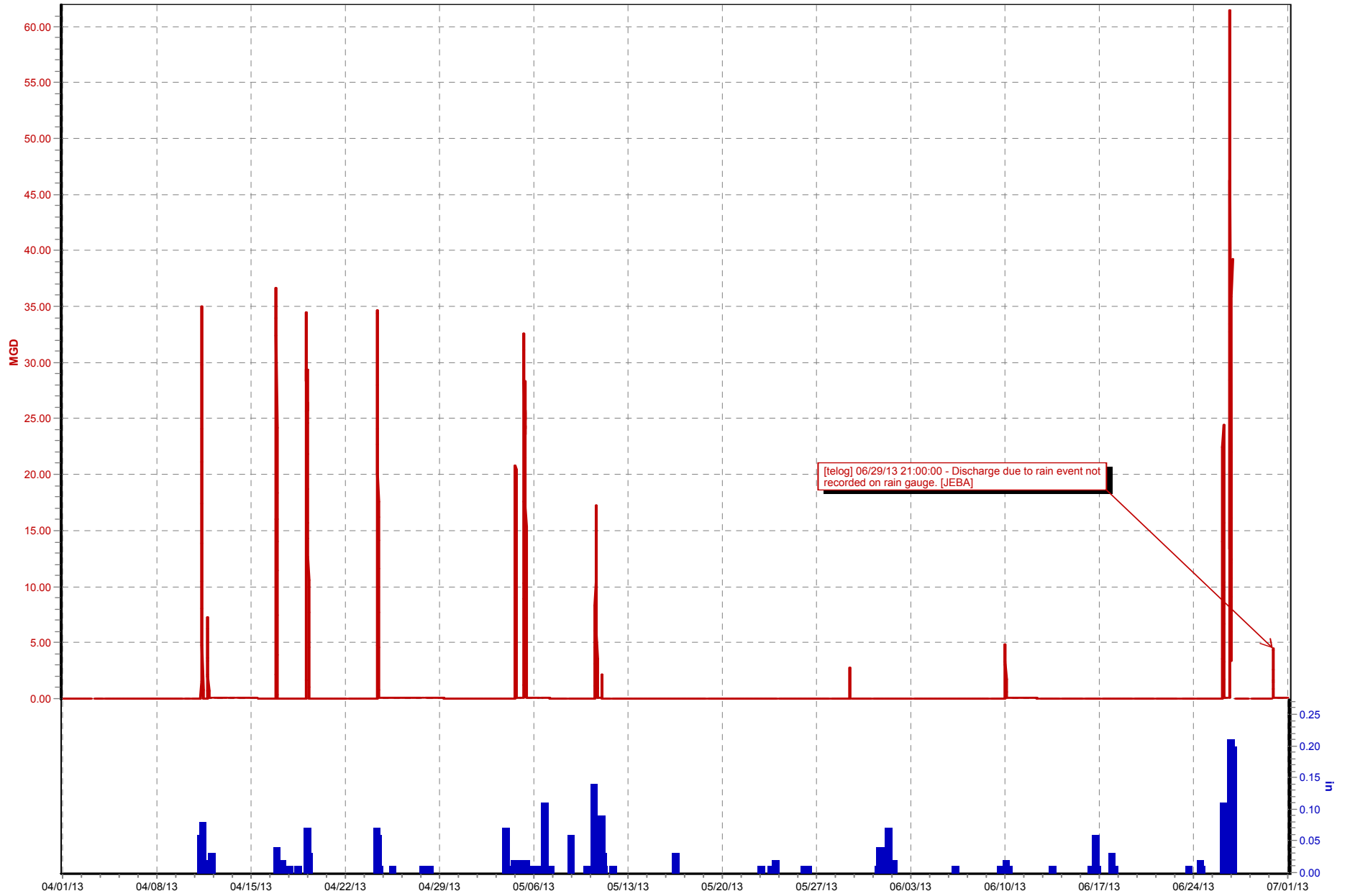
CSO015 Bell Lane (04/01/13 to 07/01/13)

Flow (MGD) TR04_Morris Forman WQTC.Rain (in)



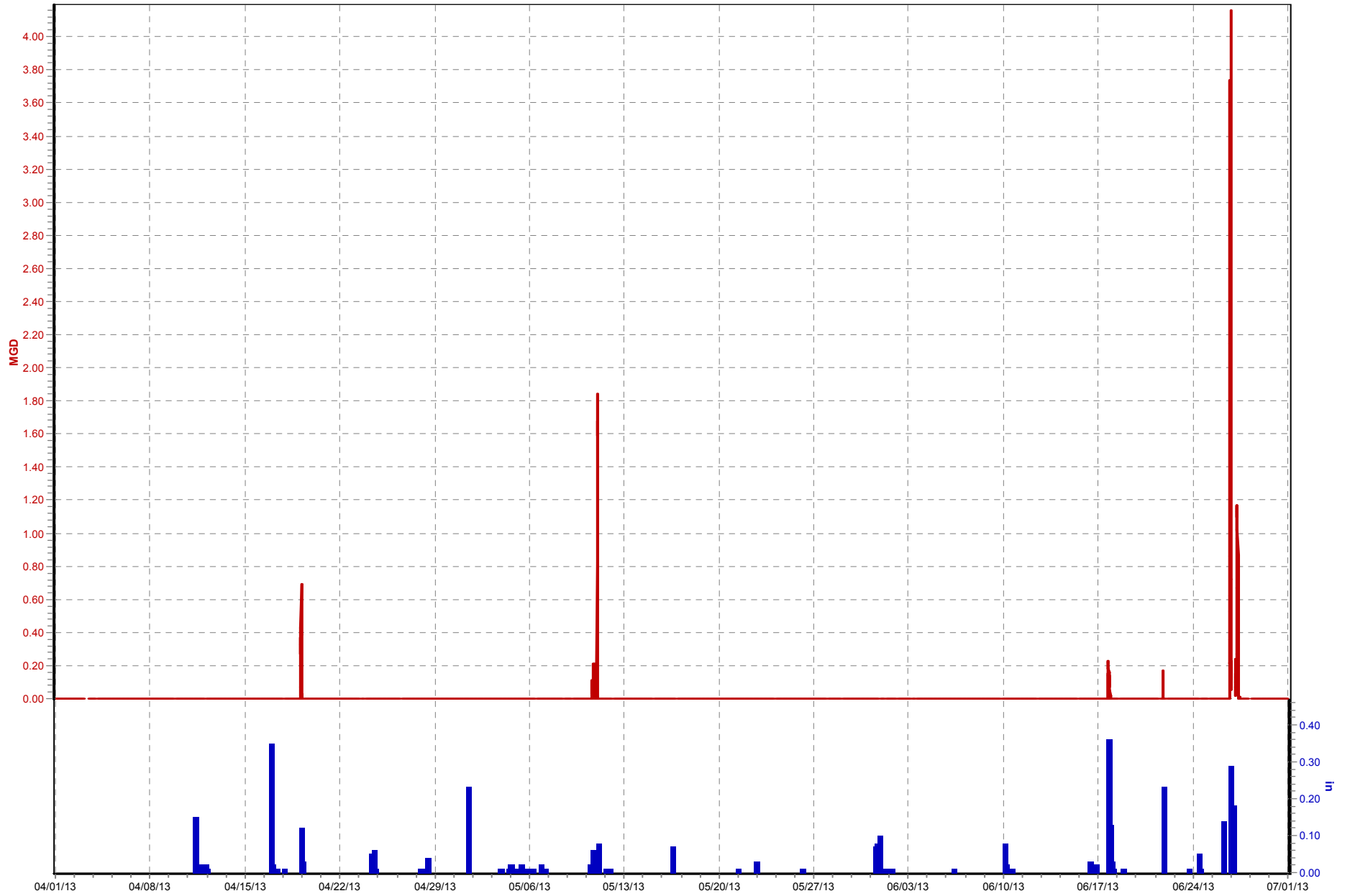
CSO016 Winnrose Way (04/01/13 to 07/01/13)

CSO016 Flow (MGD) TR04_Morris Forman WQTC.Rain (in)



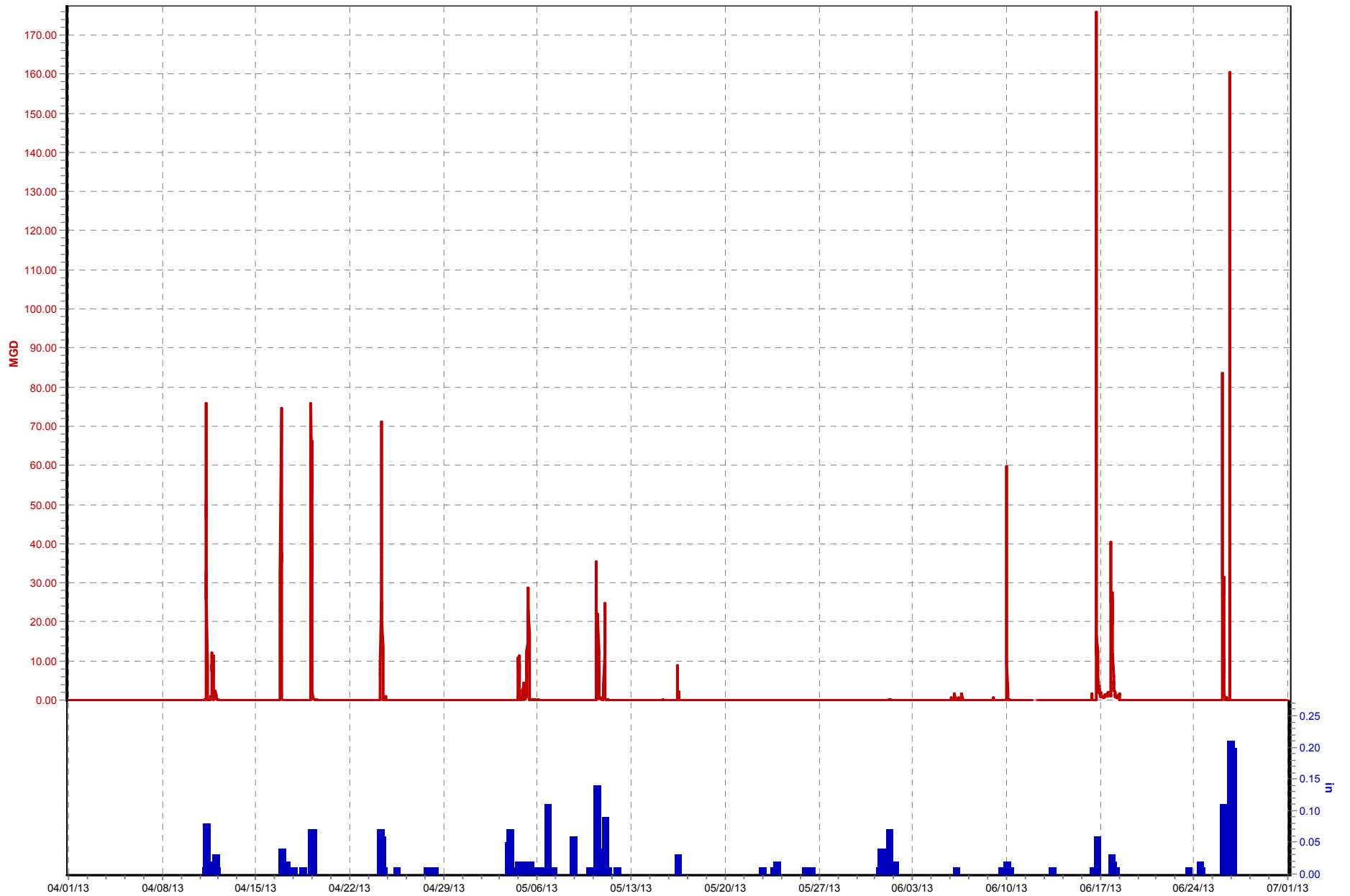
CSO018 Nightingale Rd (04/01/13 to 07/01/13)

Nightingale PS.CSO018 Flow (MGD) TR12_Nightingale PS.Rain (in)



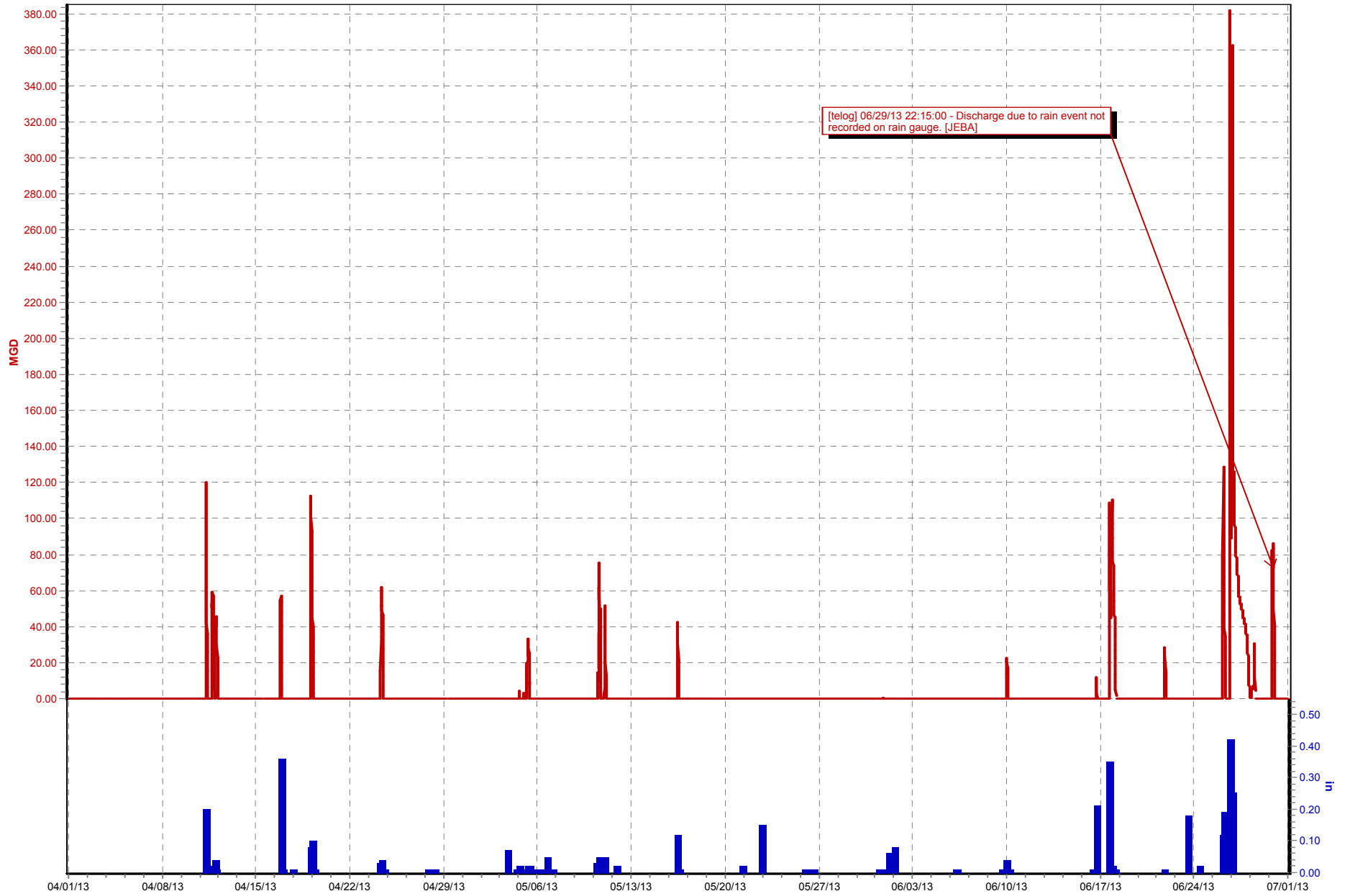
CSO019 34th and Rudd (04/01/13 to 07/01/13)

Flow 1 (MGD) TR04_Morris Forman WQTC.Rain (in)



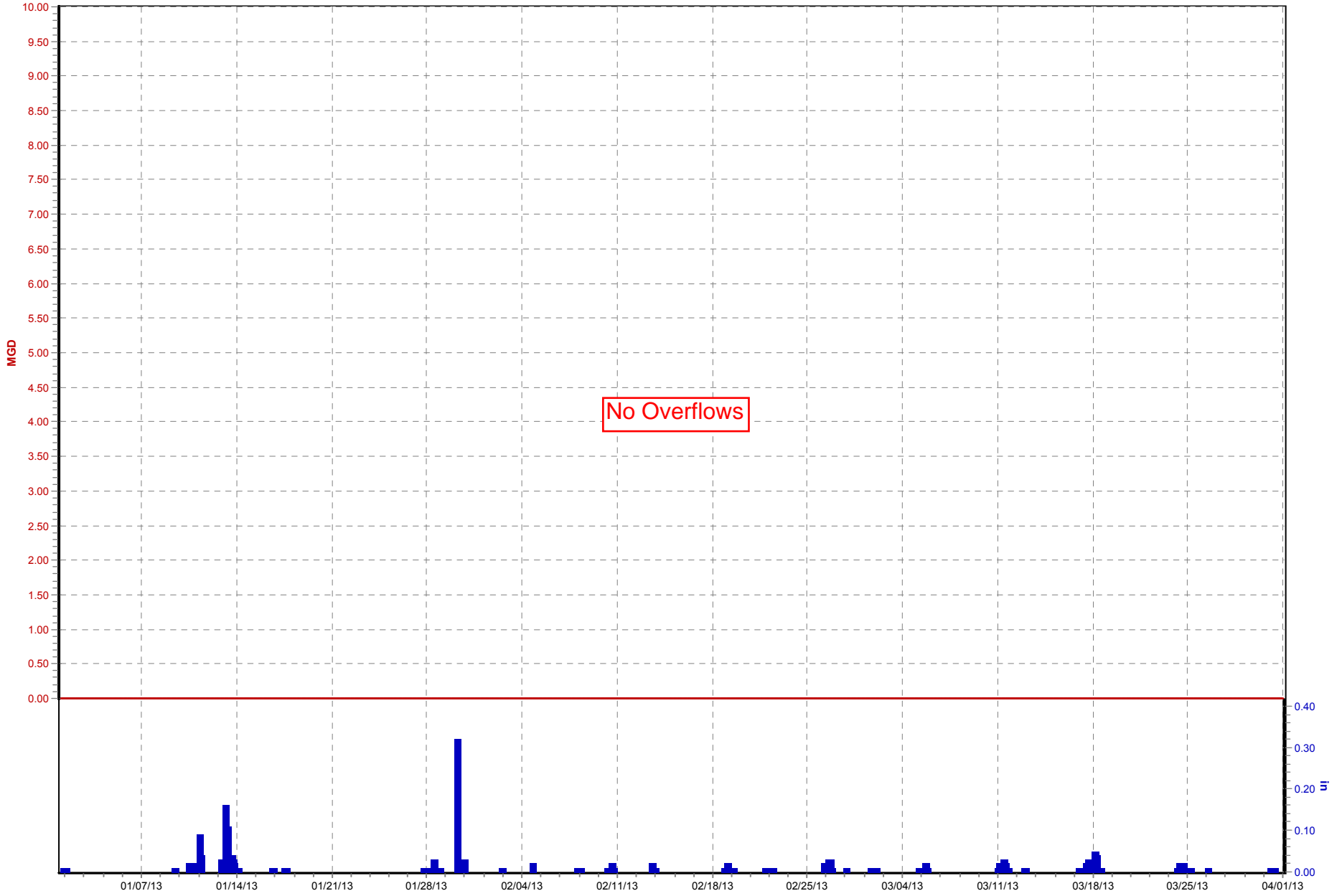
CSO020 Buchanan St by Stark PS (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



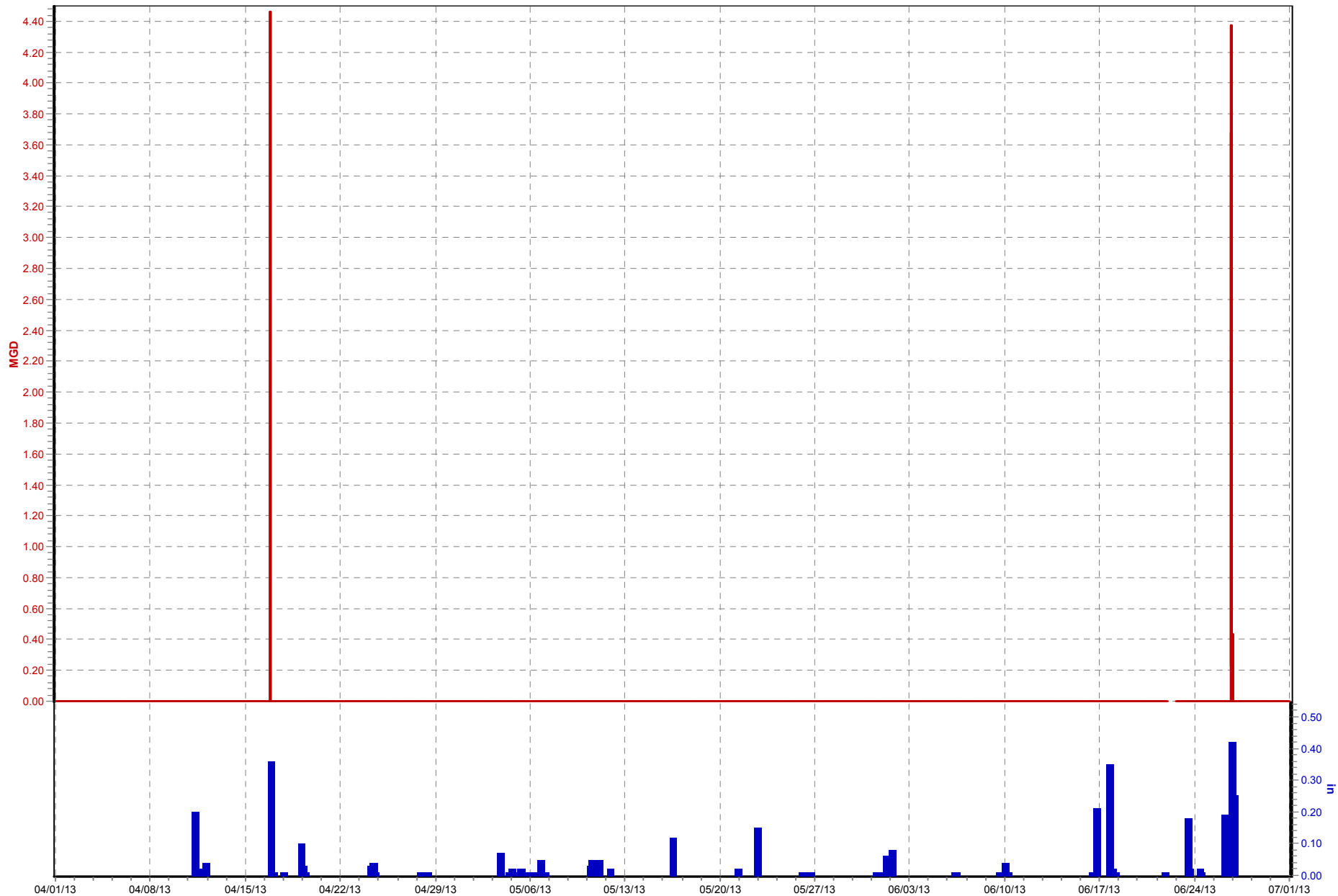
CSO027 7th and Broadway (01/01/13 to 04/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



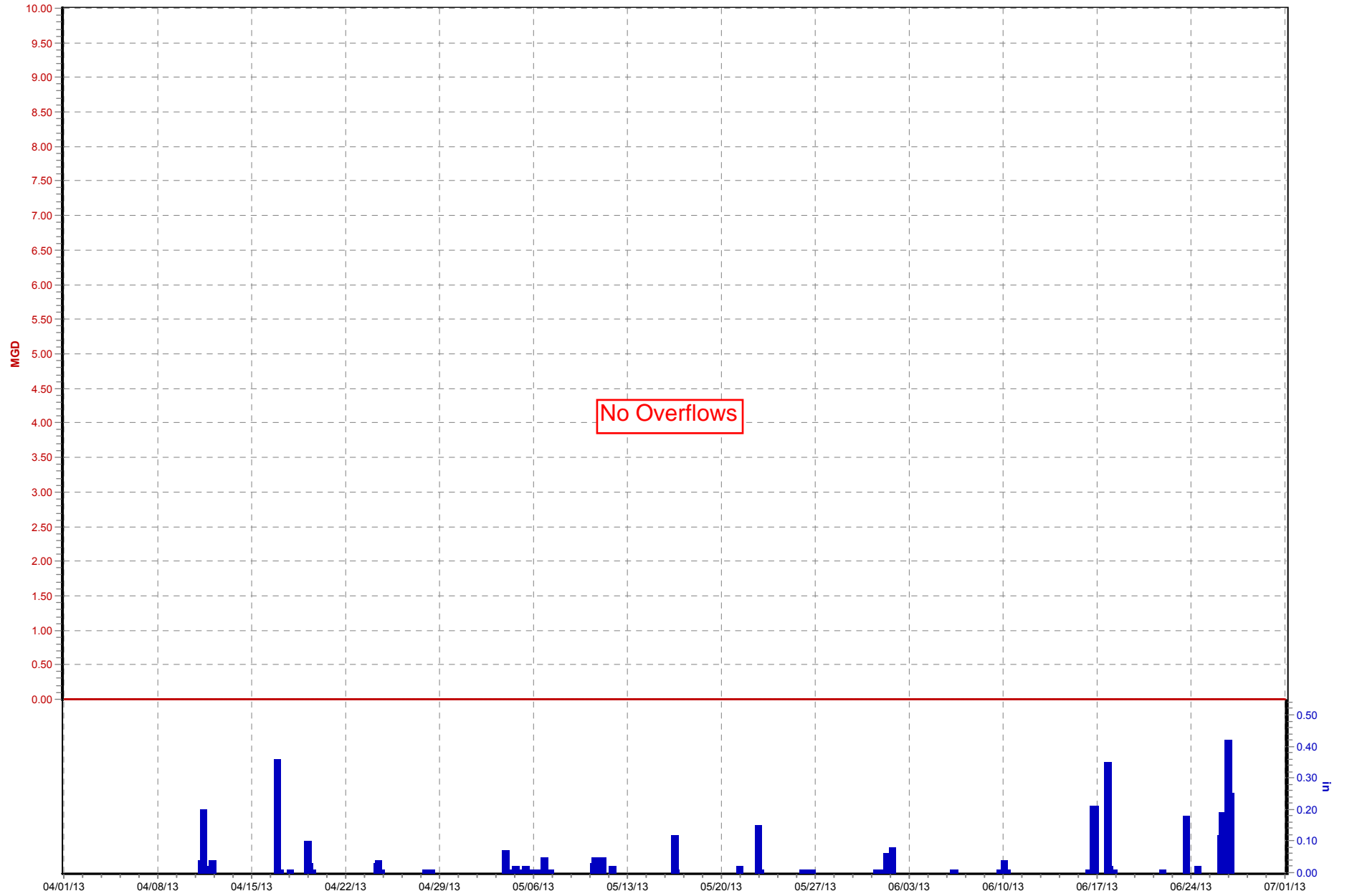
CSO028 6th and York St (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



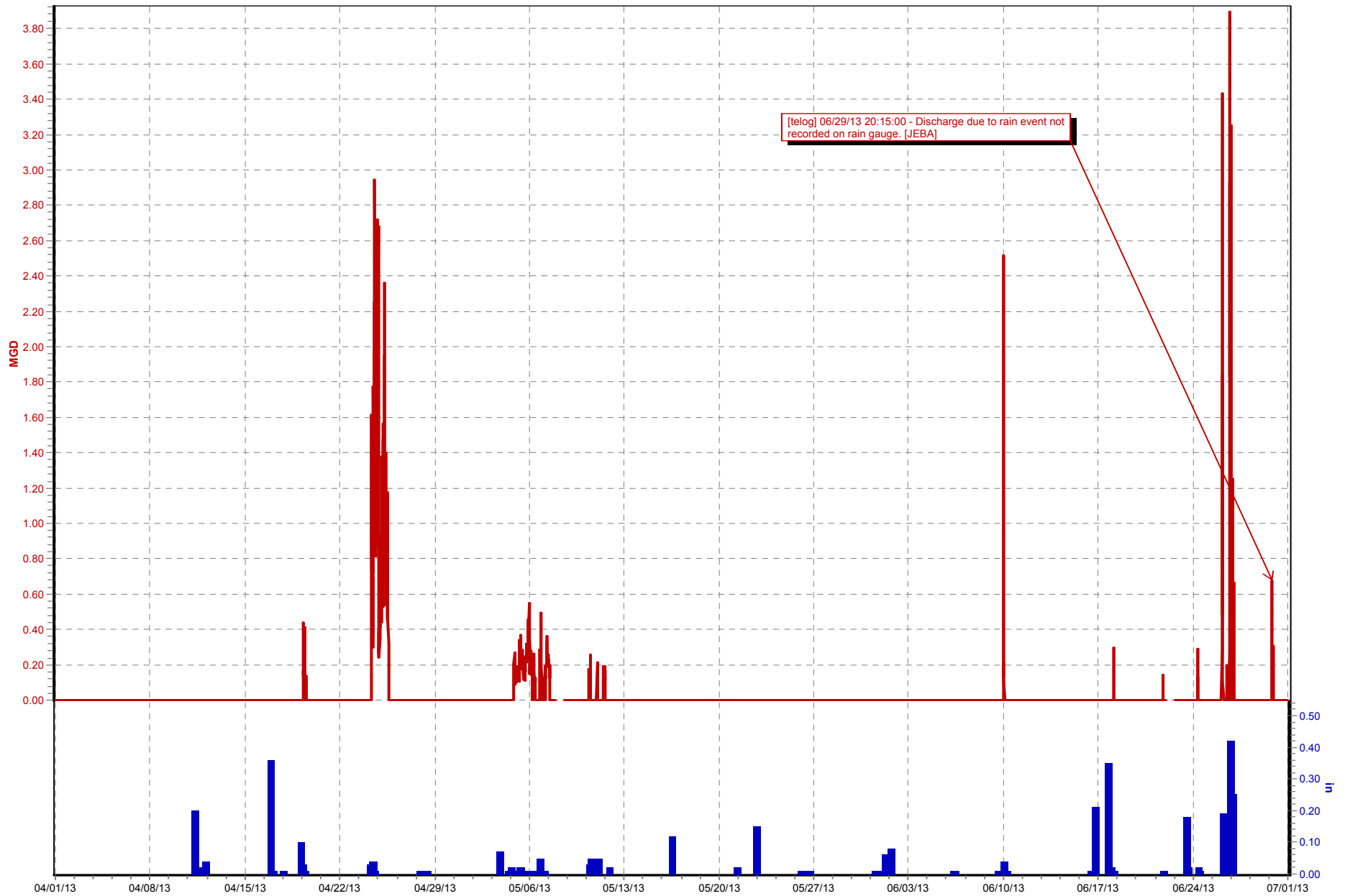
CSO029 LGE Lot 9th St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



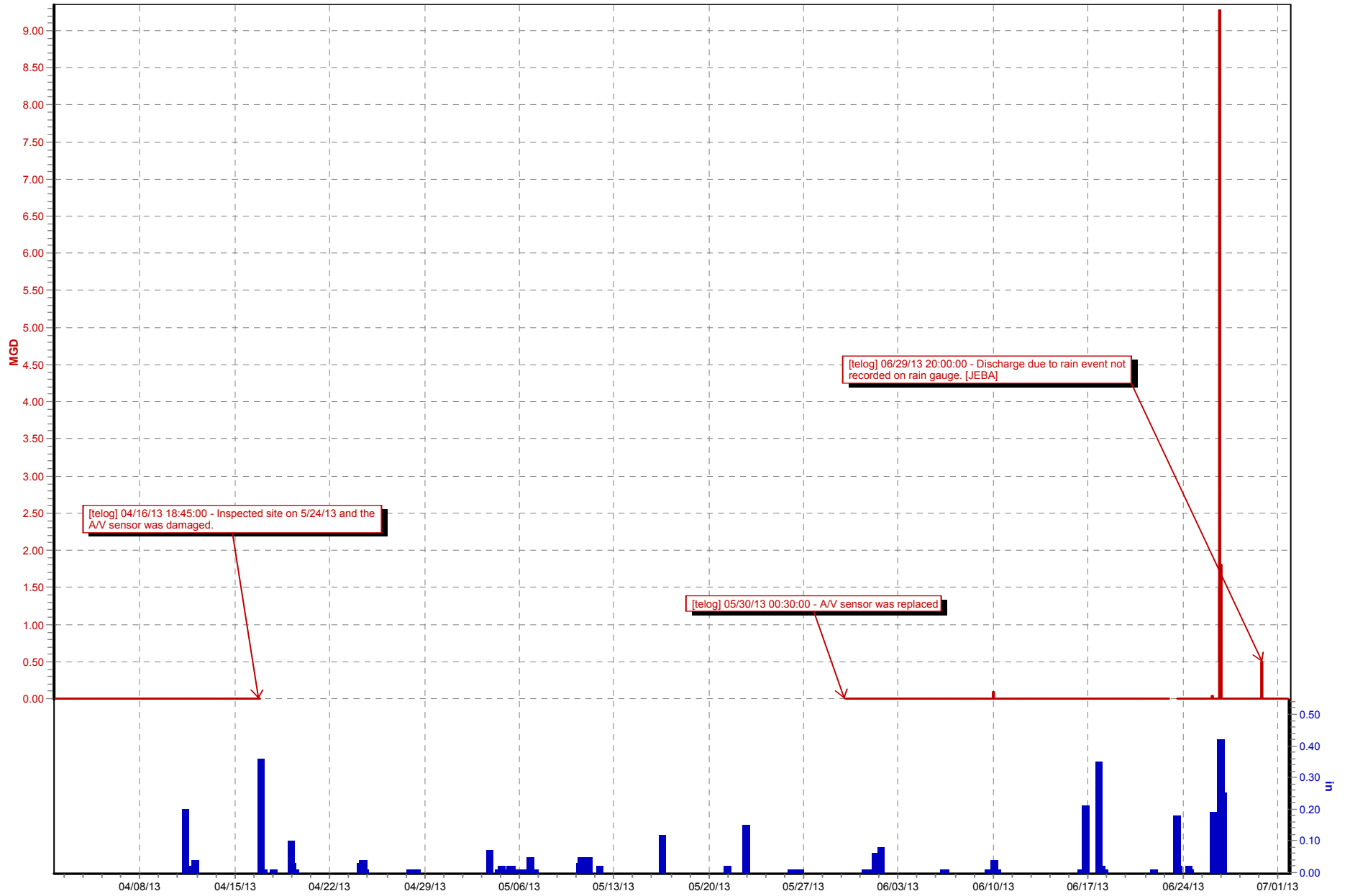
CSO031 6th and Breckinridge (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



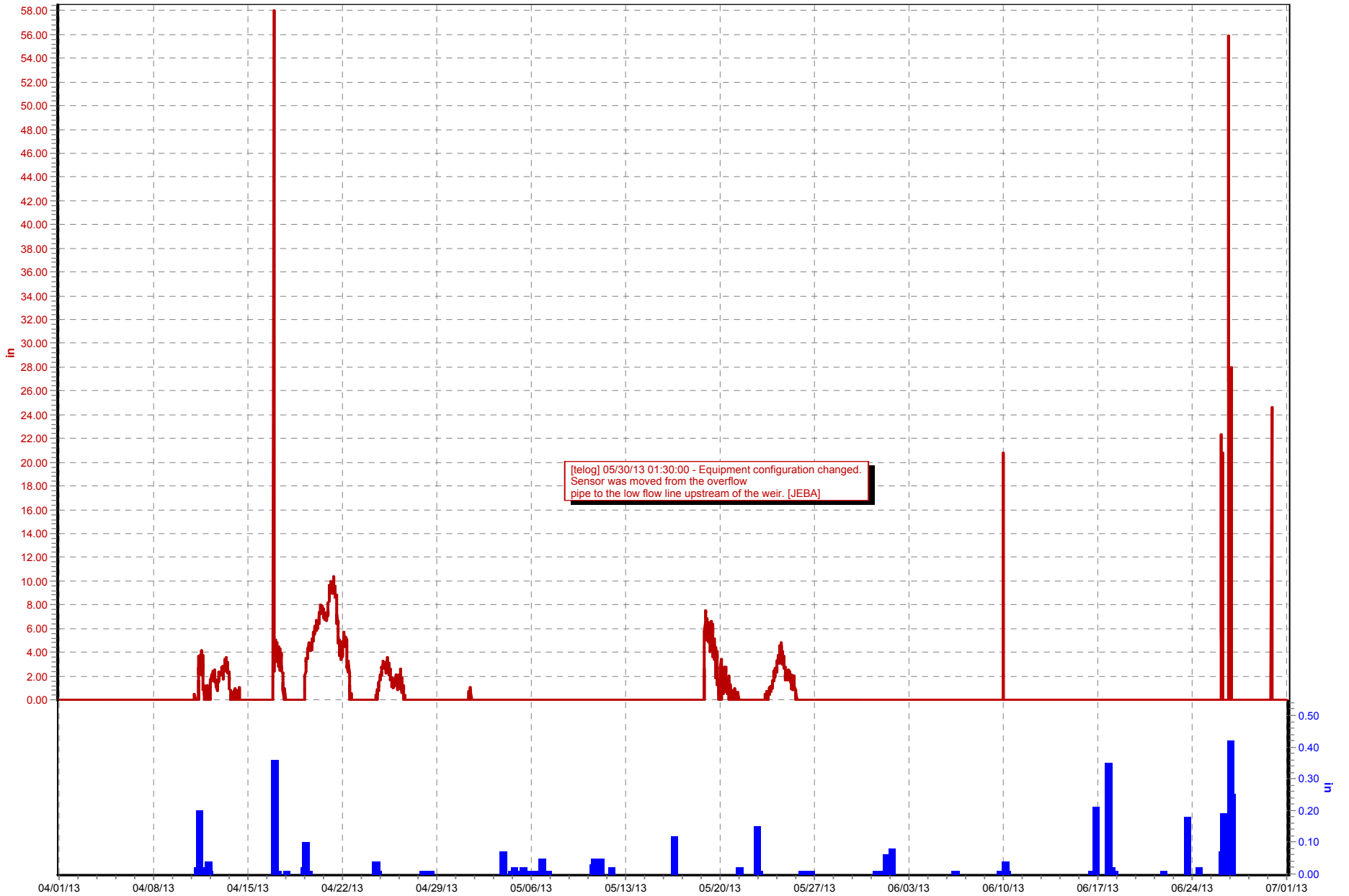
CSO034 4th and York (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



CSO035_Upstream_of_Dam (04/01/13 to 07/01/13)

CSO 035 Overflow Level (in) CSO035.Overflow Level (in) TR05_Beargrass PS.Rain (in)



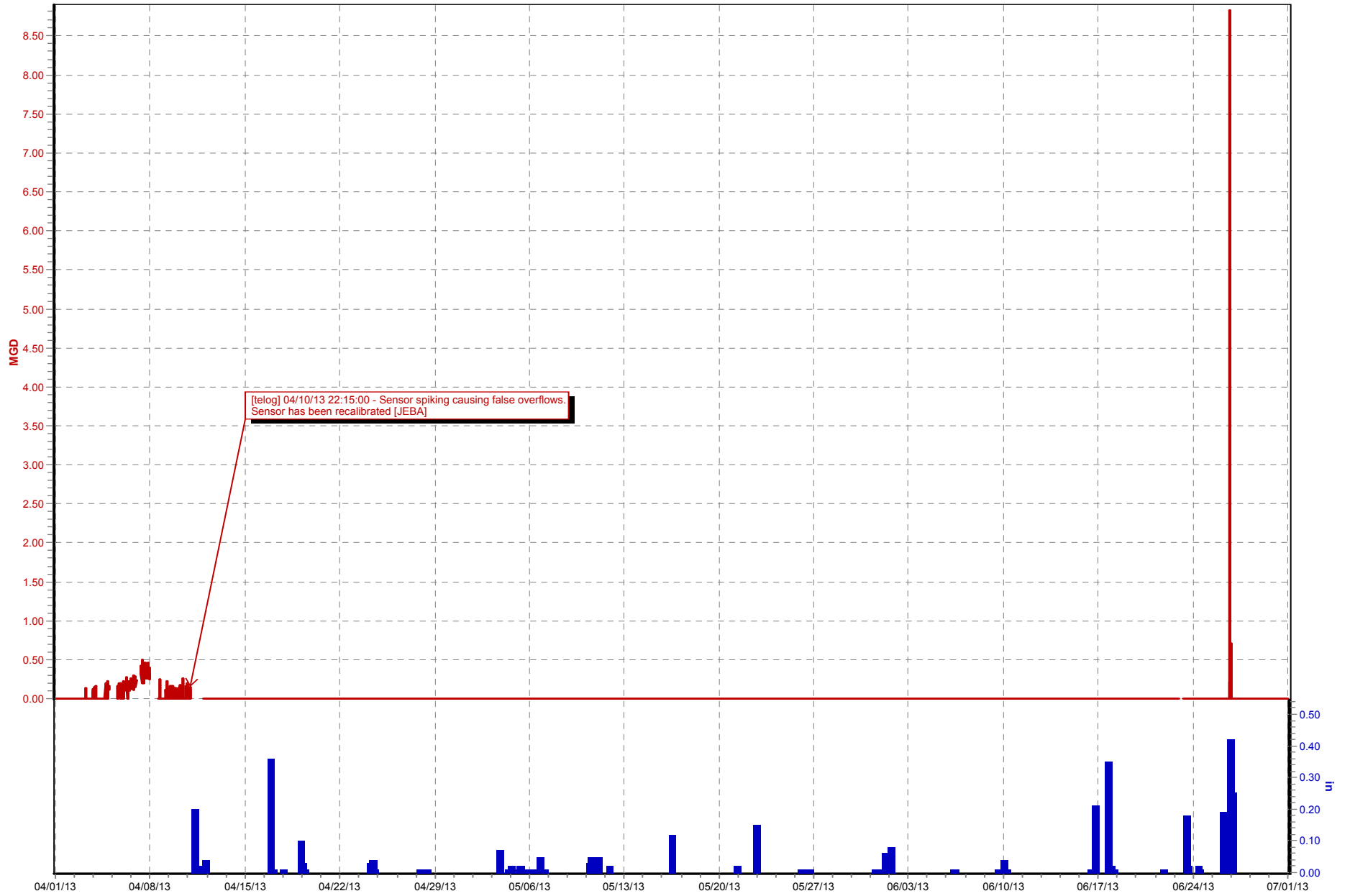
CSO036 3rd and Broadway (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



CSO038 5th and Broadway (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



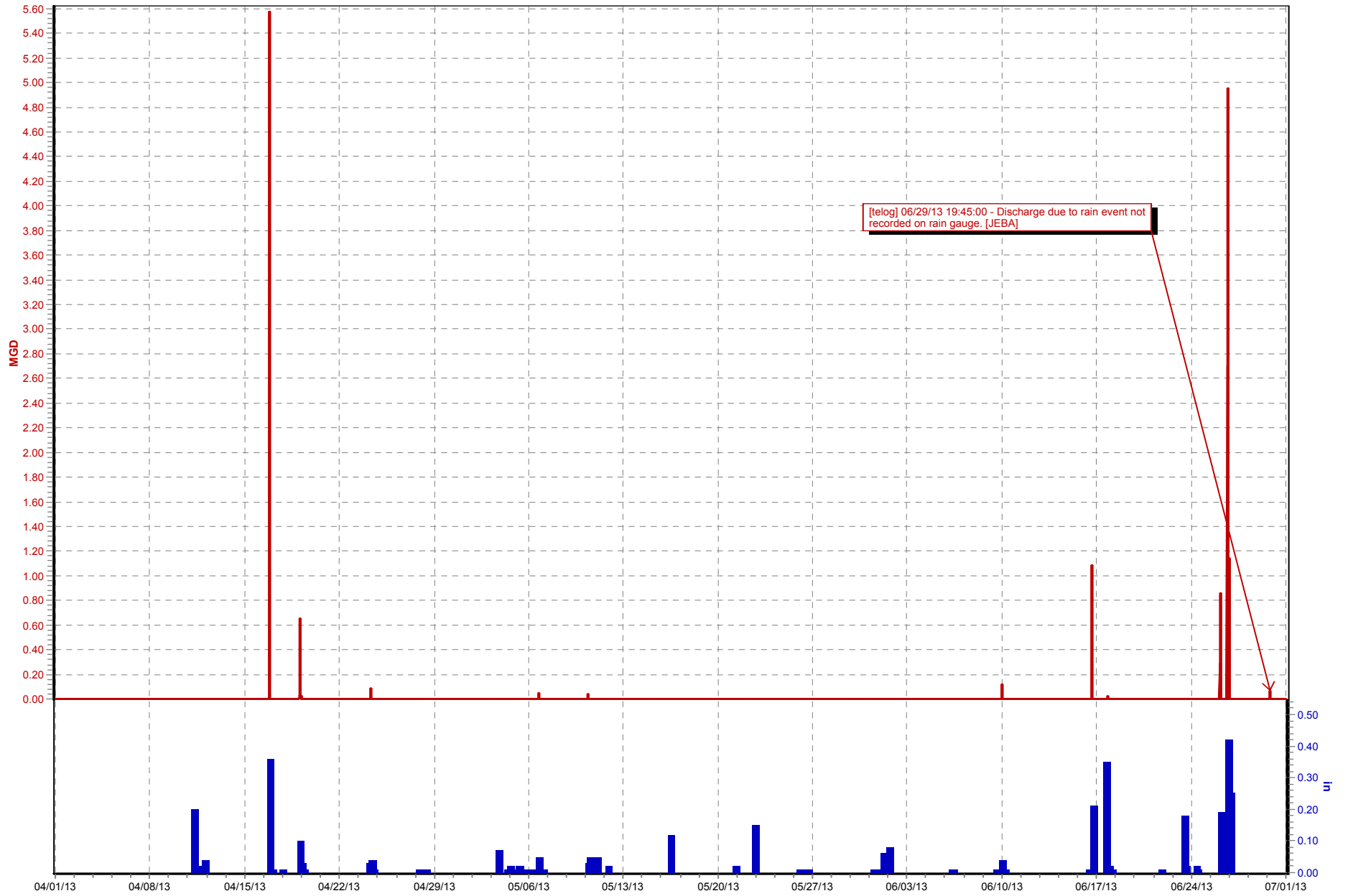
CSO050 12th and Rowan (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO051 11th St and Main St (04/01/13 to 07/01/13)

M1 Flow (MGD) TR05_Beargrass PS.Rain (in)



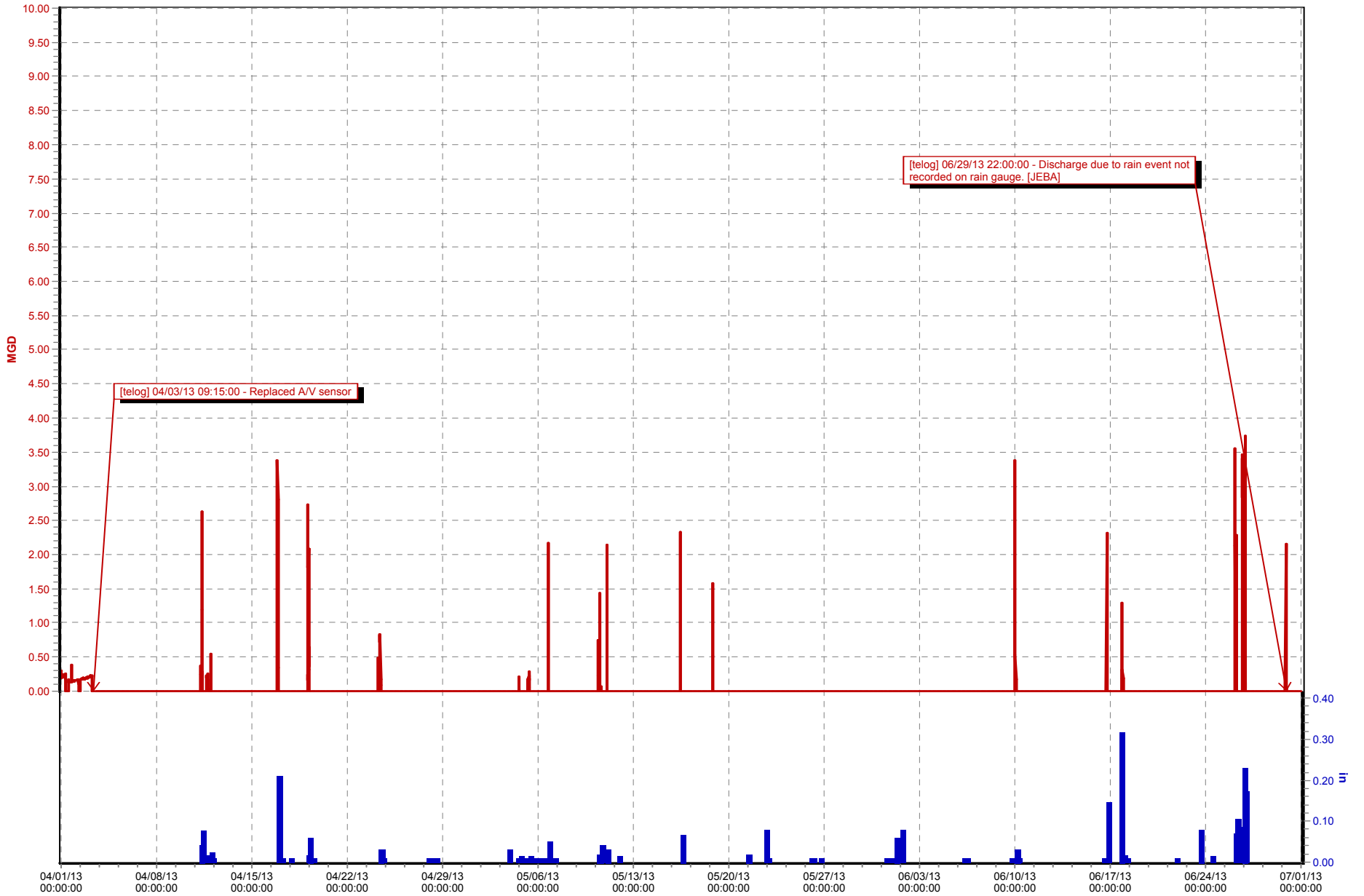
CSO052 10th St (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



CSO053 7th and Main St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



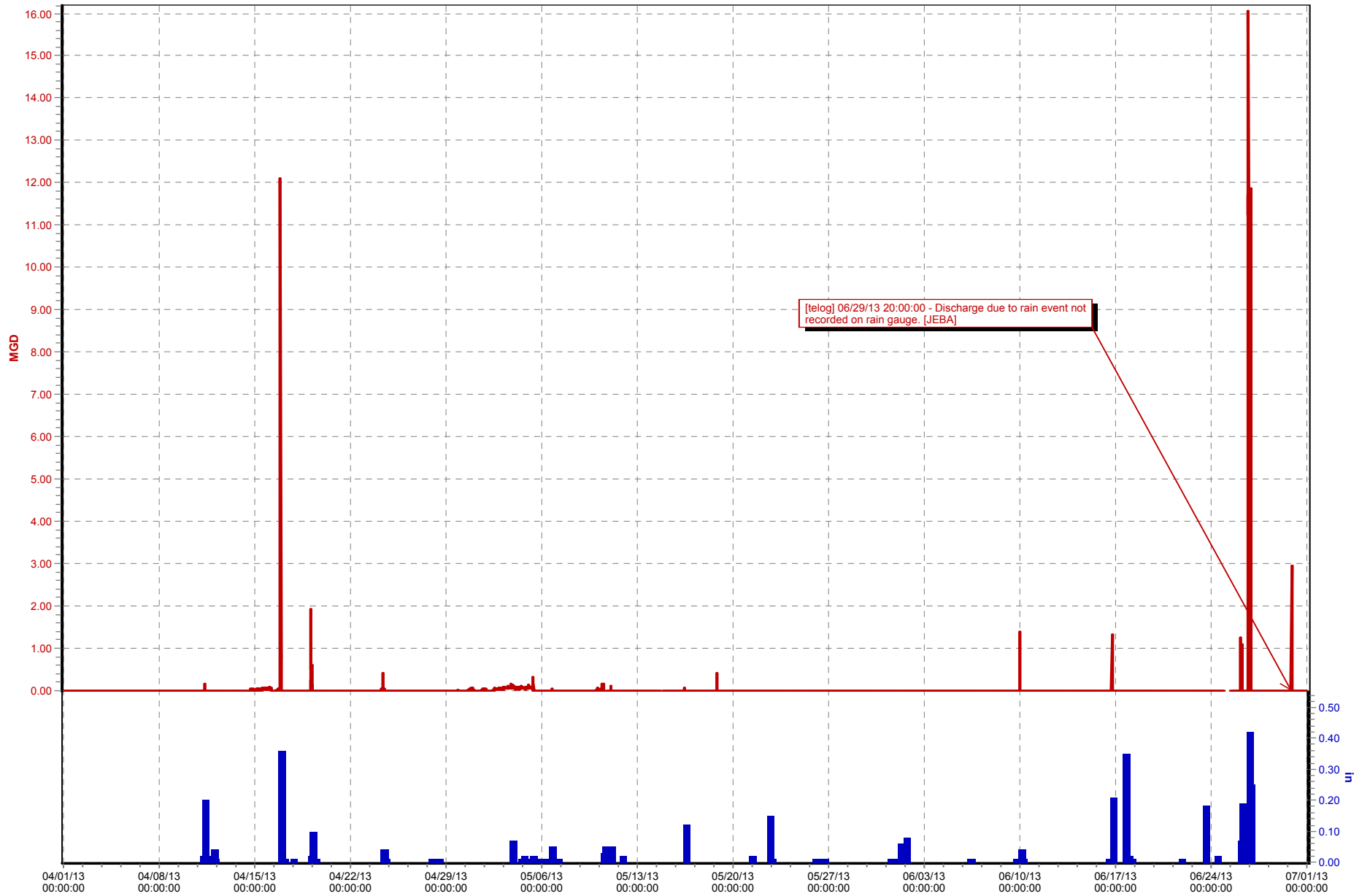
CSO054 7th St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



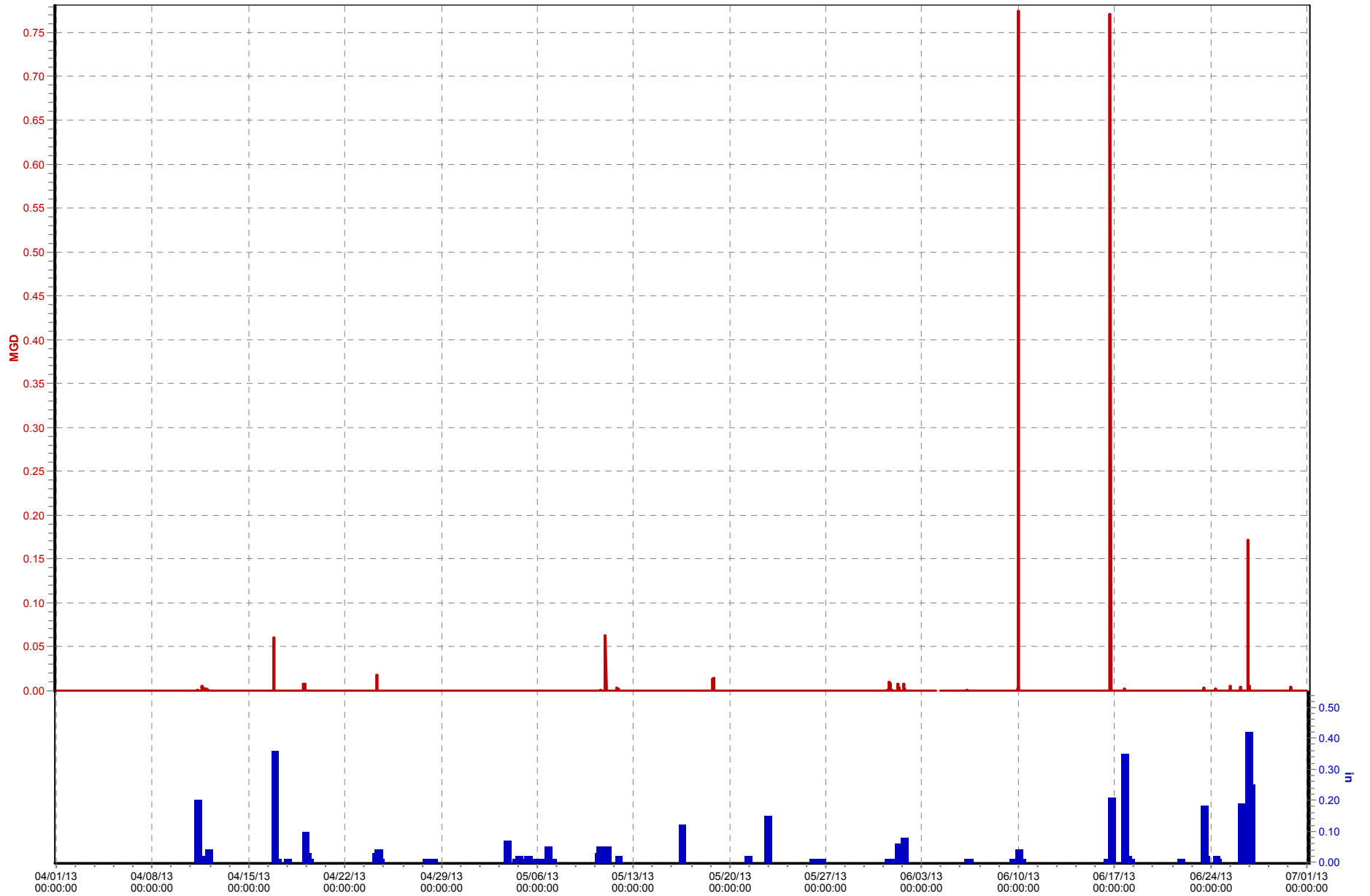
CSO055 6th St (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



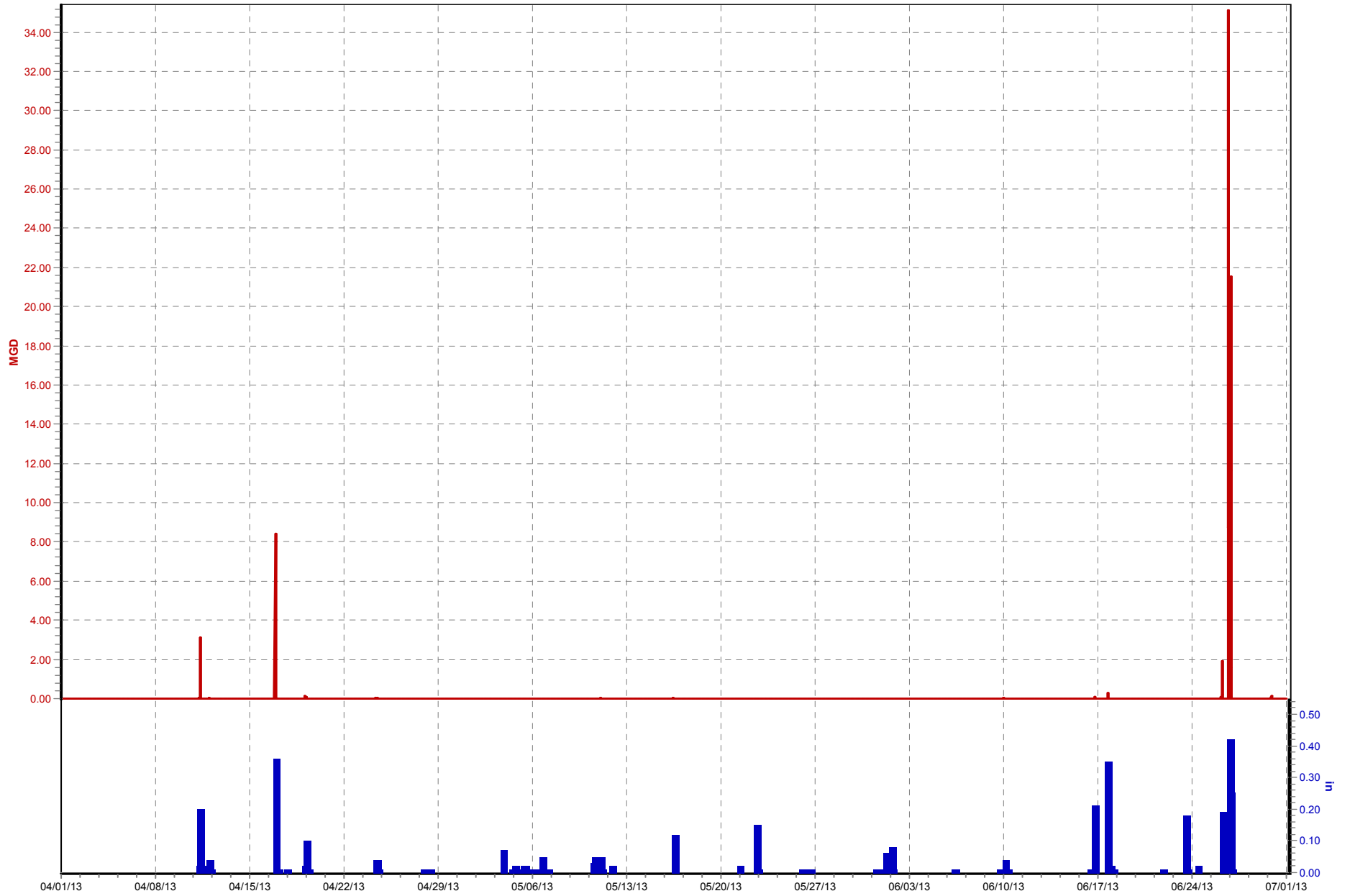
CSO057 1st and Main (04/01/13 to 07/01/13)

M1 Flow (MGD) TR05_Beargrass PS.Rain (in)



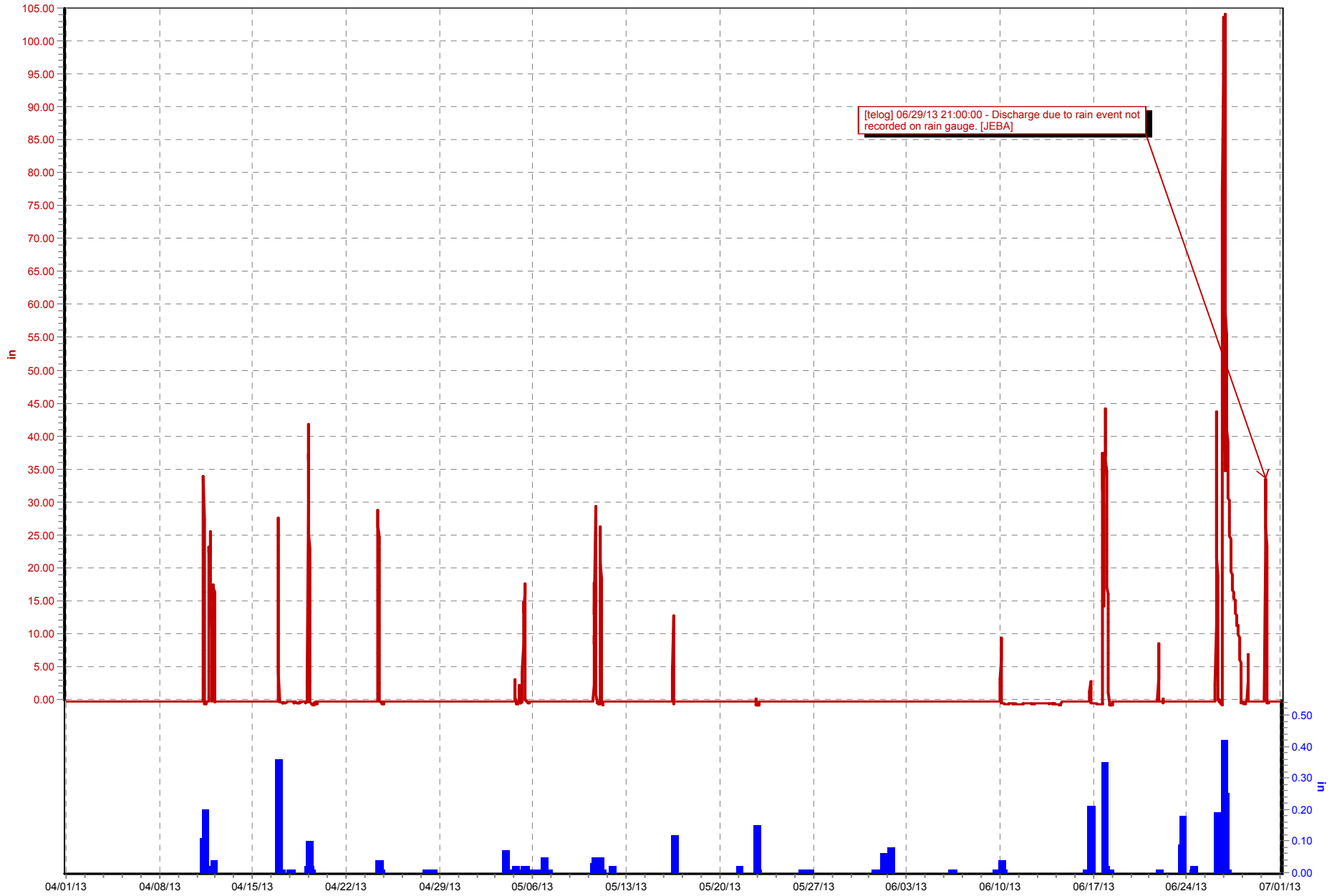
CSO058 (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO082 Lex Rd (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



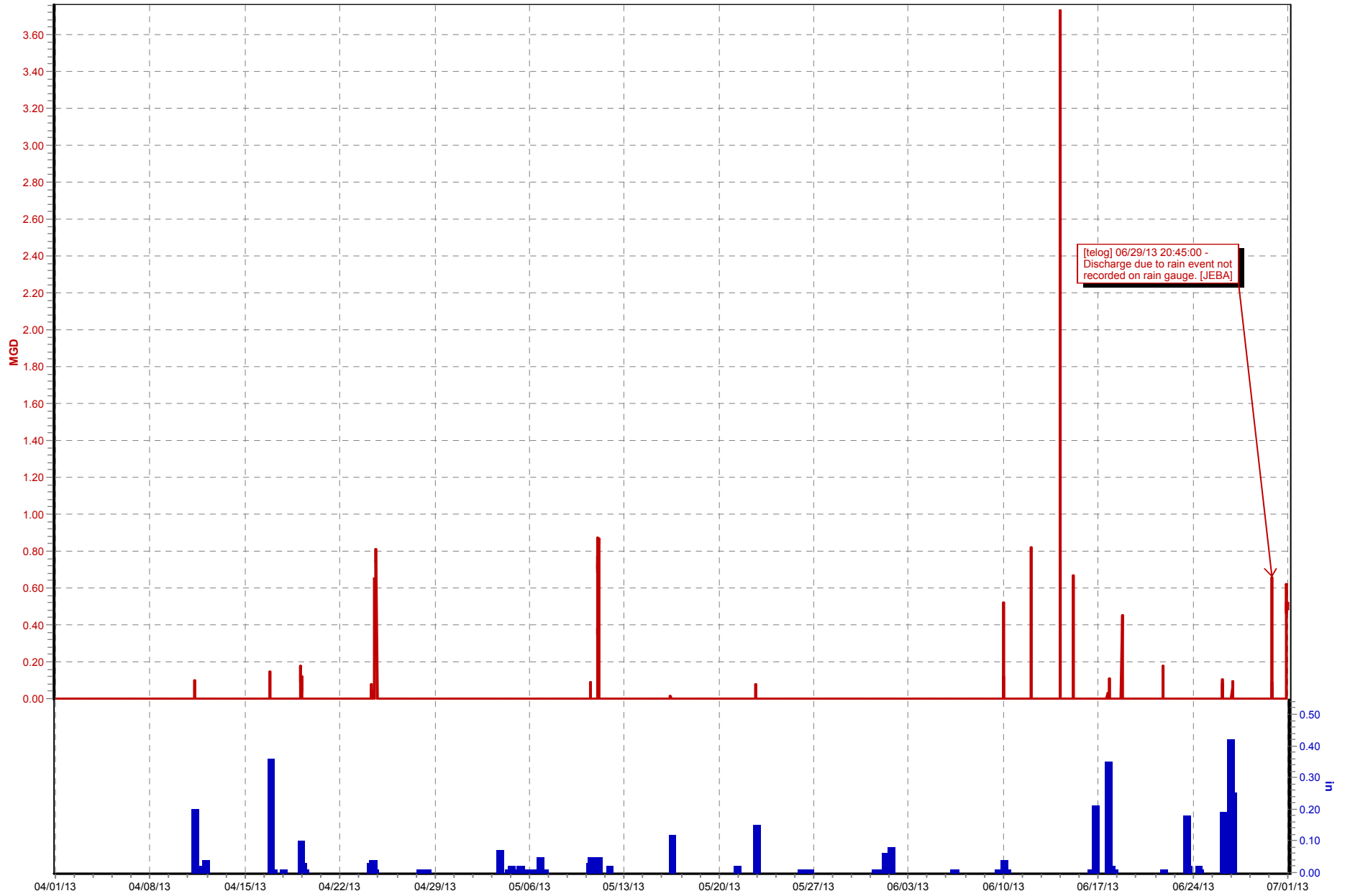
CSO083 E Broadway (04/01/13 to 07/01/13)

M1 Flow (MGD) TR05_Beargrass PS.Rain (in)



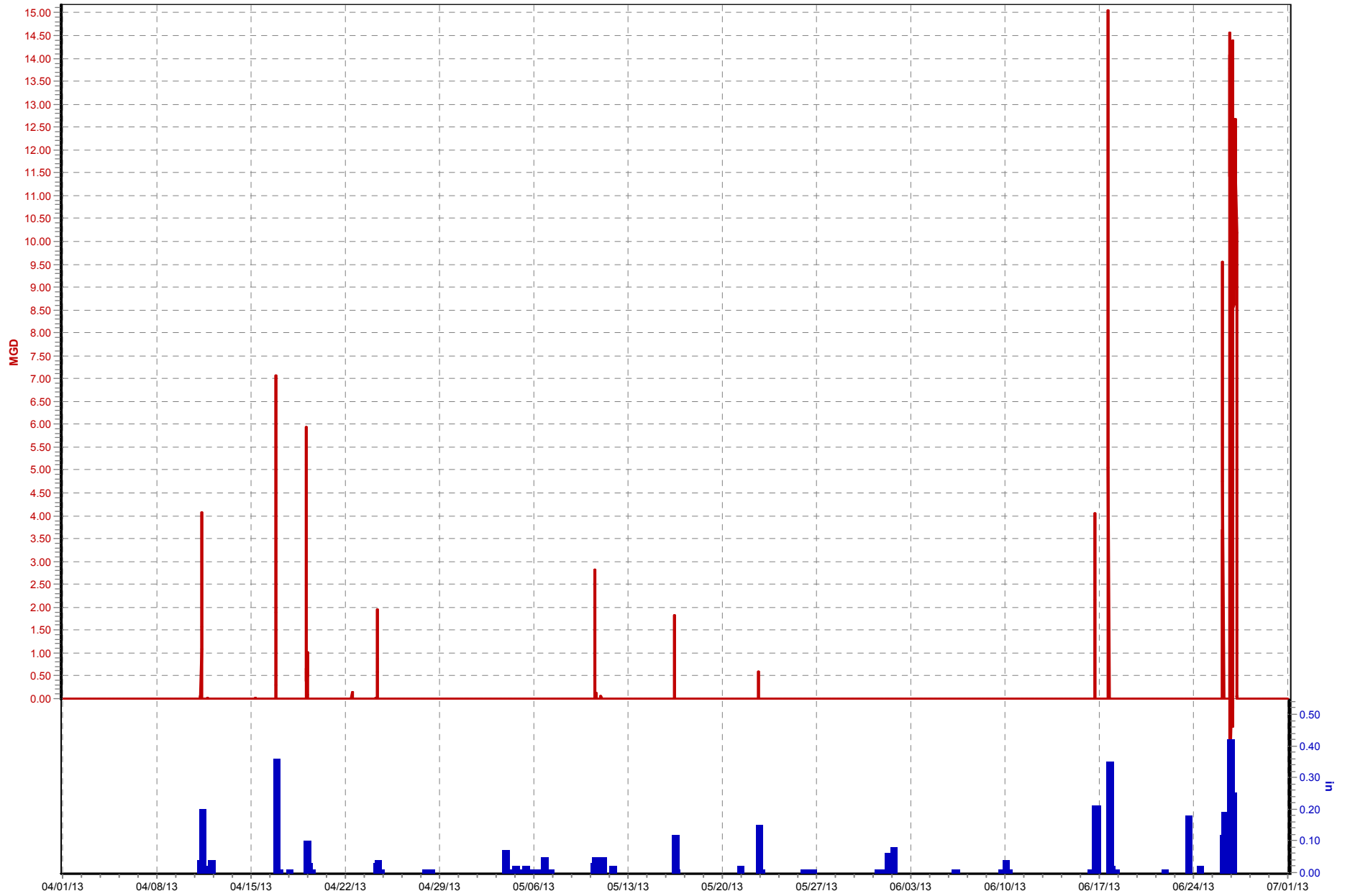
CSO084 Brent St and BGC (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO088 Brownsboro Rd-BGC (04/01/13 to 07/01/13)

Adjusted Flow (MGD) TR05_Beargrass PS.Rain (in)



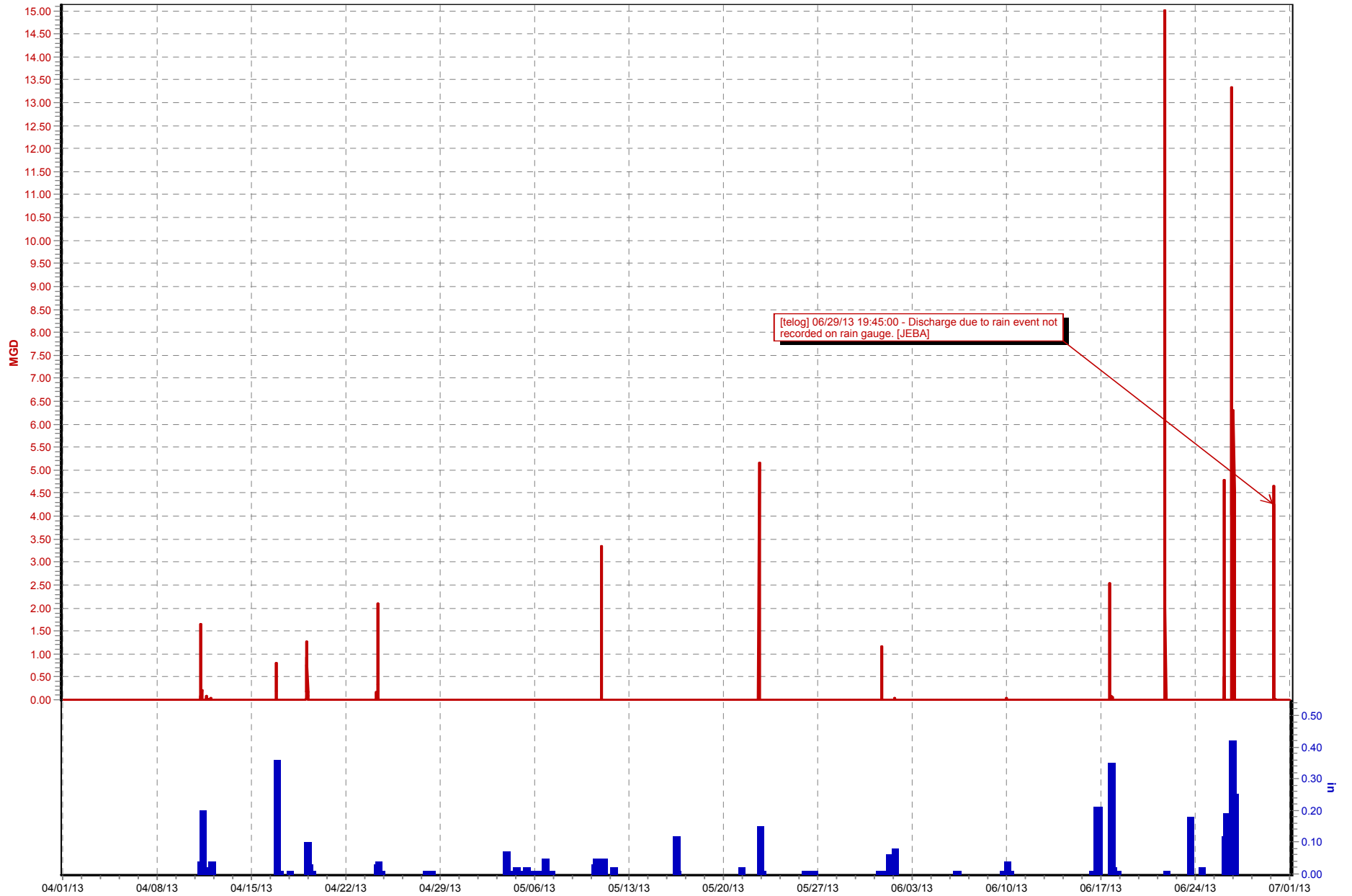
CSO091 Schiller Ave (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



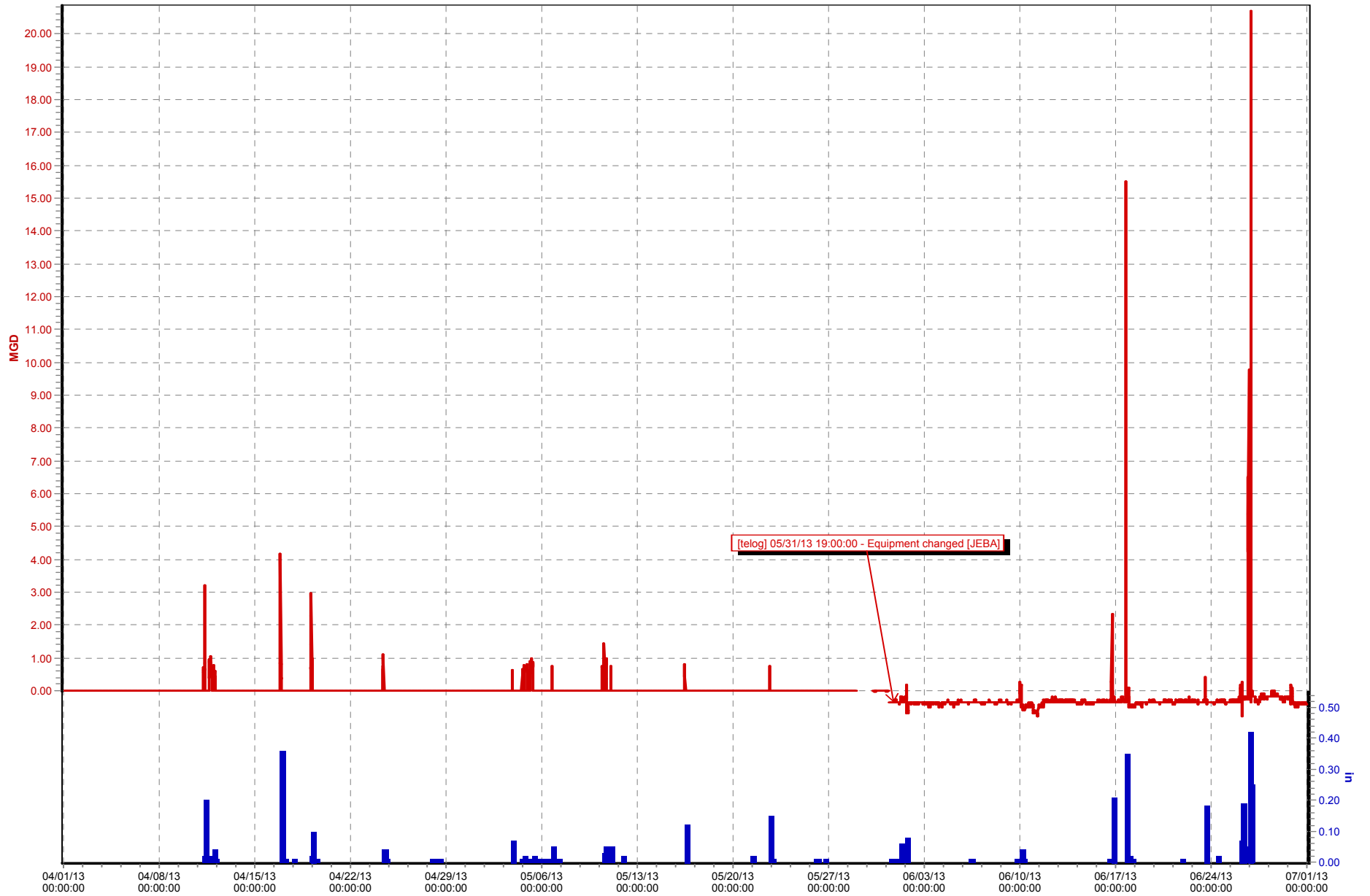
CSO092 Schiller Ave (04/01/13 to 07/01/13)

M1 Flow (MGD) TR05_Beargrass PS.Rain (in)



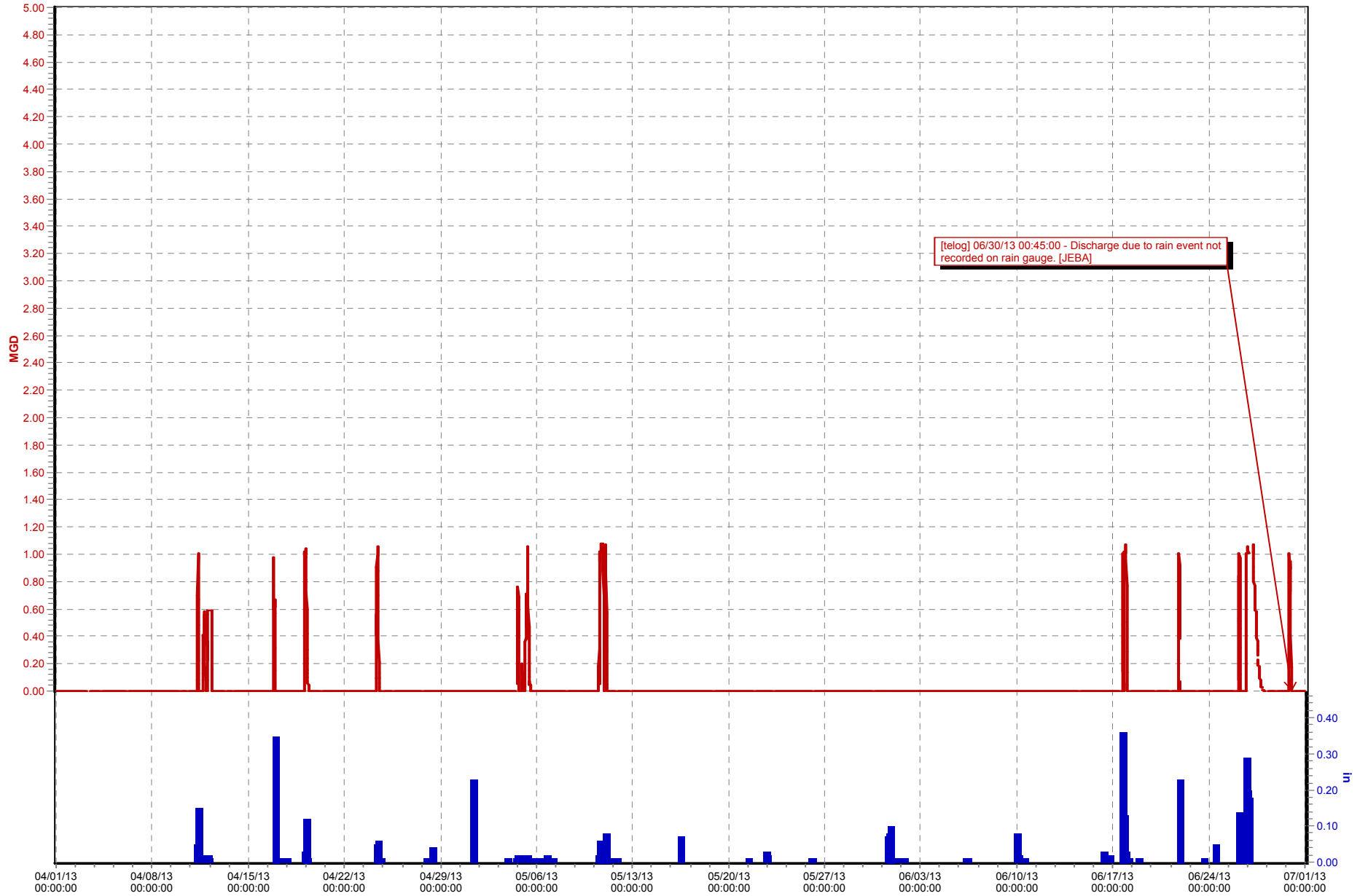
CSO093 Mellwood Ave (04/01/13 to 07/01/13)

Level 1 (in) CSO093 Upstream_of_Weir Plate.CSO level (in) TR05_Beargrass PS.Rain (in)



CSO097 Castlevale Dr (04/01/13 to 07/01/13)

C097_FLOW_MGD (MGD) TR12_Nightingale PS.Rain (in)



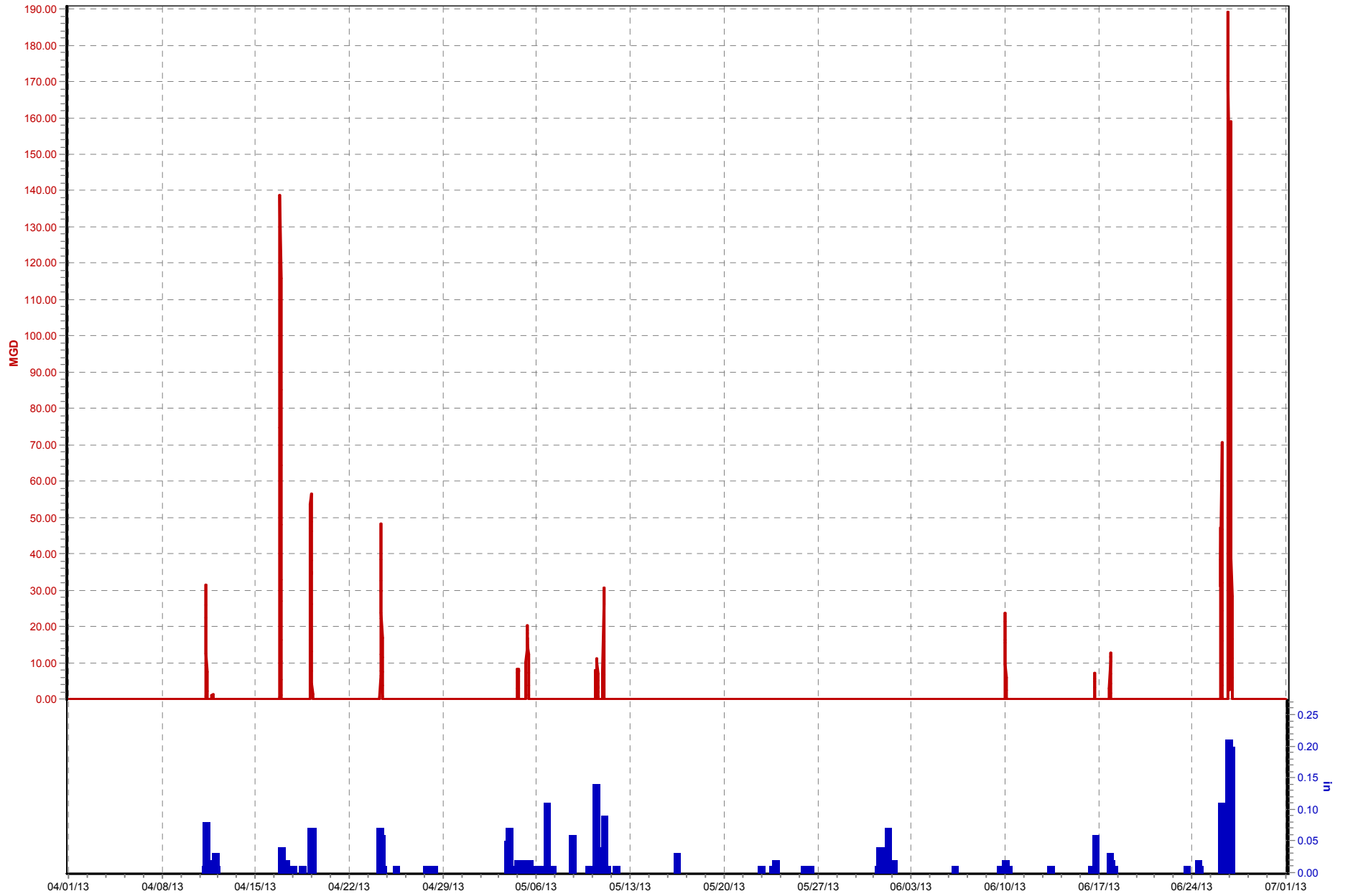
CSO104 SWest Pkwy and Broadway (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



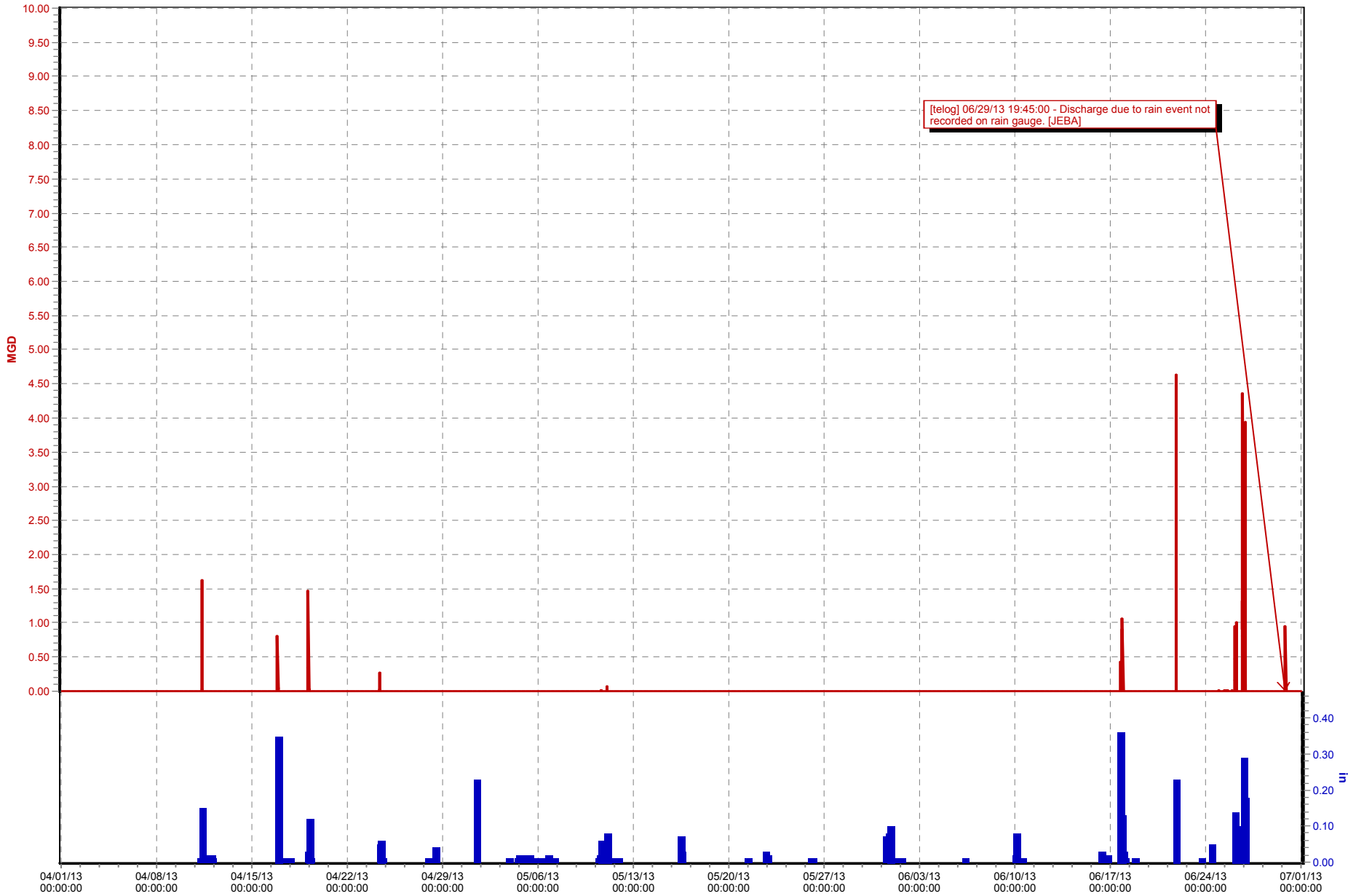
CSO105 Broadway and SWest Pkwy (04/01/13 to 07/01/13)

Flow 1 (MGD) TR04_Morris Forman WQTC.Rain (in)



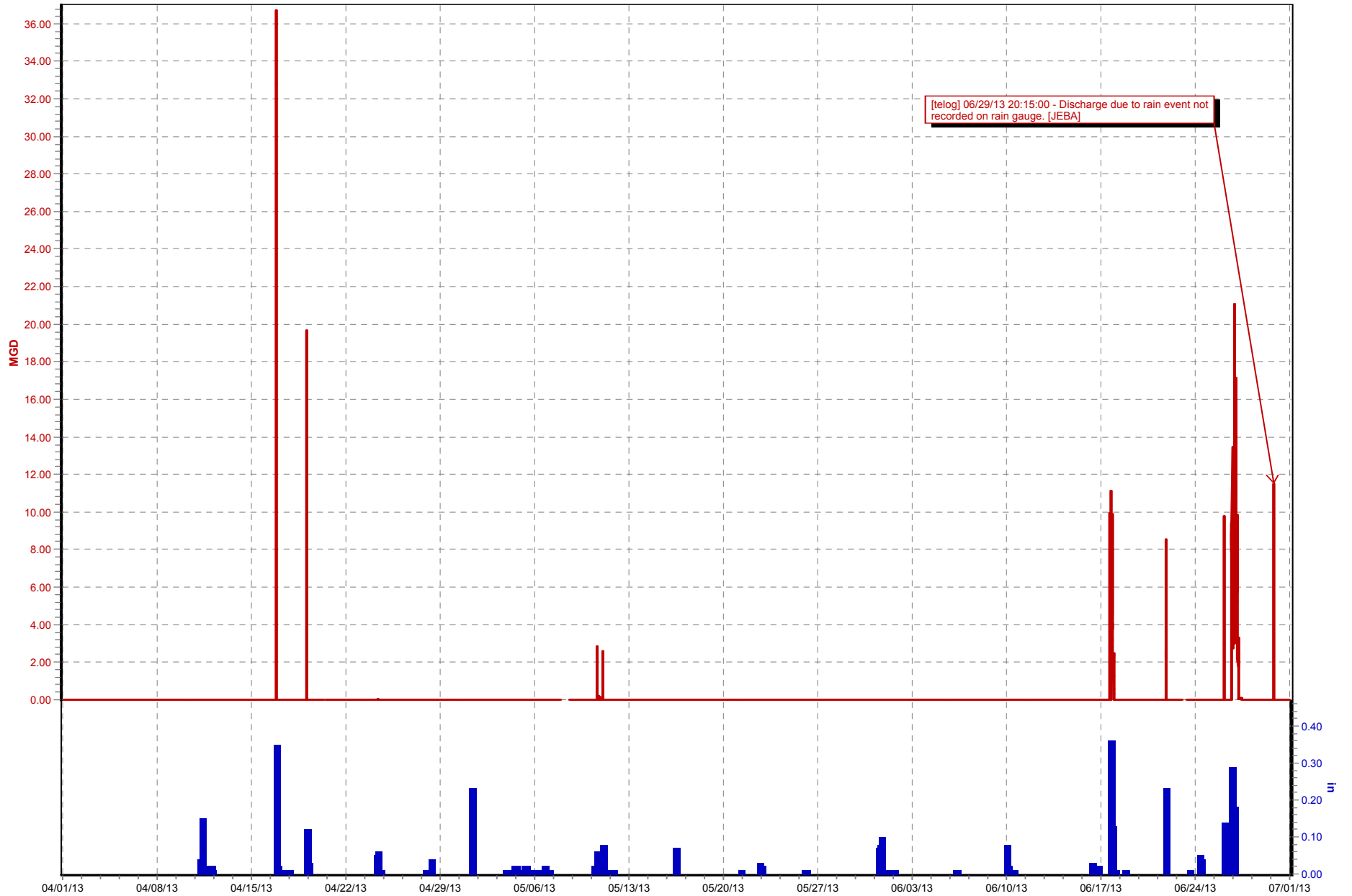
CSO106 Castlevale Dr (04/01/13 to 07/01/13)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



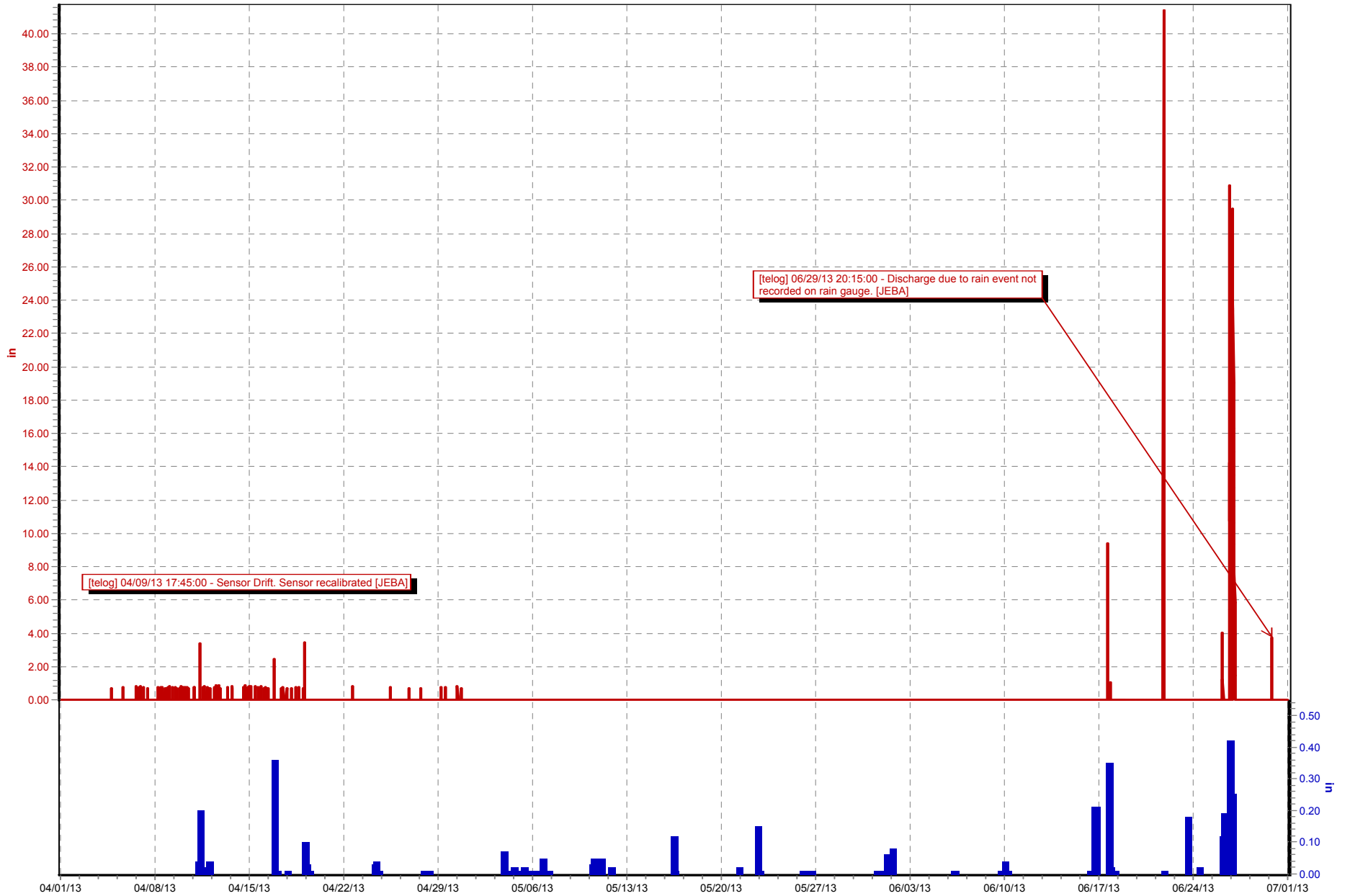
CSO108 CDS Unit (04/01/13 to 07/01/13)

Flow (MGD) TR12_Nightingale PS.Rain (in)



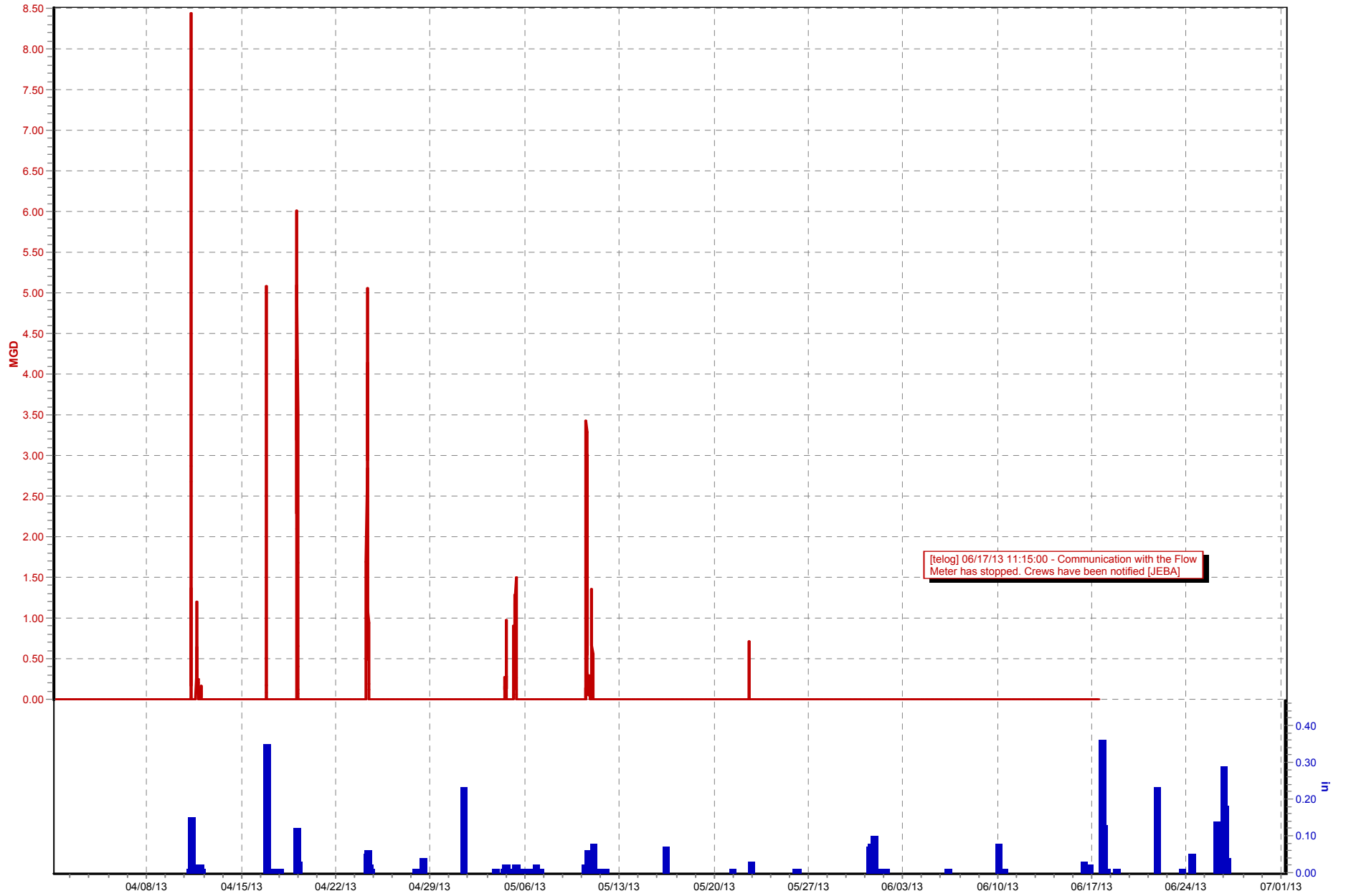
CSO109 Newburg Rd (04/01/13 to 07/01/13)

Level (in) CSO109 Upstream-54 Inch Pipe.Potential Overflow (in) TR05_Beargrass PS.Rain (in)



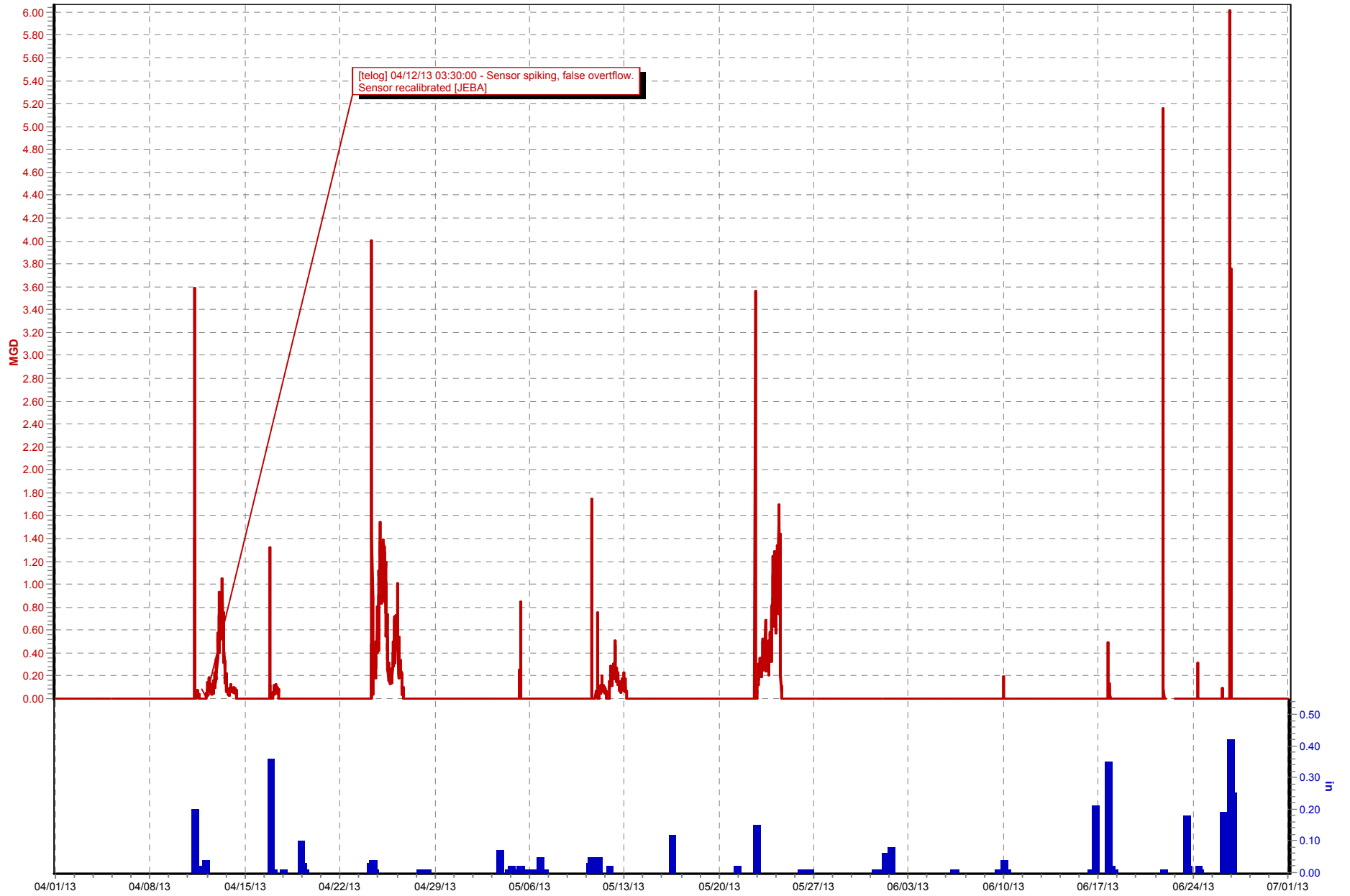
CSO110 Eastern Pkwy and BGC (04/01/13 to 07/01/13)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



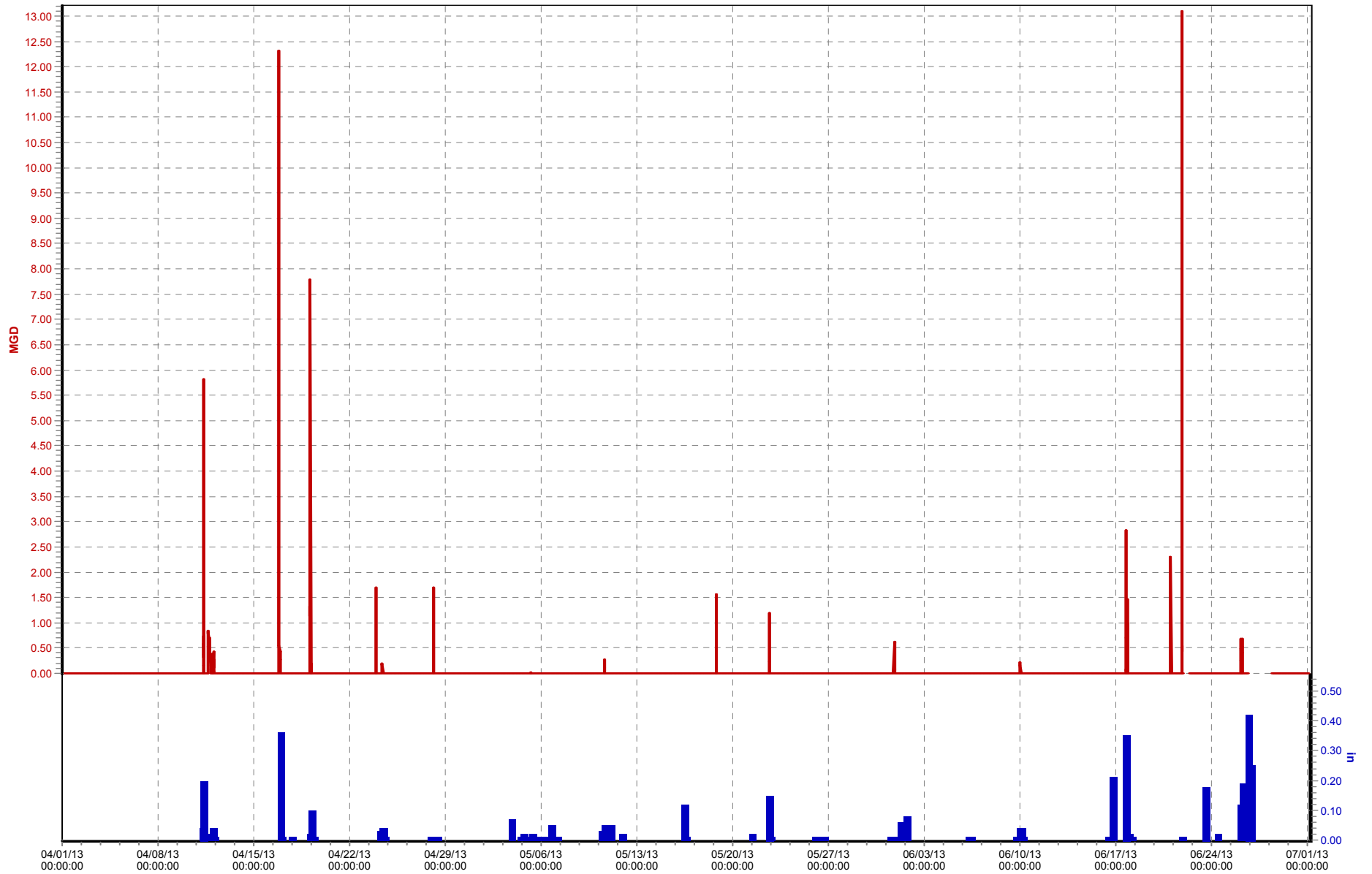
CSO111 Eastern Pkwy and BGC (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



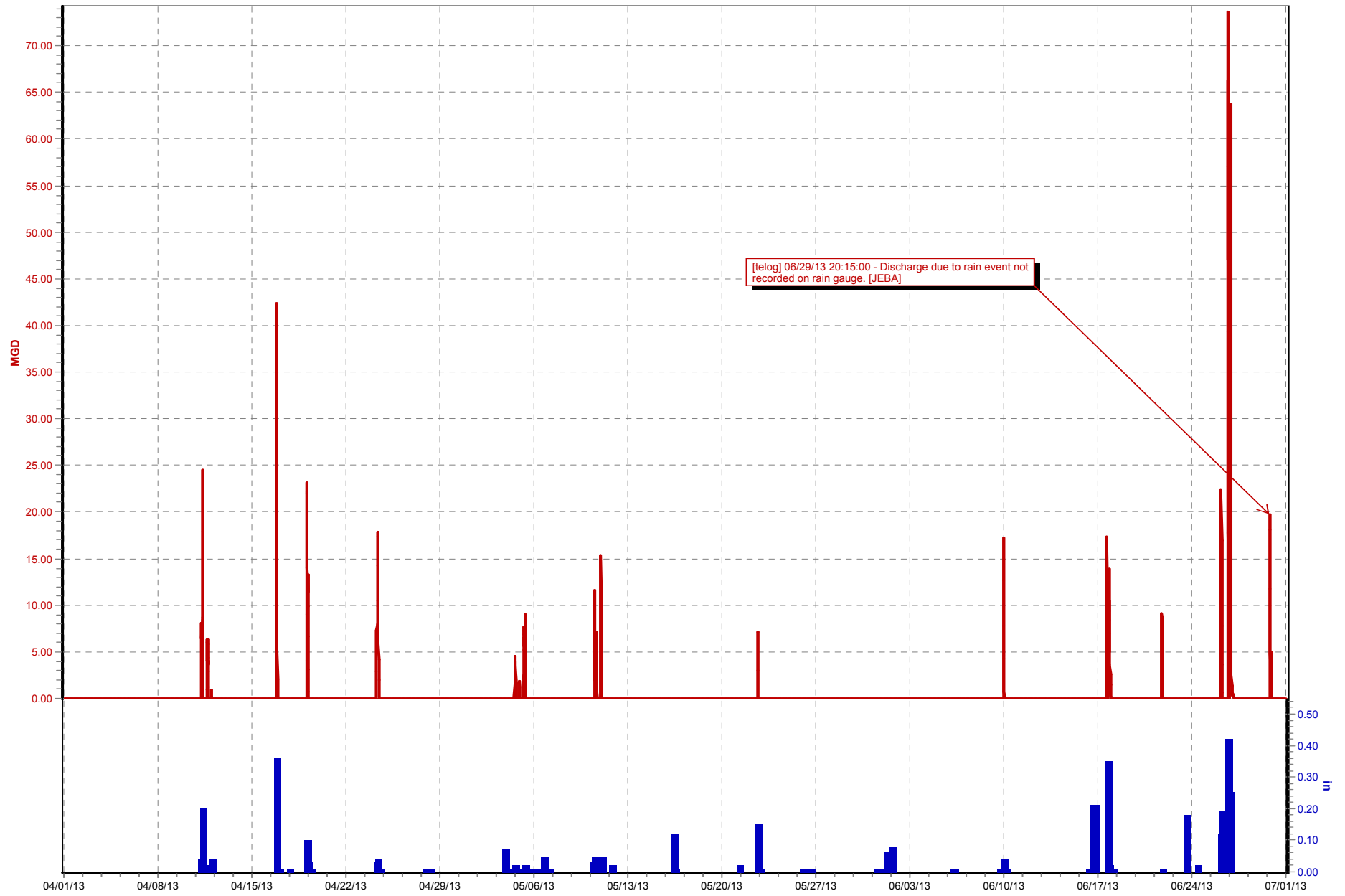
CSO113 (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



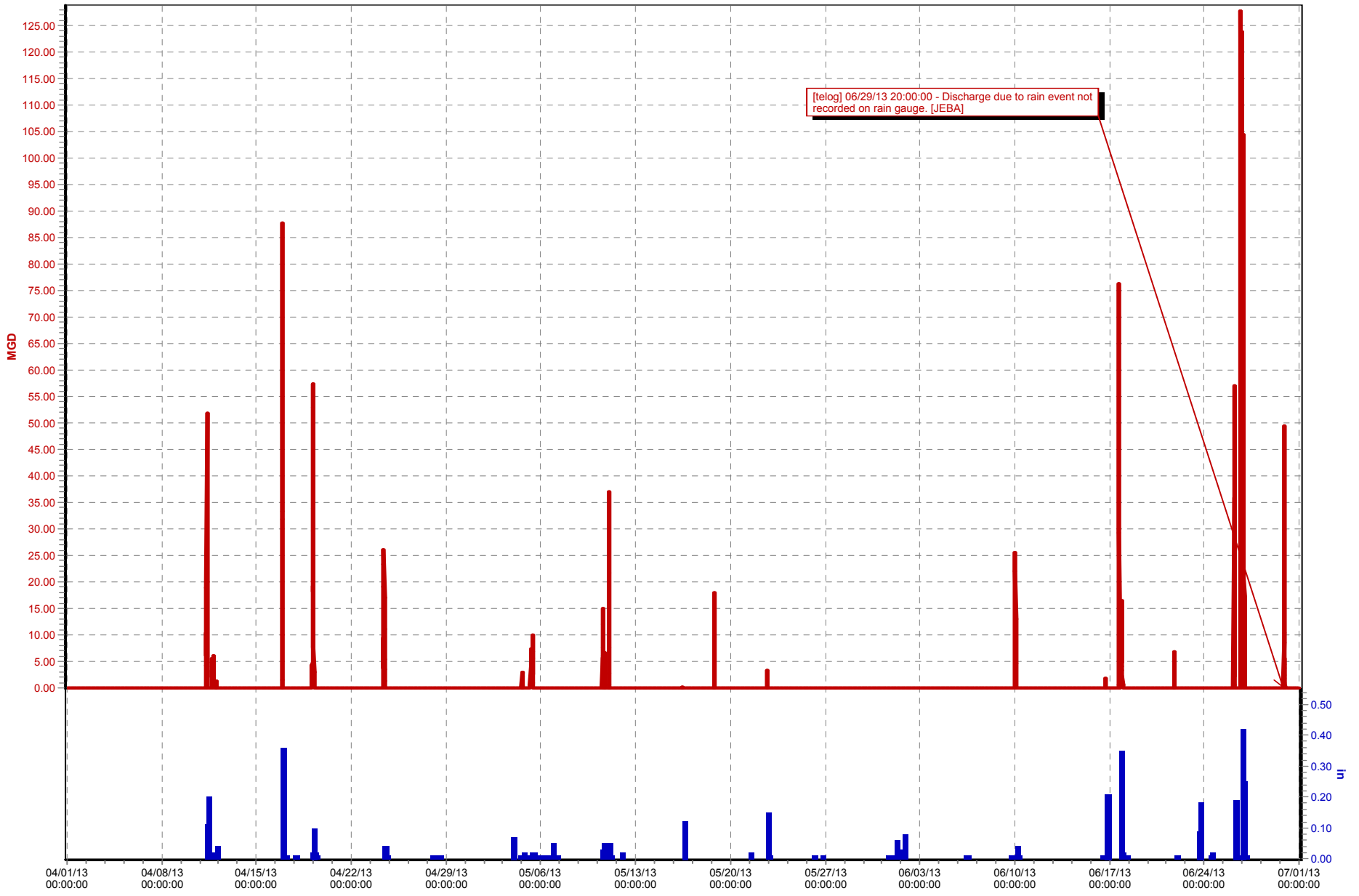
CSO117 Dry Sewer and BGC Logan (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



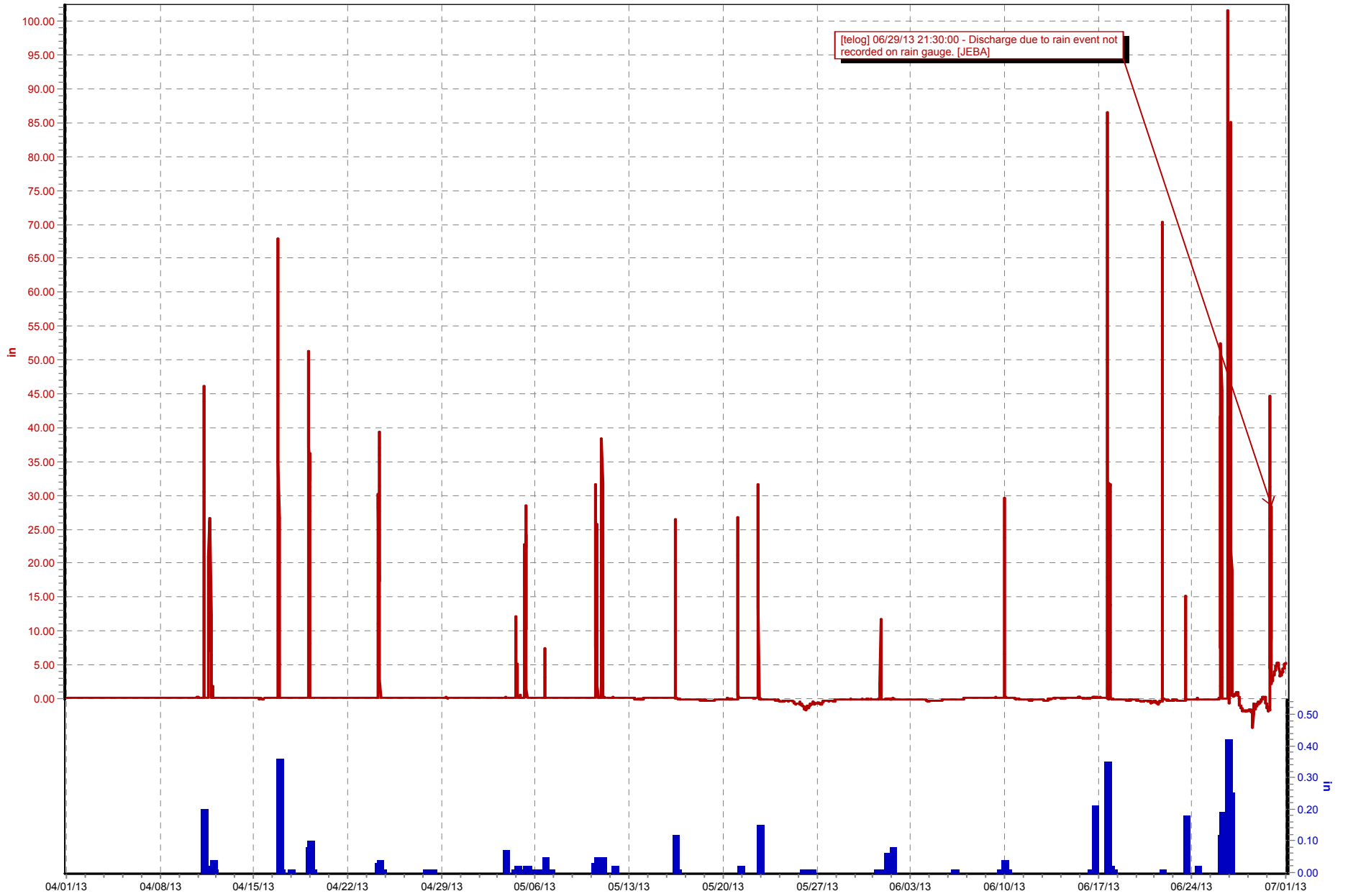
CSO118 Broadway and BGC (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



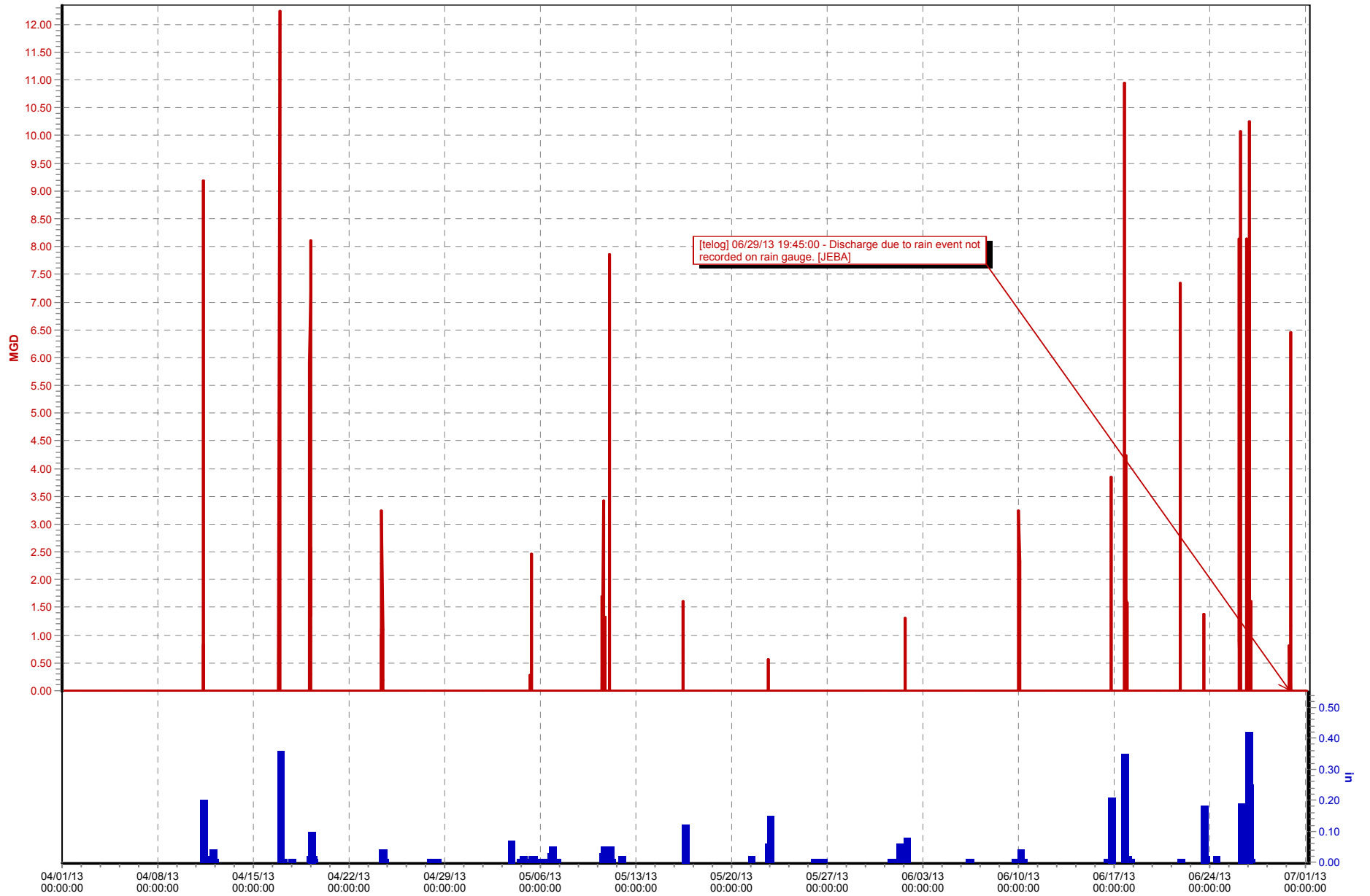
CSO119 (04/01/13 to 07/01/13)

level (in) TR05_Beargrass PS.Rain (in)



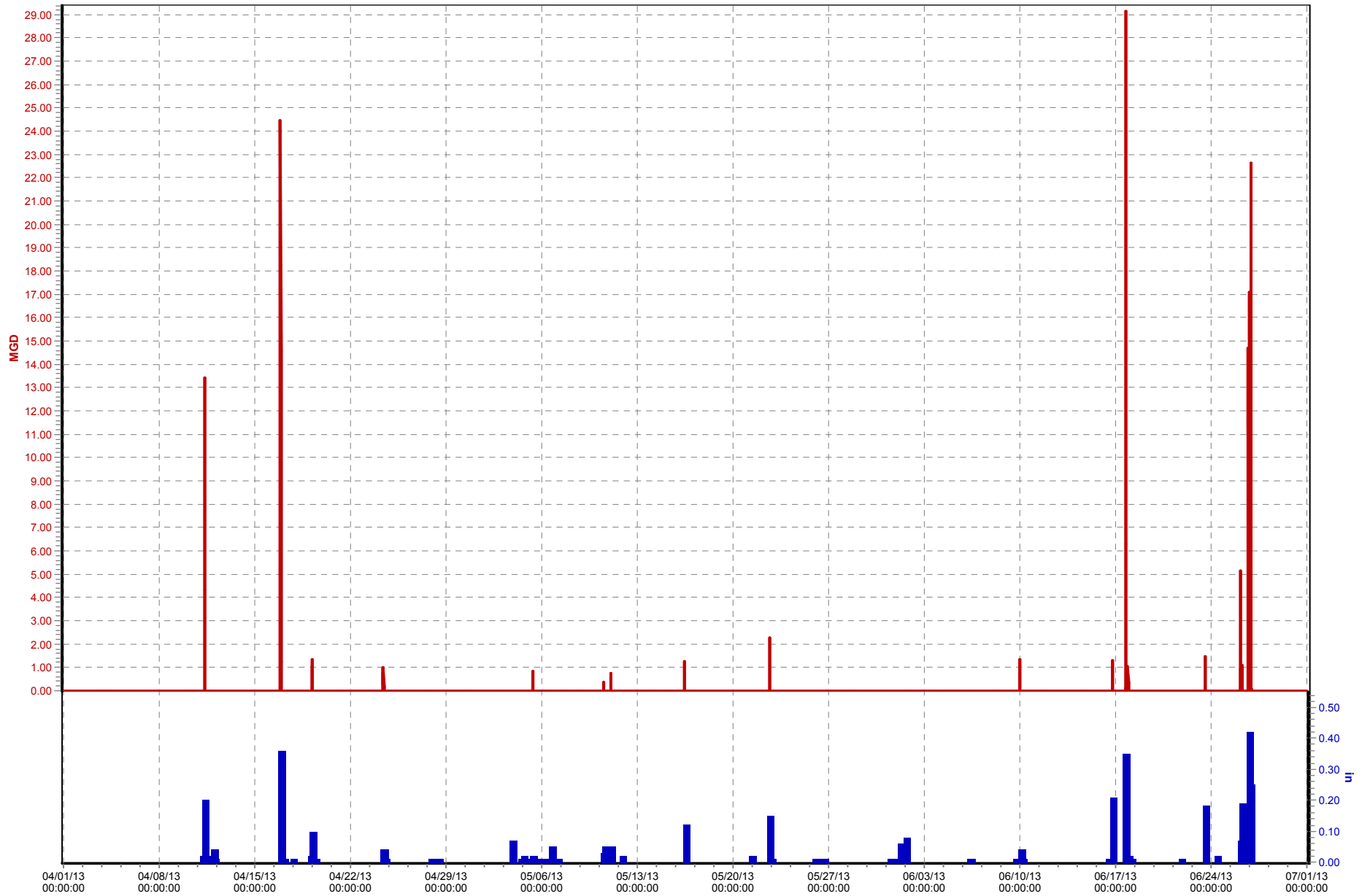
CSO120 Hamilton Ave (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



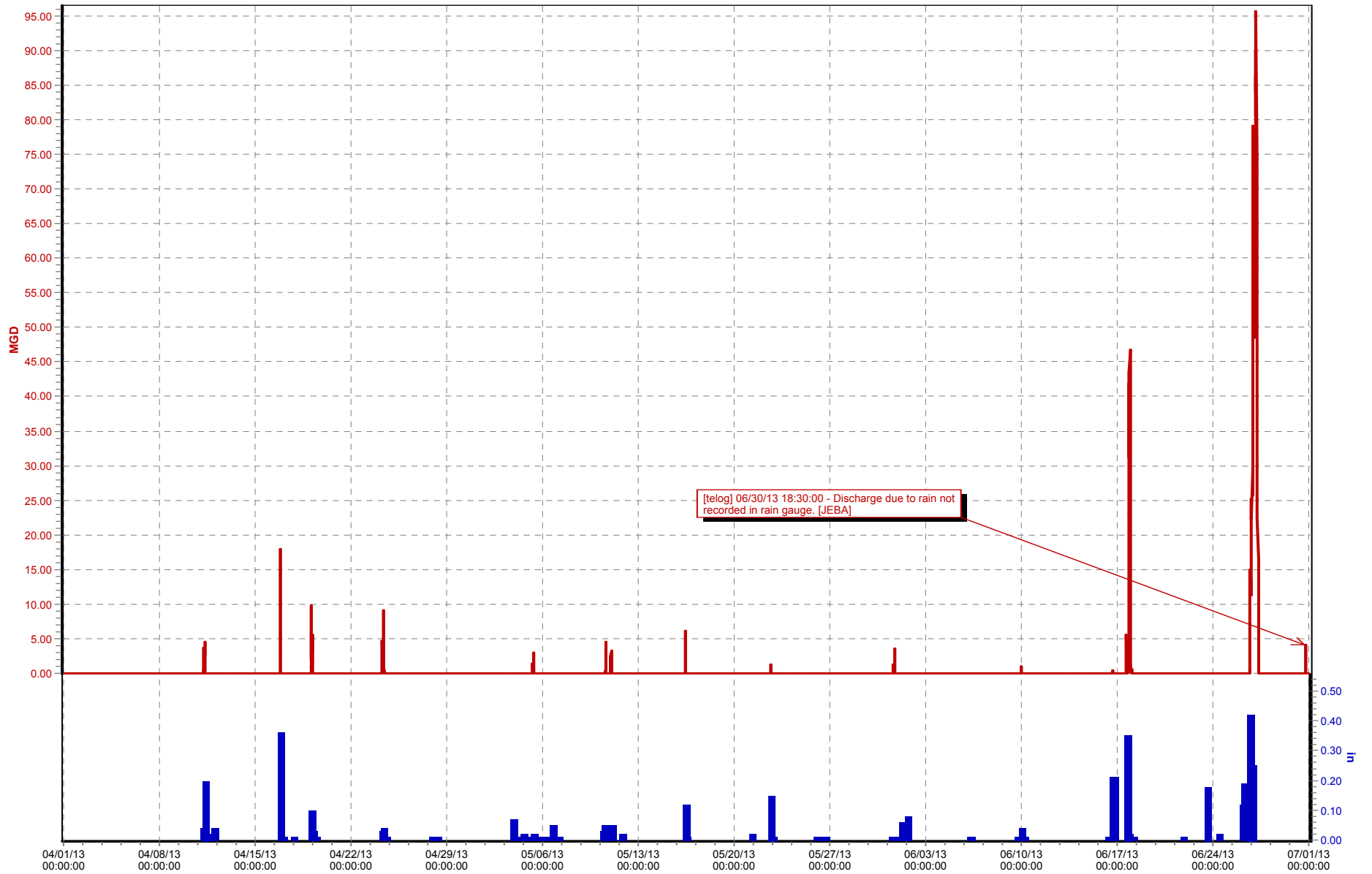
CSO121 Baxter and BGC (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO125 Grinstead Dr I64W Ramp (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



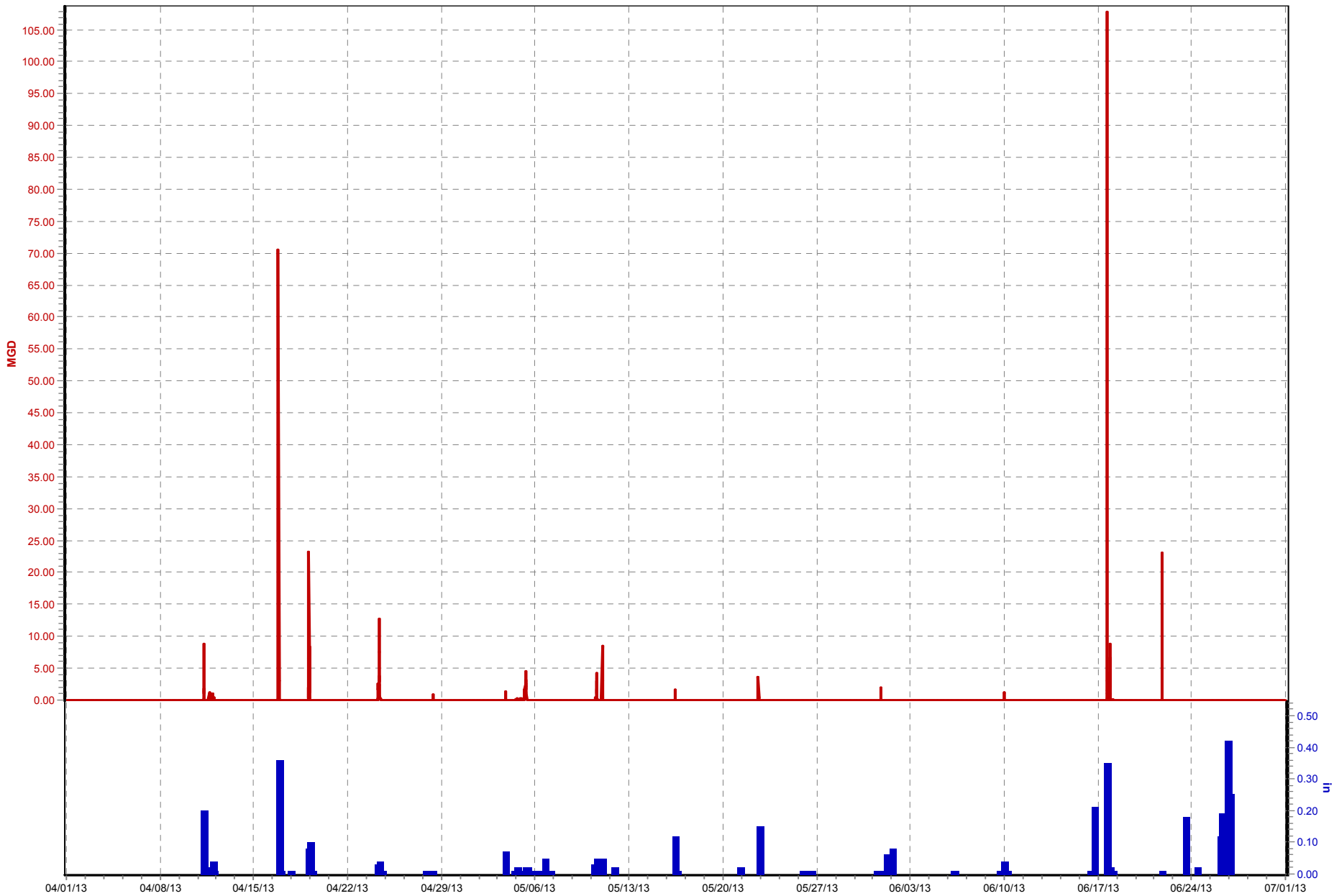
CSO126 (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



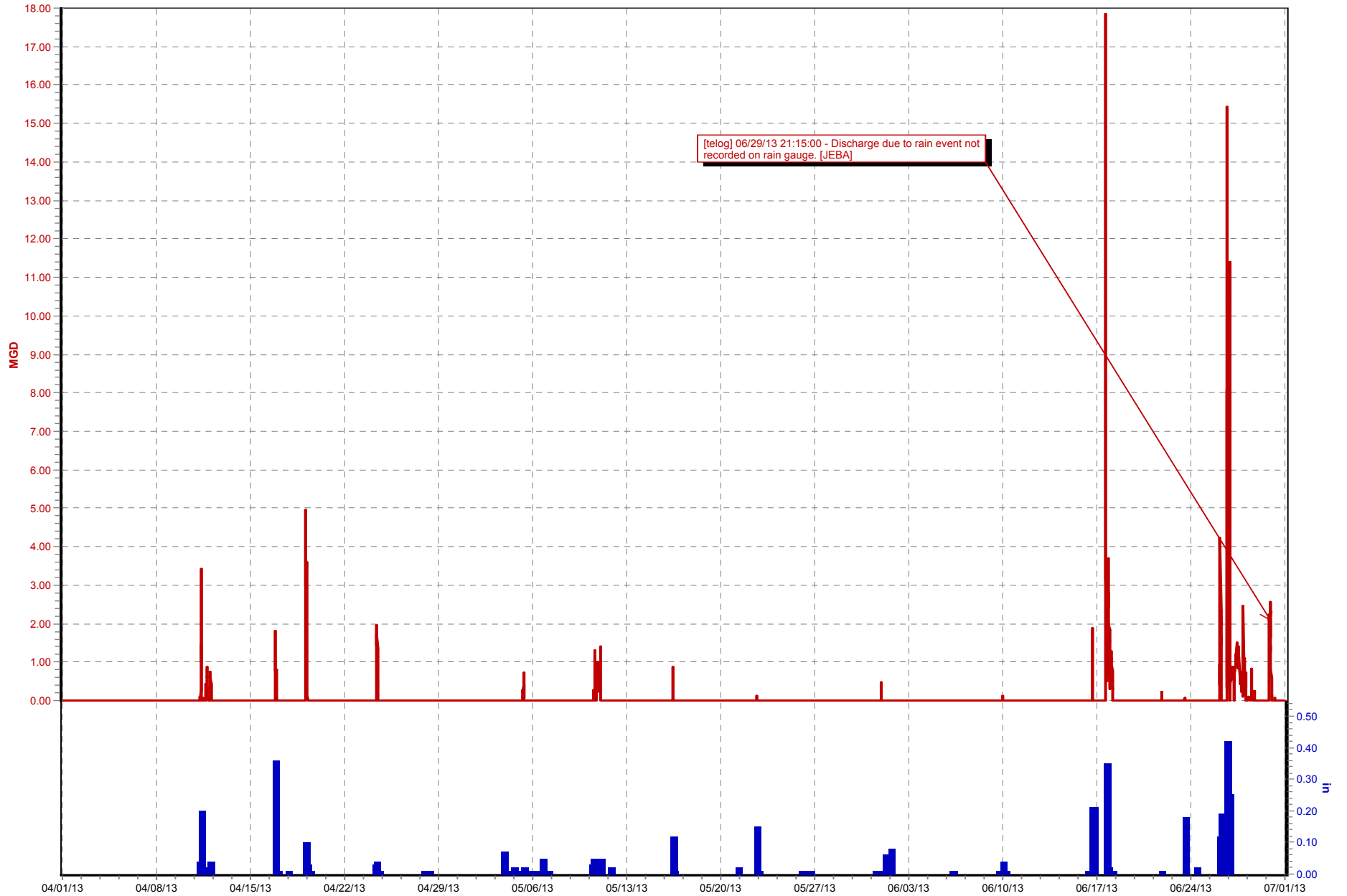
CSO127 Etley Ave and Lex Rd (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



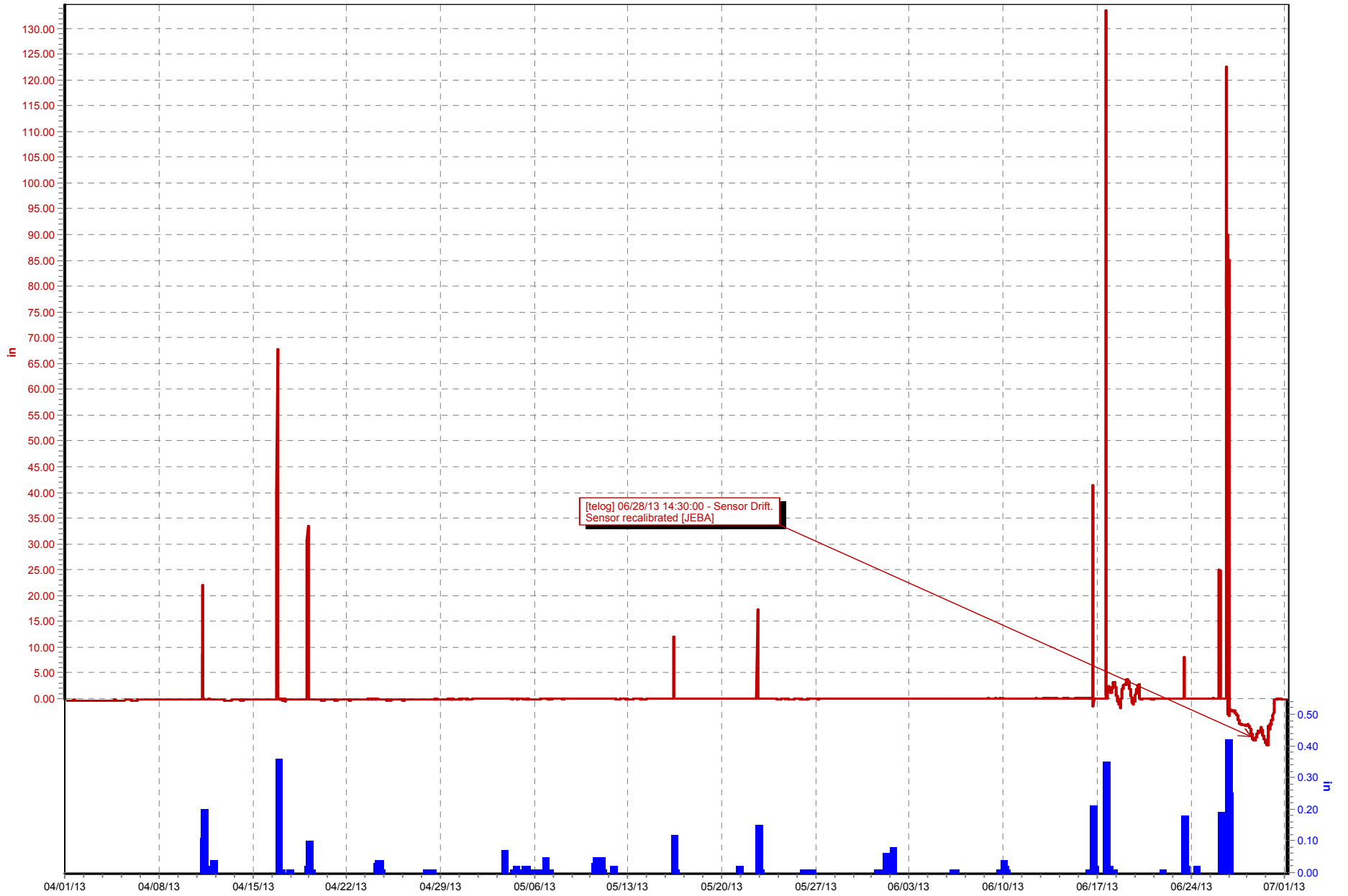
CSO130 Webster St n Story Ave (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



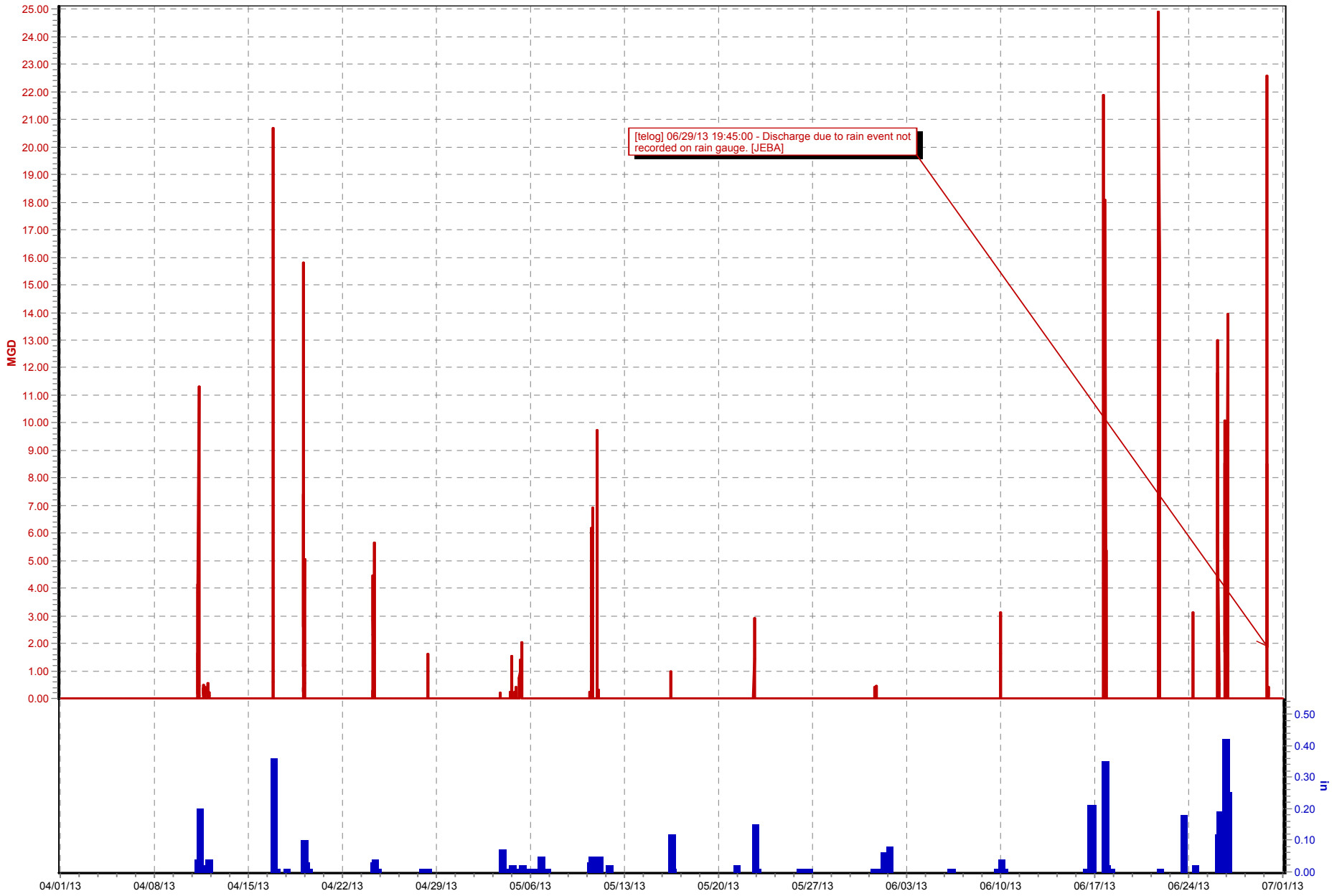
CSO131 Frankfort Ave (04/01/13 to 07/01/13)

level (in) TR05_Beargrass PS.Rain (in)



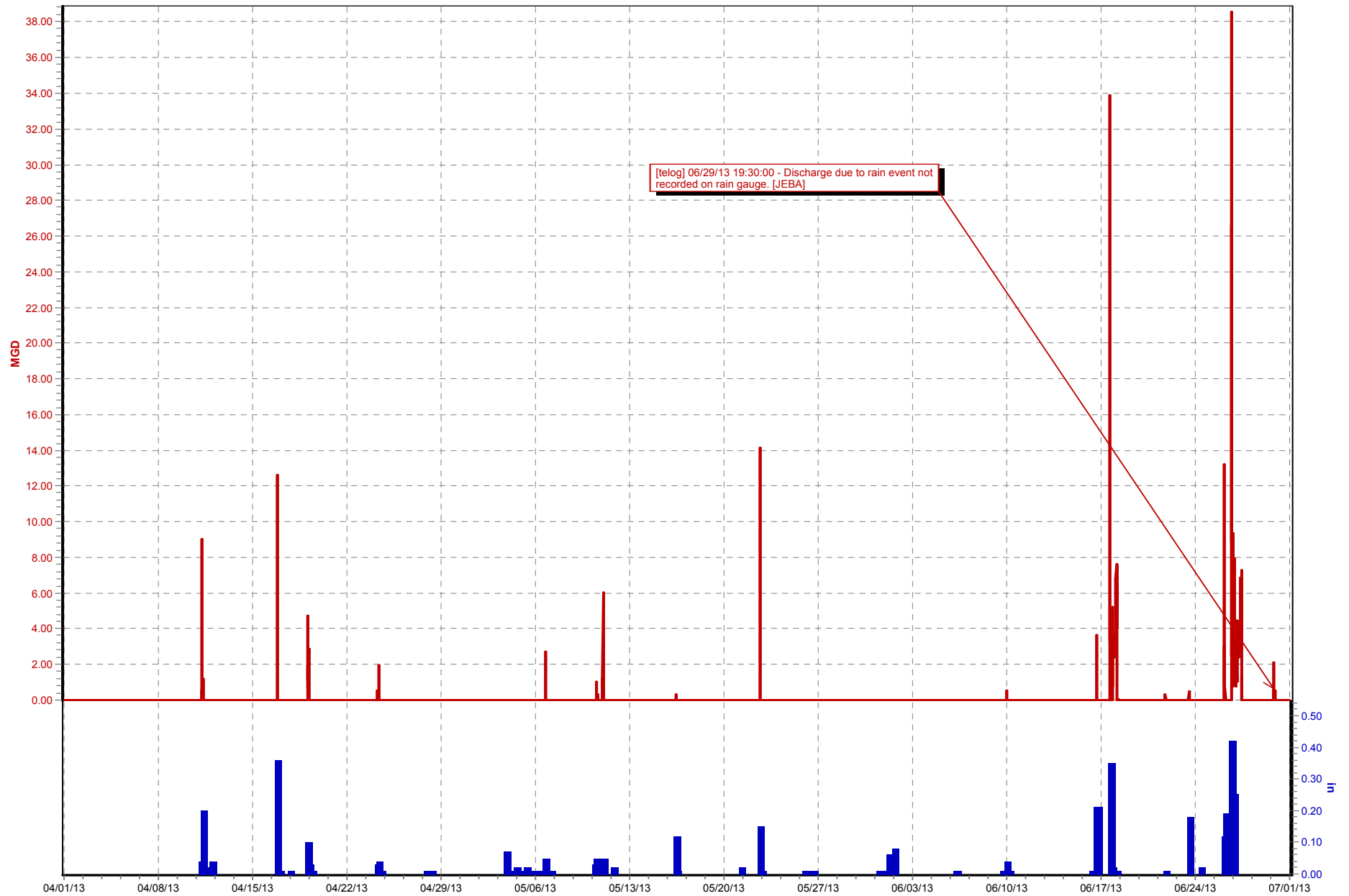
CSO137 Cavalry Cemetery (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO140 Locust St_Lobdell Alley (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



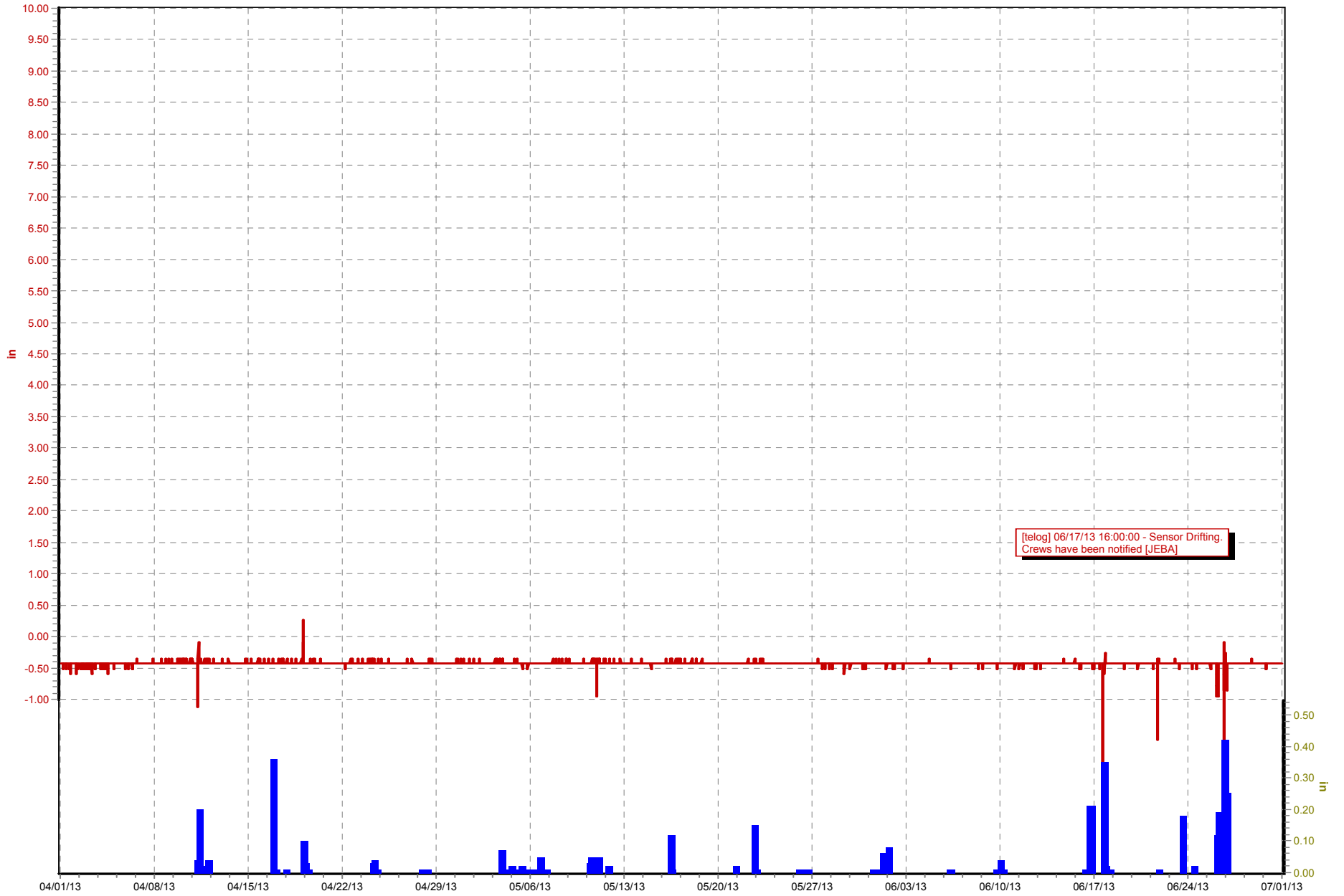
CSO141 Baxter_SF BGC (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



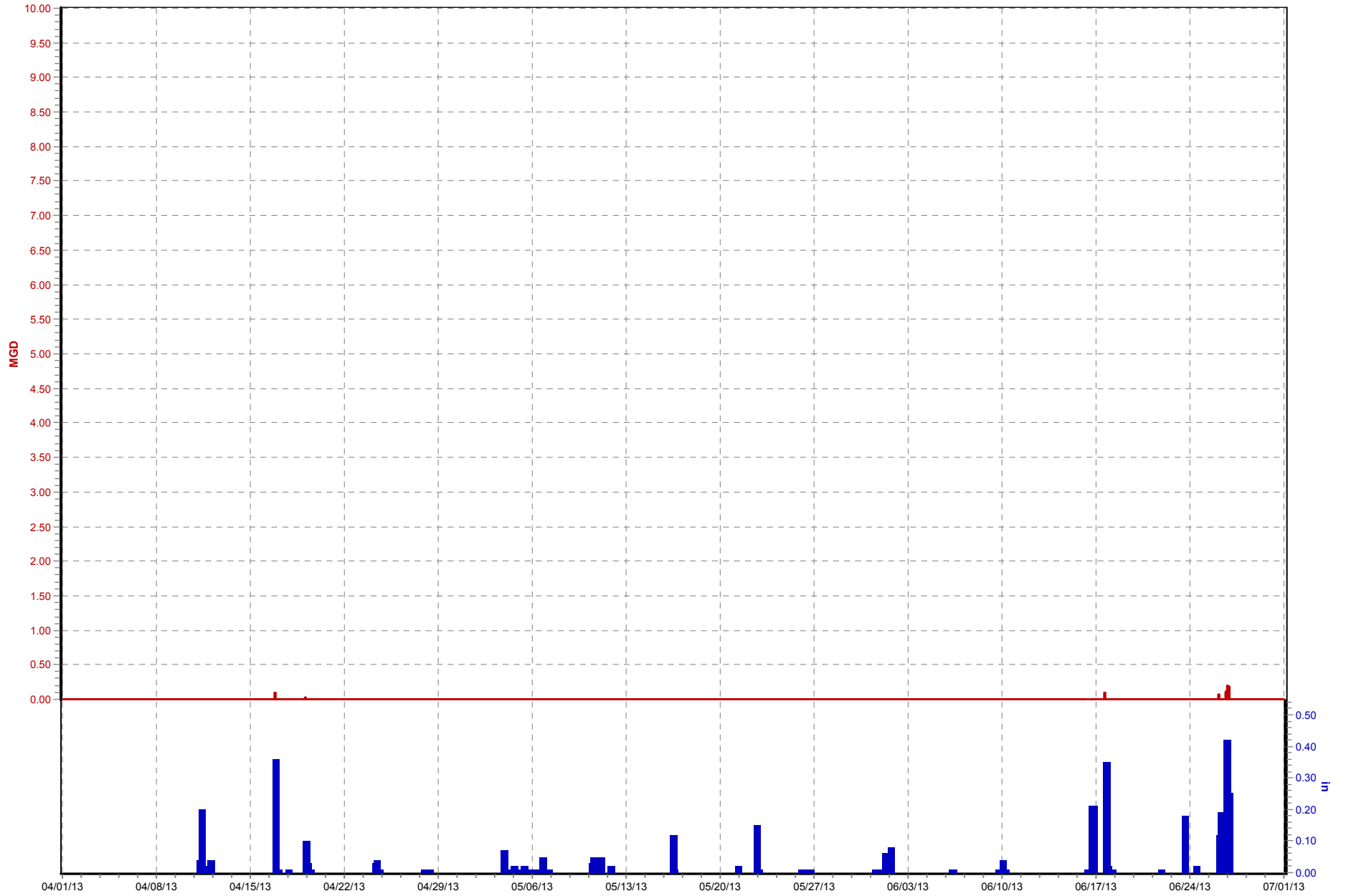
CSO142 Logan St_St Catherine (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



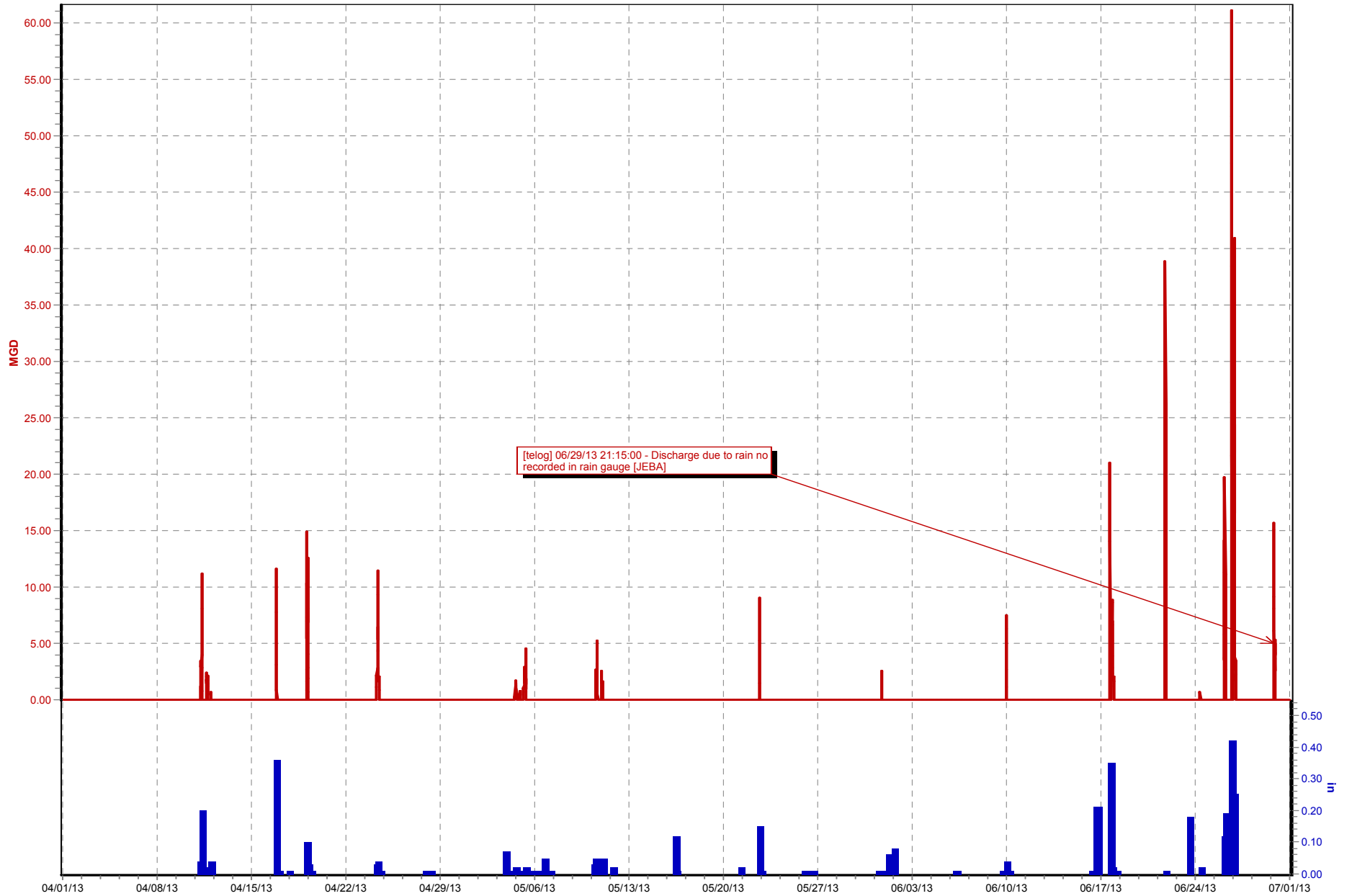
CSO144 Brauner Way (04/01/13 to 07/01/13)

M1 Flow (MGD) TR05_Beargrass PS.Rain (in)



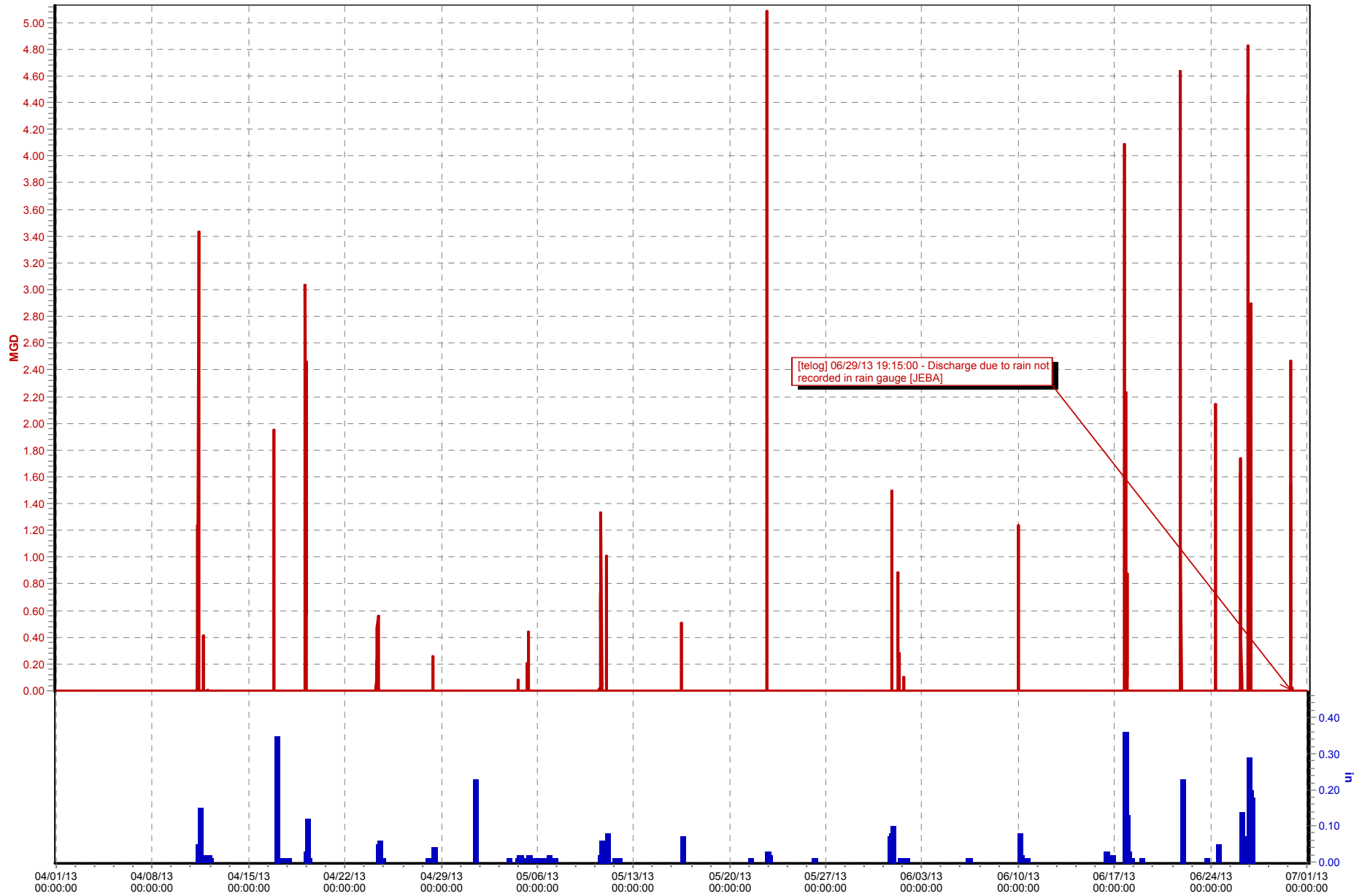
CSO146 Swan St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



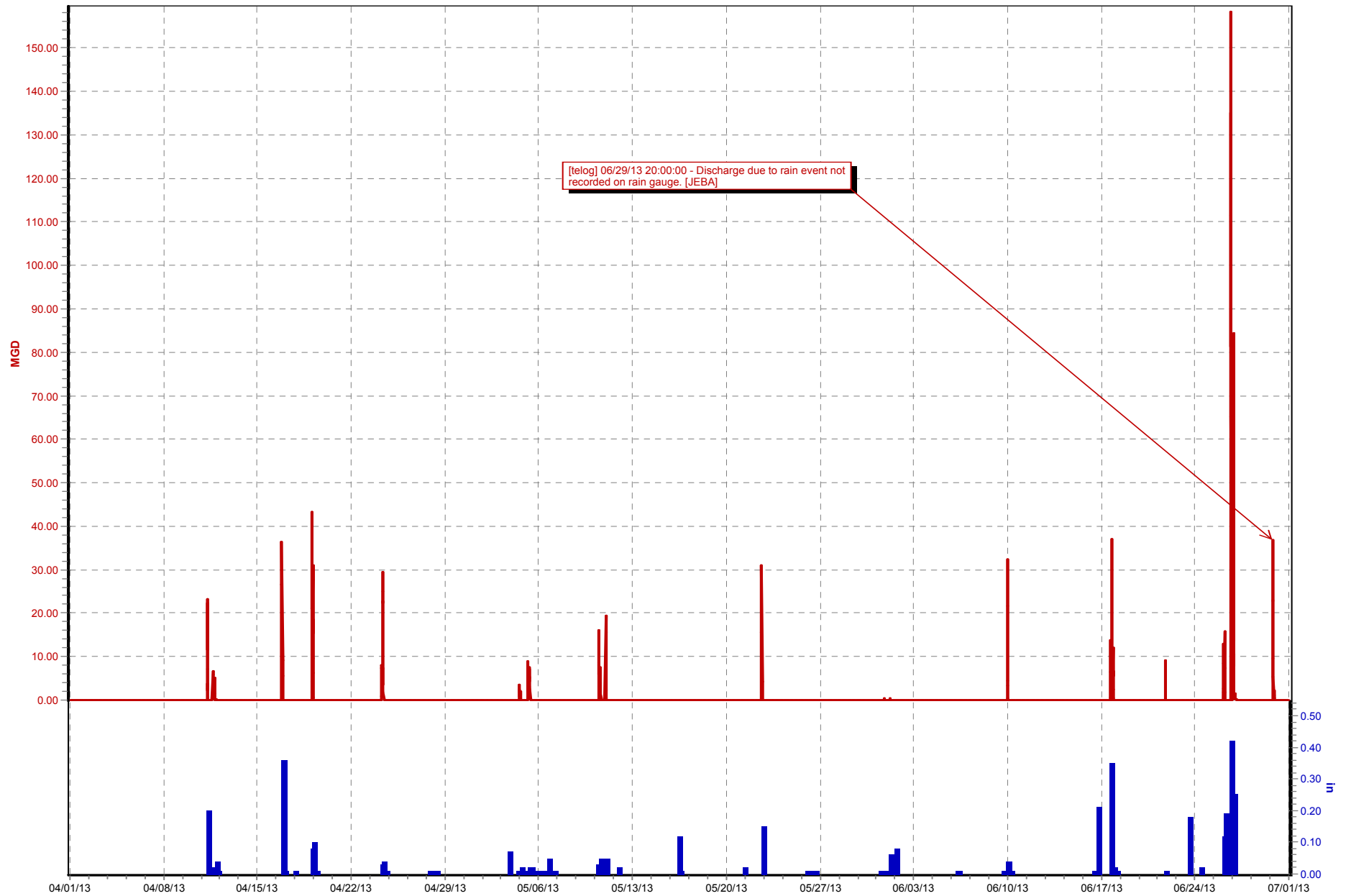
CSO148 Eastern Pkwy (04/01/13 to 07/01/13)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



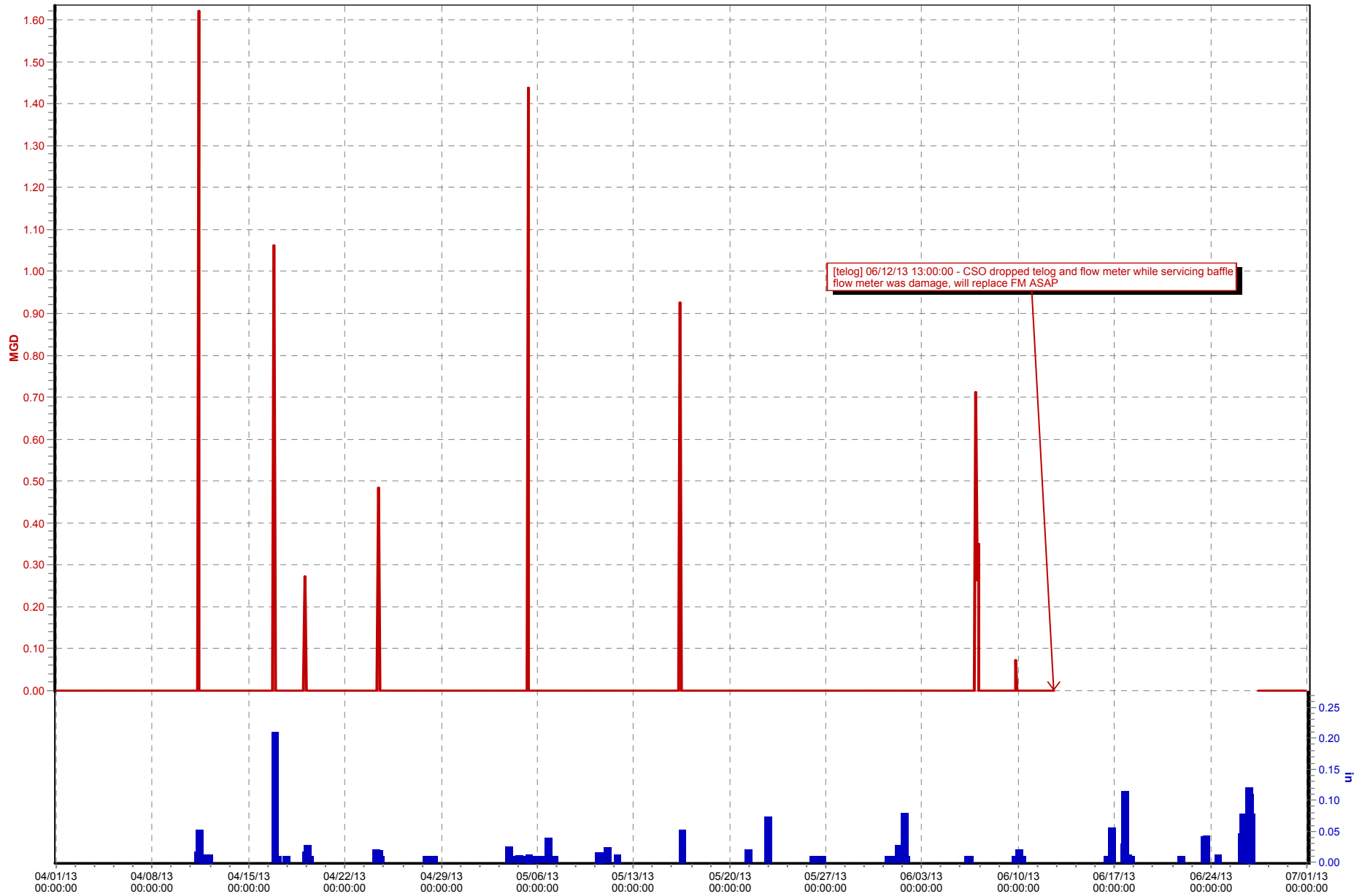
CSO149 KY St_St Paul Ct (04/01/13 to 07/01/13)

Flow 1-CSO149 (MGD) TR05_Beargrass PS.Rain (in)



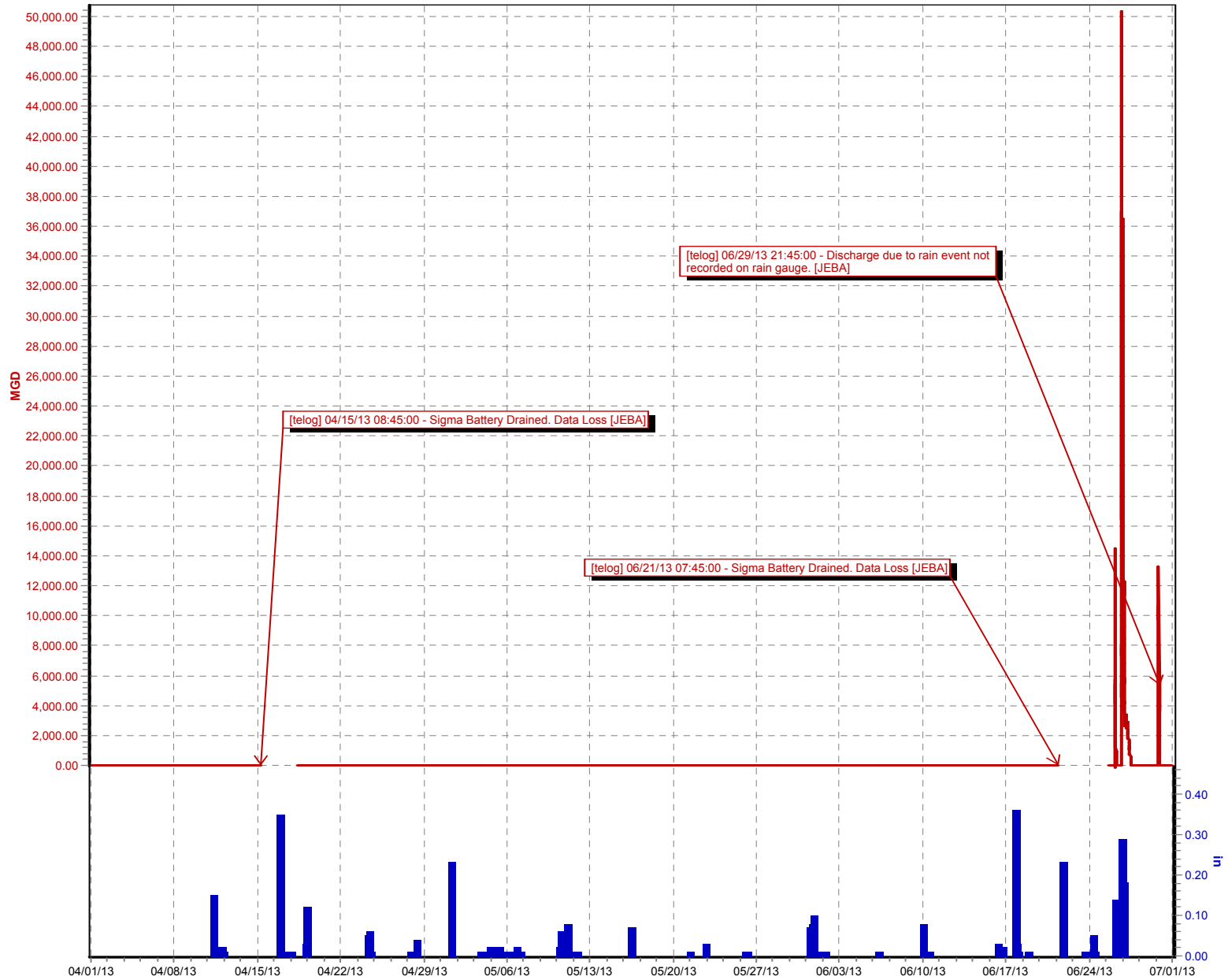
CSO150 8th St_Wash St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



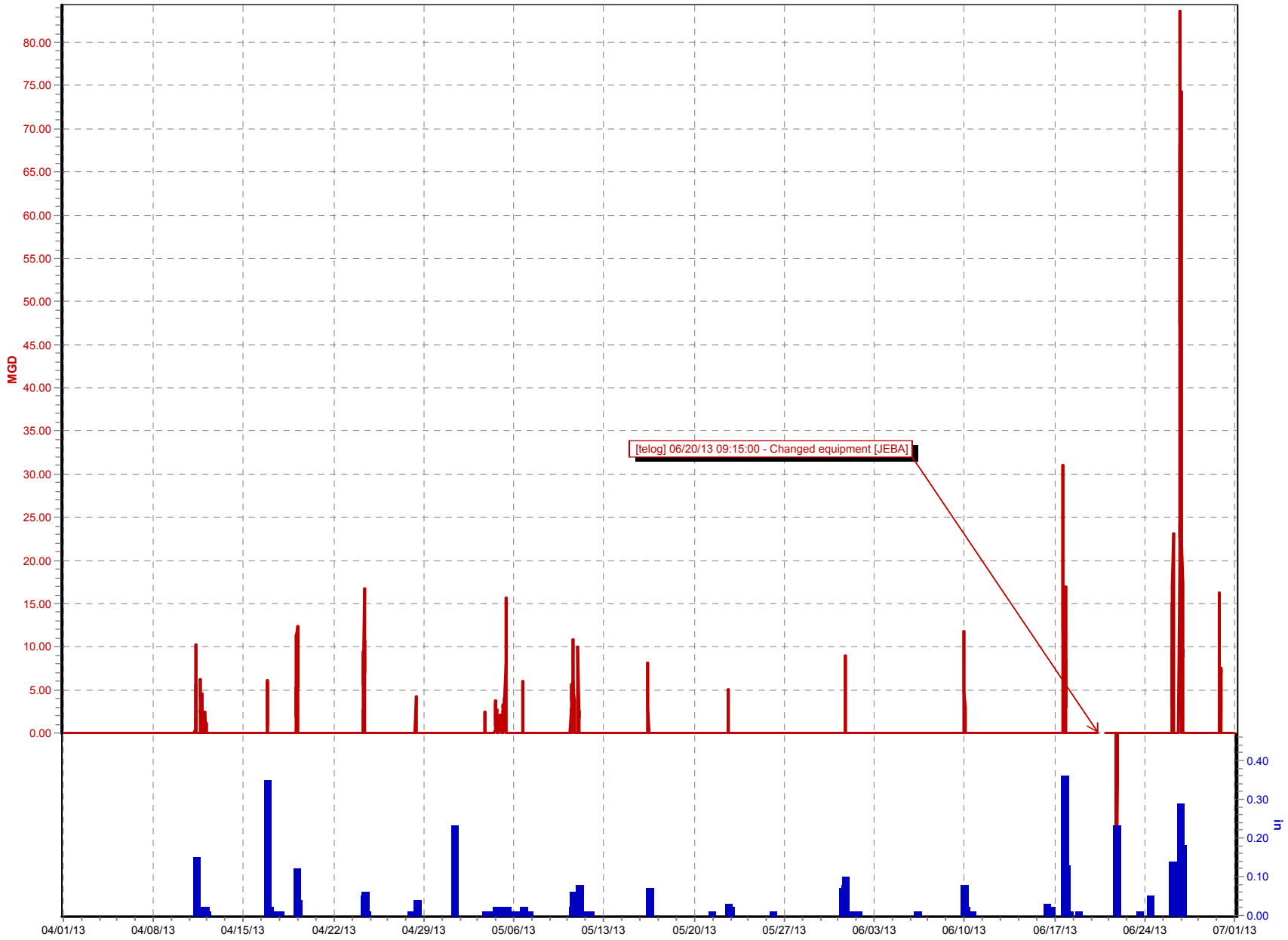
CSO151 Castlewood Dell (04/01/13 to 07/01/13)

Flow 1 (MGD) CSO 151_CSO_Upstream.CSO Flow (gpm) TR12_Nightingale PS.Rain (in)



CSO152 (04/01/13 to 07/01/13)

Flow 1 (MGD) CSO 152_CSO_Upstream.CSO Flow MGD (MGD) TR12_Nightingale PS.Rain (in)



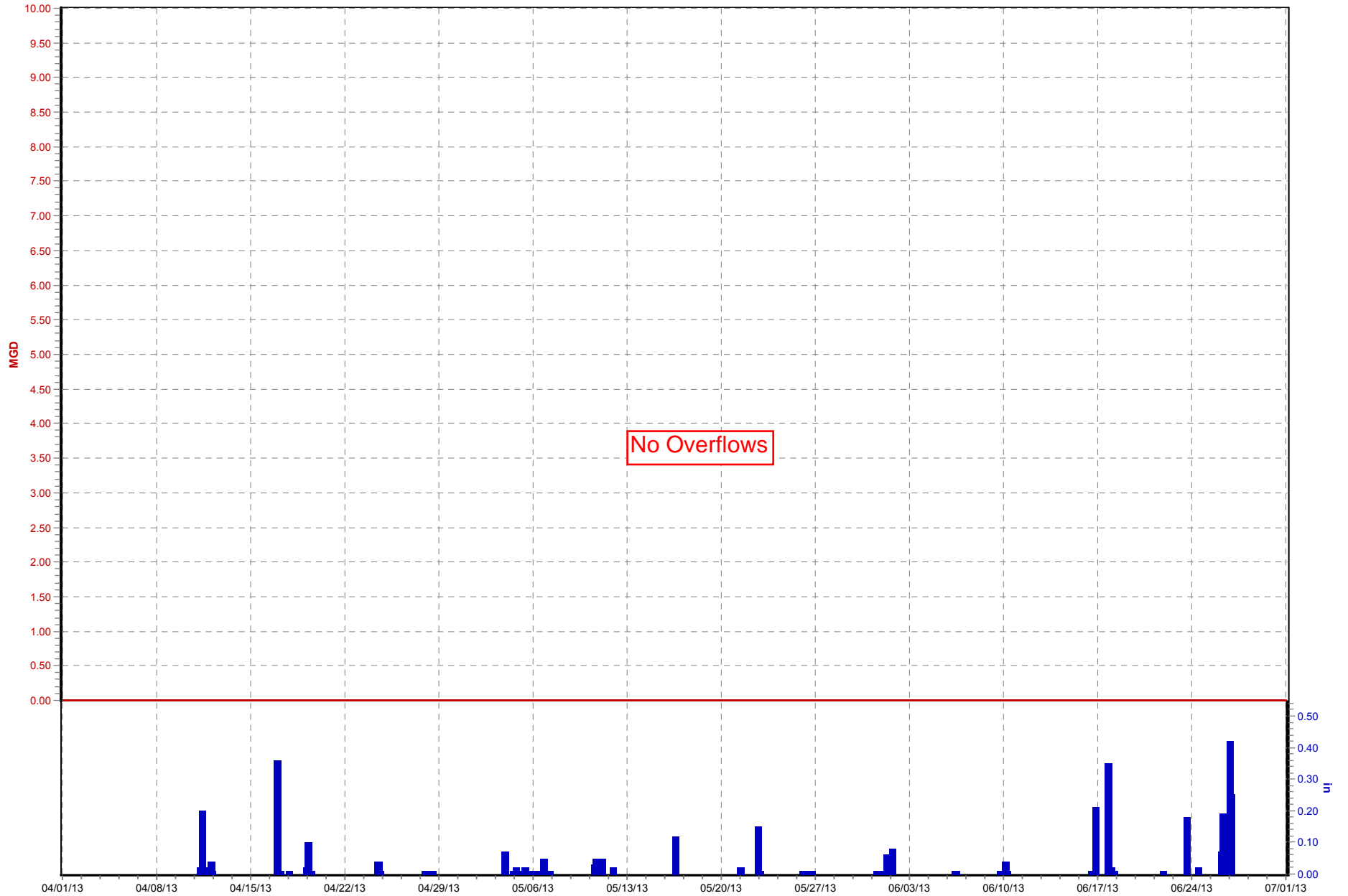
CSO153 Lex Rd (04/01/13 to 07/01/13)

1Flow (MGD) TR05_Beargrass PS.Rain (in)



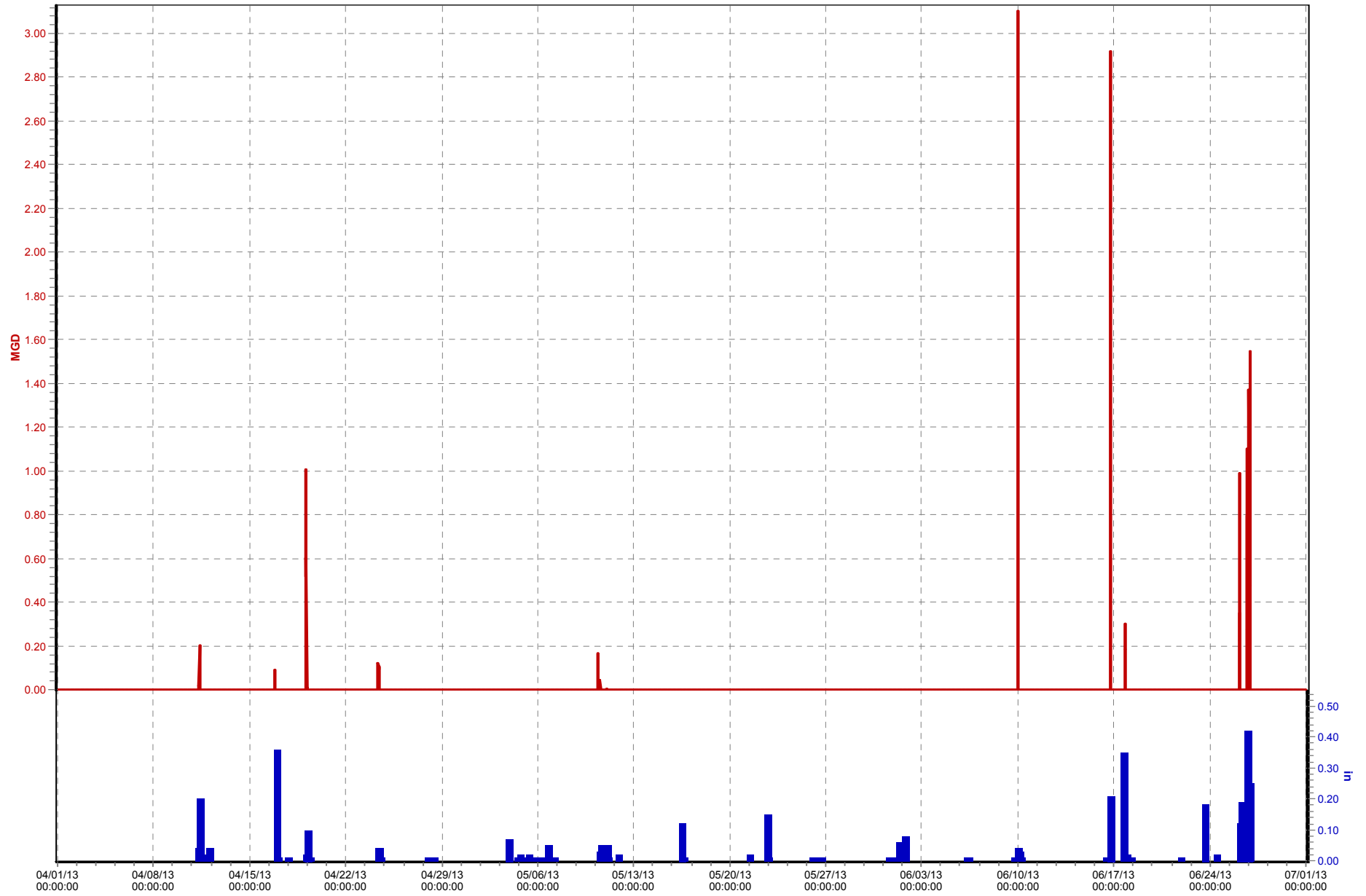
CSO154 Mellwood Ave (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO155 Rowan St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



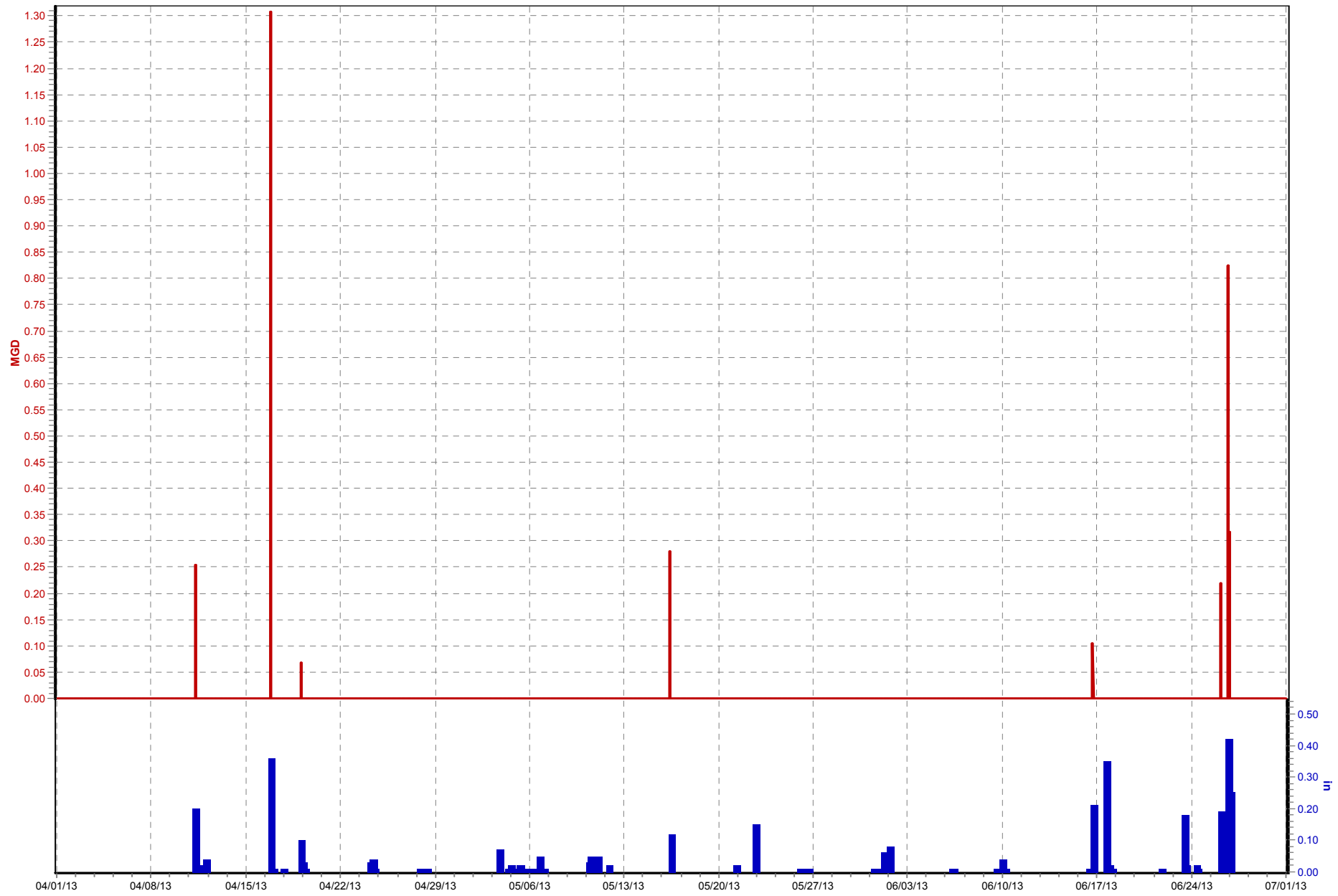
CSO160 1st St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO161 1st and Market St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



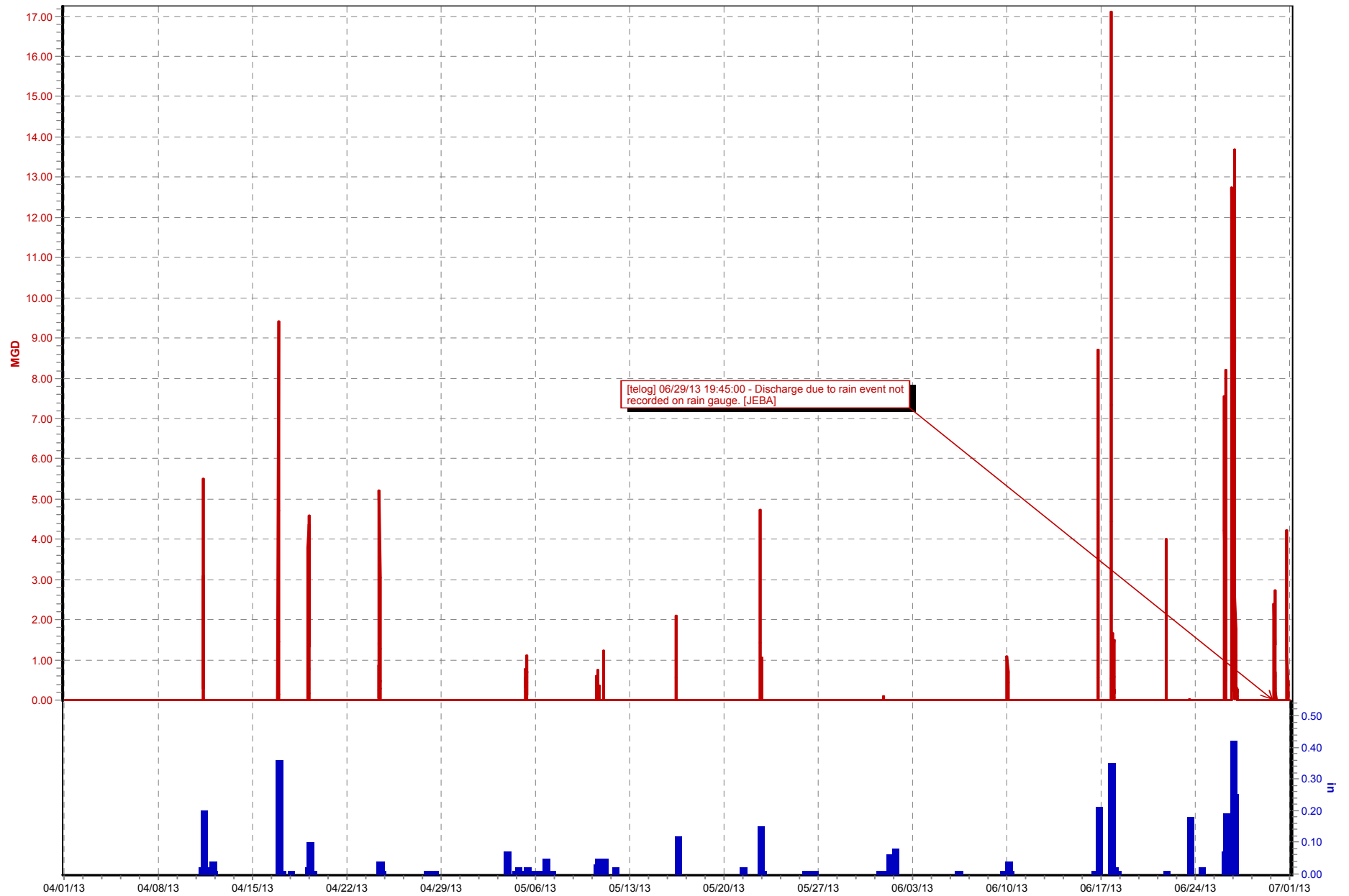
CSO166 Lex Rd (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



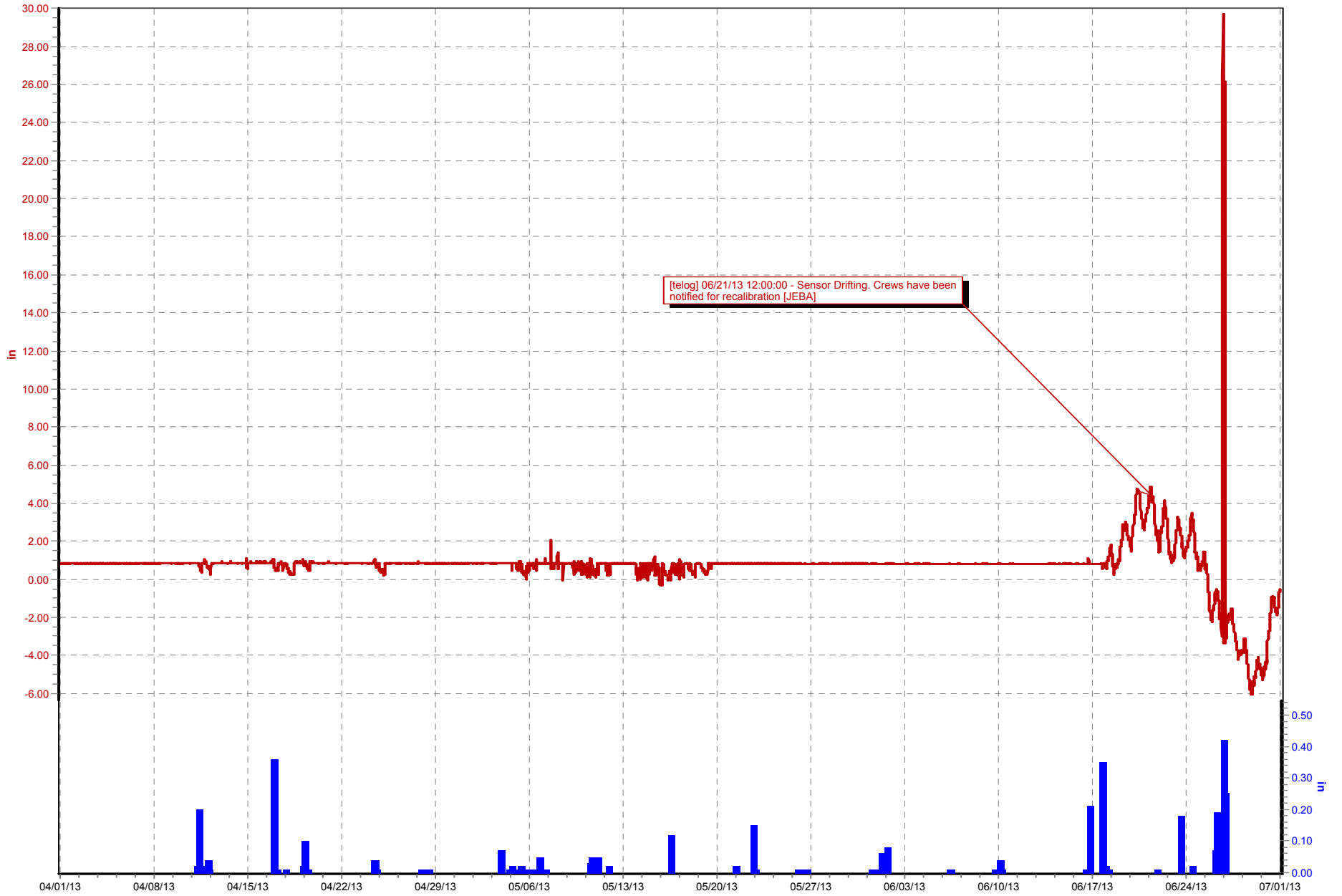
CSO167 Brownsboro Rd (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



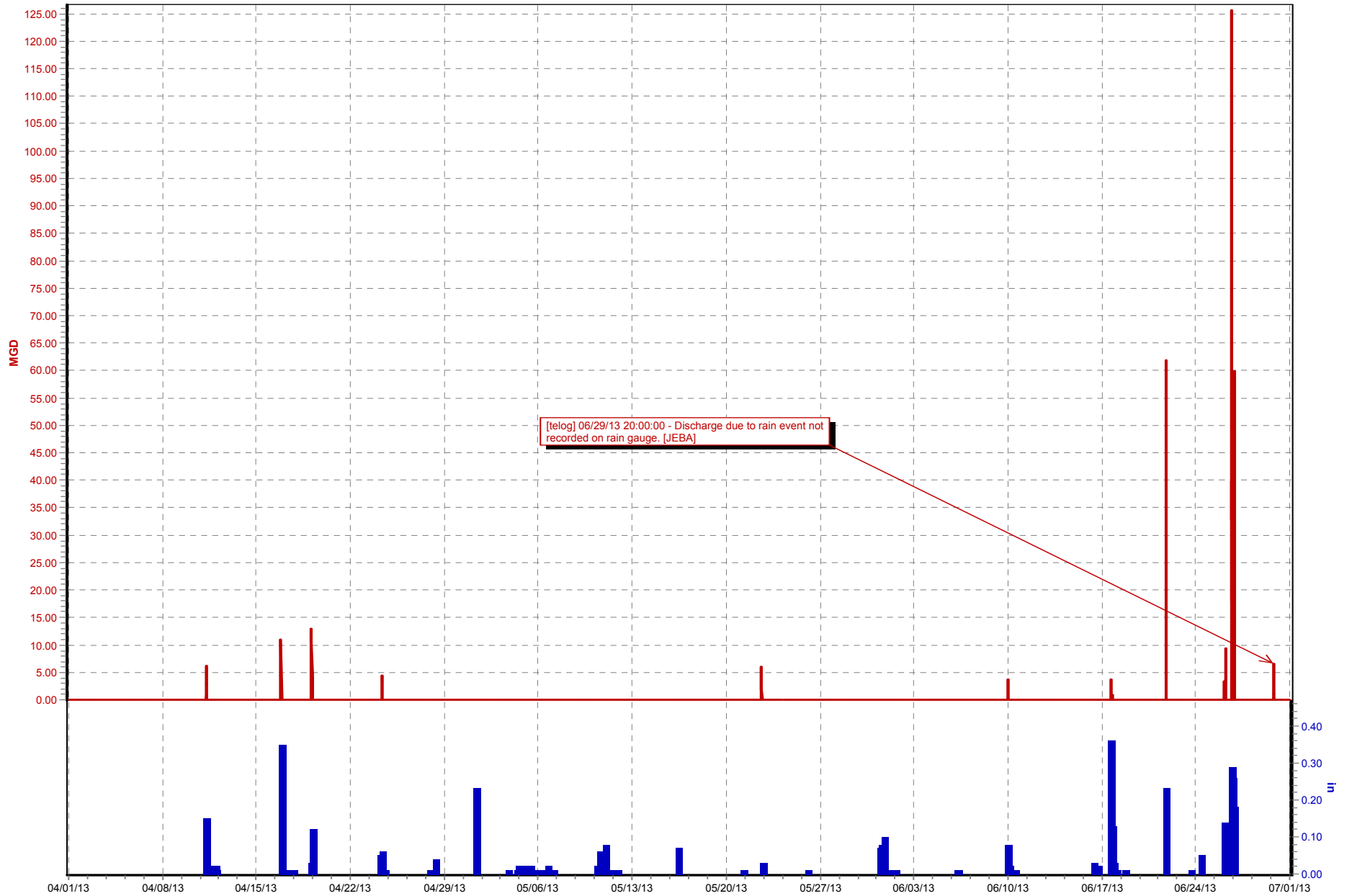
CSO172 River Road (04/01/13 to 07/01/13)

level (in) TR05_Beargrass PS.Rain (in)



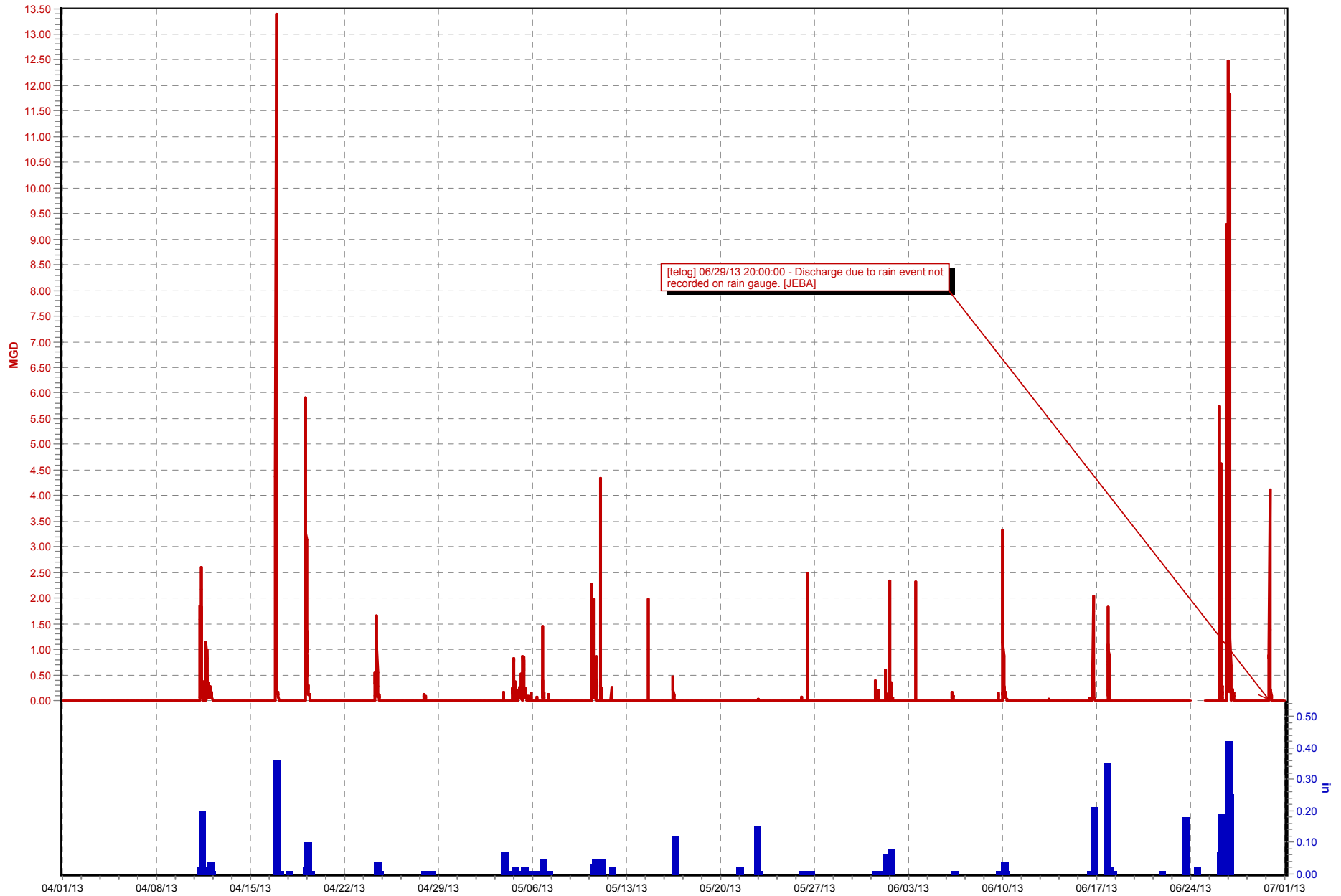
CSO174 Goss_Boyle Ave (04/01/13 to 07/01/13)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



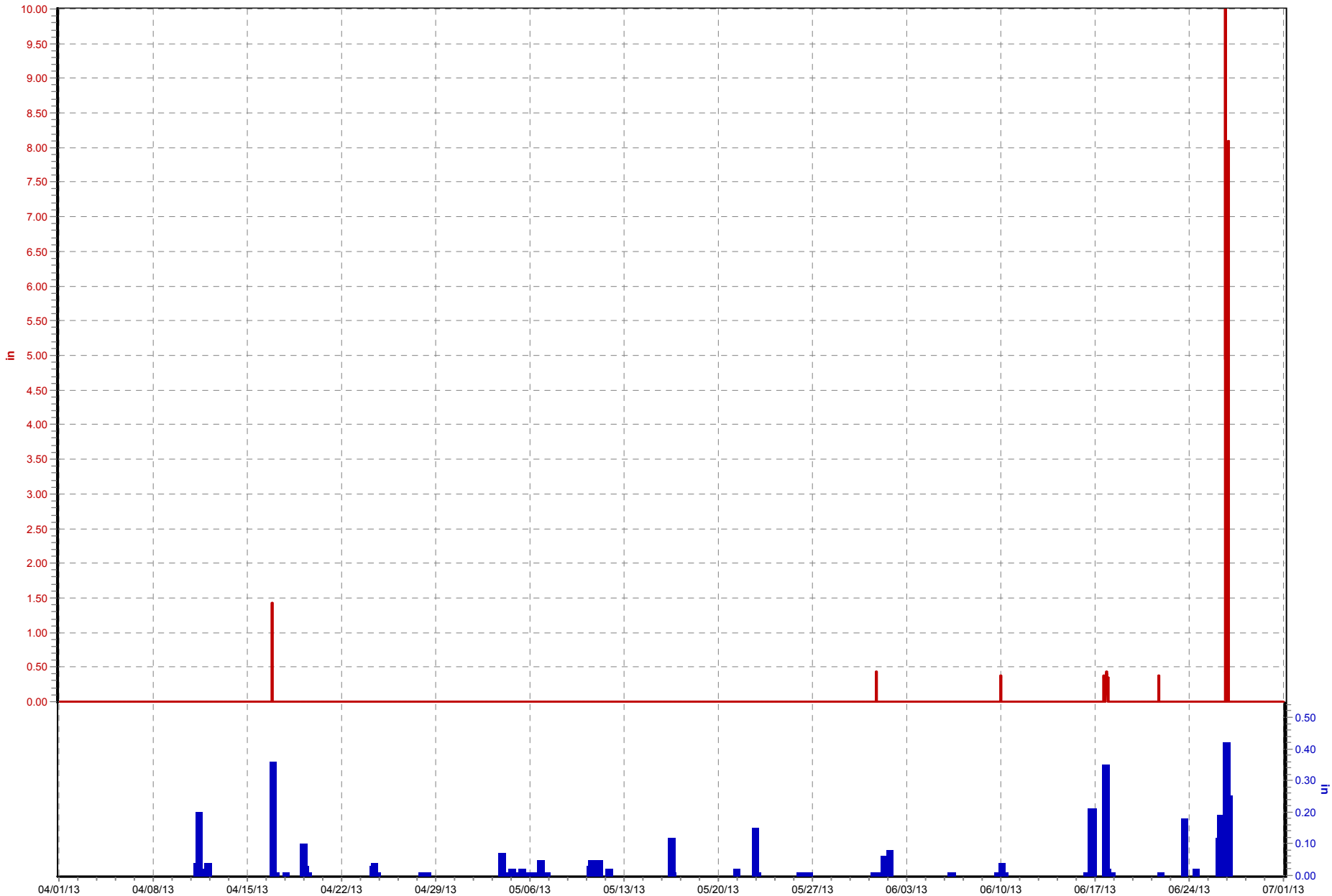
CSO178 RoyWilkins Ave (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



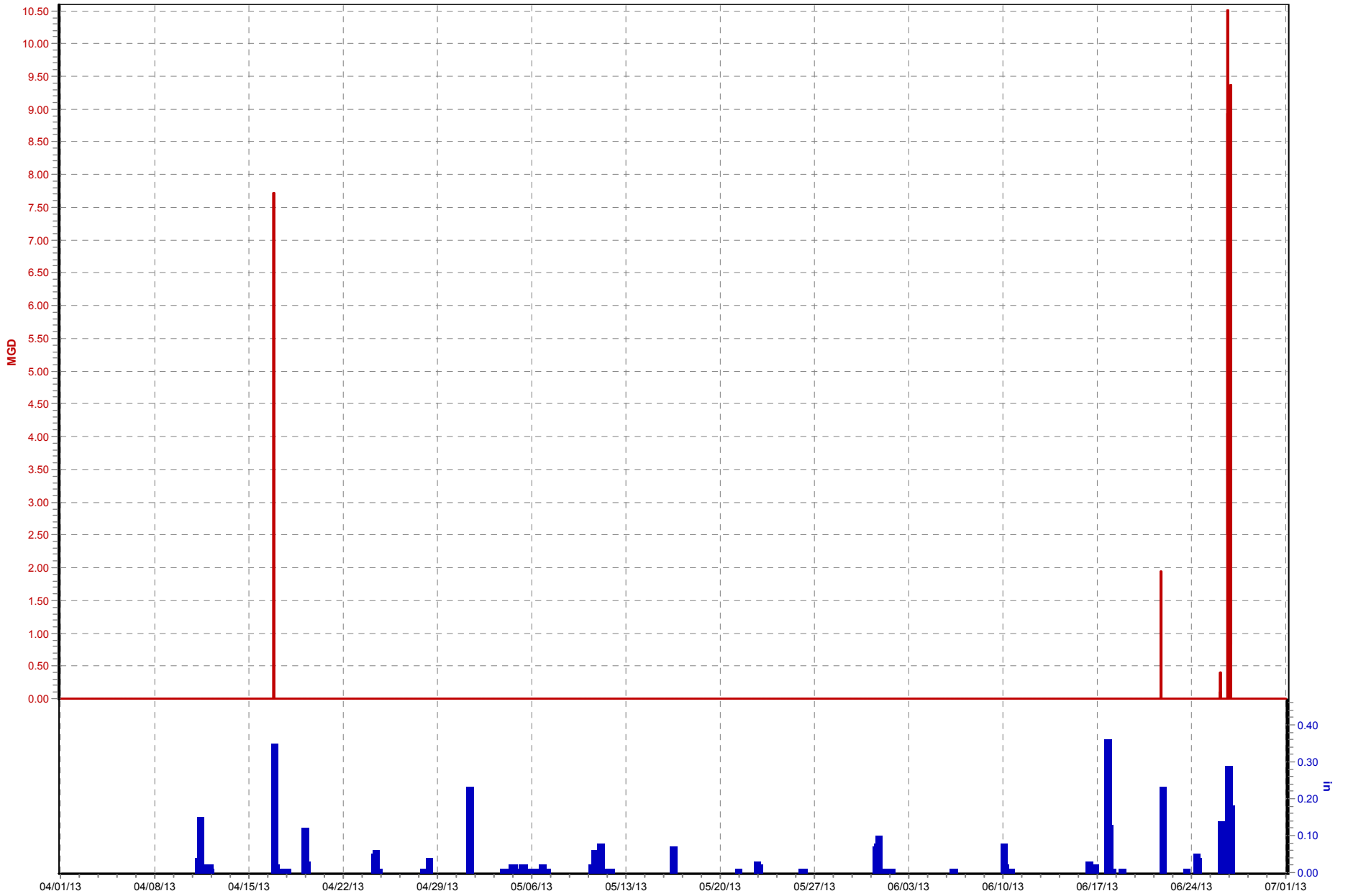
CSO179 KY St_St Paul Ct (04/01/13 to 07/01/13)

Level 2-CSO179 (in) TR05_Beargrass PS.Rain (in)



CSO180 E Ormsby_Clay St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



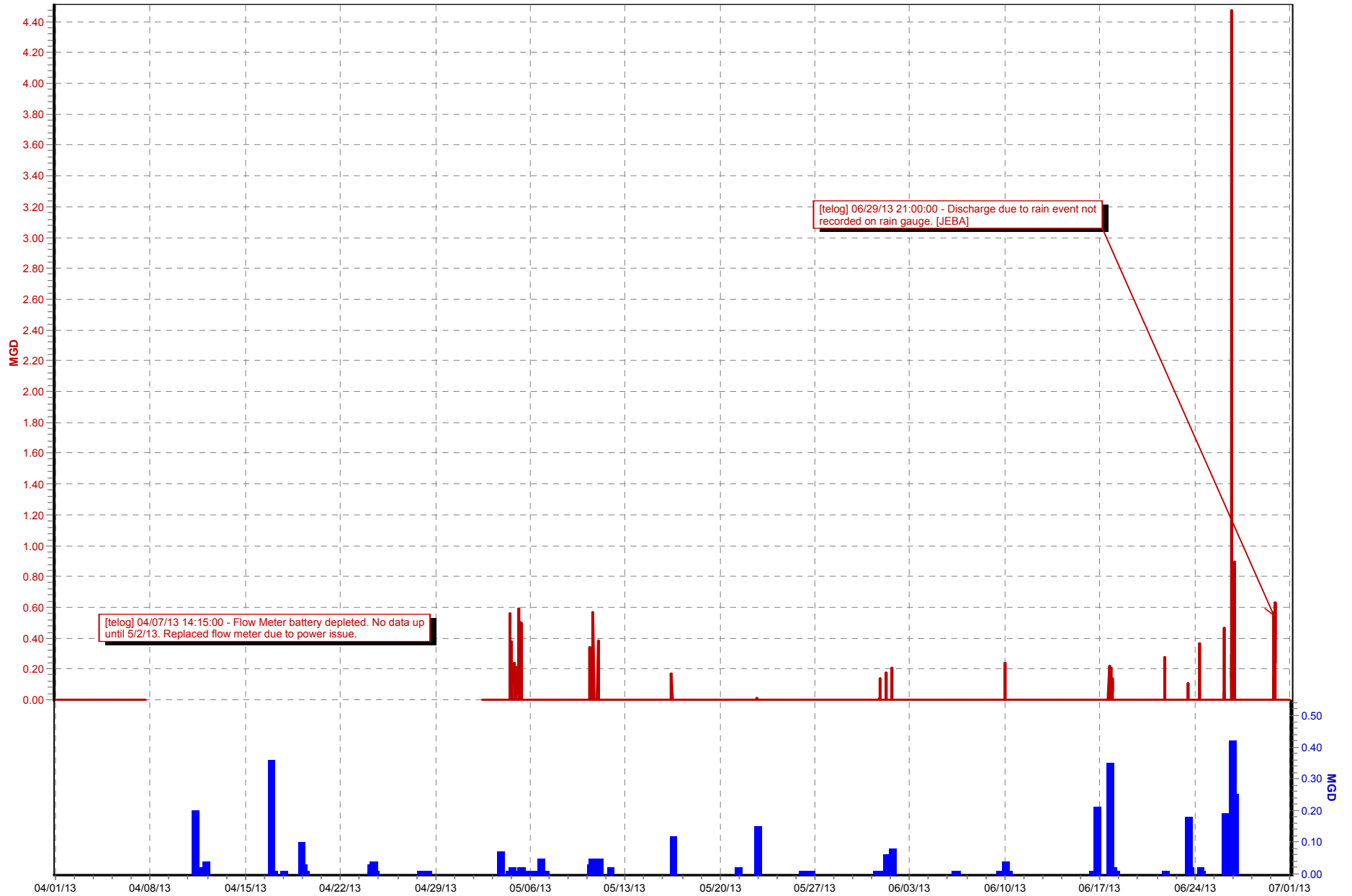
CSO181 (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



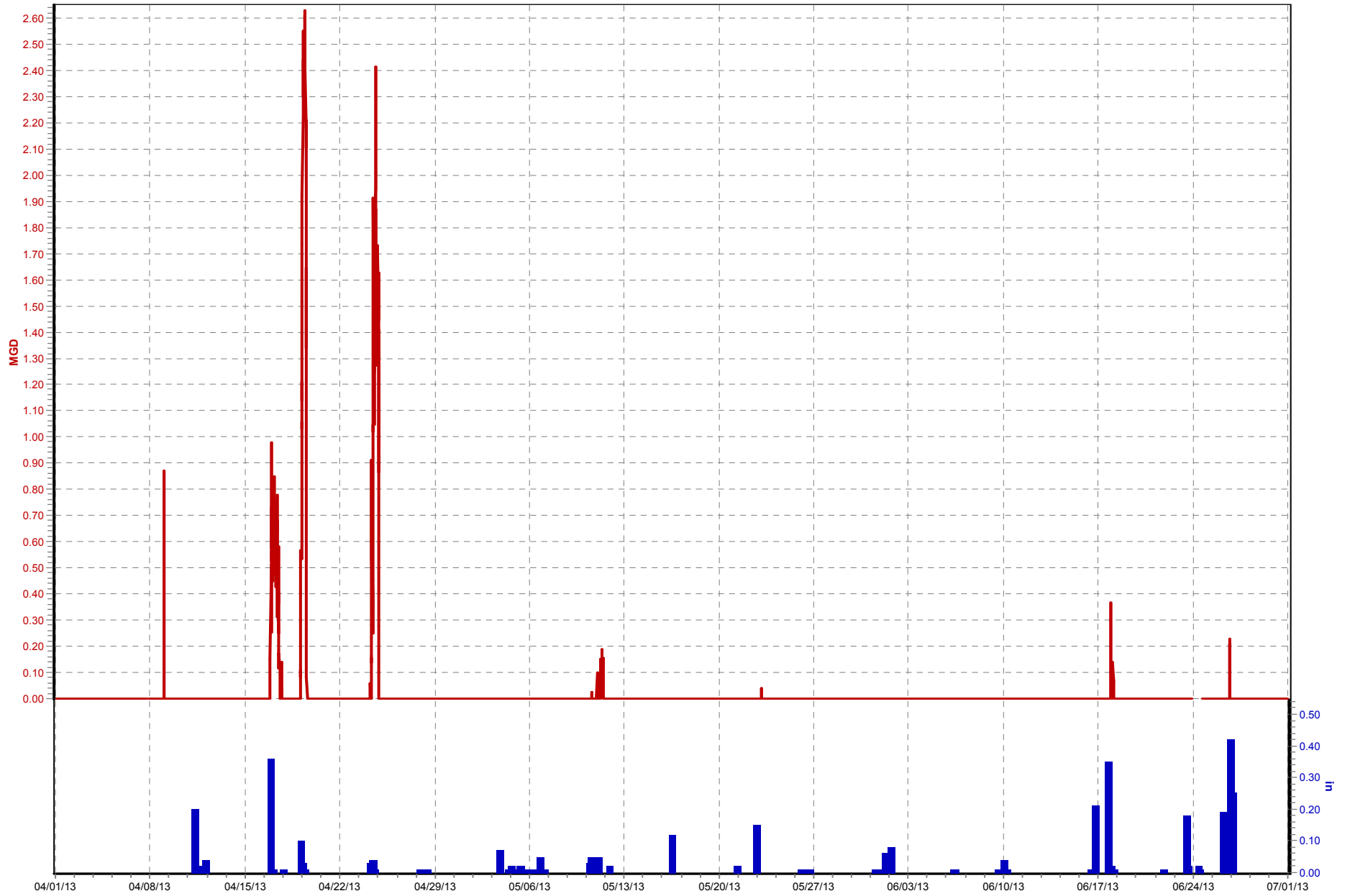
CSO182 Shelby_Burnett St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



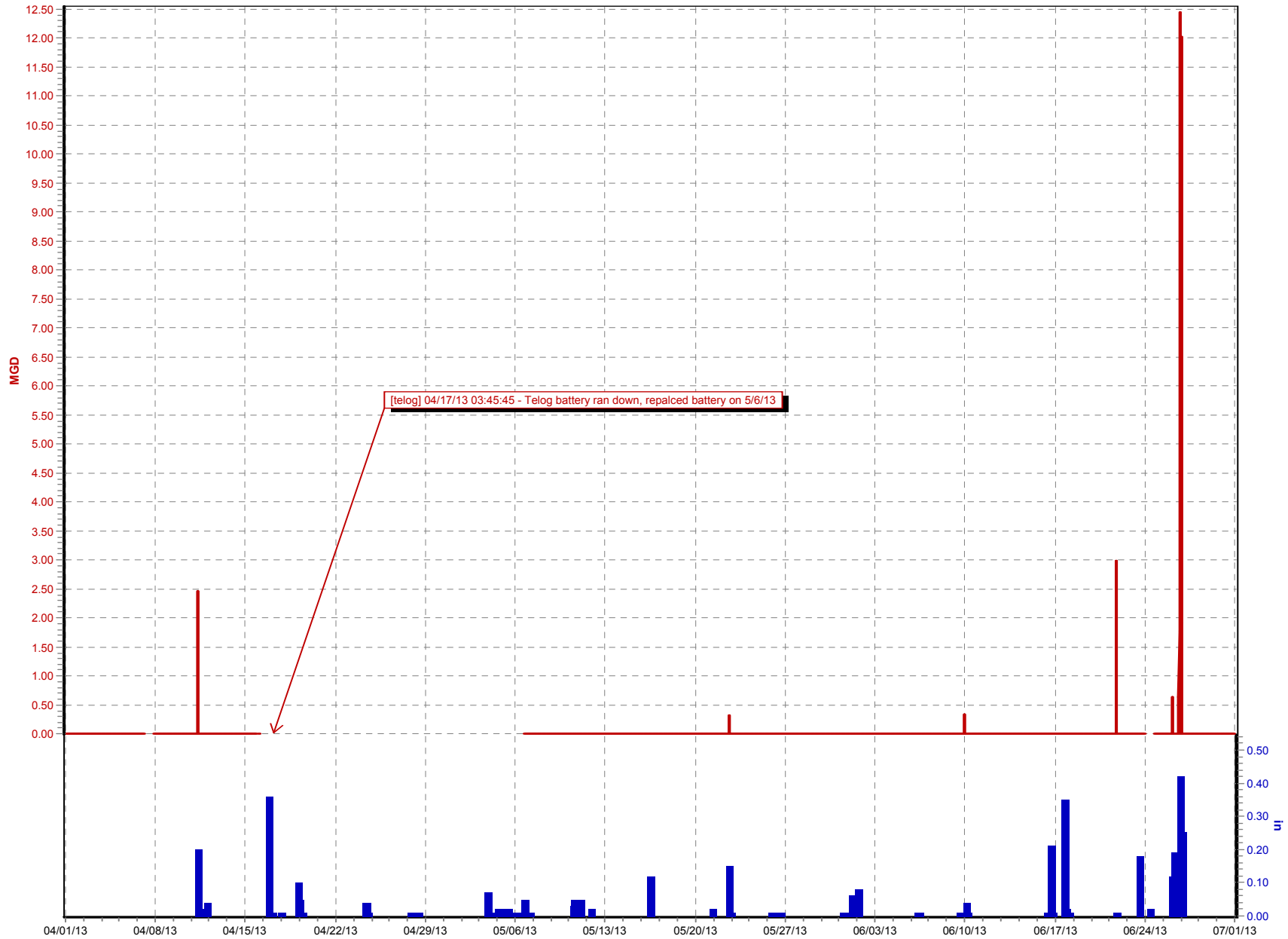
CSO183 Keswick Blvd (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



CSO184(04/01/13 to 07/01/13)

1Flow-CSO184 (MGD) TR05_Beargrass PS.Rain (in)



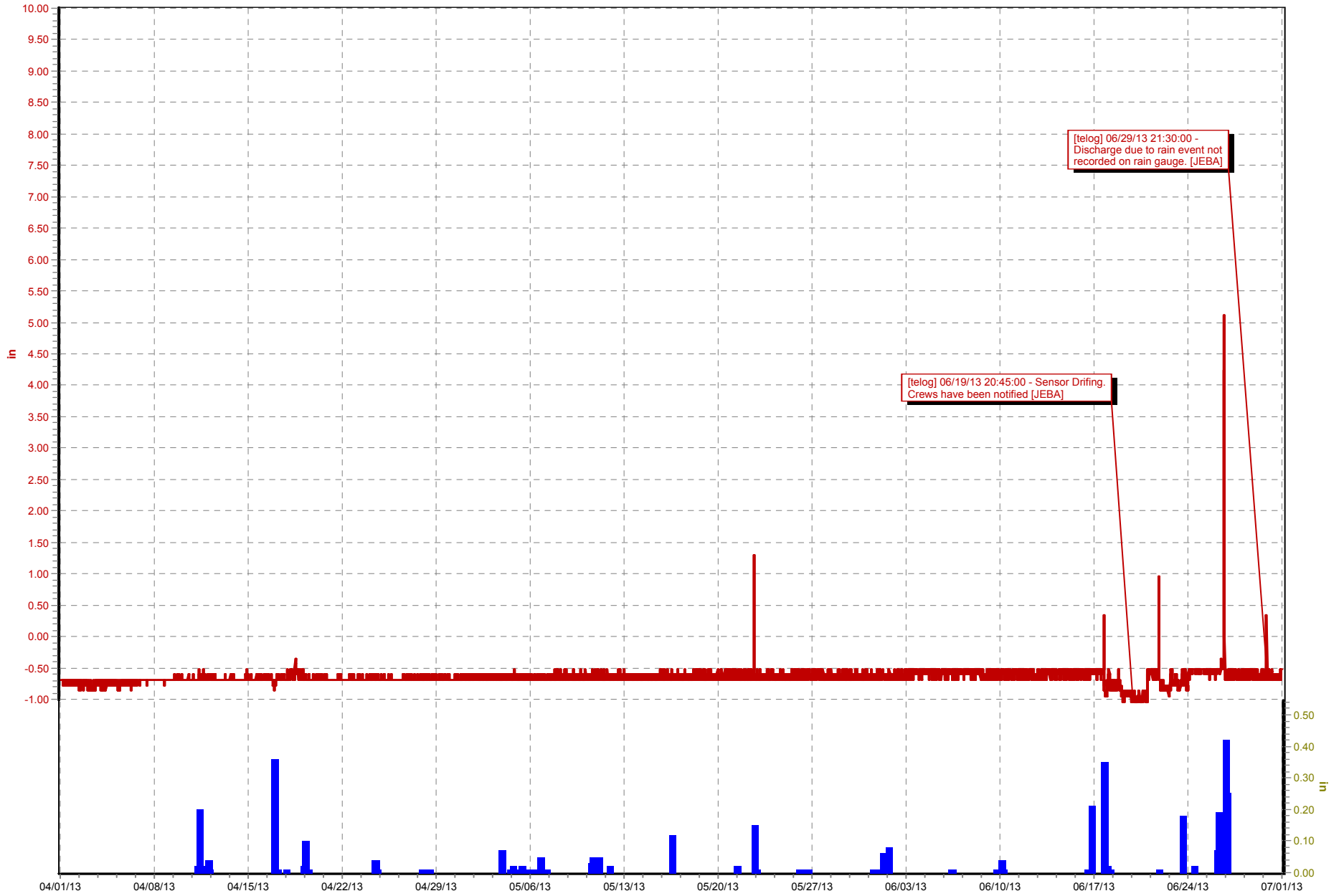
CSO185 S Shelby St (04/01/13 to 07/01/13)

2Level-CSO185 (in) TR05_Beargrass PS.Rain (in)



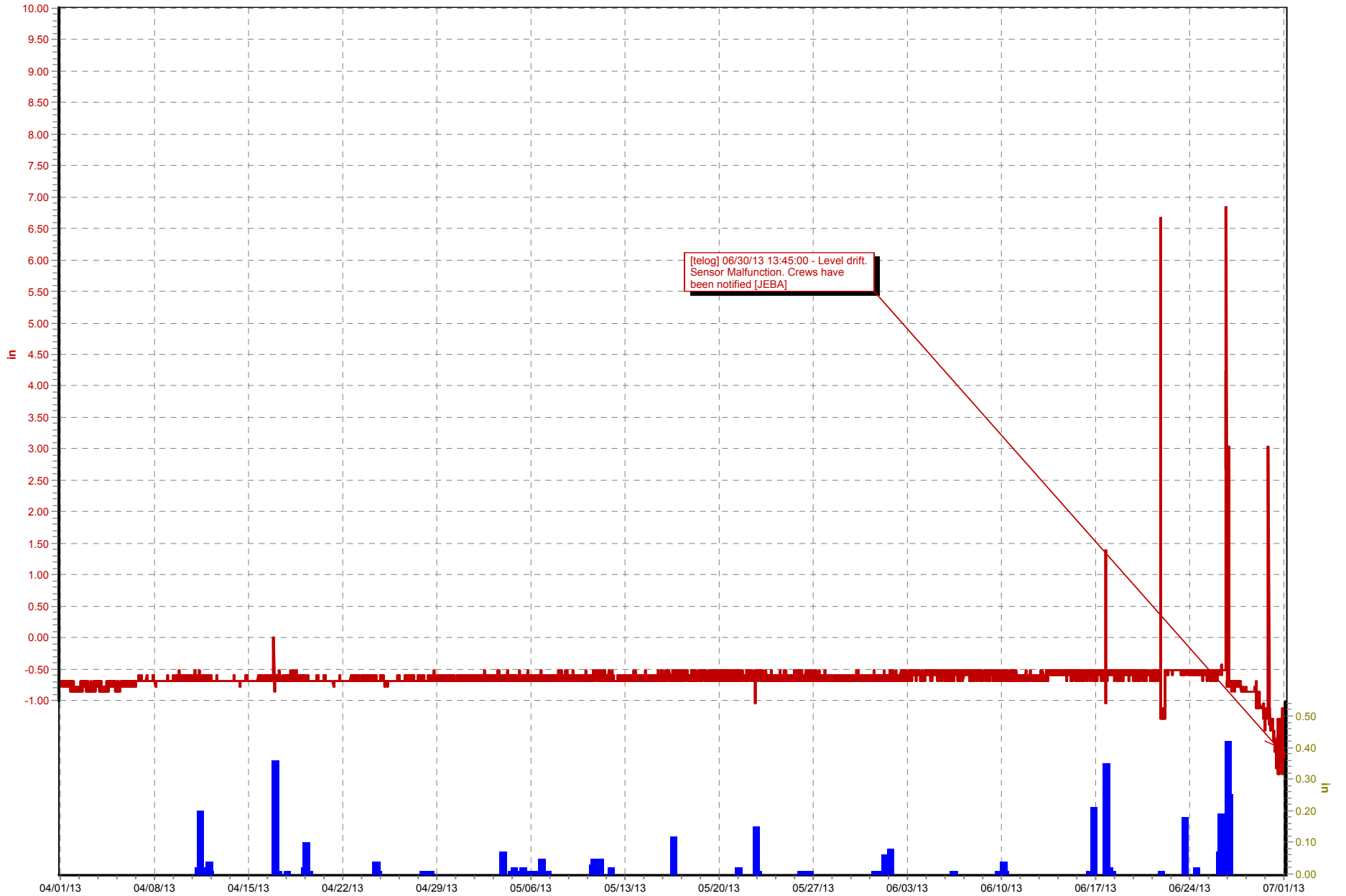
CSO186 Logan St (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



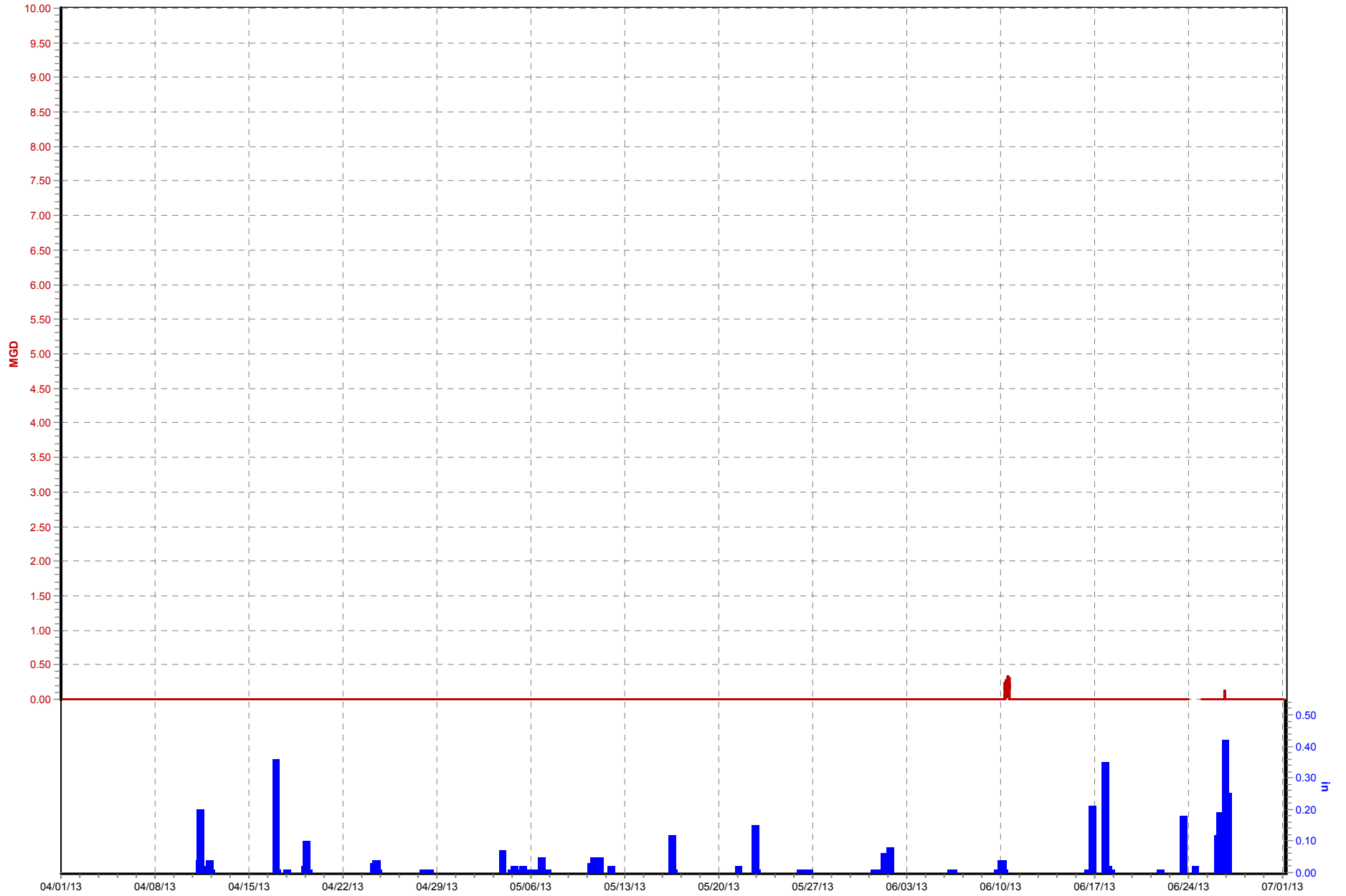
CSO187 Shelby St (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



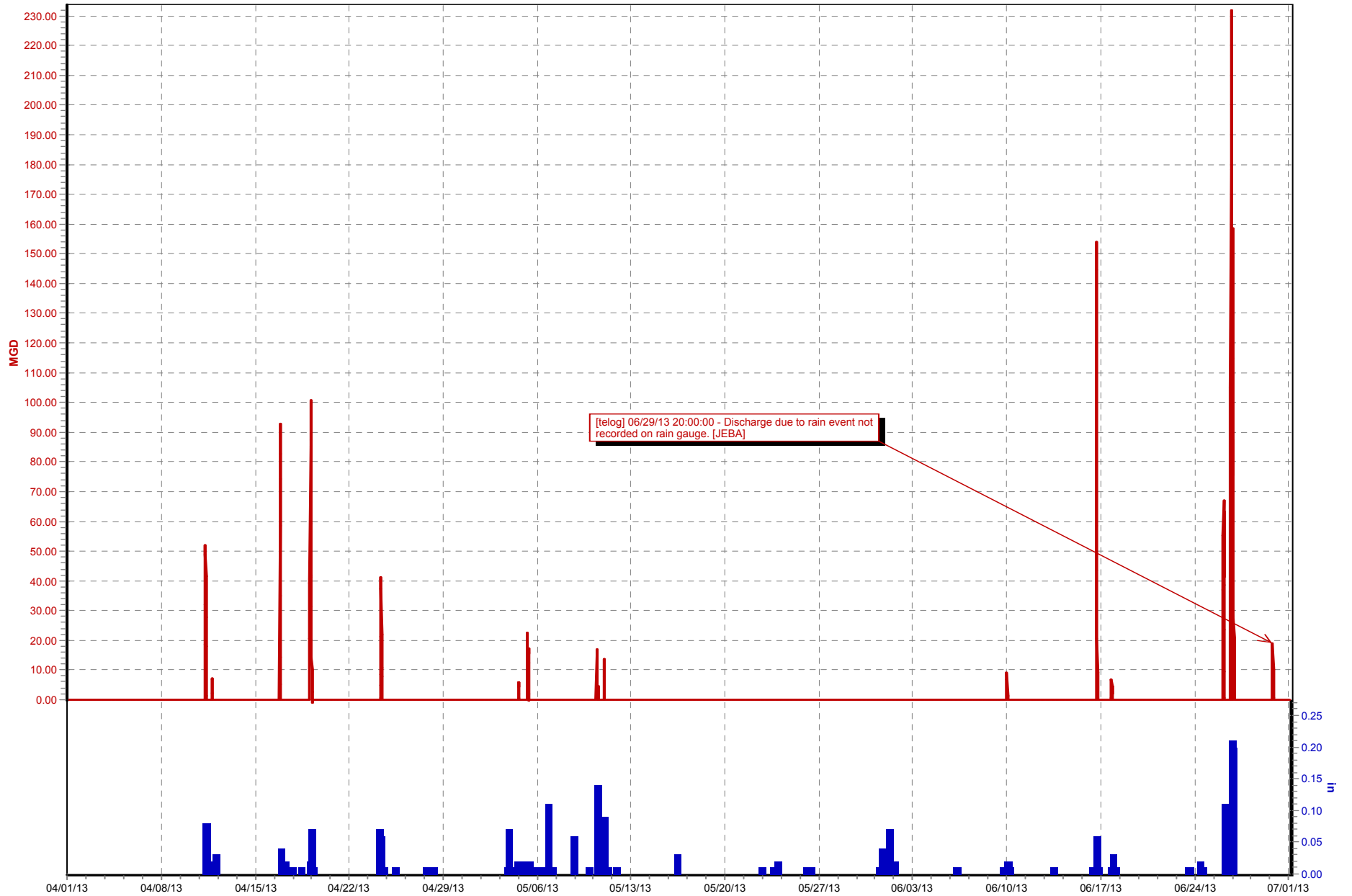
CSO188 Clay St (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



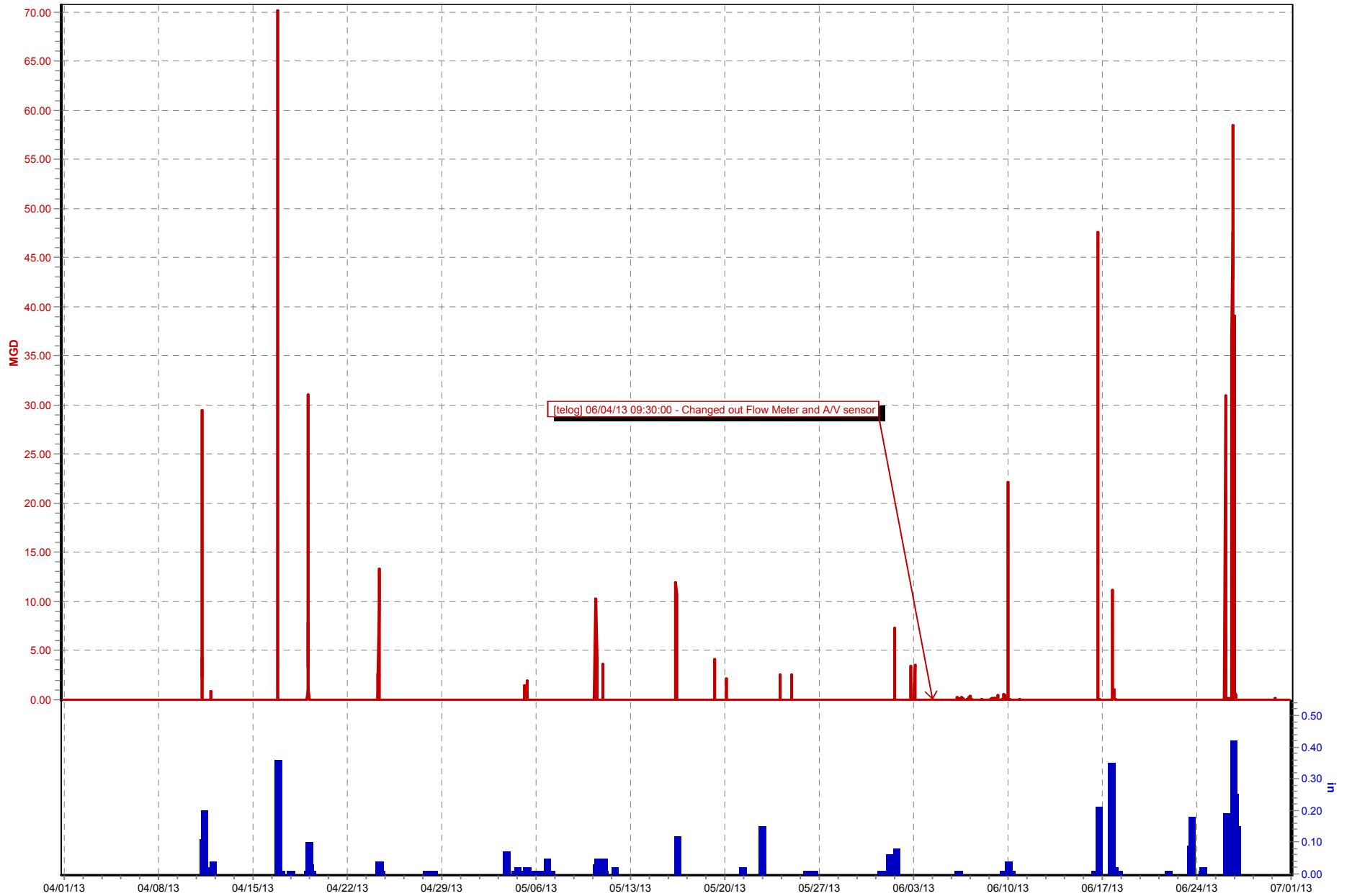
CSO189 Shawnee PK PS (04/01/13 to 07/01/13)

Flow 1 (MGD) TR04_Morris Forman WQTC.Rain (in)



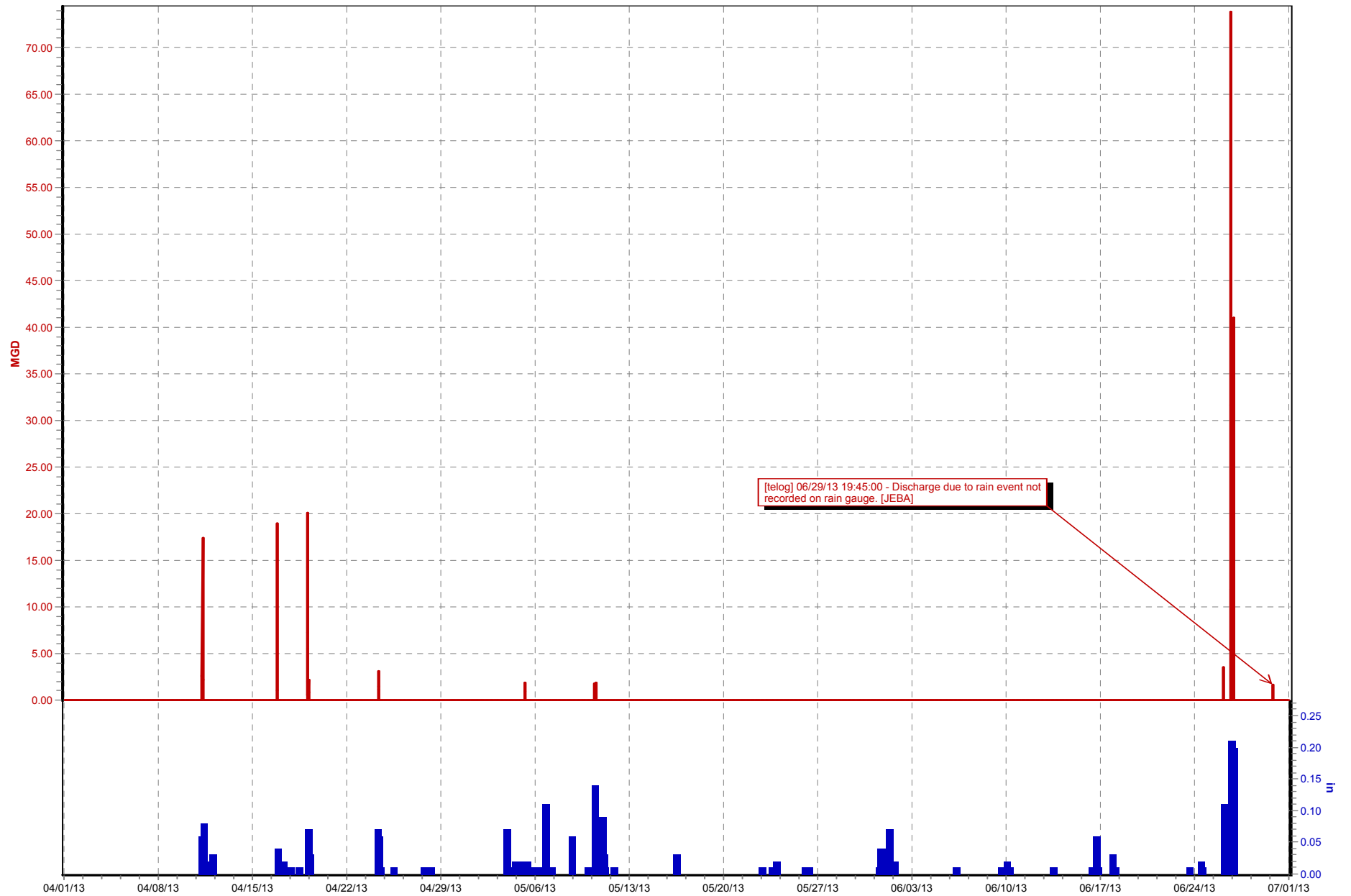
CSO190 NWest Pkwy (03/31/13 to 06/30/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



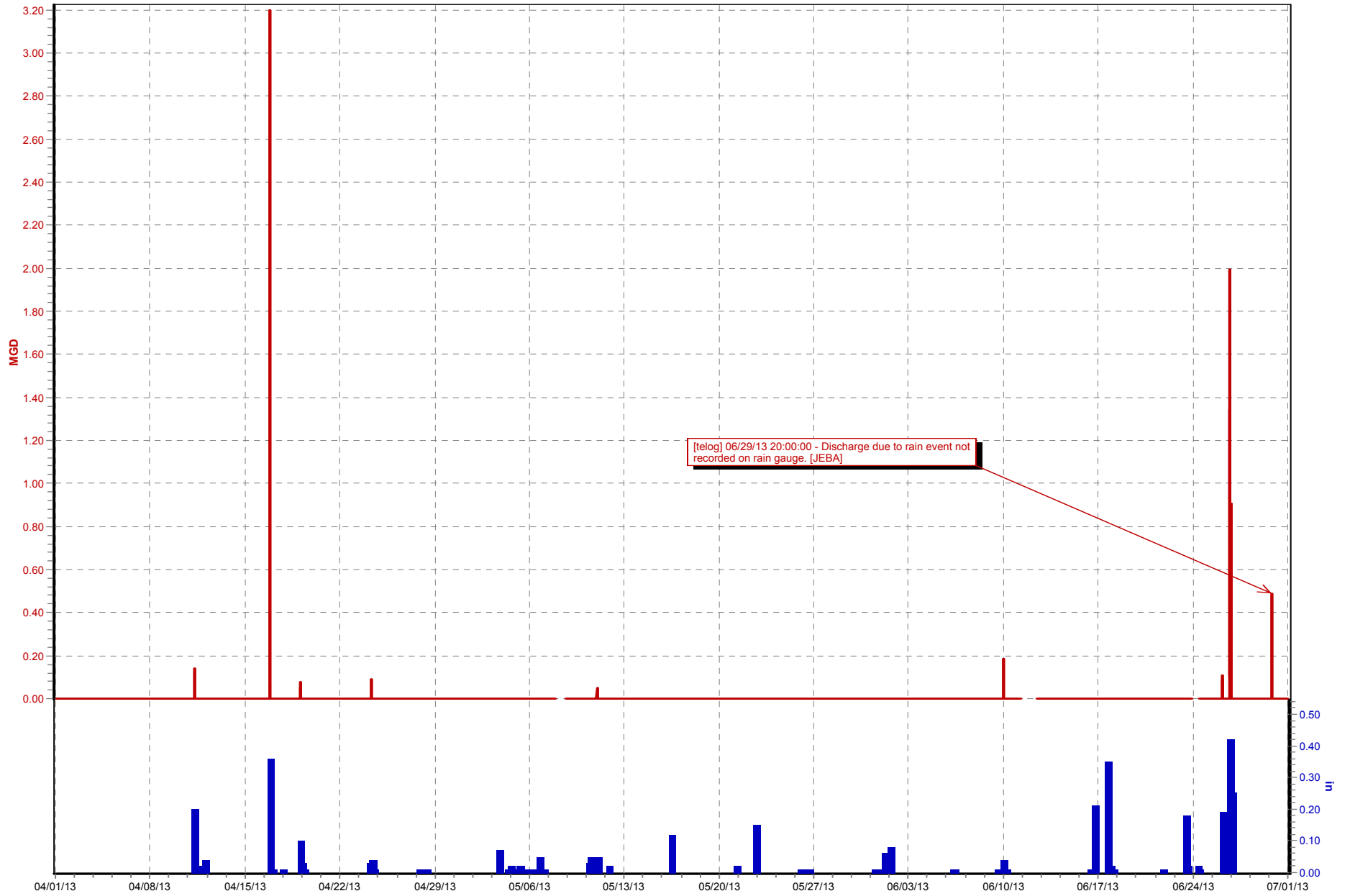
CSO191 Bells Lane PS (04/01/13 to 07/01/13)

Flow (MGD) TR04_Morris Forman WQTC.Rain (in)



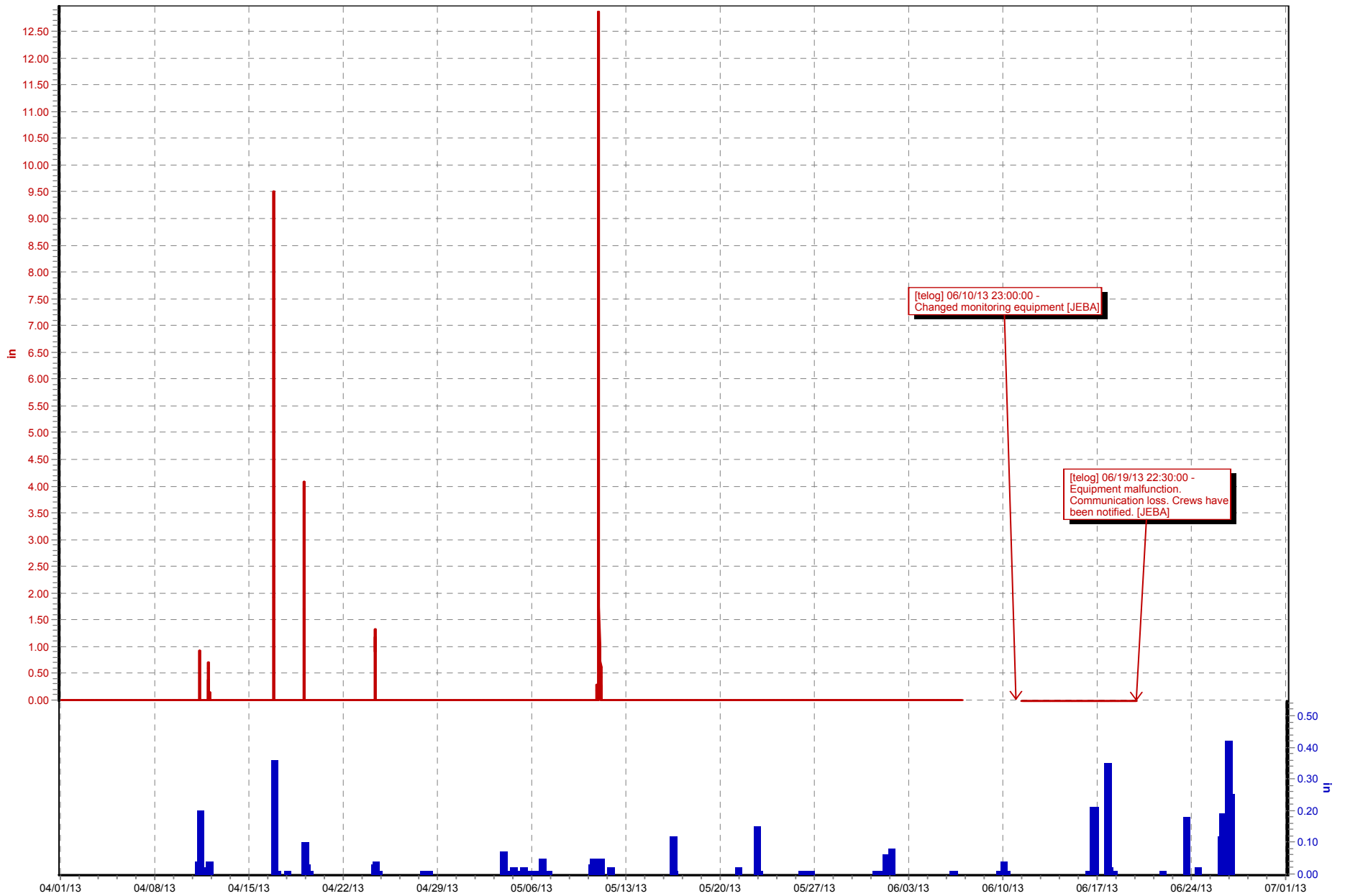
CSO193 6th and KY (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



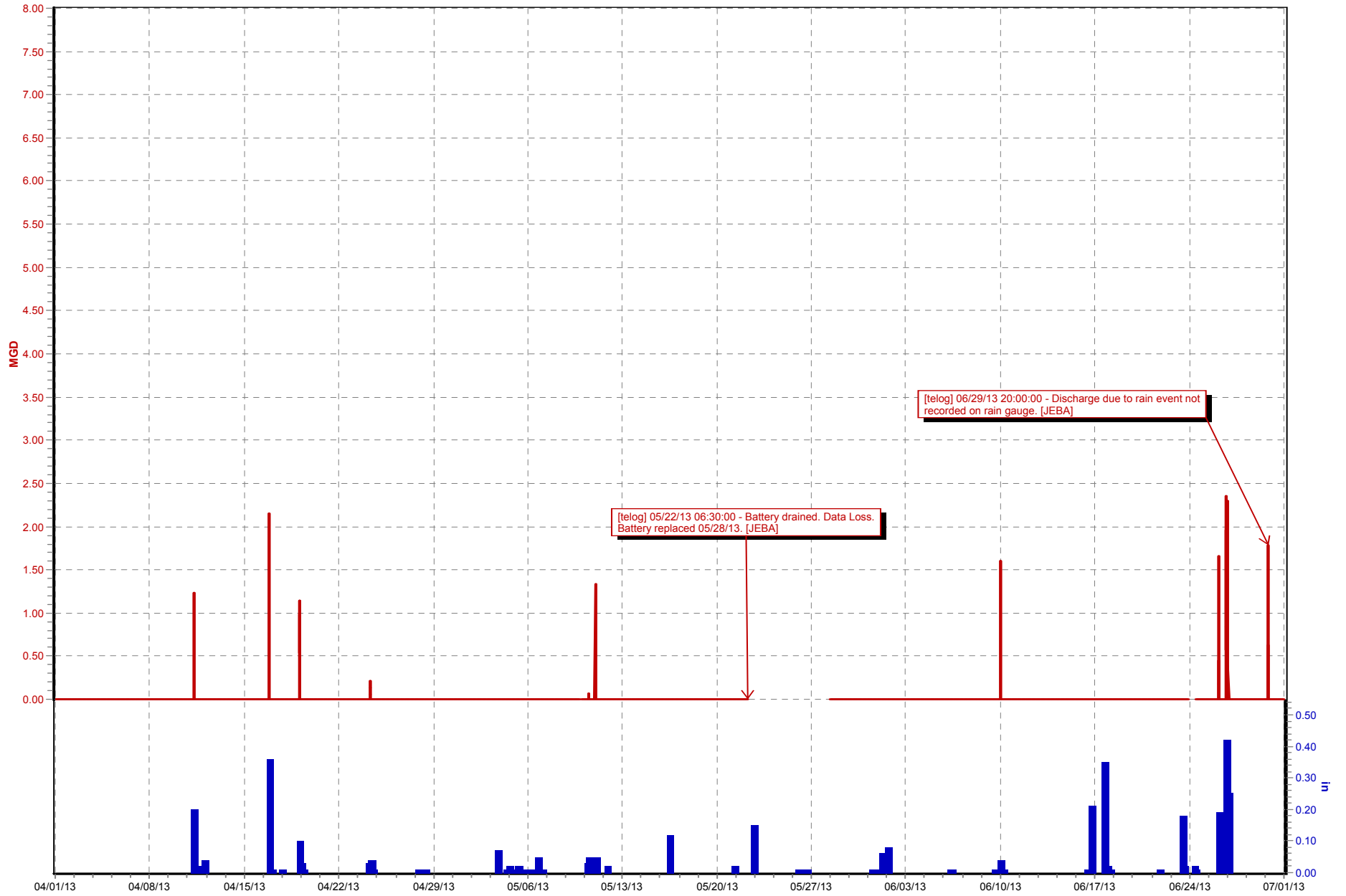
CSO195 S 4th St (04/01/13 to 07/01/13)

Level (in) CSO195 Upstream of Dam-2.CSO Level (in) TR05_Beargrass PS.Rain (in)



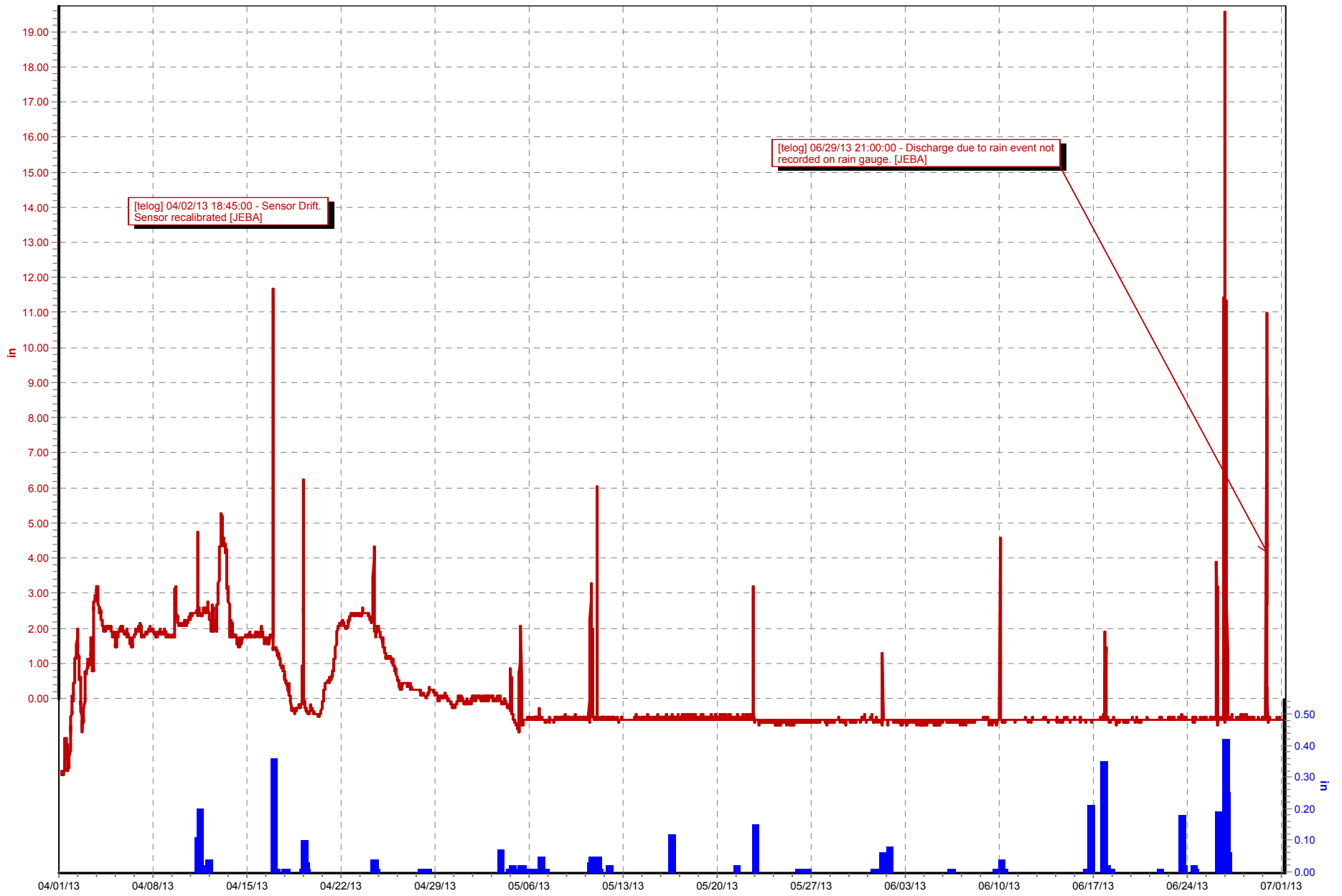
CSO196 (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



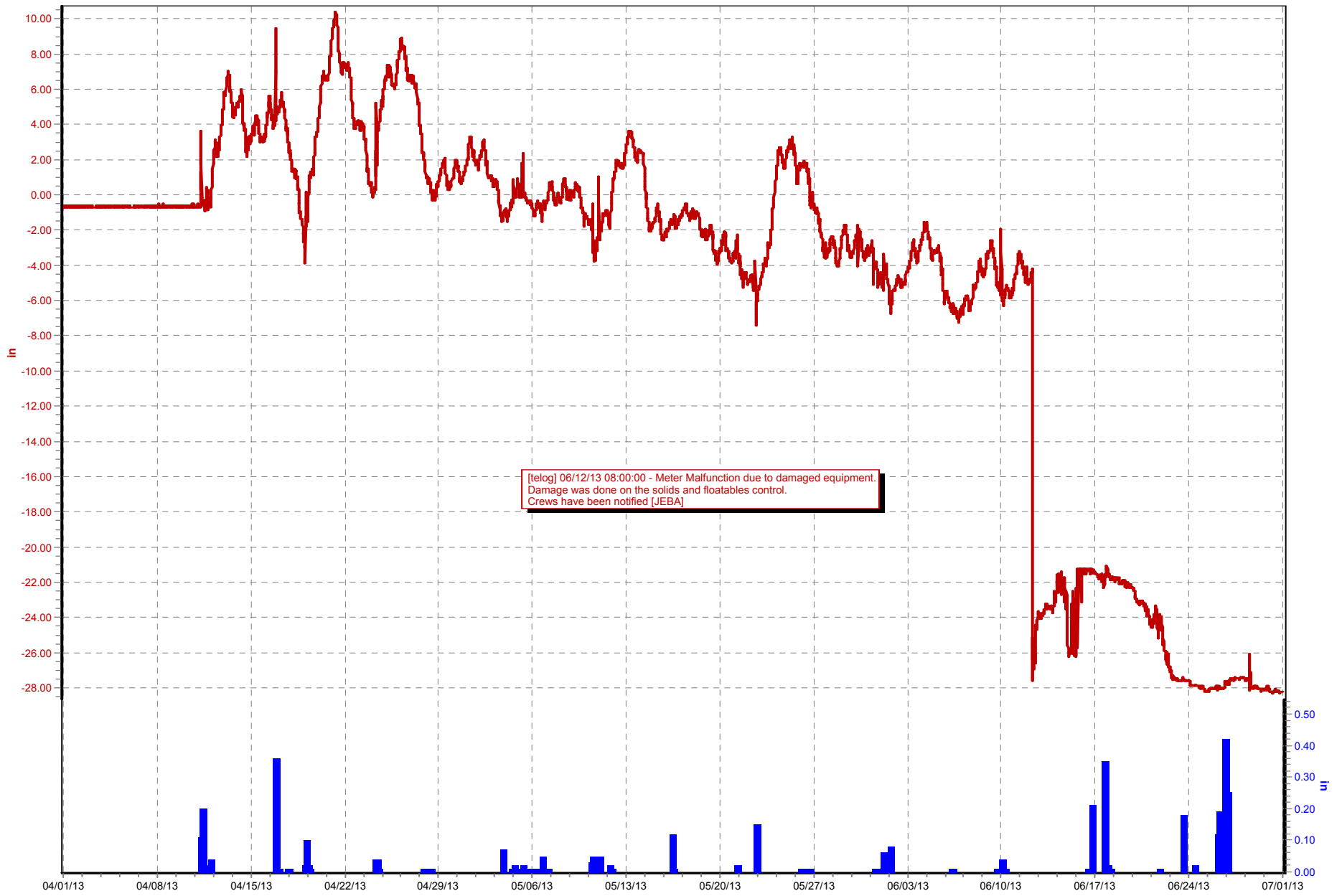
CSO197 S 3rd St (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



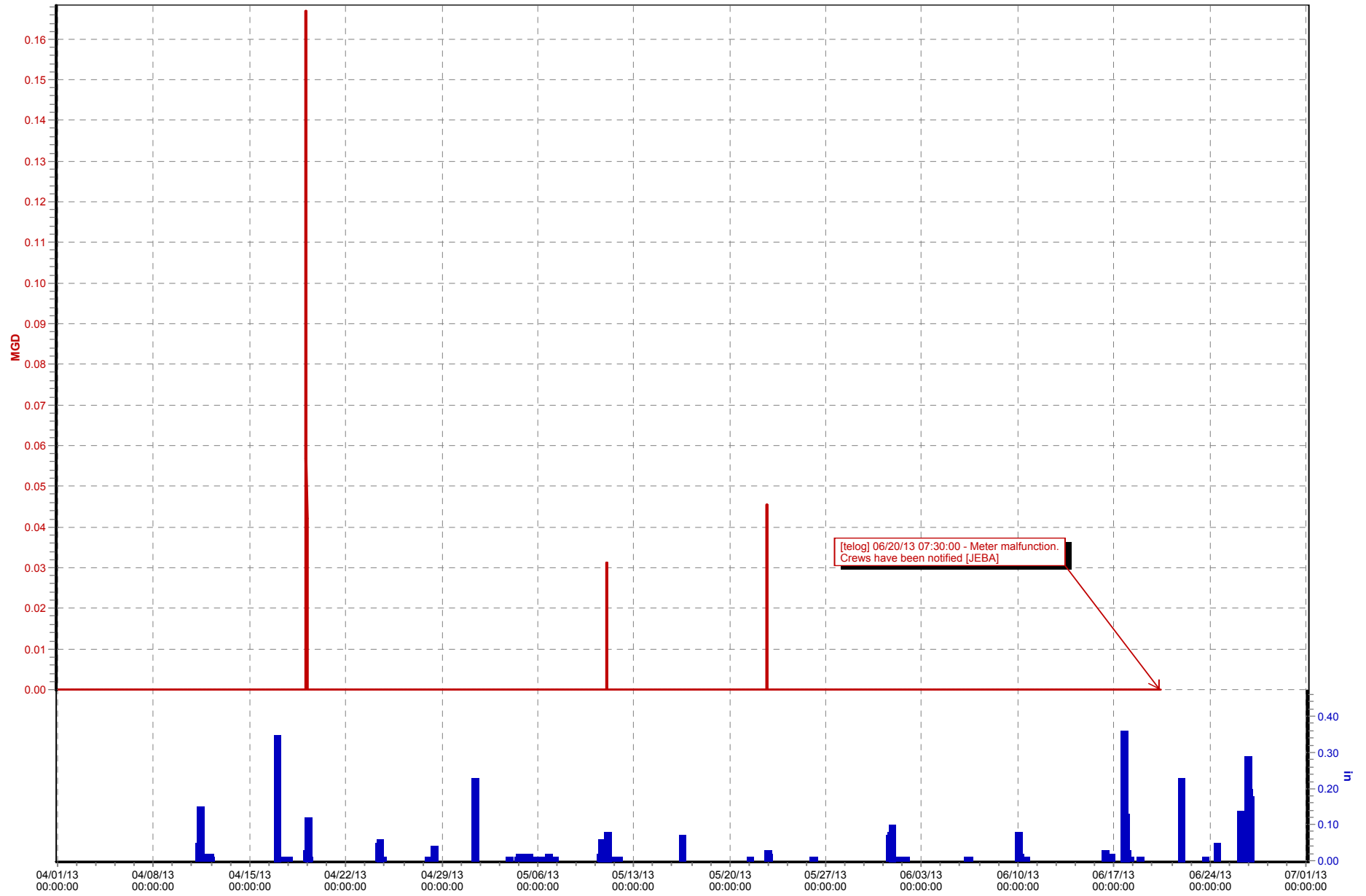
CSO198 S 3rd St (04/01/13 to 07/01/13)

Level (in) TR05_Beargrass PS.Rain (in)



CSO199 S 3rd St (04/01/13 to 07/01/13)

Flow (MGD) TR12_Nightingale PS.Rain (in)



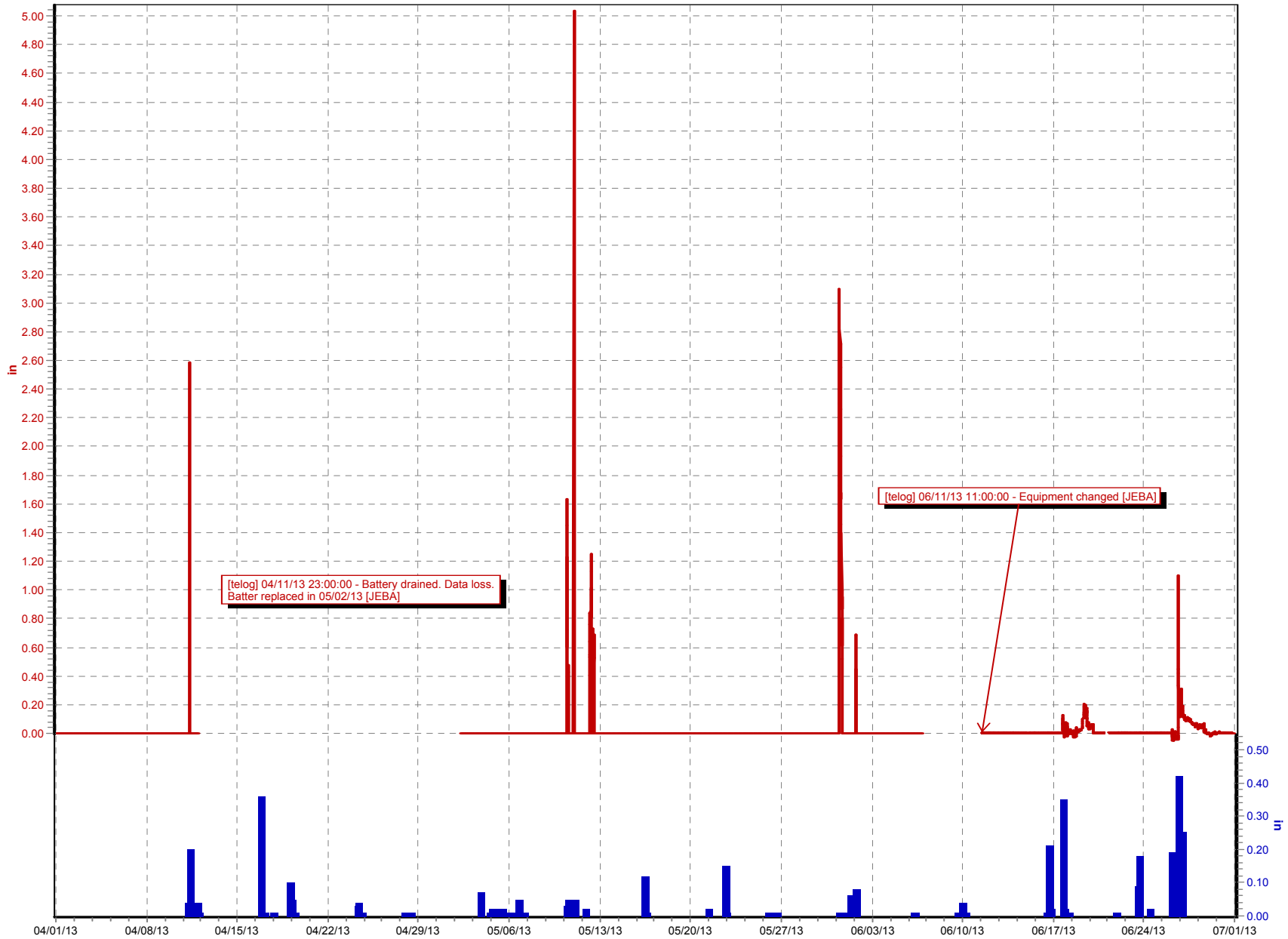
CSO200 S 3rd St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



CSO201 S 5th St (04/01/13 to 07/01/13)

Level (in) CSO201 Upstream of Dam-02.CSO Level (in) TR05_Beargrass PS.Rain (in)



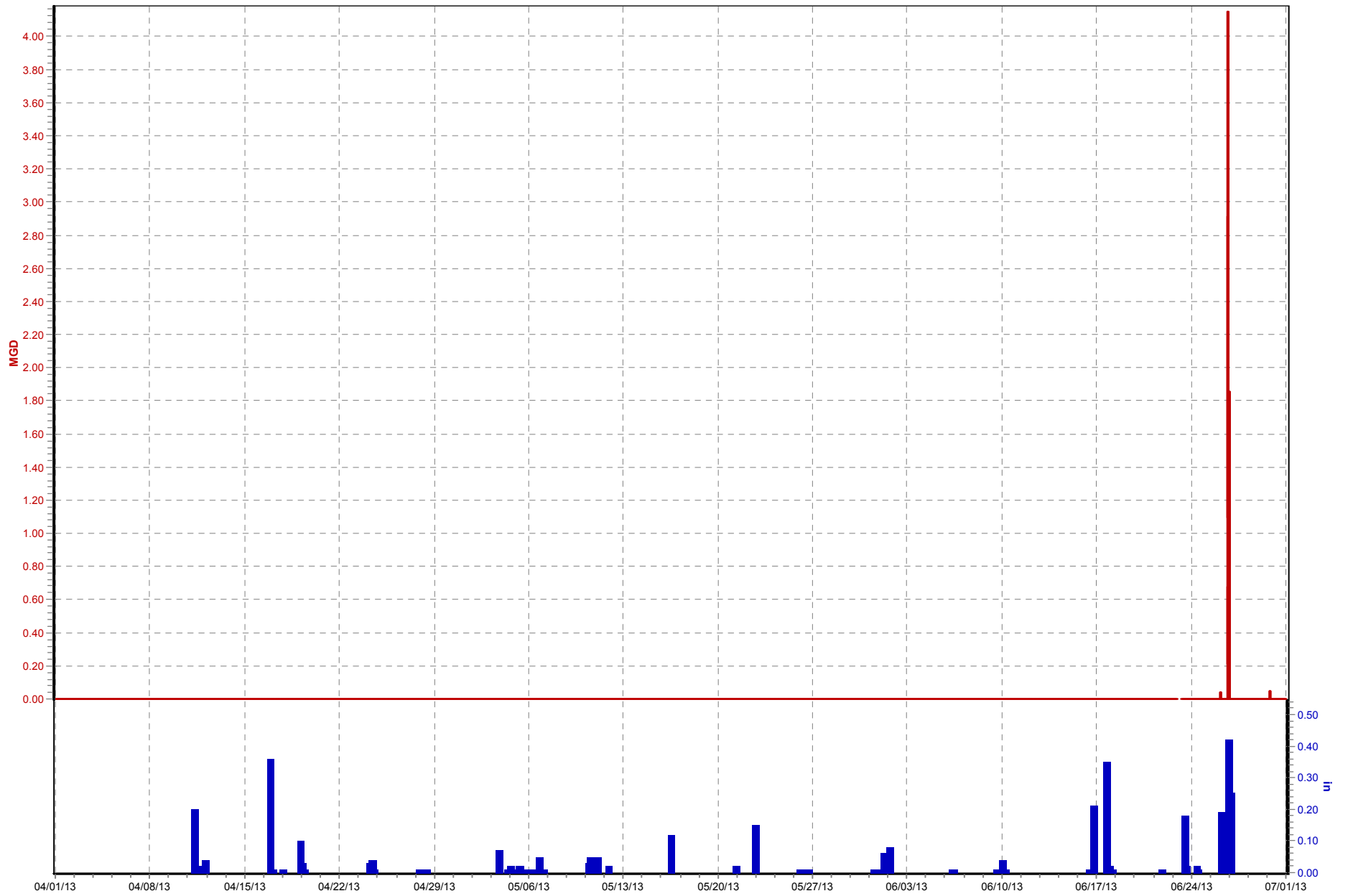
CSO202 W Ormsby Ave (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



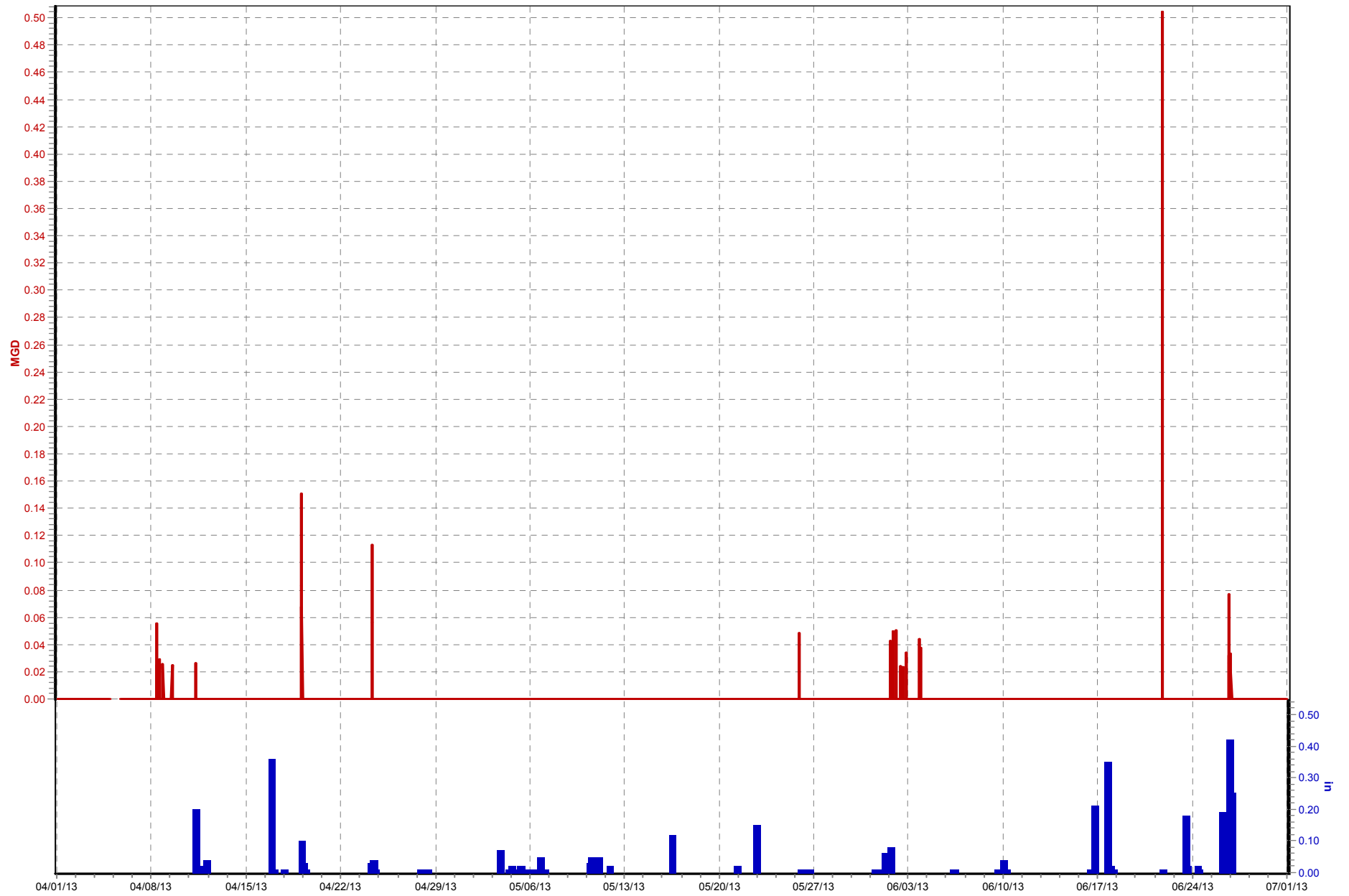
CSO203 S 4th St (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



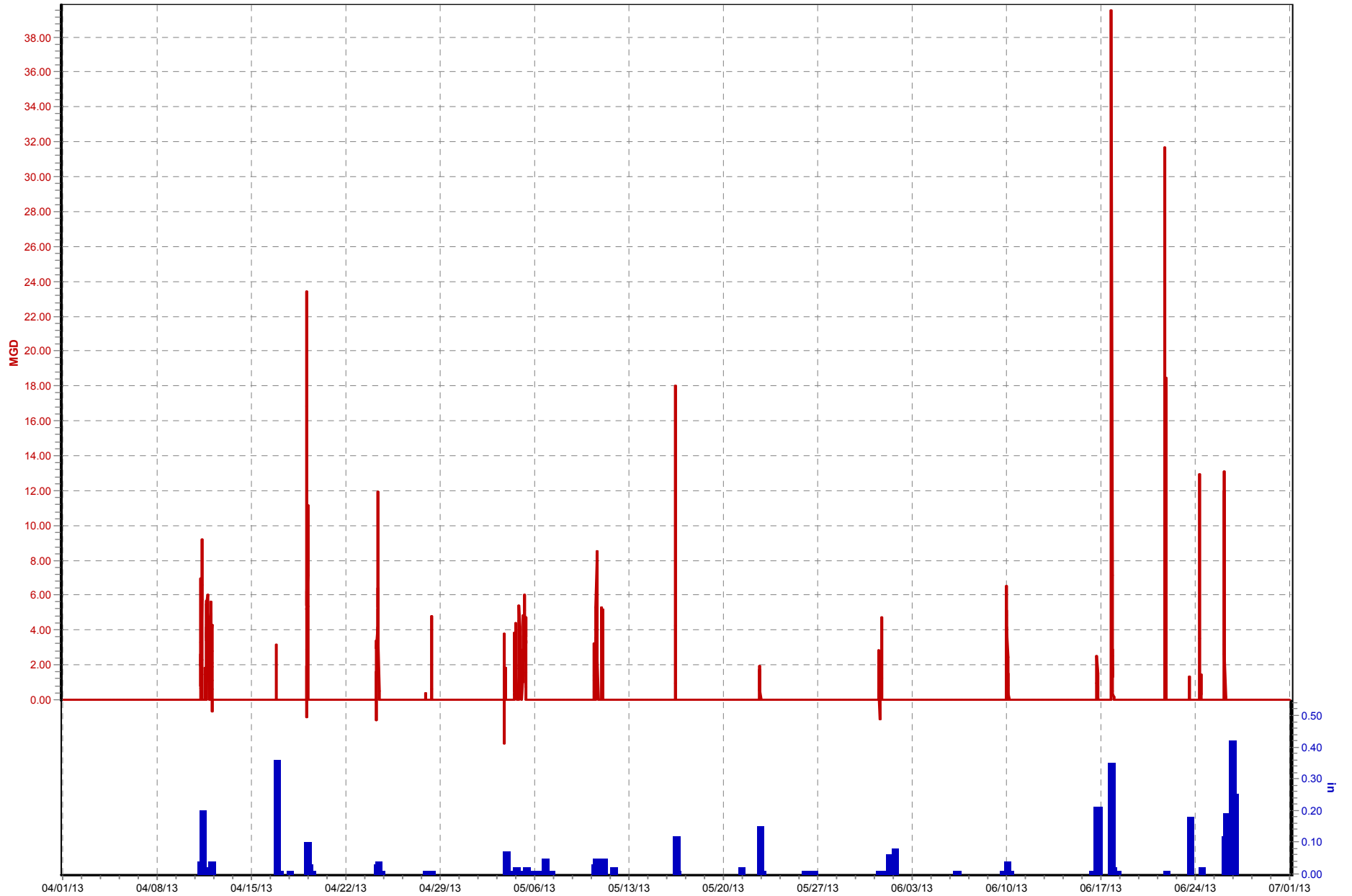
CSO205 Morgan St (04/01/13 to 07/01/13)

Flow (MGD) TR05_Beargrass PS.Rain (in)



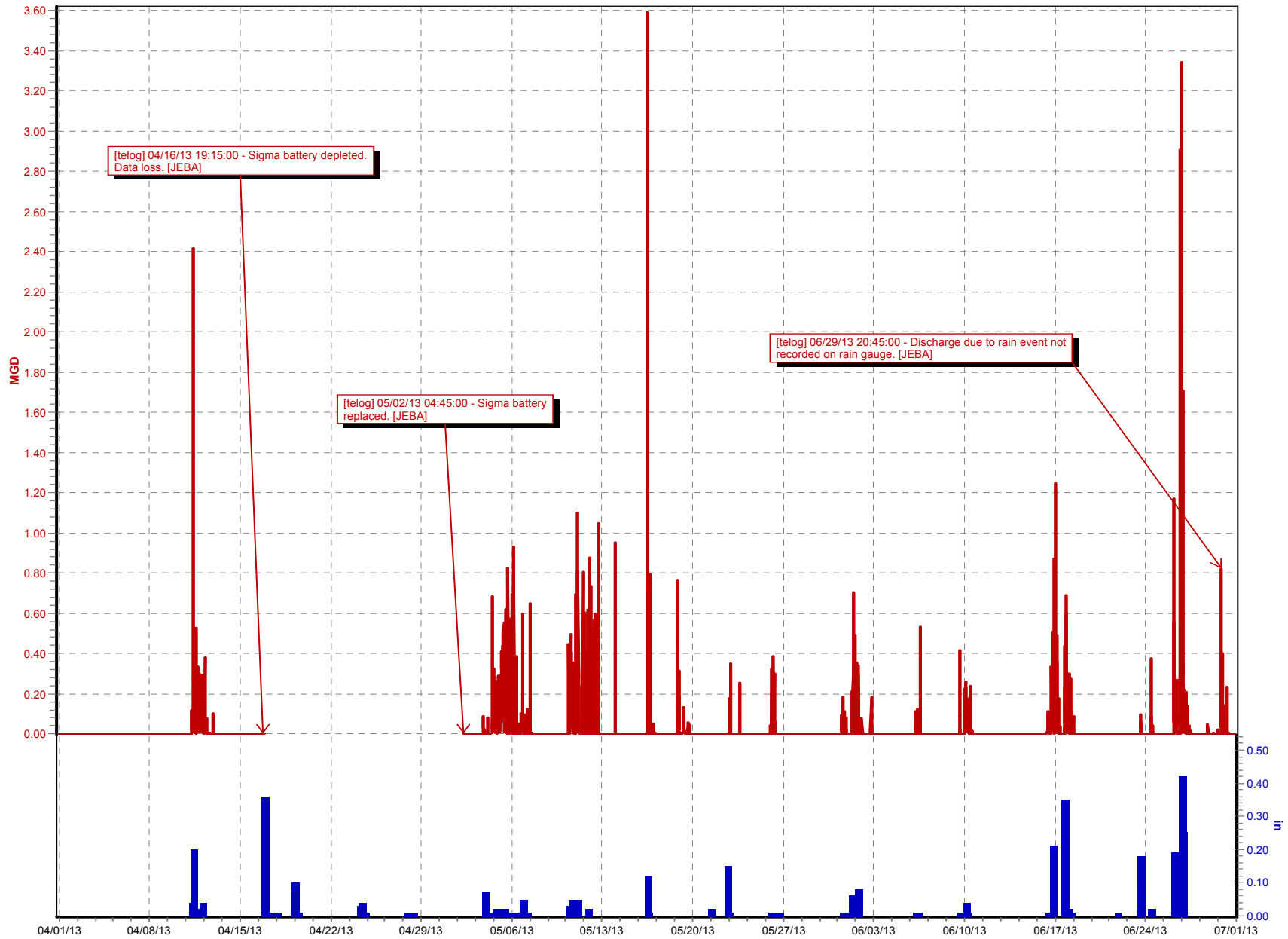
CSO206 Cherokee Park_String St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



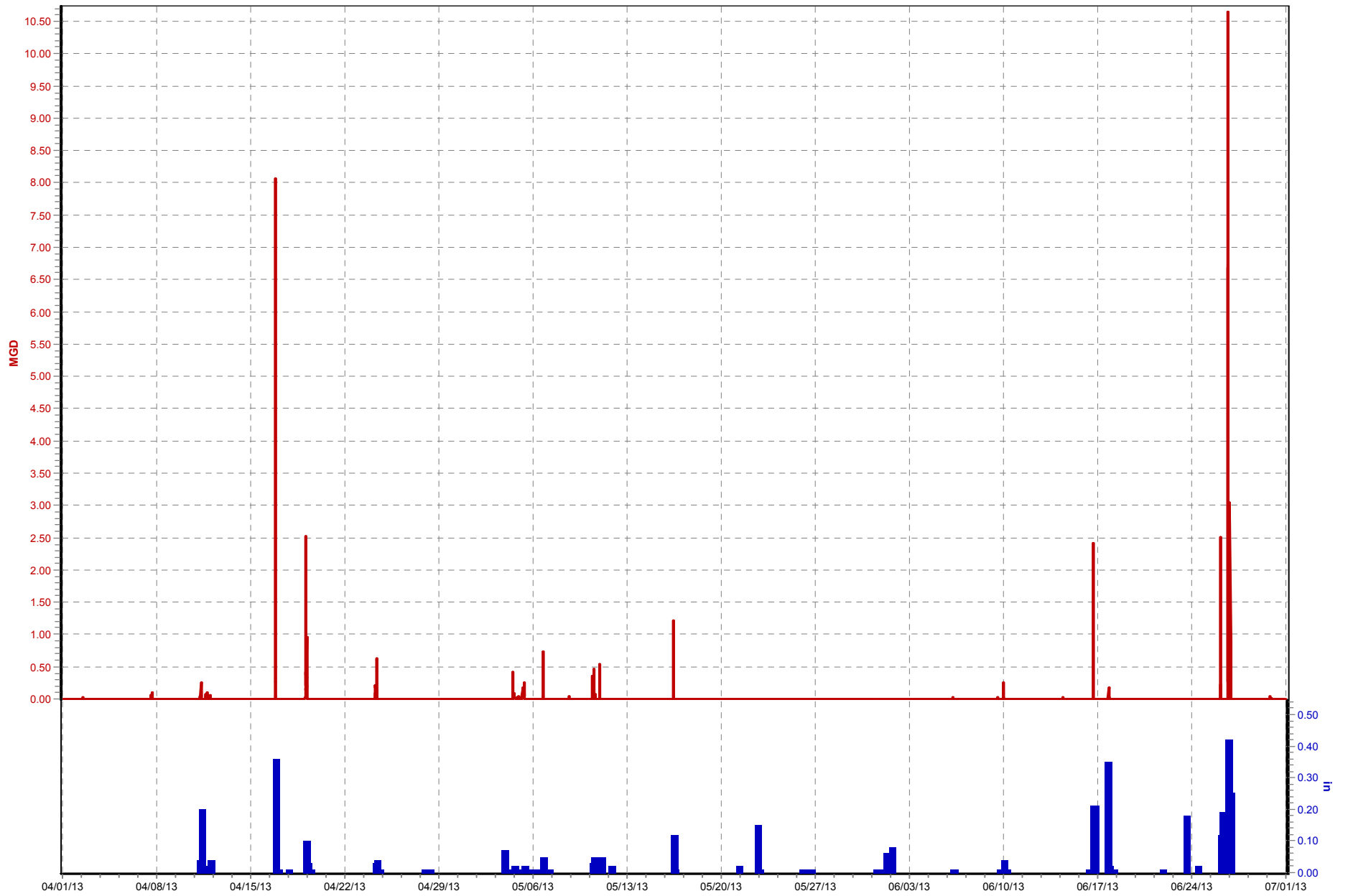
CSO207 W Jefferson St_2nd St (03/31/13 to 06/30/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



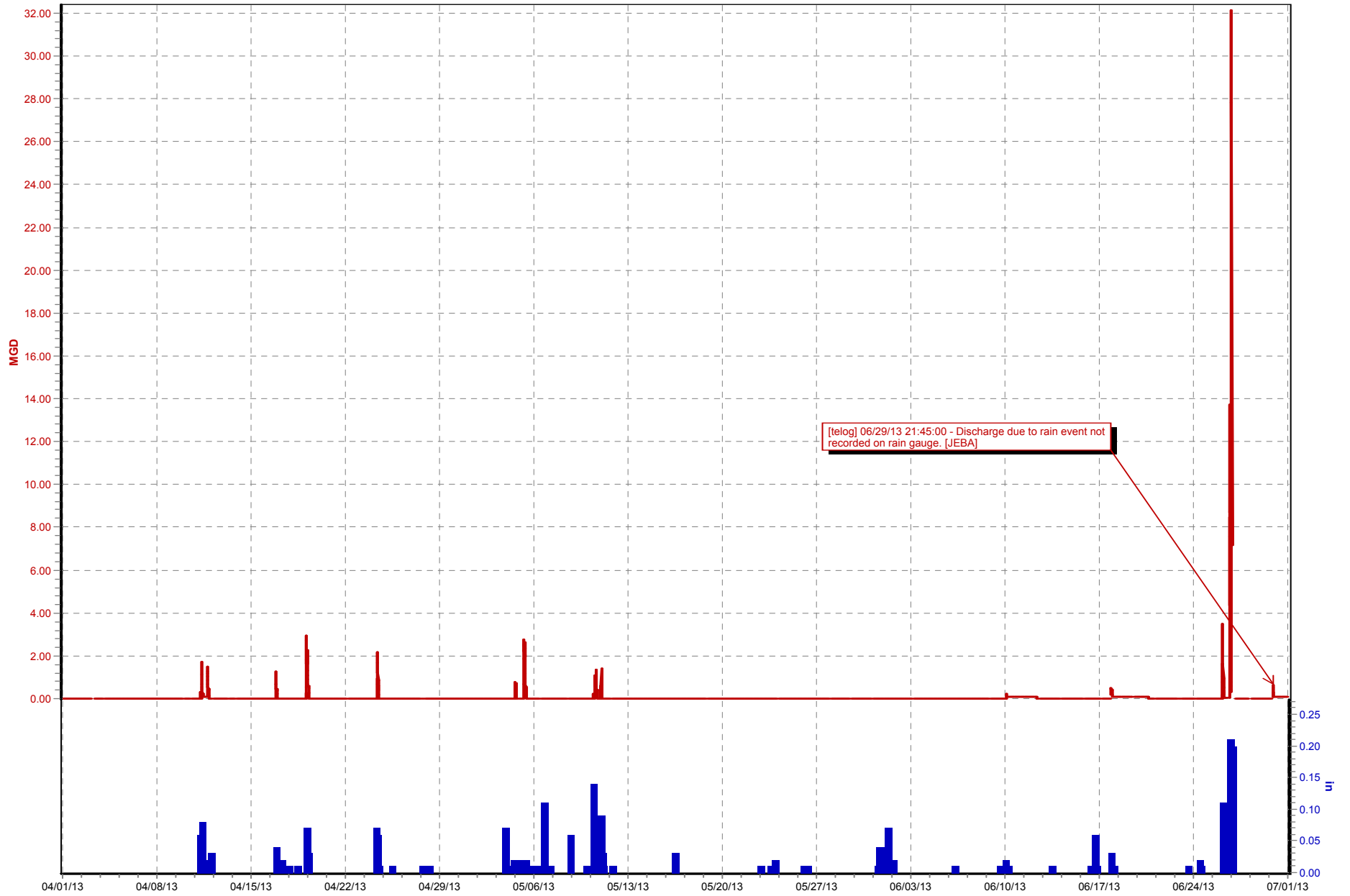
CSO208 W Jefferson St_12th St (04/01/13 to 07/01/13)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



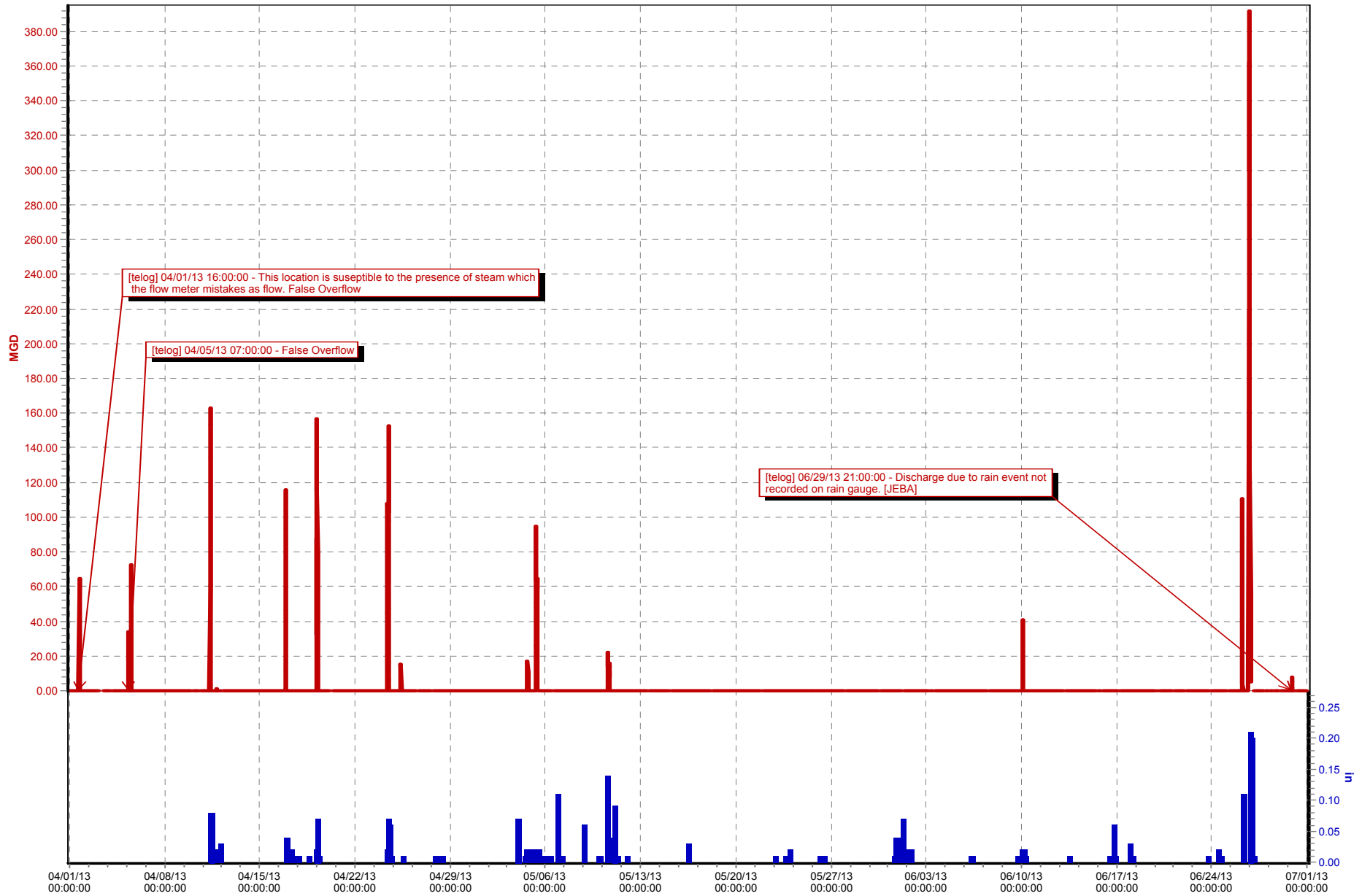
CSO210 Whayne Supply (04/01/13 to 07/01/13)

CSO210 Flow (MGD) TR04_Morris Forman WQTC.Rain (in)



CSO211 Wayne Supply (04/01/13 to 07/01/13)

Flow (MGD) TR04_Morris Forman WQTC.Rain (in)



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 Abatement 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