MSD
Metropolitan Sewer District

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

October 28, 2011

Chief, Clean Water Enforcement Branch
Water Protection Division
US EPA Region 4
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, GA 30303

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

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

Subject: Quarterly Report Number 24
Civil Action No. 3:08-cv-00608-CRS

Attention Chief:

Please find attached our Quarterly Report, prepared in accordance with Paragraph 29 of our Amended Consent Decree. This report is for the period July 1, 2011 – September 30, 2011. This report provides an overview of significant program elements, issues, and accomplishments pertaining to Consent Decree compliance activities. Included are sections on Project WIN activities related to: NMC, SORP, Discharge Abatement Plans, Public Outreach, Education, Notification and Participation, CMOM and Performance Overview.

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

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

Sincerely,

Brian Bingham.
Regulatory Services Director

Q24 Certification KDEP 10-28-11
cc: H. J. Schardein, Jr Paula Purifoy Laurence J. Zielke

Louisville and Jefferson County Wet Weather Consent Decree Quarterly Report #24

Reporting Period:

July 1, 2011 through September 30, 2011

Submitted To:

Kentucky Department of Environmental Protection

United States Environmental Protection Agency

United States Department of Justice

Submitted By:

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

Submittal Date:

October 30, 2011

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INTRODUCTION

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

This is the twenty-third Quarterly Report submitted in accordance with Paragraph 29 of the Amended Consent Decree. This report covers the time period from April 1, 2011, through June 30, 2011. **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 (July 1, 2011, through September 30, 2011).

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 (July 1, 2011, through September 30, 2011).

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 (July 1, 2011, through September 30, 2011), and the anticipated projects and activities that are scheduled to be performed during the next two reporting periods (October 1, 2011, through March 31, 2011), 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 (July 1, 2011, through September 30, 2011).

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 (July 1, 2011, through September 30, 2011), and include the schedule for activities planned for the next two reporting periods (October 1, 2011, through March 31, 2011), 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 phosphorous 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 www.msdlouky.org/projectwin. Highlights of the NMC program implementation over this reporting period are outlined below.

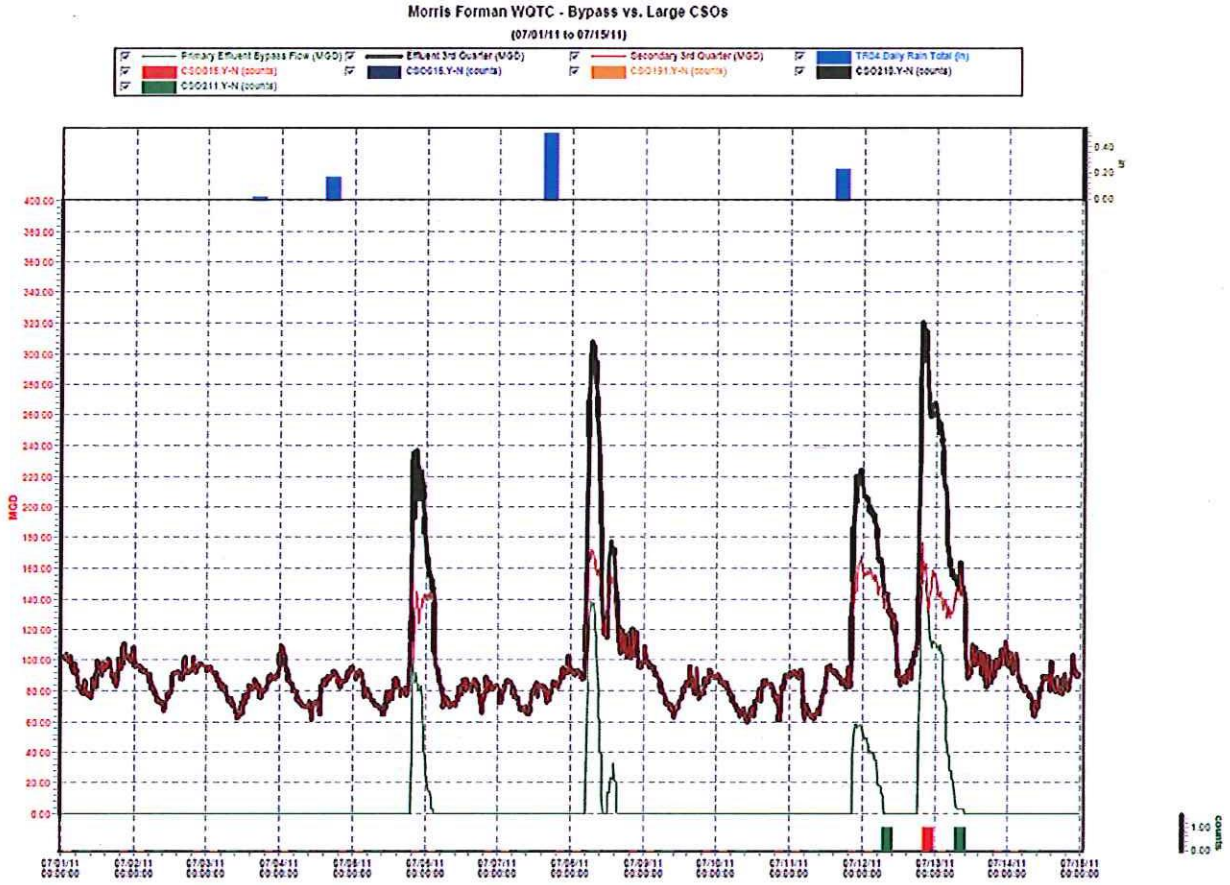
1.2 NMC 2: Maximization of Storage in the Collection System

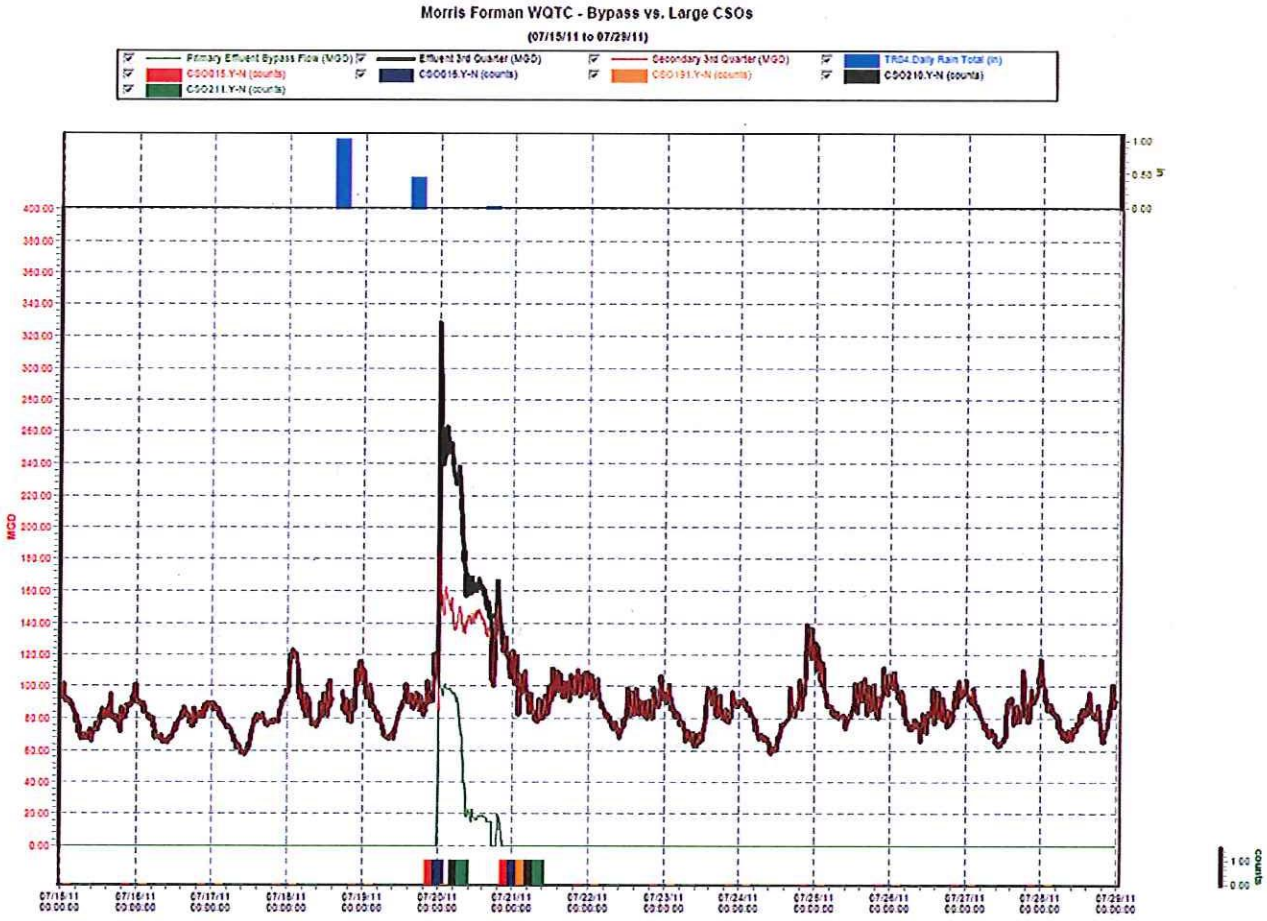
Continued operation of Phase 1 and Phase 2 of the Real Time Control system. During this reporting period, approximately 247.9 MG were stored in the system during rain events and routed to the Morris Forman WQTC once the system was able to handle the flow. See the figure at the end of this section for a detailed report.

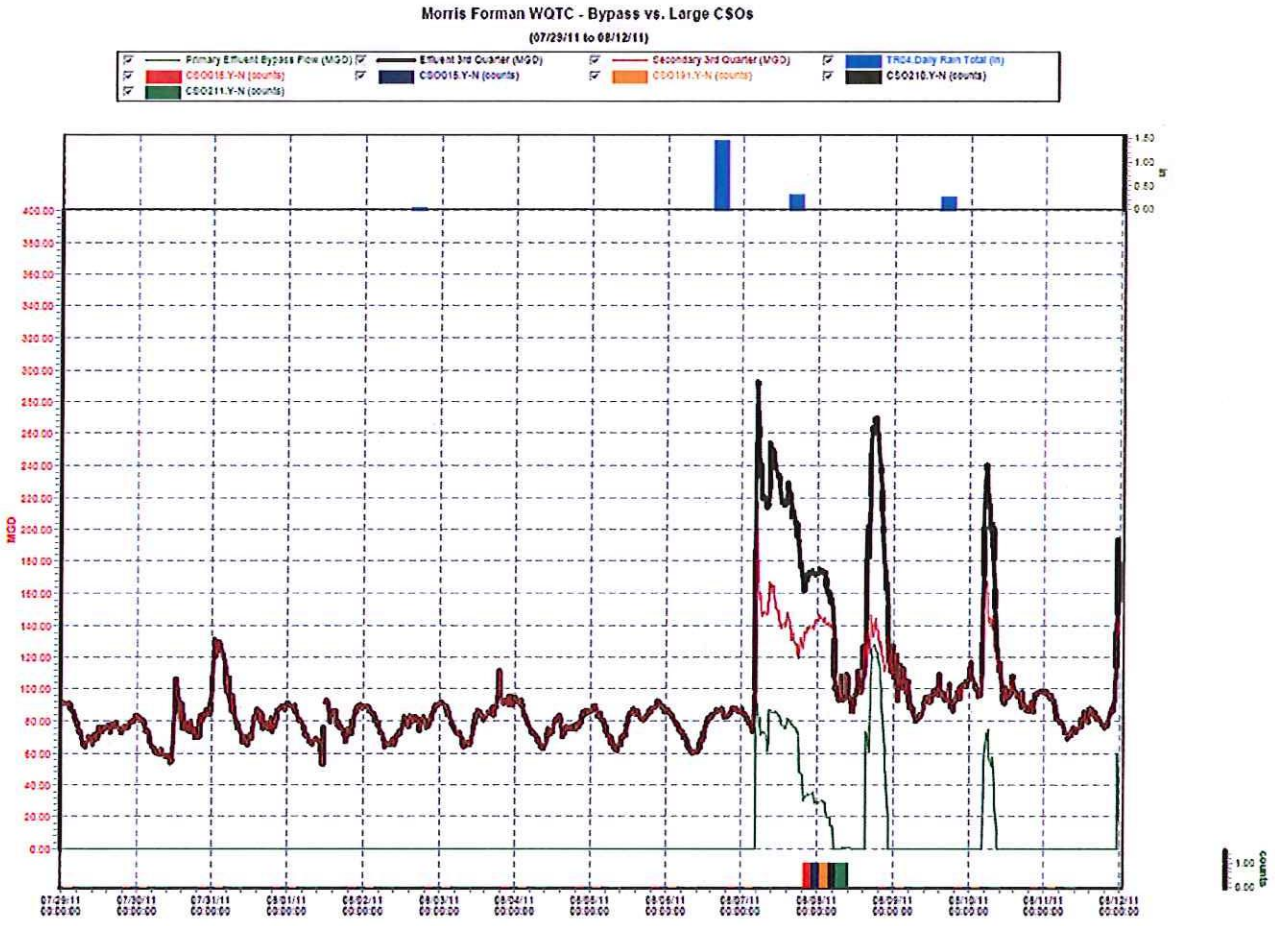
1.3 NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC)

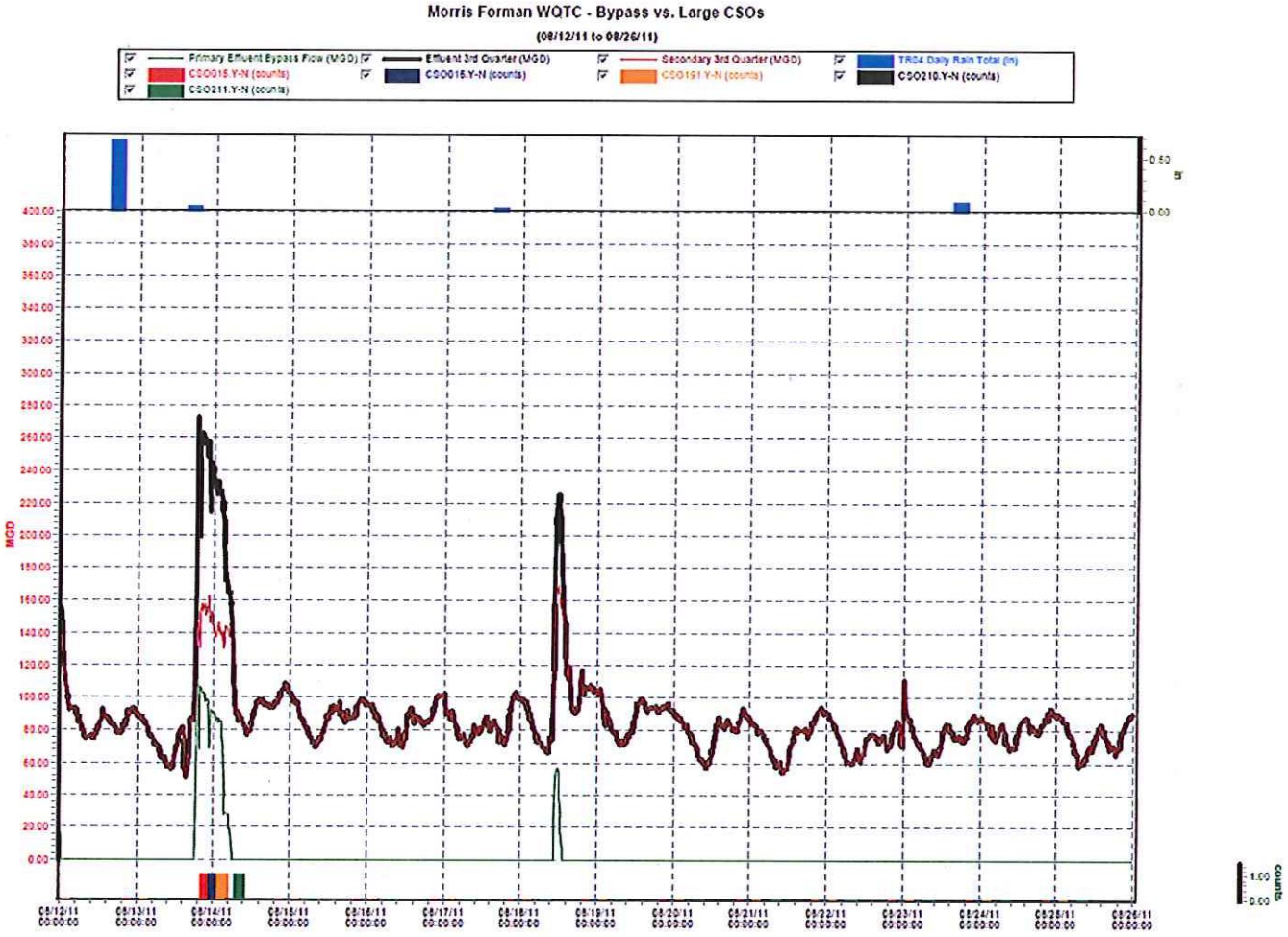
The following charts illustrate performance in maximizing flow to the Morris Forman WQTC. The top of the chart shows rainfall inches per day. The middle part of the chart shows Morris Forman WQTC effluent flow, secondary treatment flow, and secondary bypass flow. The bottom of the chart shows days with 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, so CSO activations at CSO 211 are keyed to water levels in the Main Diversion Structure during periods of high river level. The other CSO activations are tied to flow measurement downstream of the respective CSOs.

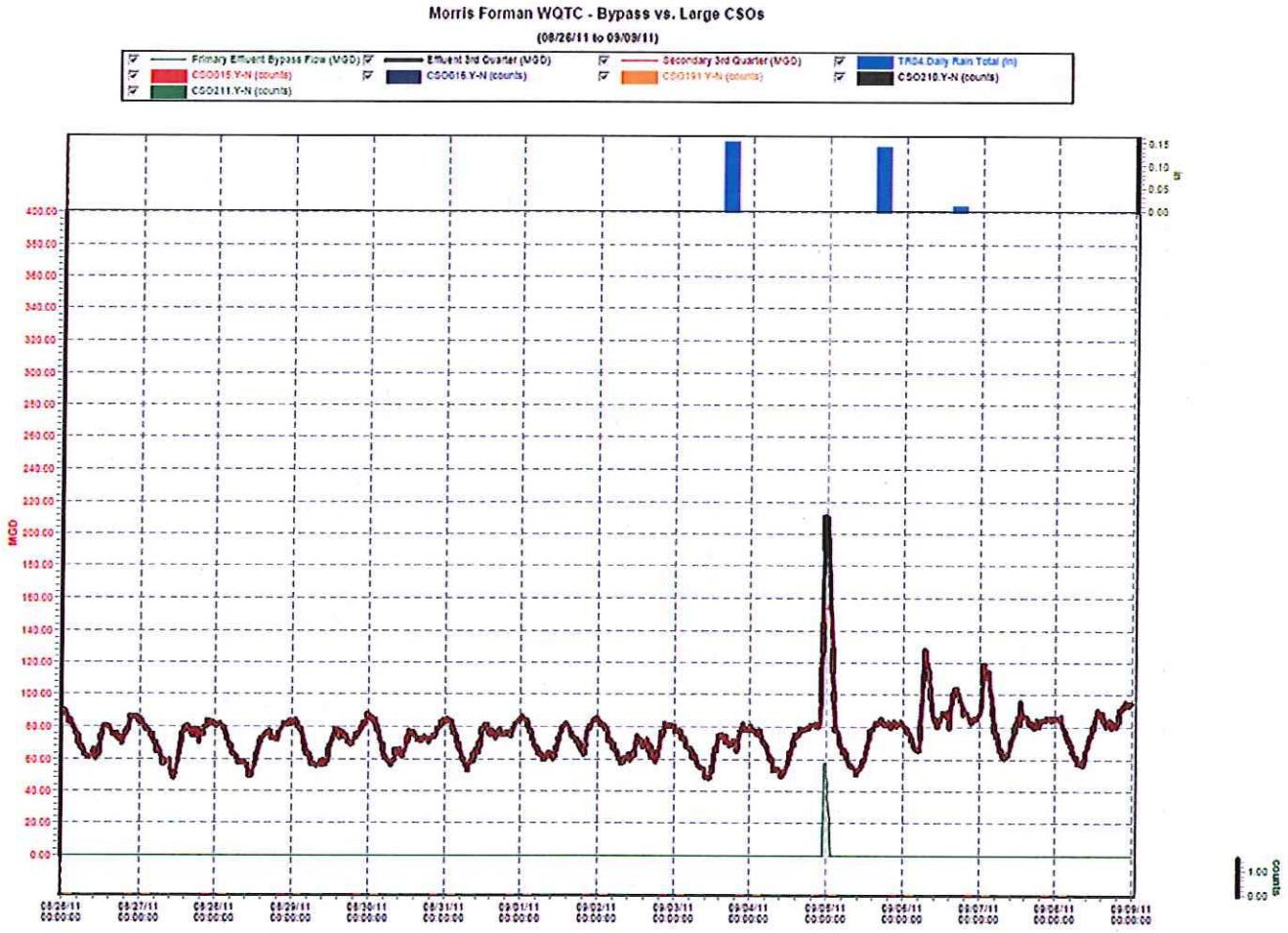
During June one of the primary sedimentation basins was taken out of service for repairs that were completed July 6. Preventive maintenance inspections and similar repairs were required for the other three primary sedimentation basins. Basins were out of service July 13 through August 14, and August 18 through the end of this reporting period. It is anticipated that the third basin repairs will be completed in early October, and the fourth basin will be taken down for repairs shortly after that. These repairs included cleaning, normal "wear and tear" preventive maintenance, and repair of the bottom scrapers, which are a high-wear item. With one sedimentation basin out of service, the peak flow capacity of the Morris Forman WQTC is 210 – 270 MGD, depending on sludge blanket depths. This is reflected in the reduced peak wet weather flows handled during most of this reporting period.

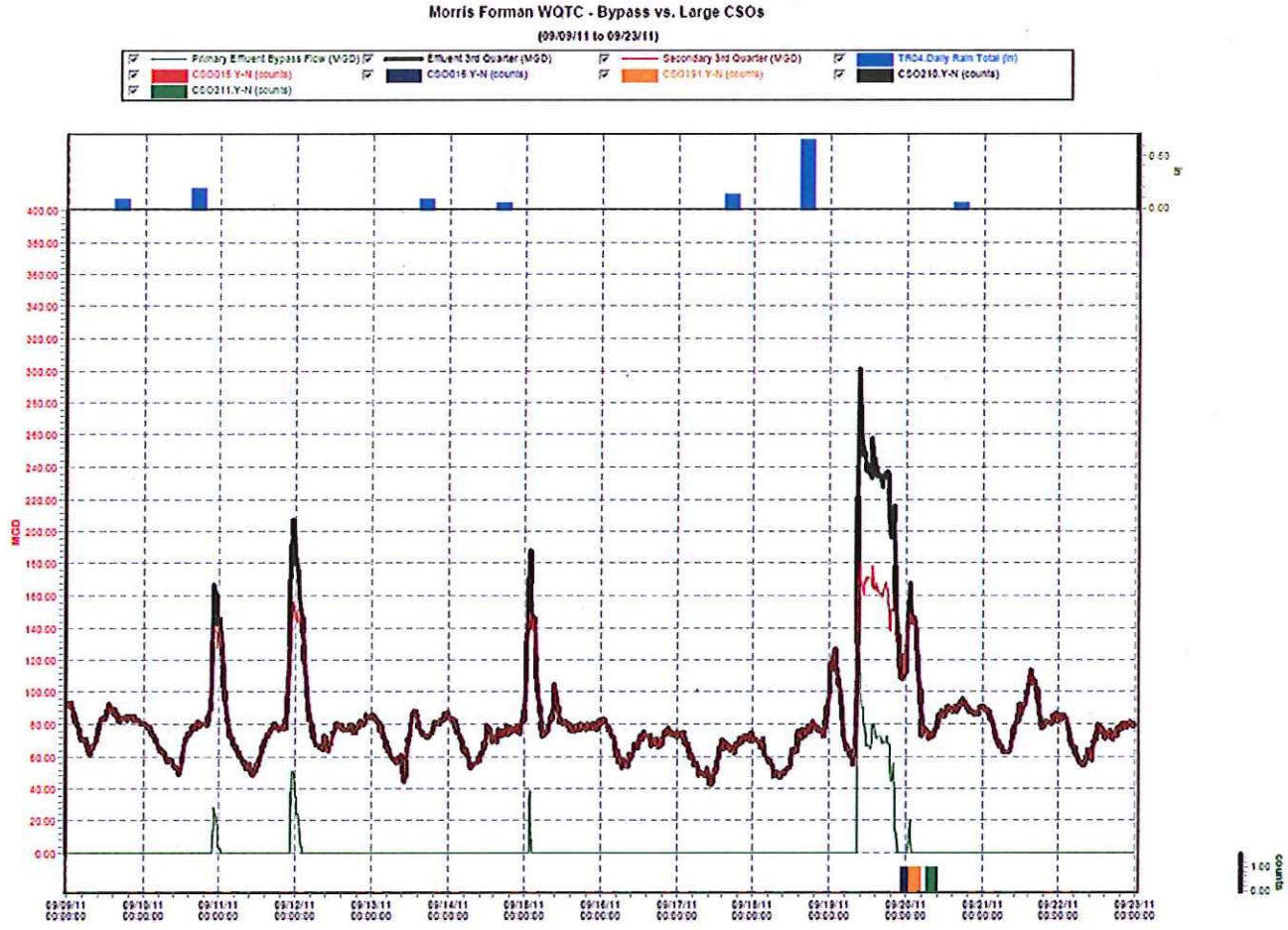

Morris Forman WQTC - Bypass vs. Large CSOs
(07/01/11 to 07/15/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TR04 Daily Rain Total (in)
CSO015.Y-N (counts)
CSO016.Y-N (counts)
CSO191.Y-N (counts)
CSO210.Y-N (counts)
CSO211.Y-N (counts)
MGD
in
counts

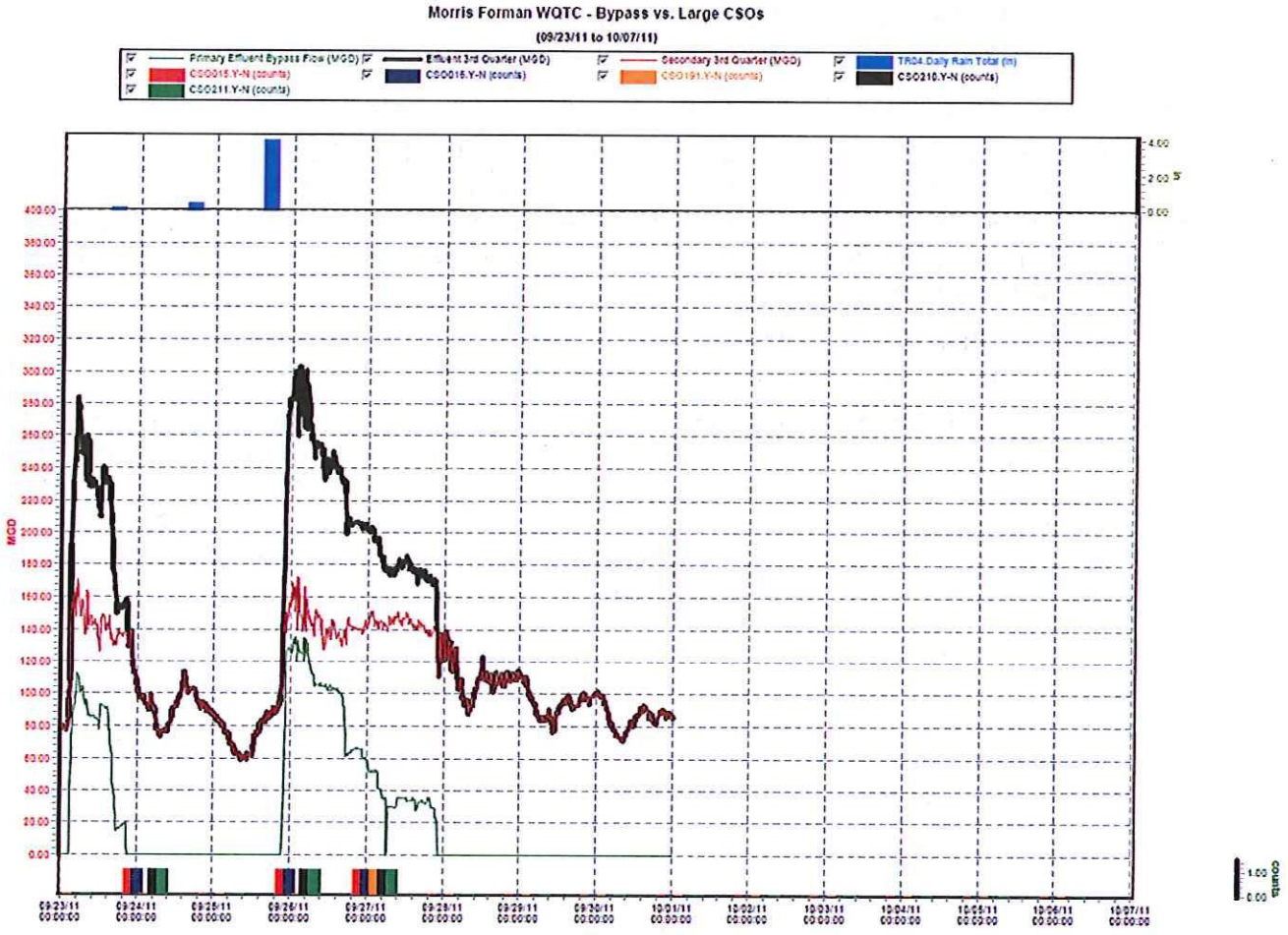

Morris Forman WQTC - Bypass vs. Large CSOs
(07/15/11 to 07/29/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TRG4 Daily Rain Total (in)
CSO015.Y-N (counts)
CSO016.Y-N (counts)
CSO191.Y-N (counts)
CSO210.Y-N (counts)
CSO211.Y-N (counts)
MGD
COUNTS


Morris Forman WQTC - Bypass vs. Large CSOs
(07/29/11 to 08/12/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TRG4 Daily Rain Total (in)
CSO016.Y-N (counts)
CSO015.Y-N (counts)
CSO191.Y-N (counts)
CSO210.Y-N (counts)
CSO211.Y-N (counts)
MGD
in
counts


Morris Forman WQTC - Bypass vs. Large CSOs
(08/12/11 to 08/26/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TRG4 Daily Rain Total (in)
CSO015.Y-N (counts)
CSO016.Y-N (counts)
CSO151.Y-N (counts)
CSO210.Y-N (counts)
CSO211.Y-N (counts)
MGD
in
counts


Morris Forman WQTC - Bypass vs. Large CSOs
(08/26/11 to 09/09/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TRG4 Daily Rain Total (in)
CSO015 Y-N (counts)
CSO016 Y-N (counts)
CSO191 Y-N (counts)
CSO210 Y-N (counts)
CSO211 Y-N (counts)
MGD
in
counts


Morris Forman WQTC - Bypass vs. Large CSOs
(09/09/11 to 09/23/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TRD4.Daily Rain Total (in)
CSO015.Y-N (counts)
CSO016.Y-N (counts)
CSO151.Y-N (counts)
CSO210.Y-N (counts)
CSO211.Y-N (counts)
MGD
in
counts


Morris Forman WQTC - Bypass vs. Large CSOs
(09/23/11 to 10/07/11)
Primary Effluent Bypass Flow (MGD)
Effluent 3rd Quarter (MGD)
Secondary 3rd Quarter (MGD)
TRM Daily Rain Total (in)
CSO015.Y-N (counts)
CSO016.Y-N (counts)
CSO191.Y-N (counts)
CSO210.Y-N (counts)
CSO211.Y-N (counts)
MGD
COUNTS

There were no KPDES permit violations at Morris Forman WQTC during July, August, or September, 2011.

During this reporting period, the following activities were completed:

- Main Diversion Structure Flow Measurement – Continued to monitor and improve measurement accuracy over several storms and made minor corrections to the various constants. MSD will continue to monitor and refine this relationship, with the eventual goal of incorporating the Sluice Gate 1 into an automatic flow control system for the Morris Forman WQTC.
- Wet Weather Operational Plan - Training began on some of the new SOPs, which will be fully put in place over the next few reporting periods.
- RTC System-Wide Optimization Project –A draft final report was completed by September 30, 2011. Continued evaluations of the impacts of the recalibration and level of control review has held up issuing the draft report for MSD review and comment, as some of the control sites may change as a result of this recalibration and level of control changes. It is anticipated that the final report for this project will be issued during the next reporting period.

Real Time Control Operations Detailed Report

MSD Louisville/Jefferson County Metropolitan Sewer District

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

Period	
From :	07/01/2011
To :	09/30/2011

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)	Max** Rain Gauge	SWPS SG Chamber	SWOR2	Brady Lake and Executive Inn Storage	Southern Outfall	Ohio River Interceptor	Sneads Branch	Total		
2011-047	07/05/2011 19:35	07/06/2011 04:05	8:30	0.15	0.17	TR04	4.5	3.0	1.7	0.8	1.7	1.3	12.9	No	High intensity rainfall on western portion of system only
2011-048	07/08/2011 02:40	07/08/2011 19:50	17:10	0.60	1.39	TR14	3.3	2.4	0.4	1.6	2.2	1.1	10.9	No	
2011-049	07/12/2011 15:30	07/13/2011 10:00	18:30	0.56	1.06	TR11	12.6	6.2	4.2	3.7	3.2	2.2	32.0	No	Rainfall distributed over short duration (+/- 4 hours)
2011-051	07/19/2011 19:55	07/21/2011 01:35	29:40	1.26	1.76	TR14	9.0	7.5	4.2	3.7	4.0	2.8	31.1	No	
2011-055	08/07/2011 03:30	08/08/2011 08:45	29:15	1.48	1.90	TR12	9.5	7.2	5.7	3.8	4.1	2.7	32.9	No	SWGS manually controlled for portion of event.
2011-056	08/08/2011 13:40	08/08/2011 23:55	10:15	0.18	0.32	TR11	3.2	2.6	1.3	2.1	2.8	1.5	13.3	No	
2011-058	08/13/2011 18:55	08/14/2011 04:45	9:50	0.55	1.22	TR13	9.3	3.9	3.7	4.8	4.2	2.5	28.4	No	
2011-068	09/18/2011 09:05	09/20/2011 08:20	47:15	0.71	0.83	TR05	8.7	0.0	0.7	5.5	4.5	2.5	21.9	No	SWOR2 manually controlled
2011-070	09/23/2011 00:55	09/24/2011 03:55	27:00	0.82	1.01	TR14	13.7	0.0	2.5	4.8	4.2	1.2	26.4	No	SWOR2 manually controlled
2011-072	09/25/2011 19:10	09/27/2011 21:50	50:40	3.08	4.28	TR04	19.2	1.0	7.5	3.8	3.8	3.0	38.2	No	SWOR2 manually controlled
TOTAL							92.9	33.6	31.7	34.5	34.5	20.8	247.9		

* 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

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. At this time MSD is awaiting an approval letter for this most recent SORP. A hard copy of the approved SORP document will be distributed to each division throughout MSD and a viewable, downloadable electronic version will be posted to the MSD Project WIN website www.msdlouky.org/projectwin once the approval letter is received.

The current approved SORP document is dated November 5, 2008 and can be viewed on the MSD Project WIN website www.msdlouky.org/projectwin. The following activities were performed during this reporting period.

2.2 Overflow Management and Field Documentation

- Monitored approximately 158 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 16 unauthorized discharges. Inspection routes were run during rain events as described in the following table:

Route Description	08/11/2011	09/26/2011
RS Middle/Muddy Fork SSO Inspection Route	X	X
RS Jeffersontown/ Fern Creek SSO Inspection Route		X
RS Hikes Point SSO Inspection Route		X
Engineering Rain Event SSO Inspection Route		X
RS Jeffersontown Siphon Inspection Route		X

- Due to Capacity related issues, during this reporting period, MSD Metro Operations staff hauled 317,400 gallons of sewage. MSD also hauled due to other issues as indicated in the following table:

MSD Hauled Volumes In Gallons (July 1, 2011 – September 30, 2011)				
	July	August	September	Total
CAPACITY	59,100	0	258,300	317,400
MECHANICAL	0	0	3,500	3,500
OBSTRUCTION	0	7,100	0	7,100
POWER	13,500	122,400	0	135,900
STRUCTURAL	0	14,000	0	14,000
	72,600	143,500	261,800	477,900

2.3 Staff Training and Communication

- Reviewed and updated the training documentation for the 2011 third quarter SORP training that included overflow cleanup.
- Commenced planning for the 2011 fourth quarter SORP training that will focus on documentation.

- Conducted the following SORP Quarterly training sessions which were attended by 271 employees.

Staff Training Participation- July 1, 2011 – September 30, 2011		
Division	Date	Number of Attendees
I&FP Staff	9/2/2011	10
I&FP Staff	9/9/2011	19
ENG/RS Staff	9/15/2011	34
Morris Forman Staff	9/21/2011	12
Morris Forman Staff	9/21/2011	39
Morris Forman Staff	9/21/2011	20
Metro Staff	9/22/2011	32
Morris Forman Staff	9/22/2011	9
Morris Forman Staff	9/28/2011	9
Morris Forman Staff	9/28/2011	10
Metro Staff	9/28/2011	10
Morris Forman Staff	9/28/2011	13
ENG/RS Staff	9/29/2011	54
Total		271

SECTION 3: Program Activities for Discharge Abatement Plans

3.1 Integrated Overflow Abatement Plan (IOAP)

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

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

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.msdlouky.org/projectwin.

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.

- Prospect WQTC Elimination Projects Easement Status - A total of 38 easements have been identified that are necessary to complete the entire suite of projects related to the plant eliminations. To date, MSD has acquired 16 of these easements, and have made offers to purchase two others. The remaining 20 easement plats are still being finalized.

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.msdlouky.org/projectwin.

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.

3.3.3 Green Demonstration Project Update

The Final CSO Long Term Control Plan (Volume 2 of the IOAP) included 19 green demonstration projects with schedules for completion in 2010 and 2011. Currently 12 green demonstration projects have been certified.

Five demonstration projects were outlined as "dry well" technologies. Throughout the course of 2011, MSD has engaged EPA Underground Injection Control (UIC) in discussions on the level of permitting required for this technology type. Due to the need to develop pilot project areas to examine the short and long term effects of storm water injection into the aquifer under the CSS, an extensive amount of study will need to be performed prior to the issuance of permits or a streamlined permitting process. This dry well pilot area data collection process will make the construction of the five demonstration dry well projects impossible to accomplish prior to December 31, 2011. The following demonstration project alternatives were proposed to replace the five dry well demonstration projects in the previous quarterly report:

CERTIFICATION DATES FOR IOAP PROJECTS (Sorted By ACD Certification Date)				
Budget ID	**ACD Project Number**	**IOAP (September 30, 2009) Project Name**	**Proposed Green Demonstration Project Location (September 30, 2011)**	**ACD Date**
H09444	L_OR_MF_191_S_12_A_A	I-264 AND GIBSON DRY WELL	University of Louisville - Grawemayer Hall Green Parking Lot	31-Dec-11
H09442	L_OR_MF_189_S_12_A	I-264 OFF-RAMP DRY WELL	Speed Art Museum - Infiltration Trench	31-Dec-11
H09443	L_OR_MF_019_S_12_A	I-264 ON-RAMP DRY WELL	CSO 130 - Green Street	31-Dec-11
H09446	L_OR_MF_191_S_12_A_B	JFK MONTESSORI AREA DRY WELL	3rd Street Ventures	31-Dec-11
H09445	L_OR_MF_191_S_12_A_C	RUSSELL LEE DRIVE DRY WELL	Wilson Crossings - Green Parking Lot	31-Dec-11
TBD	ADD. RAIN GARDEN PROJECT	TBD	German/Paristown - Green Street/Rain Garden	31-Dec-11
H11044	Bardstown Rd Presbyterian Church Green Parking Lot	TBD	Brown-Forman Green Roof	31-Dec-11

The following table shows the status of the remaining green demonstration projects:

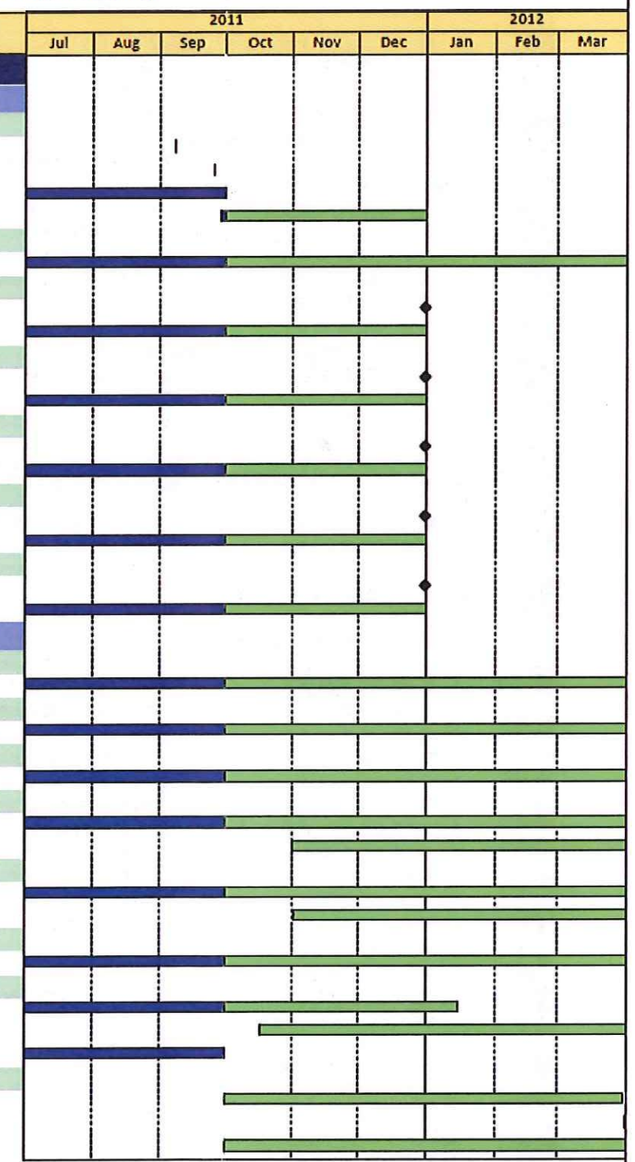
Proposed Green Demonstration Project Location (July 30, 2011)	Status
University of Louisville - Grawemayer Hall Green Parking Lot	Construction nearing completion, project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.
Speed Art Museum - Infiltration Trench	Construction nearing completion, project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.
East Washington Street at Adams Street Green Street	Project to be advertised for construction in October. Project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.
3rd Street Ventures (3rd Street & Cardinal Blvd)	Construction nearing completion, project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.
Wilson Crossings - Green Parking Lot	Construction on-going. Project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.
German/Paristown - Green Street/Rain Garden	Project bid on September 8, 2011. Project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.
Bardstown Rd Presbyterian Church Green Parking Lot	Project in the planning stage – planning and zoning variances will delay project start. It is proposed that this project be replaced with the Brown Forman vegetated roof. Project to be completed prior to December 31, 2011 and certified prior to January 30, 2012.

3.4 Activity Progress Chart

A Gantt chart showing the progress of the above activities performed during this reporting period, or planned activities for the next two periods is located at the end of this section. The chart is formatted to follow the outline of the project schedule in the IOAP (Refer to IOAP, Volume 1 – Figure 6.3.1). Note that the schedule may show completion dates that are earlier than the dates contained in Figure 6.3.1. These early completion dates represent targets for MSD's project management use, but do not represent a change in schedule commitments. The dates in the approved IOAP, SSDP, ISSDP, and LTCP remain the committed dates for completion of the suite of projects.

MSD Final Integrated Overflow Abatement Plan Implementation Schedule (01 July 2011 - 31 March 2012)

ACD Project Number	Activity Name	At Completion Duration	Physical % Complete	Finish	IOAP Finish Date
Long Term Control Plan		4258.0		31-Dec-20	31-Dec-20
Green Demonstration Projects		3867.0		31-Dec-20	31-Dec-20
PARIS GERMAN TOWN (H11460)		549.0		31-Dec-11	31-Dec-11
ADDITIONAL RAIN GARDEN PROJECT	PARIS GERMAN TOWN - BID	0.0	100%	08-Sep-11 A	31-Dec-11
ADDITIONAL RAIN GARDEN PROJECT	PARIS GERMAN TOWN- AWARD	0.0	100%	26-Sep-11 A	31-Dec-11
ADDITIONAL RAIN GARDEN PROJECT	PARIS GERMAN TOWN - PLANNING	458.0	75%	01-Oct-11	31-Dec-11
ADDITIONAL RAIN GARDEN PROJECT	PARIS GERMAN TOWN- CONSTRUCTION	94.0	0%	31-Dec-11	31-Dec-11
GREEN INFRASTRUCTURE PROGRAM		3867.0		31-Dec-20	31-Dec-20
MULTIPLE	GREEN INFRASTRUCTURE PROJECTS - CONSTRUCTION	3867.0	10%	31-Dec-20	31-Dec-20
GRAWEMAYER HALL PARKING LOT		549.0		31-Dec-11	31-Dec-11
L_OR_MF_191_S_12_A_A	GI I-264 & GIBSON DRY WELL - CD CERTIFY	0.0	0%	31-Dec-11*	31-Dec-11
L_OR_MF_191_S_12_A_A	GI I-264 & GIBSON DRY WELL - PLANNING	549.0	95%	31-Dec-11	31-Dec-11
SPEED ART MUSEUM INF TRENCH		549.0		31-Dec-11	31-Dec-11
L_OR_MF_189_S_12_A	GI I-264 OFF-RAMP DRY WELL - CD CERTIFY	0.0	0%	31-Dec-11*	31-Dec-11
L_OR_MF_189_S_12_A	GI I-264 OFF-RAMP DRY WELL - PLANNING	549.0	95%	31-Dec-11	31-Dec-11
EAST WASHINGTON AT ADAMS GREEN STREET		549.0		31-Dec-11	31-Dec-11
L_OR_MF_019_S_12_A	GI I-264 ON-RAMP DRY WELL - CD CERTIFY	0.0	0%	31-Dec-11*	31-Dec-11
L_OR_MF_019_S_12_A	GI I-264 ON-RAMP DRY WELL - PLANNING	549.0	80%	31-Dec-11	31-Dec-11
3RD STREET AND CAMPBELL VENTURES		549.0		31-Dec-11	31-Dec-11
L_OR_MF_191_S_12_A_B	GI JFK MONTESSORI AREA DRY WELL - CD CERTIFY	0.0	0%	31-Dec-11*	31-Dec-11
L_OR_MF_191_S_12_A_B	GI JFK MONTESSORI AREA DRY WELL - PLANNING	549.0	95%	31-Dec-11	31-Dec-11
WILSON CROSSING GREEN PARKING LOT		549.0		31-Dec-11	31-Dec-11
L_OR_MF_191_S_12_A_C	GI RUSSELL LEE DRIVE DRY WELL - CD CERTIFY	0.0	0%	31-Dec-11*	31-Dec-11
L_OR_MF_191_S_12_A_C	GI RUSSELL LEE DRIVE DRY WELL - PLANNING	549.0	85%	31-Dec-11	31-Dec-11
Gray Infrastructure Projects		1756.0		24-Feb-14	31-Dec-17
ADAMS STREET STORAGE BASIN		547.0		30-Jun-12	31-Dec-12
L_OR_MF_172_S_09B_B_A_0	ADAMS STREET STORAGE BASIN - DESIGN	547.0	10%	30-Jun-12	31-Dec-12
CSO 123 DOWNSPOUT DISCONNECTION		914.0		30-Dec-12	31-Dec-12
L_MI_MF_123_S_08_A_A_0	DOWNSPOUT DISCONNECT CSO 123 - DESIGN	914.0	30%	30-Dec-12	31-Dec-12
CSO 058 SEWER SEPARATION		578.0		30-Jun-12	31-Dec-14
L_OR_MF_058_S_08_A_A_0	CSO 58 SEWER SEPARATION - DESIGN	578.0	5%	30-Jun-12	31-Dec-14
CSO 093 SEWER SEPARATION		412.0		30-Jul-12	31-Dec-15
L_SO_MF_093_S_08_A_A_0	CSO 93 SEWER SEPARATION - DESIGN	412.0	5%	30-Jul-12	31-Dec-15
L_SO_MF_093_S_08_A_A_0	CSO 93 SEWER SEPARATION - EASEMENT	273.0	0%	30-Jul-12	31-Dec-15
CSO 140 SEWER SEPARATION		551.0		31-Dec-12	31-Dec-15
L_MI_MF_140_S_08_A_A_0	CSO 140 SEWER SEPARATION - DESIGN	551.0	5%	31-Dec-12	31-Dec-15
L_MI_MF_140_S_08_A_A_0	CSO 140 SEWER SEPARATION - EASEMENT	426.1	0%	31-Dec-12	31-Dec-15
CSO 160 SEWER SEPARATION		459.0		30-Sep-12	31-Dec-15
L_OR_MF_160_S_08_A_A_0	CSO 160 SEWER SEPARATION - DESIGN	459.0	5%	30-Sep-12	31-Dec-15
CSO 206 SEWER SEPARATION		1644.0		30-Dec-13	30-Dec-13
L_MI_MF_206_S_08_A_A_0	CSO 206 SEWER SEPARATION - DESIGN	890.6	50%	15-Jan-12	30-Dec-13
L_MI_MF_206_S_08_A_A_0	CSO 206 SEWER SEPARATION - EASEMENT	257.4	0%	30-Jun-12	30-Dec-13
L_MI_MF_206_S_08_A_A_0	CSO 206 SEWER SEPARATION - CONSTRUCTION	1644.0	25%	30-Dec-13	30-Dec-13
I-64 AND GRINSTEAD DRIVE STORAGE BASIN		254.0		10-Jun-12	31-Dec-14
L_MI_MF_127_M_09B_B_A_8	I-64 & GRINSTEAD STORAGE BASIN - DESIGN 30% COMPLETE	182.0	0%	30-Mar-12	31-Dec-14
L_MI_MF_127_M_09B_B_A_8	I-64 & GRINSTEAD STORAGE BASIN - DESIGN 100% COMPLETE	61.0	0%	30-May-12	31-Dec-14
L_MI_MF_127_M_09B_B_A_8	I-64 & GRINSTEAD STORAGE BASIN - EASEMENT	254.0	0%	10-Jun-12	31-Dec-14



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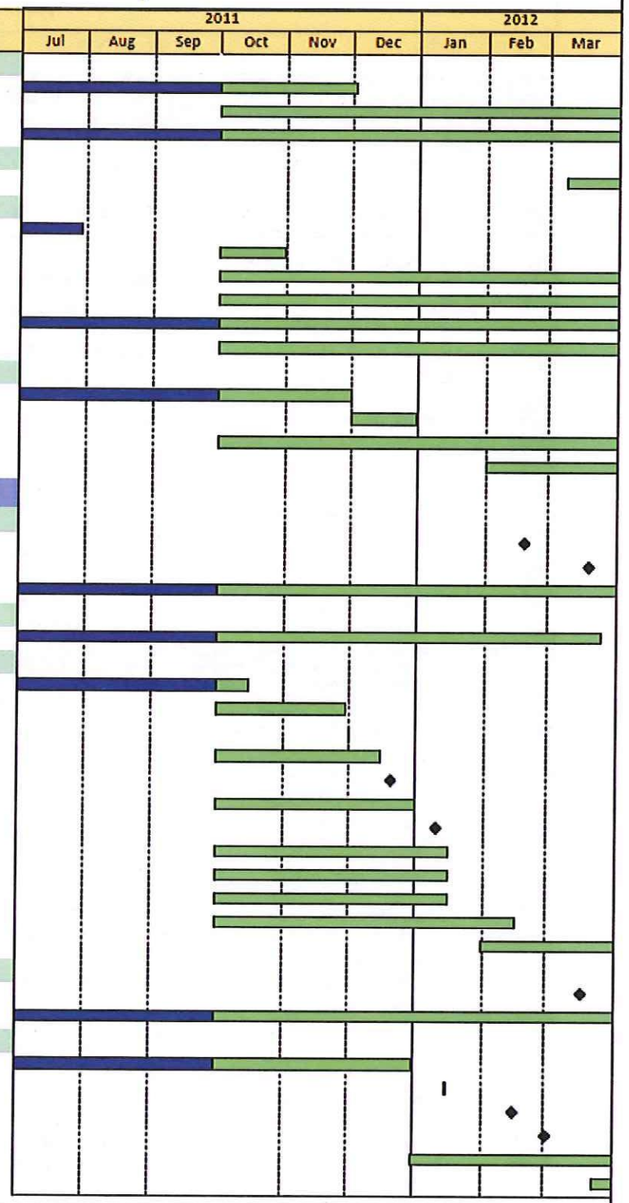
Date Date: 01-Oct-11

MSD Final Integrated Overflow Abatement Plan Implementation Schedule (01 July 2011 - 31 March 2012)

ACD Project Number	Activity Name	At Completion Duration	Physical % Complete	Finish	IOAP Finish Date
LOGAN STREET AND BRECKENRIDGE ST STORAGE BASIN		1640.0		31-Oct-13	31-Dec-17
L_SO_MF_092_M_09B_B_D_8	LOGAN ST & BRECKENRIDGE ST STORAGE BASIN - DESIGN	941.0	10%	02-Dec-11	31-Dec-17
L_SO_MF_092_M_09B_B_D_8	LOGAN ST & BRECKENRIDGE ST STORAGE BASIN - EASEMENT	364.0	0%	28-Sep-12	31-Dec-17
L_SO_MF_092_M_09B_B_D_8	LOGAN ST & BRECKENRIDGE ST STORAGE BASIN - DESIGN	854.0	0%	31-Oct-13	31-Dec-17
NIGHTINGALE PUMP STATION REPLACEMENT		719.0		24-Feb-14	31-Dec-16
L_SO_MF_018_S_03_A_A	NIGHTINGALE PUMP STATION REPLACEMENT - DESIGN	719.0	0%	24-Feb-14	31-Dec-16
PADDY'S RUN WET WEATHER TREATMENT FACILITY		644.0		05-Nov-12	31-Dec-14
L_OR_MF_015_M_13_B_B_8	PADDY'S RUN WW TREATMENT FACILITY - PRELIMINARY SITE CHARACT	180.0	100%	30-Jul-11 A	31-Dec-14
L_OR_MF_015_M_13_B_B_8	PADDY'S RUN WW TREATMENT FACILITY - TIME AND MATERIALS	30.0	0%	30-Oct-11	31-Dec-14
L_OR_MF_015_M_13_B_B_8	PADDY'S RUN WW TREATMENT FACILITY - COST ESTIMATE AND CONC ...	241.0	0%	28-May-12	31-Dec-14
L_OR_MF_015_M_13_B_B_8	PADDY'S RUN WW TREATMENT FACILITY - DESIGN 60%	367.0	0%	01-Oct-12	31-Dec-14
L_OR_MF_015_M_13_B_B_8	PADDY'S RUN WW TREATMENT FACILITY - EASEMENT	612.0	10%	01-Nov-12	31-Dec-14
L_OR_MF_015_M_13_B_B_8	PADDY'S RUN WW TREATMENT FACILITY - DESIGN 100%	402.0	0%	05-Nov-12	31-Dec-14
STORY AVENUE AND MAIN STREET STORAGE BASIN		455.0		30-Apr-12	31-Dec-13
L_OR_MF_020_S_09B_B_A_8	STORY AVE & MAIN ST STORAGE BASIN- COMPLETE ALTERNATIVE STU...	303.0	10%	30-Nov-11	31-Dec-13
L_OR_MF_020_S_09B_B_A_8	STORY AVE & MAIN ST STORAGE BASIN- COMPLETE REPORT AND SEL...	30.0	0%	30-Dec-11	31-Dec-13
L_OR_MF_020_S_09B_B_A_8	STORY AVE & MAIN ST STORAGE BASIN- DESIGN	213.0	0%	30-Apr-12	31-Dec-13
L_OR_MF_020_S_09B_B_A_8	STORY AVE & MAIN ST STORAGE BASIN - EASEMENT	90.0	0%	30-Apr-12	31-Dec-13
Flood Pump Station Projects		728.0		16-Dec-12	31-Dec-14
4TH STREET FLOOD PUMP STATION		442.0		18-Apr-12	31-Dec-12
L_OR_MF_022_M_03_A_A	4TH ST FPS DWO ELIMINATION - SUBST. COMPL	0.0	0%	19-Feb-12	31-Dec-12
L_OR_MF_022_M_03_A_A	4TH ST FPS DWO ELIMINATION - CD CERTIFY	0.0	0%	19-Mar-12	31-Dec-12
L_OR_MF_022_M_03_A_A	4TH ST FPS DWO ELIMINATION - CONSTRUCTION	442.0	60%	18-Apr-12	31-Dec-12
17TH STREET FLOOD PUMP STATION		357.0		25-Mar-12	31-Dec-14
L_OR_MF_190_S_03_A_A	17TH ST FPS DWO ELIMINATION - DESIGN	357.0	30%	25-Mar-12	31-Dec-14
27TH STREET FLOOD PUMP STATION		663.0		12-Oct-12	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH ST FPS DWO ELIMINATION - DESIGN	300.0	60%	15-Oct-11	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH STREET FLOOD PUMP STATION - BIDDING ASSISTANCE	60.0	0%	29-Nov-11	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH ST FPS DWO ELIMINATION - AD DATE	1.0	0%	30-Nov-11	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH STREET FLOOD PUMP STATION - COST ESTIMATE	76.0	0%	15-Dec-11	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH ST FPS DWO ELIMINATION - BID OPEN	0.0	0%	20-Dec-11	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH ST FPS DWO ELIMINATION - PROJECT MANAGEMENT	92.0	0%	31-Dec-11	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH ST FPS DWO ELIMINATION - AWARD	0.0	0%	10-Jan-12	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH STREET FLOOD PUMP STATION - SITE VISITS, SURVEYS, PERMITS	107.0	0%	15-Jan-12	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH STREET FLOOD PUMP STATION - DRAWING PREPARATION	107.0	0%	15-Jan-12	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH STREET FLOOD PUMP STATION - SPECIFICATIONS	107.0	0%	15-Jan-12	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH STREET FLOOD PUMP STATION - MEETINGS	138.0	0%	15-Feb-12	30-Jun-13
L_OR_MF_019_S_03_A_A	27TH ST FPS DWO ELIMINATION - CONSTRUCTION	255.1	0%	12-Oct-12	30-Jun-13
34TH STREET FLOOD PUMP STATION		426.0		15-Apr-12	31-Dec-12
L_OR_MF_019_S_03_A_B	34TH ST FPS DWO ELIMINATION - SUBST COMPL	0.0	0%	17-Mar-12	31-Dec-12
L_OR_MF_019_S_03_A_B	34TH ST FPS DWO ELIMINATION - CONSTRUCTION	426.0	40%	15-Apr-12	31-Dec-12
SHAWNEE FLOOD PUMP STATION		728.0		16-Dec-12	30-Jun-13
L_OR_MF_189_M_03_A_A	SHAWNEE FPS DWO ELIMINATION - DESIGN	376.0	60%	30-Dec-11	30-Jun-13
L_OR_MF_189_M_03_A_A	SHAWNEE FPS DWO ELIMINATION - AD DATE	1.0	0%	15-Jan-12	30-Jun-13
L_OR_MF_189_M_03_A_A	SHAWNEE FPS DWO ELIMINATION - BID OPEN	0.0	0%	15-Feb-12*	30-Jun-13
L_OR_MF_189_M_03_A_A	SHAWNEE FPS DWO ELIMINATION - AWARD	0.0	0%	01-Mar-12*	30-Jun-13
L_OR_MF_189_M_03_A_A	SHAWNEE FPS DWO ELIMINATION - PROJECT MANAGEMENT AND COO...	179.0	0%	26-Jun-12	30-Jun-13
L_OR_MF_189_M_03_A_A	SHAWNEE FPS DWO ELIMINATION - CONSTRUCTION	269.0	0%	16-Dec-12	30-Jun-13



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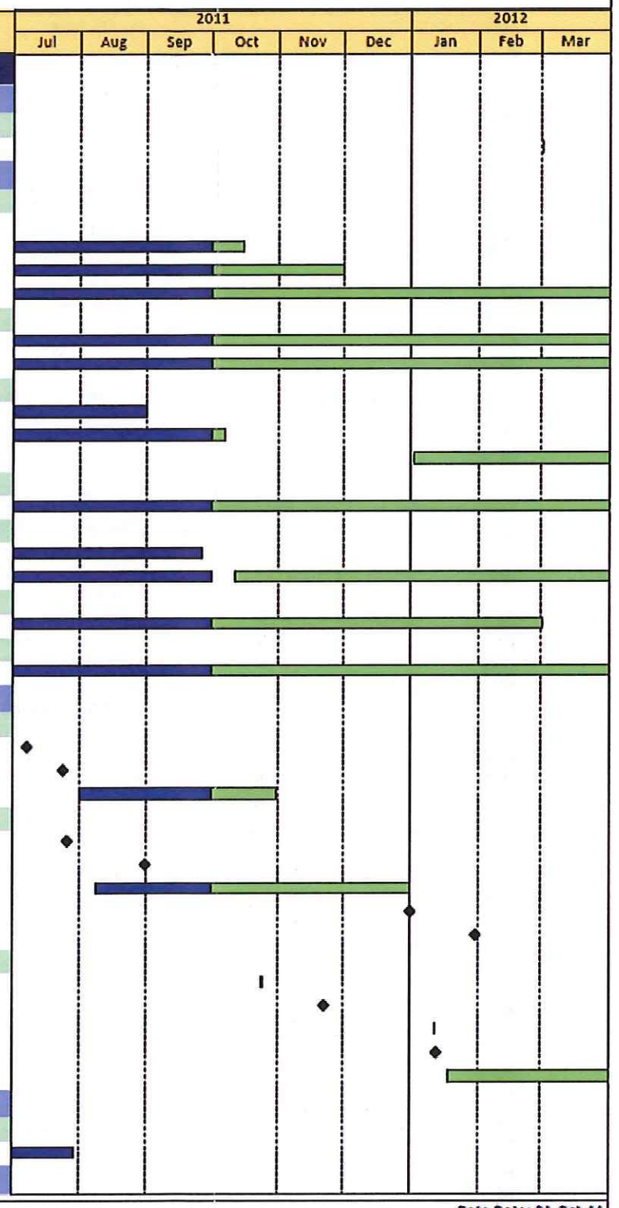
Date Date: 01-Oct-11

MSD Final Integrated Overflow Abatement Plan Implementation Schedule (01 July 2011 - 31 March 2012)

ACD Project Number	Activity Name	At Completion Duration	Physical % Complete	Finish	IOAP Finish Date
Sanitary Sewer Discharge Plan		1629.0		15-Jan-14	31-Dec-24
Floyds Fork Area		1.0		01-Mar-12	31-Dec-12
EDEN CARE PS SSO INVESTIGATION		1.0		01-Mar-12	31-Dec-12
S_FF_FF_NB02_S_13_C	EDEN CARE PUMP STATION ILS - AD DATE	1.0	0%	01-Mar-12	31-Dec-12
Jeffersontown Area		1024.0		01-Jan-13	31-Dec-15
BILLTOWN ROAD PS		815.0		06-Jun-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	BILLTOWN RD PS FM & INT - 10% DESIGN	0.0	100%	01-Jul-11 A	31-Dec-15
S_JT_JT_NB01_M_01_C_A	BILLTOWN ROAD P.S.,F.M. & INT - EASEMENTS	580.0	95%	15-Oct-11	31-Dec-15
S_JT_JT_NB01_M_01_C_A	BILLTOWN RD PS FM & INT - 90% DESIGN	533.0	0%	30-Nov-11	31-Dec-15
S_JT_JT_NB01_M_01_C_A	BILLTOWN ROAD P.S.,F.M., & INT - CONSTRUCTION	342.0	15%	06-Jun-12	31-Dec-15
CHENOWETH HILLS PS ELIMINATION		824.0		01-Oct-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	CHENOWETH RUN INTERCEPTOR SEC. 2 - EASEMENTS	429.0	0%	01-Sep-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	CHENOWETH RUN INTERCEPTOR SEC. 2 - DESIGN	824.0	95%	01-Oct-12	31-Dec-15
CHENOWETH HILLS WQTC ELIMINATION & PS IMPROVEMENTS		640.0		01-Jun-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	CHEN HILLS WWTP ELIMINATION & PUMP STATION ELIMINATION- PLAN...	366.0	100%	01-Sep-11 A	31-Dec-15
S_JT_JT_NB01_M_01_C_A	CHEN HILLS WWTP ELIMINATION & PUMP STATION ELIMINATION - DESI...	221.0	20%	07-Oct-11	31-Dec-15
S_JT_JT_NB01A_M_03_C	CHEN HILLS WWTP ELIMINATION & PUMP STATION ELIMINATION - EAS...	152.0	0%	01-Jun-12	31-Dec-15
JEFFERSON FORCE MAIN		854.0		01-Jan-13	31-Dec-15
S_JT_JT_NB01_M_01_C_A	GRAND AVE PS - DESIGN	854.0	20%	01-Jan-13	31-Dec-15
JEFFERSONTOWN WQTC ELIMINATION		763.0		01-Aug-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	JEFFERSONTOWN TP ELIMINATION - PLANNING	300.0	100%	26-Sep-11 A	31-Dec-15
S_JT_JT_NB01_M_01_C_A	JEFFERSONTOWN TP ELIMINATION - DESIGN	763.0	50%	01-Aug-12	31-Dec-15
KLONDKE INTERCEPTOR		548.0		01-Mar-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	KLONDIKE INTERCEPTOR - DESIGN	548.0	90%	01-Mar-12	31-Dec-15
UPPER BILLTOWN ROAD INTERCEPTOR		915.0		31-Dec-12	31-Dec-15
S_JT_JT_NB01_M_01_C_A	UPPER BILLTOWN ROAD INTERCEPTOR-DESIGN	915.0	30%	31-Dec-12	31-Dec-15
Beargrass Creek Middle Fork Area		923.0		15-Jan-14	31-Dec-13
ANCHOR ESTATES- VANNAH PS ELIMINATION		115.0		30-Oct-11	31-Dec-13
S_MI_MF_NB06_M_01_A_A - 2	ANCHOR ESTATES ILS & PS ELIMINATION - BID OPEN	0.0	100%	08-Jul-11 A	31-Dec-13
S_MI_MF_NB06_M_01_A_A - 2	ANCHOR ESTATES ILS & PS ELIMINATION - AWARD	0.0	100%	25-Jul-11 A	31-Dec-13
S_MI_MF_NB06_M_01_A_A - 2	ANCHOR ESTATES ILS & PS ELIMINATION - CONSTRUCTION	91.0	90%	30-Oct-11	31-Dec-13
HURSTBOURNE I&I INVESTIGATION & REHABILITATION		188.0		30-Jan-12	31-Dec-11
S_MI_MF_NB07_S_07_C	HURSTBOURNE I&I INVEST & REHAB - BID OPEN	0.0	100%	26-Jul-11 A	31-Dec-11
S_MI_MF_NB07_S_07_C	HURSTBOURNE I&I INVEST & REHAB - AWARD	0.0	100%	01-Sep-11 A	31-Dec-11
S_MI_MF_NB07_S_07_C	HURSTBOURNE I&I INVEST & REHAB - CONSTR	145.0	25%	31-Dec-11	31-Dec-11
S_MI_MF_NB07_S_07_C	HURSTBOURNE I&I INVEST & REHAB - SUBST COMP	0.0	0%	31-Dec-11*	31-Dec-11
S_MI_MF_NB07_S_07_C	HURSTBOURNE I&I INVEST & REHAB - CD CERTIFY	0.0	0%	30-Jan-12*	31-Dec-11
UMF #1 - BUECHEL BASIN		815.0		15-Jan-14	31-Dec-13
S_MISF_MF_NB01_M_01_C_A1	BUECHEL SURGE BASIN - AD DATE	1.0	0%	24-Oct-11	31-Dec-13
S_MISF_MF_NB01_M_01_C_A1	BUECHEL SURGE BASIN - BID OPEN	0.0	0%	22-Nov-11*	31-Dec-13
S_MISF_MF_NB01_M_01_C_A1	BUECHEL BASIN ASSISTANCE DURING BIDDING	0.0	0%	12-Jan-12*	31-Dec-13
S_MISF_MF_NB01_M_01_C_A1	BUECHEL SURGE BASIN - AWARD	0.0	0%	12-Jan-12*	31-Dec-13
S_MISF_MF_NB01_M_01_C_A1	BUECHEL SURGE BASIN - CONSTRUCTION	729.0	0%	15-Jan-14	31-Dec-13
Southeastern Diversion Area		60.0		30-Jul-11 A	30-Jun-11
PARKVIEW ESTATES I/I INVESTIGATION & REHABILITATION		60.0		30-Jul-11 A	30-Jun-11
S_SD_MF_NB03_S_07_C	PARKVIEW ESTATES I&I INVESTIGATION - CONSTRUCTION	60.0	100%	30-Jul-11 A	30-Jun-11
Pond Creek Area		486.0		30-Mar-12	31-Dec-24



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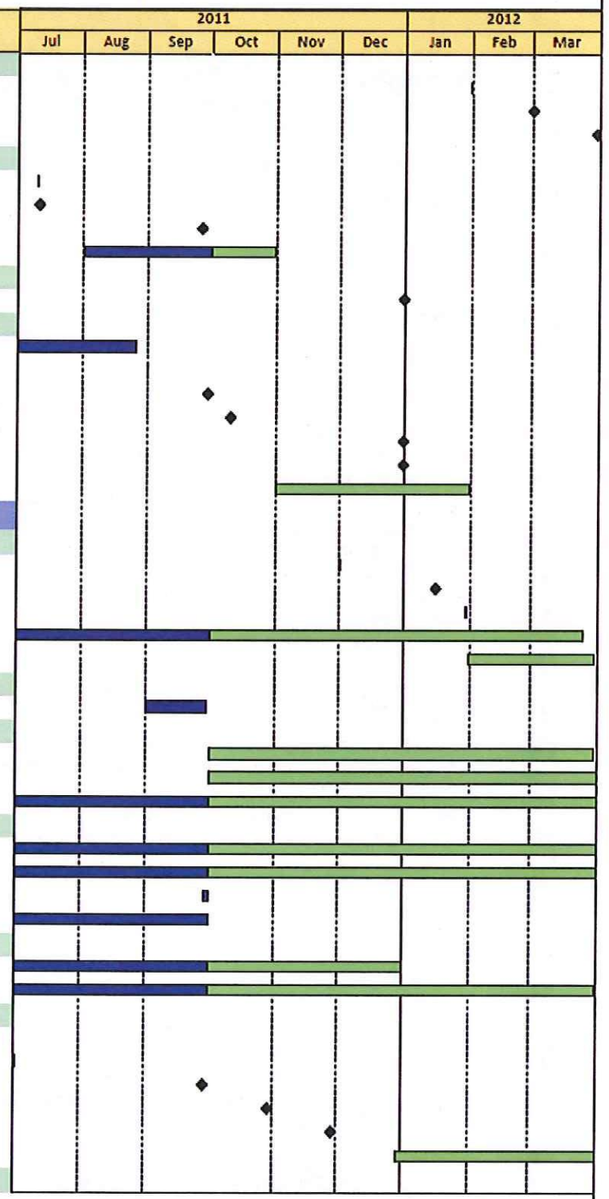
Date Date: 01-Oct-11

MSD Final Integrated Overflow Abatement Plan Implementation Schedule (01 July 2011 - 31 March 2012)

ACD Project Number	Activity Name	At Completion Duration	Physical % Complete	Finish	IOAP Finish Date
CHARLESWOOD INTERCEPTOR EXTENSION		60.0		30-Mar-12	31-Dec-22
S_PO_WC_PC03_M_01_C	CHARLESWOOD SUBD. INT. #23 - AD DATE	0.0	0%	31-Jan-12	31-Dec-22
S_PO_WC_PC03_M_01_C	CHARLESWOOD SUBD. INT. #23 - BID OPEN	0.0	0%	29-Feb-12	31-Dec-22
S_PO_WC_PC03_M_01_C	CHARLESWOOD SUBD. INT. #23 - AWARD	0.0	0%	30-Mar-12	31-Dec-22
EDSEL PS I/I INVESTIGATION & REHABILITATION		113.0		31-Oct-11	30-Sep-11
S_PO_WC_PC11_M_07_C	EDSEL PUMP STATION I&I INVESTIGATION - NTP	0.0	100%	11-Jul-11 A	30-Sep-11
S_PO_WC_PC11_M_07_C	EDSEL PUMP STATION I&I INVESTIGATION - AWARD	0.0	100%	11-Jul-11 A	30-Sep-11
S_PO_WC_PC11_M_07_C	EDSEL PUMP STATION I&I INVESTIGATION - SUBSTANTIALLY COMPLETE	0.0	100%	27-Sep-11 A	30-Sep-11
S_PO_WC_PC11_M_07_C	EDSEL PUMP STATION I&I INVESTIGATION - CONSTRUCTION	91.0	99%	31-Oct-11	30-Sep-11
GOVERNMENT CENTER PS ELIMINATION		0.0		31-Dec-11	31-Dec-24
S_PO_WC_PC06_M_01_C	GOVERNMENT CENTER PS ELIMINATION - AS-BUILTS	0.0	0%	31-Dec-11*	31-Dec-24
LANTANA PS I/I INVESTIGATION & REHABILITATION		427.0		31-Jan-12	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - DESIGN	269.0	100%	26-Aug-11 A	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - AD DATE	0.0	100%	01-Sep-11 A	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - BID OPEN	0.0	100%	30-Sep-11 A	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - AWARD	0.0	0%	10-Oct-11*	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - SUBSTANTIALLY ...	0.0	0%	31-Dec-11	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - CD CERTIFICATION	0.0	0%	31-Dec-11	31-Dec-11
S_PO_WC_PC05_M_07_C	LANTANA PUMP STATION WET WEATHER STORAGE - CONSTRUCTION	92.0	0%	31-Jan-12	31-Dec-11
Ohio River Force Main Area		1281.0		01-Jan-14	31-Dec-15
DERINGTON CT PS I/I INVESTIGATION & REHABILITATION		424.0		30-Mar-12	31-Mar-12
S_OR_MF_NB03_S_07_C	DERINGTON CT PUMP STATION I&I INVESTIGATION- AD DATE	1.0	0%	01-Dec-11	31-Mar-12
S_OR_MF_NB03_S_07_C	DERINGTON CT PUMP STATION I&I INVESTIGATION - BID OPEN	0.0	0%	15-Jan-12*	31-Mar-12
S_OR_MF_NB03_S_07_C	DERINGTON CT PUMP STATION I&I INVESTIGATION - AWARD	1.0	0%	30-Jan-12	31-Mar-12
S_OR_MF_NB03_S_07_C	DERINGTON CT PUMP STATION I&I INVESTIGATION - DESIGN	419.0	50%	25-Mar-12	31-Mar-12
S_OR_MF_NB03_S_07_C	DERINGTON CT PUMP STATION I&I INVESTIGATION - CONSTRUCTION	60.0	0%	30-Mar-12	31-Mar-12
LELAND RD SSO INVESTIGATION		29.0		30-Sep-11 A	31-Dec-12
S_OR_MF_NB02_S_13_C	LELAND ROAD RELIEF SEWER - CONSTRUCTION (PROJECT CANCELLED)	29.0	100%	30-Sep-11 A	31-Dec-12
HARROD'S CREEK INTERCEPTOR		428.0		01-May-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CRK INT PH. I - EASEMENT	182.0	0%	30-Mar-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	EPSC PLANS	184.0	0%	01-Apr-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CRK FM&I PH. I - 100% DESIGN	428.0	10%	01-May-12	31-Dec-15
HARROD'S CREEK INTERCEPTOR PHASE 2		1035.0		30-Apr-13	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CRK INT PHASE II - DESIGN	700.0	90%	30-May-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CRK INT PH II - CONSTRUCTION DOCUMENTS	335.0	90%	30-May-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CRK INT PHASE II - EASEMENTS	401.0	50%	02-Nov-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CRK INT PH II - UPDATE & FINALIZE PLANS	670.0	90%	30-Apr-13	31-Dec-15
HUNTING CREEK NORTH		640.0		31-Mar-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	NORTH HUNTING CREEK PS & FM - 90% SUBMITTAL	390.0	0%	31-Dec-11	31-Dec-15
S_OR_MF_NB04_M_03_B_B	NORTH HUNTING CREEK PS & FM - DESIGN	640.0	90%	31-Mar-12	31-Dec-15
RIVER ROAD INTERCEPTOR		974.0		28-Feb-13	31-Dec-15
S_OR_MF_NB04_M_03_B_B	RIVER ROAD INTERCEPTOR - DESIGN	365.0	100%	01-Jul-11 A	31-Dec-15
S_OR_MF_NB04_M_03_B_B	RIVER ROAD 100% DESIGN	1.0	100%	02-Jul-11 A	31-Dec-15
S_OR_MF_NB04_M_03_B_B	RIVER ROAD INTERCEPTOR - AD DATE	0.0	100%		31-Dec-15
S_OR_MF_NB04_M_03_B_B	RIVER ROAD INTERCEPTOR - BID OPENING	0.0	0%	29-Oct-11*	31-Dec-15
S_OR_MF_NB04_M_03_B_B	RIVER ROAD INTERCEPTOR - AWARD	0.0	0%	28-Nov-11	31-Dec-15
S_OR_MF_NB04_M_03_B_B	RIVER ROAD INTERCEPTOR - CONSTRUCTION	428.0	0%	28-Feb-13	31-Dec-15
SHADOW WOOD		1281.0		01-Jan-14	31-Dec-15



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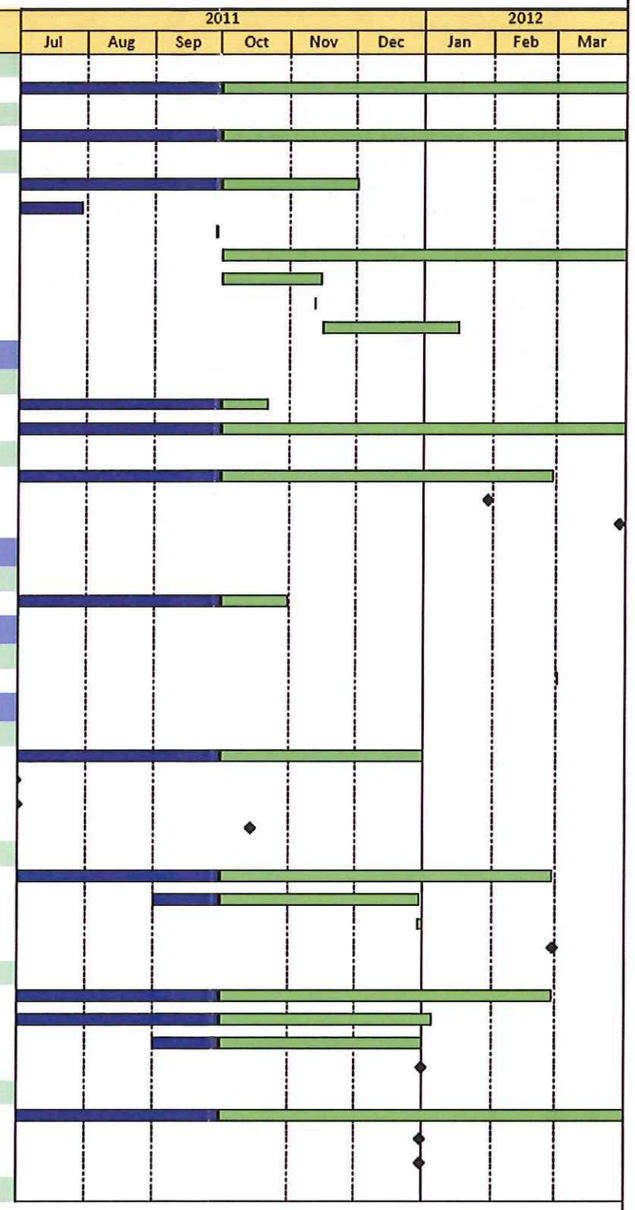
Date Date: 01-Oct-11

MSD Final Integrated Overflow Abatement Plan Implementation Schedule (01 July 2011 - 31 March 2012)

ACD Project Number	Activity Name	At Completion Duration	Physical % Complete	Finish	IOAP Finish Date
SHADOW WOOD		1281.0		01-Jan-14	31-Dec-15
S_OR_MF_NB04_M_03_B_B	SHADOW WOOD - DESIGN	1281.0	30%	01-Jan-14	31-Dec-15
TIMBERLAKE AND HUNTING CREEK SOUTH		640.0		31-Mar-12	31-Dec-15
S_OR_MF_NB04_M_03_B_B	TIMBERLAKE AND HUNTING CREEK SOUTH - DESIGN	640.0	60%	31-Mar-12	31-Dec-15
HARROD'S CREEK PUMP STATION		1067.0		01-Jun-13	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CREEK P.S. & F.M. - DESIGN	519.0	60%	01-Dec-11	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HC/PROSPECT AREA STUDY-FINAL DESIGN- 60%	173.0	100%	30-Jul-11 A	31-Dec-15
S_OR_MF_NB04_M_03_B_B	EPSC PLANS	1.0	100%	30-Sep-11 A	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HARRODS CREEK P.S. & F.M. - EASEMENT	610.0	0%	01-Jun-13	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HC/PROSPECT AREA STUDY-FINAL DESIGN- 90% MILESTONE	46.0	0%	15-Nov-11	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HC/PROSPECT AREA STUDY-RIVER ROAD INTERCEPTOR PLAN UPDATE	0.0	0%	12-Nov-11	31-Dec-15
S_OR_MF_NB04_M_03_B_B	HC/PROSPECT AREA STUDY-FINAL DESIGN- 100% MILESTONE	62.0	0%	16-Jan-12	31-Dec-15
Mill Creek Area		876.1		25-Apr-12	31-Dec-21
EAST ROCKFORD LANE PS RELOCATION		876.1		25-Apr-12	31-Dec-21
S_MC_WC_NB02_S_03_C	EAST ROCKFORD LN PS RELOC 100% DESIGN	690.1	100%	22-Oct-11	31-Dec-21
S_MC_WC_NB02_S_03_C	EAST ROCKFORD LANE PS RELOCATION - CONSTRUCTION	330.0	60%	25-Apr-12	31-Dec-21
SHIVELY INTERCEPTOR		607.0		29-Mar-12	31-Dec-14
S_MC_WC_NB01_M_01_A	SHIVELY INTERCEPTOR - CONSTRUCTION	577.0	40%	28-Feb-12	31-Dec-14
S_MC_WC_NB01_M_01_A	SHIVELY INTERCEPTOR - SUBST. COMPLETE	0.0	0%	30-Jan-12	31-Dec-14
S_MC_WC_NB01_M_01_A	SHIVELY INTERCEPTOR - AS-BUILTS	0.0	0%	29-Mar-12	31-Dec-14
Combined Sewer System Area		162.0		31-Oct-11	30-Jun-11
HAZELWOOD PS I&I INVESTIGATION & REHABILITATION		162.0		31-Oct-11	30-Jun-11
S_MC_MF_55665_S_07_C	HAZELWOOD PUMP STATION I&I INVESTIGATION - CONSTRUCTION	162.0	99%	31-Oct-11	30-Jun-11
Small WWTP Area		1.0		01-Mar-12	31-Dec-12
LAKE FOREST PS SSO INVESTIGATION		1.0		01-Mar-12	31-Dec-12
S_FF_LF_NB01_S_13_C_A	LAKE FOREST PUMP STATION IMPROVEMENT - AD DATE	1.0	0%	01-Mar-12	31-Dec-12
Interim SSDP Projects		970.0		27-Sep-12	27-Nov-12
DEREK R GUTHRIE WQTC 1 (H09562 DRGWQTC BLOWER PACKAGE)		579.0		31-Dec-11	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: BLOWER PKG - CONSTRUCTION	579.0	95%	31-Dec-11	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: BLOWER PKG - AS-BUILTS	0.0	100%	01-Jul-11 A	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: SUBSTANTIAL COMPLETION	0.0	100%	01-Jul-11 A	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: FINAL COMPLETION	0.0	0%	15-Oct-11*	31-Dec-11
DEREK R GUTHRIE WQTC 2 (H09563 DRGWQTC WET WEATHER EQUALIZATION)		243.0		28-Feb-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER EQUALIZATION BASIN-CONSTR	243.0	50%	28-Feb-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER EQUALIZATION BASIN-SUB COMP	121.0	50%	30-Dec-11	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER EQUALIZATION BASIN-CD CERTIFY	2.0	0%	31-Dec-11	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER EQUALIZATION BASIN-AS BLTS	0.0	0%	28-Feb-12*	31-Dec-11
DEREK R GUTHRIE WQTC 3 (H09561 DRGWQTC WET WEATHER TREATMENT)		758.0		28-Feb-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER TREATMENT FACILITY-ESM'TS	758.0	10%	28-Feb-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER TREATMENT FACILITY- CONSTRUCTION	584.0	50%	05-Jan-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER TREATMENT FACILITY- SUB OPERATIONAL	122.0	80%	31-Dec-11	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: WET WEATHER TREATMENT FACILITY- CD CERTIFY 80%	0.0	0%	31-Dec-11*	31-Dec-11
DEREK R GUTHRIE WQTC 4 (H06302 DRGWQTC WET WEATHER FLOW EQUALIZATION & TREATMENT)		795.0		30-Jun-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: PUMPING PACKAGE - CONSTRUCT	795.0	80%	30-Jun-12	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: PUMPING PACKAGE - SUBST OPERATIONAL	0.0	0%	31-Dec-11*	31-Dec-11
DEREK R GUTHRIE WATER QUALITY TR	DRGWQTC: PUMPING PACKAGE - CD CERTIFY	0.0	0%	31-Dec-11*	31-Dec-11
HIKE'S POINT INTERCEPTOR PHASE 1		609.0		30-Dec-11	27-Nov-12



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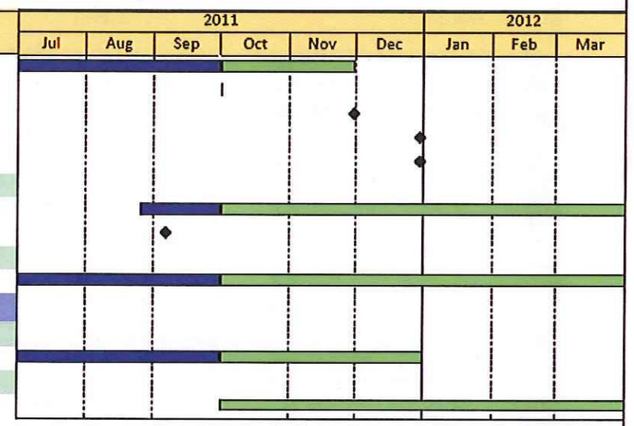
Date Date: 01-Oct-11

MSD Final Integrated Overflow Abatement Plan Implementation Schedule (01 July 2011 - 31 March 2012)

ACD Project Number	Activity Name	At Completion Duration	Physical % Complete	Finish	IOAP Finish Date
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR - CONSTRUCTION	579.0	95%	30-Nov-11	27-Nov-12
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR - ATTEND PREBID PHASE 2	1.0	0%	01-Oct-11	27-Nov-12
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR - SUBST COMPLETE	0.0	0%	30-Nov-11	27-Nov-12
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR - AS-BUILTS	0.0	0%	30-Dec-11	27-Nov-12
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR - CD CERTIFY	0.0	0%	30-Dec-11	27-Nov-12
HIKE'S POINT INCEPTOR PHASE 2		399.0		27-Sep-12	27-Nov-12
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR PHASE II- CONSTRUCTION	399.0	5%	27-Sep-12	27-Nov-12
HIKES LANE INTERCEPTOR /HIGHGATE	HIKES POINT INTERCEPTOR PHASE II- AWARD	0.0	100%	07-Sep-11 A	27-Nov-12
SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR		612.0		12-May-12	12-May-12
SOUTHEASTERN DIVERSION STRUCTU	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - CONSTR	612.0	80%	12-May-12	12-May-12
Other Projects		1156.0		29-Sep-12	30-Dec-24
CPE/CCP MODIFICATIONS TO WQTC		883.0		31-Dec-11	31-Dec-11
CPE/CCP MODIFICATIONS TO WQTC	CPE/CCP MODIFICATIONS TO WWTP - DESIGN	883.0	80%	31-Dec-11	31-Dec-11
I/I REDUCTION PROGRAM		365.0		29-Sep-12	30-Dec-24
MULTIPLE	FY12 I/I REDUCTION PROGRAM - CONSTRUCTION	365.0	0%	29-Sep-12	30-Dec-24



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Date Date: 01-Oct-11

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

4.1 Public Notification Program

MSD produced and distributed a number of products aimed at notifying the community of the objectives of Project WIN and how to lessen the risks associated with coming into contact with sewage overflows.

4.2 Public Education Programs

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

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

- Conducted a sewer overflow abatement project review and input meeting on Tuesday, September 27, 2011. Staff were available to speak about specific projects and programs. Presentations were given on the Integrated Overflow Abatement Program (IOAP) progress to date and status of three IOAP projects currently in design.
    - Presentations were given on the following topics:
        - IOAP Program Overview
        - Logan Street CSO Basin
        - Jeffersontown Water Quality Treatment Center Elimination
        - Prospect Water Quality Treatment Centers Eliminations
    - These video presentations were also shown:
        - Billtown Road Interceptor and Pump Station
        - Derek R. Guthrie Water Quality Treatment Center Expansion
        - Federal Building/GSA Green Infrastructure Partnership
- Provided information to the WWT through the Project WIN website, at www.msdlouky.org/projectwin.
- Scheduled a WWT meeting for November 29, 2011.

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.msdlouky.org/projectwin.

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 5.5 – 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 5.5 – CMOM Activity Schedule**.

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

Activity details are provided in the CMOM schedule provided as **Section 5.5 – CMOM Activity Schedule**.

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

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

5.3.1 Hite Creek Water Quality Treatment Center

During this reporting period, MSD has continued working on the Facilities Plan Update, establishing the study area and projecting the flow and loads from the service area. During the next reporting period, the alternative analysis for both the collection and treatment systems will be initiated 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 began in this reporting period. The expansion will provide an average daily design capacity of 5.25 MGD at the current site. During the next reporting period, the new influent force main is expected to be complete and the sludge holding tanks and secondary clarifiers will be under construction.

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

See **Section 3 – Program Activities for Discharge Abatement Plans** for an update on the design and construction of the three projects that make up the Derek R. Guthrie WQTC Wet Weather Equalization and Treatment Project (Budget ID multiple).

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**.

- Received KDEP minor permit modification approval for the elimination of the polishing pond July 1, 2010. The lagoon elimination construction project was bid on August 31, 2011, and awarded on September 18, 2011. During the next reporting period, it is anticipated the project will be certified substantially complete by October 30, 2011.

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**.

- Received KDEP minor permit modification approval for the elimination of the polishing pond July 1, 2010. The lagoon elimination construction project was bid on August 31, 2011, and awarded on September 28, 2011. During the next reporting period, it is anticipated the project will be certified substantially complete by November 30, 2011.

5.3.5.4 Ken Carla Water Quality Treatment Center

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

5.3.5.5 Shadow Wood Water Quality Treatment Center

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

5.3.6 Jeffersontown Water Quality Treatment Center

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

5.3.7 Starview Water Quality Treatment Center

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

5.3.8 Berrytown Water Quality Treatment Center

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

5.3.9 Chenoweth Hills Water Quality Treatment Center

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

5.3.10 Other Water Quality Treatment Centers

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

- McNeely Lake WQTC – Completed review of several alternatives to eliminate the plant. A final gravity solution alternative was selected as the elimination plan. 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. A developer is proposing to expand this pump station as part of a future development project. If the development occurs, MSD will review the current budget for funds to eliminate the plant. During the next reporting period, MSD will continue discussions with the developer to coordinate the plant elimination. MSD will also continue to monitor the structural condition of the pant and perform remedial activities as needed coordinating with the proposed elimination schedule.
- Silver Heights WQTC – Completed the review of several alternatives to eliminate the plant. A gravity solution alternative was selected and budget was allocated creating a capital project to eliminate the plant. During the next reporting period, MSD will begin preliminary design of the elimination project.

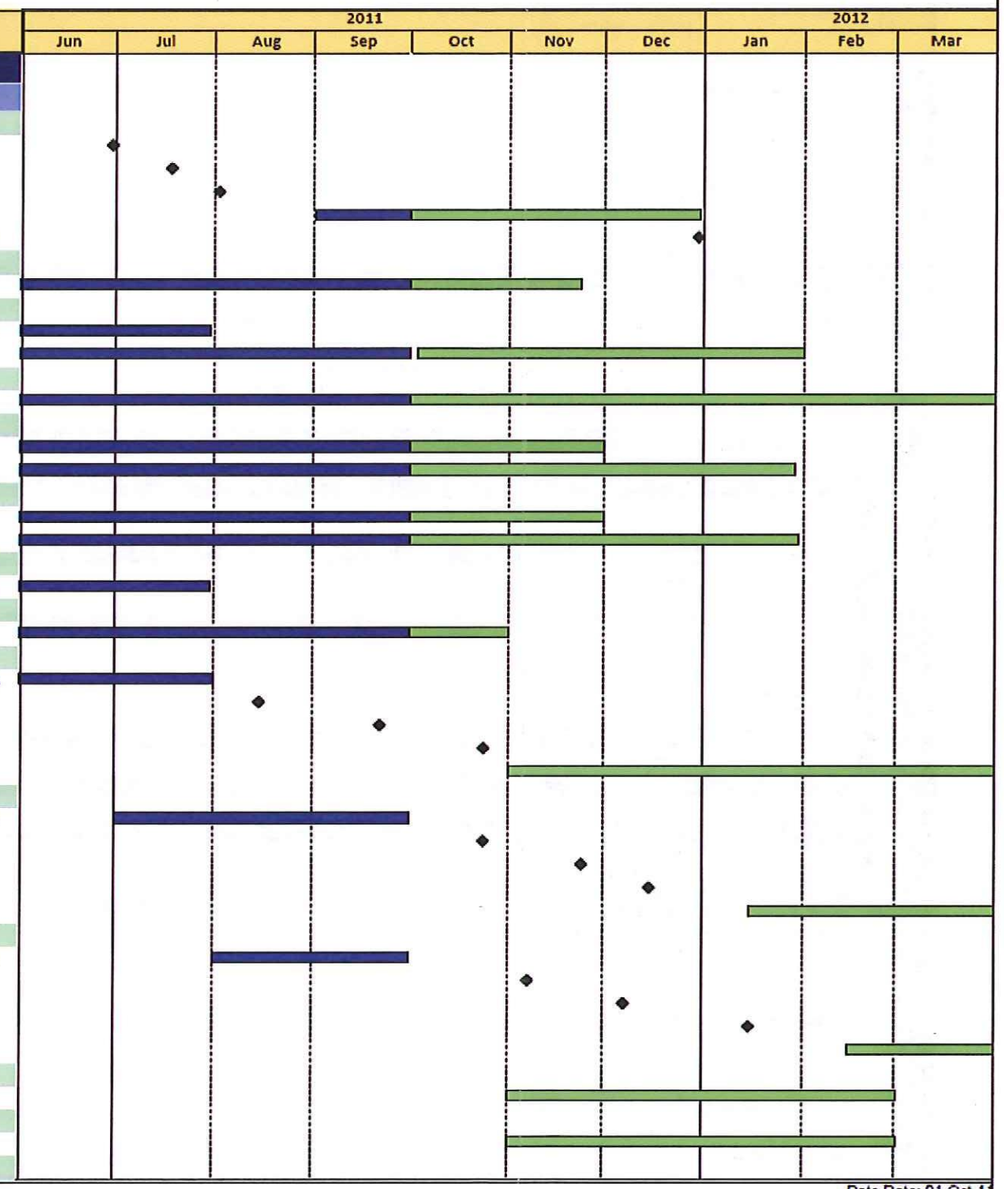
5.4 CMOM Activity Schedule

CMOM capital project milestones for the period of July 1, 2011, through September 30, 2011, as well as a look-ahead for the period of October 1, 2011, through March 31, 2011, are provided in the schedule below.

MSD CMOM FY11 Annual Commitments Schedule (01 June 2011 - 31 March 2012)

Date: 15-Oct-11

Activity ID	Activity Name	Start	Finish
CMOM FY ANNUAL REPORT COMMITMENTS FINAL		04-Oct-10 A	01-Nov-12
M-E-9 Infrastructure Rehabilitation		04-Oct-10 A	01-Nov-12
Shadow Wood I/I Rehabilitation		30-Jun-11 A	30-Dec-11
A2680	Design	30-Jun-11 A	
A2690	Ad	18-Jul-11 A	
A2700	Bid Opening	02-Aug-11 A	
A2710	Construction	01-Sep-11 A	30-Dec-11
A2720	Complete		30-Dec-11*
Goose Creek Pump Station Grinder Installation Project (F07070)		23-Nov-10 A	23-Nov-11
A1690	Warranty Period	23-Nov-10 A	23-Nov-11
Lee Ann Way Pump Station Grinder Installation Project (F07069)		01-Feb-11 A	01-Feb-12
A1850	Warranty Issues - Replace Blower	01-Feb-11 A	30-Jul-11 A
A2060	Warranty Period	02-Feb-11 A	01-Feb-12
Brandeis Viaduct #2 Pump & Controls Modifications Project (F04192)		01-May-11 A	01-May-12
A1720	Warranty Period	01-May-11 A	01-May-12
Shively Pump Station Grinder Replacement Project Planning (H10151)		01-Feb-11 A	29-Jan-12
A1860	Construction - Substantial Completion	01-Feb-11 A	30-Nov-11
A1870	Construction - Final Completion	01-Feb-11 A	29-Jan-12
Fairmount Road Pump Station Expansion Project (E00303)		20-Jan-11 A	30-Jan-12
A1880	Construction - Substantial Completion	20-Jan-11 A	30-Nov-11
A1890	Construction - Final Completion	20-Jan-11 A	30-Jan-12
Shobe Pump Station Elimination Project (A11285)		01-Dec-10 A	30-Jul-11 A
A1800	Design	01-Dec-10 A	30-Jul-11 A
Lake Forest Pump Station, Force Main & Interceptor (E05509)		04-Oct-10 A	31-Oct-11
A1830	Construction	04-Oct-10 A	31-Oct-11
Annual I/I Project (H09205)		01-Jun-11 A	01-Nov-12
A2880	Planning	01-Jun-11 A	01-Aug-11 A
A2540	Ad	15-Aug-11 A	
A2550	Bid Opening	22-Sep-11 A	
A2890	Award	24-Oct-11*	
A2560	Construction	01-Nov-11*	01-Nov-12
St Matthews Interceptor I/I Rehabilitation Project (H12059)		01-Jul-11 A	30-Jul-12
A3020	Planning	01-Jul-11 A	01-Oct-11 A
A2900	Ad	24-Oct-11*	
A2910	Bid Opening	24-Nov-11*	
A2920	Award	15-Dec-11*	
A2930	Construction	15-Jan-12*	30-Jul-12
Lea Ann Way Interceptor I/I Rehabilitation Project (H12064)		01-Aug-11 A	30-Sep-12
A3030	Planning	01-Aug-11 A	01-Oct-11 A
A2940	Ad	07-Nov-11*	
A2950	Bid Opening	07-Dec-11*	
A3000	Award	15-Jan-12*	
A3010	Construction	15-Feb-12*	30-Sep-12
Lake Forest Sanitary Sewer Rehabilitation Project (H11303)		01-Nov-11	01-Mar-12
A3150	Planning	01-Nov-11*	01-Mar-12
Prospect Phase I Sanitary Sewer Rehabilitation Project (H11311)		01-Nov-11	01-Mar-12
A3200	Planning	01-Nov-11*	01-Mar-12
Prospect Phase II SSES (H11319)		01-Jul-11 A	30-Jun-12



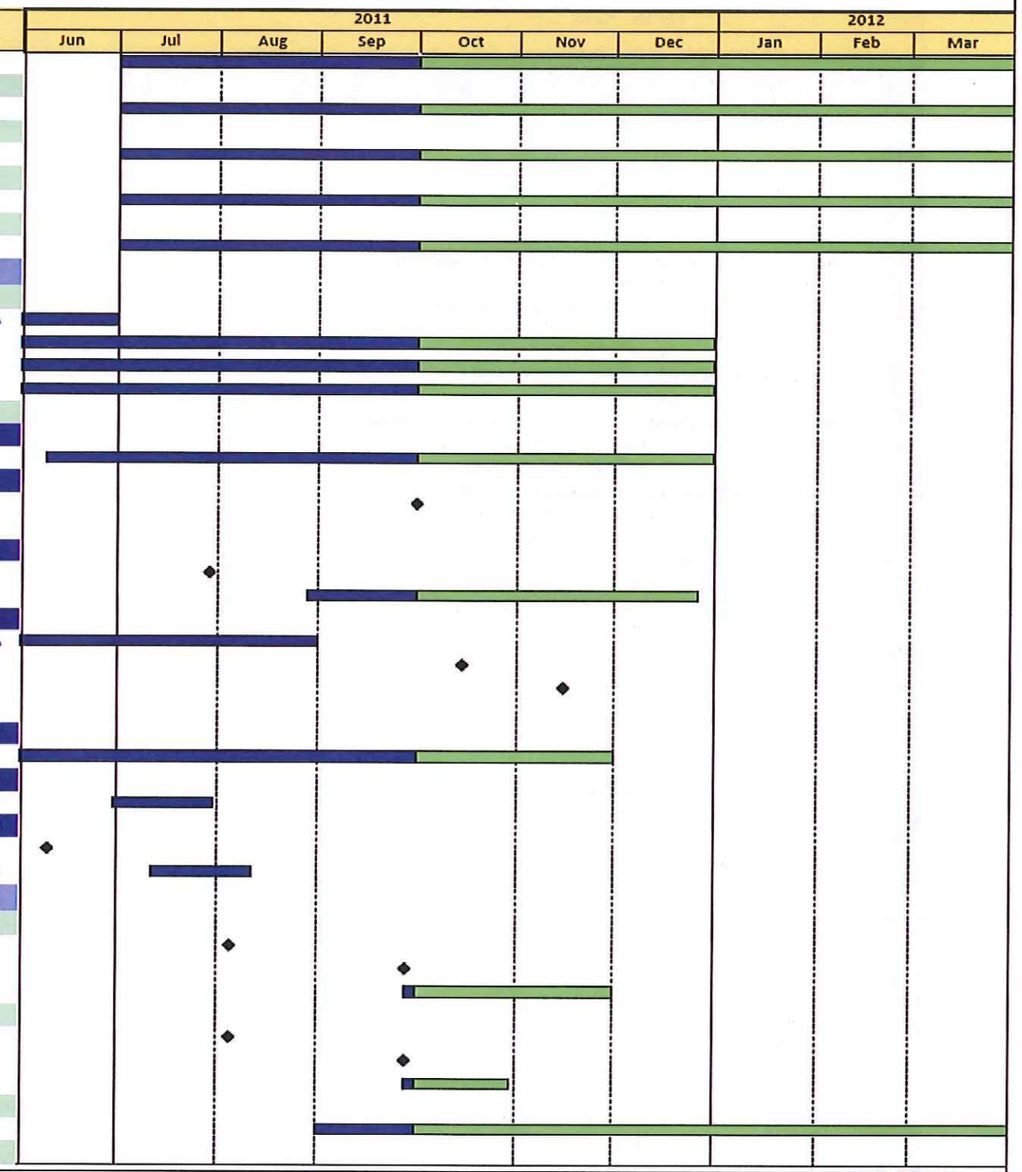
1 of 3

Date Date: 01-Oct-11

MSD CMOM FY11 Annual Commitments Schedule (01 June 2011 - 31 March 2012)

Date: 15-Oct-11

Activity ID	Activity Name	Start	Finish
A3100	Planning	01-Jul-11 A	30-Jun-12
Windham PS SSES (H11316)		01-Jul-11 A	30-Jun-12
A3110	Planning	01-Jul-11 A	30-Jun-12
Cedar Creek Phase II SSES (H11313)		01-Jul-11 A	30-Jun-12
A3120	Planning	01-Jul-11 A	30-Jun-12
Chenoweth Hills WQTC SSES (H11318)		01-Jul-11 A	30-Jun-12
A3130	Planning	01-Jul-11 A	30-Jun-12
Shively SSES (H11408)		01-Jul-11 A	30-Jun-12
A3140	Planning	01-Jul-11 A	30-Jun-12
Pump Station Operations Programs		15-Nov-10 A	31-Dec-11
O-A-1 Routine Operating Programs		15-Nov-10 A	31-Dec-11
A1320	Complete USACE Flood Operations & Maintenance Manual - Draft	15-Nov-10 A	30-Jun-11 A
A1340	Finalize Pump Station SOPs	01-Apr-11 A	31-Dec-11
A1350	Establish Draft SOPs & Job Aides for Regional Pump Stations	22-Apr-11 A	31-Dec-11
A1330	Submit Flood Operations & Maintenance Manual to USACE- Draft	01-Jun-11 A	31-Dec-11
O-A-2 Emergency Operation Programs		01-Jan-11 A	31-Dec-11
West Region Generator Phase IV (H11078)		09-Jun-11 A	31-Dec-11
A1930	Construction	09-Jun-11 A	31-Dec-11
East Region Emergency Generator Phase V (H11438)		01-Oct-11	11-Dec-11
A1960	Award	01-Oct-11*	
A1970	Construction	01-Oct-11*	11-Dec-11
Central Region Emergency Generator Phase V (H11439)		29-Jul-11 A	26-Dec-11
A2000	Award	29-Jul-11 A	
A2010	Construction	28-Aug-11 A	26-Dec-11
Trinity Homes Emergency Generator (H11440)		01-Jan-11 A	30-Dec-11
A2020	Design	01-Jan-11 A	31-Aug-11 A
A2030	Ad	15-Oct-11*	
A2040	Award	15-Nov-11*	
A2050	Construction	15-Nov-11*	30-Dec-11
Gaven Emergency Generator (H11077)		04-Feb-11 A	30-Nov-11
A2180	Construction	04-Feb-11 A	30-Nov-11
Shady Villa Access Road (H09338)		30-Jun-11 A	30-Jul-11 A
A2220	Construction	30-Jun-11 A	30-Jul-11 A
Valley Village Acess Road (H09338)		10-Jun-11 A	11-Aug-11 A
A2320	Award		10-Jun-11 A
A2260	Construction	11-Jul-11 A	11-Aug-11 A
CPE/CPE Treatment Plant Activities		01-Jul-11 A	30-Jun-12
Hunting Creek South Lagoon Elimination		05-Aug-11 A	30-Nov-11
A2080	Ad Award	05-Aug-11 A	
A2090	Award	28-Sep-11 A	
A2100	Construction	28-Sep-11 A	30-Nov-11
Timberlake Lagoon Elimination		05-Aug-11 A	30-Oct-11
A2120	Ad Award	05-Aug-11 A	
A2130	Award	28-Sep-11 A	
A2140	Construction	28-Sep-11 A	30-Oct-11
SILVER HEIGHTS WQTC Elimination Project (H12022)		01-Sep-11 A	30-Jun-12
A3390	Planning	01-Sep-11 A	30-Jun-12
MFWQTC Secondary Clarifier Flow Meters Project (H12046)		01-Aug-11 A	15-Mar-12



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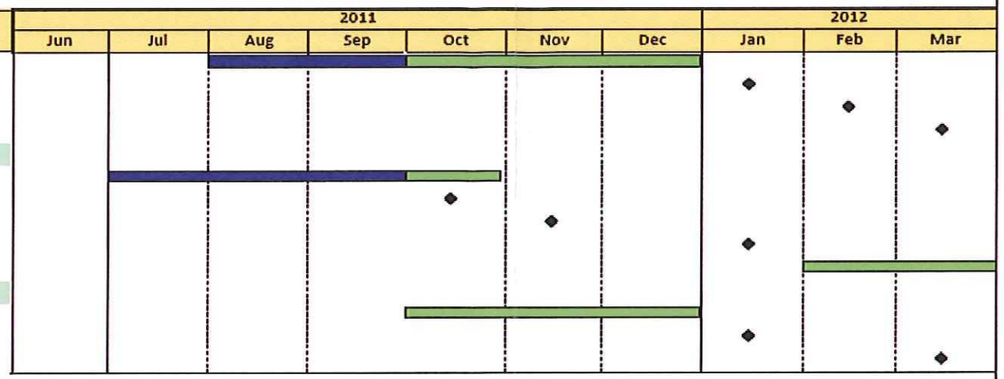
Date Date: 01-Oct-11

MSD CMOM FY11 Annual Commitments Schedule (01 June 2011 - 31 March 2012)

Date: 15-Oct-11

Activity ID	Activity Name	Start	Finish
A3340	Design	01-Aug-11 A	31-Dec-11
A3300	Ad	15-Jan-12*	
A3310	Bid Opening	15-Feb-12*	
A3330	Award	15-Mar-12*	
MFWQTC Secondary Bypass Flume Replacement (H12047)		01-Jul-11 A	30-Jun-12
A3290	Design	01-Jul-11 A	30-Oct-11
A3250	Ad	15-Oct-11*	
A3260	Bid Opening	15-Nov-11*	
A3280	Award	15-Jan-12*	
A3270	Construction	01-Feb-12*	30-Jun-12
CMOM CPE/CCP FY11 - CL2 and SO2 Flow Pacing (H09360)		01-Oct-11 A	15-Mar-12
A3440	Design	01-Oct-11 A	31-Dec-11
A3400	Ad	15-Jan-12*	
A3410	Bid Opening	15-Mar-12*	



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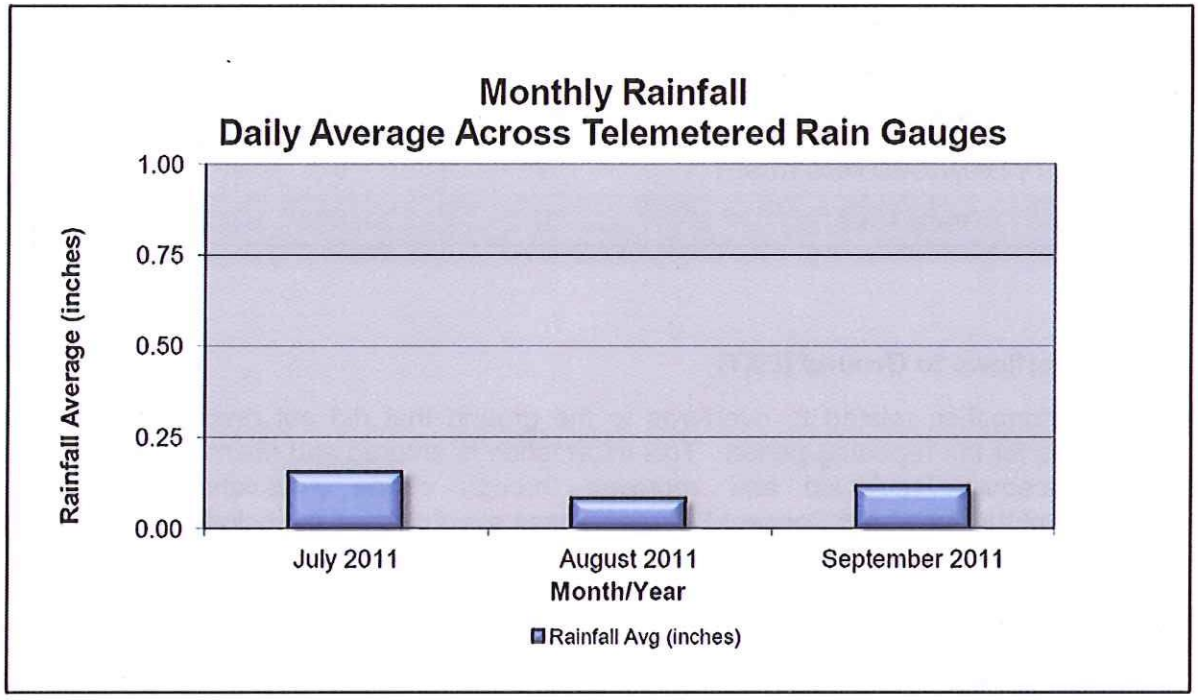
Date Date: 01-Oct-11

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). 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, 2011, through June 30, 2012, and are posted on the Project WIN website. During this quarter, 64 overflows to the Waters of the United States (WUS) have been reported.

Unauthorized Discharges (Waters of the United States)			
Problem Code	Dry Weather	Wet Weather	Grand Total
BLENDING AT JTOWN WQTC	0	1	1
BYPASS AT WQTC	5	1	6
ELECTRICAL PROBLEMS AT MSD	1	2	3
LACK OF SYSTEM CAPACITY	0	37	37
MECHANICAL FAILURE	0	2	2
OBSTRUCTION-NOT GREASE / ROOTS	5	0	5
PUMPED OVERFLOW	0	4	4
STRUCTURAL FAILURE	3	0	3
UTILITY DAMAGED MSD ASSET	3	0	3
Grand Total	17	47	64

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, 2010, through June 30, 2011.

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, 2010, through June 30, 2011.

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, 2011, through June 30, 2012. 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 - July 1, 2011 - September 30, 2011					
CSO	Type of Discharge	Date/Time	Problem	Cause	Volume (Gal)
CSO113	Dry Weather Discharge	8/17/11 12:08 PM	Obstruction	OBSTRUCTION IN MAIN SEWER	22
CSO146	Dry Weather Discharge	8/11/11 8:15 PM	Utility Damage	LWC WATER MAIN BREAK AT EASTERN PKY & CRITTENDEN DR CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW	551,760
CSO174	Dry Weather Discharge	8/11/11 8:00 PM	Utility Damage	LWC WATER MAIN BREAK AT EASTERN PKY & CRITTENDEN DR CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW	133,708
CSO211	Dry Weather Discharge	7/11/11 9:30 PM	Utility Damage	LWC 48" WATER MAIN BREAK CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW, RESULTING IN A DRY WEATHER CSO AT THE MAIN DIVERSION	202,188

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.

There were no CSO reduction projects completed during the reporting period.

6.4 SSO Reductions

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

The following projects that impacted SSOs were completed during this reporting period:

- Vannah PS Elimination – Completed September 23, 2011 – Eliminated the following SSO manhole: 01106.
- Edsel PS I/I Investigation & Rehabilitation – Completed September 27, 2011 – Eliminated the following SSO manholes: MSD1048-PS, 92098, 92099, 94009.

6.5 Gravity Line Preventive Maintenance

Each quarter, data and statistics relating 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 October 1, 2010, through September 30, 2011. 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 With Targets						
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Total	Target/ qtr
Combined Sewer Area						
Catch Basins Cleaned CSO Area - PM	4,486	5,518	6,660	8,165	24,829	4460
CSO Inspections	1,352	1,335	1,347	1,339	5,373	1272
Sanitary Sewer Area						
Catch Basins Cleaned SSO Area - PM	1,149	1,331	53	3,386	5,919	1144
County Wide						
Sewer Main Inspections MSD Crews (LF)	150,257	224,419	133,370	281,495	789,541	198000
Sewer Main Inspections Contractor (LF)	548,581	309,086	198,521	189,165	1,245,353	198000
Total Inspections (LF)	150257	533505	331891	470660	1486313	396000

Rolling Quarterly GLPM Performance					
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Total
Combined Sewer Area					
Catch Basins Cleaned CSO Area - UM	510	204	368	462	1544
CSO Debris Removal WO	83	76	135	122	416
Chemical Root Treatment CSO Area (LF)	4174	11400	1479	0	17053
Root Cutting CSO Area (LF)	6349	9,652	3,887	83,868	103,756
Flushing and Cleaning of Sewer Mains CSO Area (LF)	27975	14436	16207	32060	90678
Sanitary Sewer Area					
Catch Basins Cleaned SSO Area - UM	90	83	129	80	382
Chemical Root Treatment SSO Area (LF)	88613	105,774	7,916	0	202,303
Root Cutting SSO Area (LF)	41558	79785	46212	28300	195855
Flushing and Cleaning of Sewer Mains SSO Area (LF)	92998	83,235	69,790	32,056	278,079

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 6 bypasses that occurred at water quality treatment centers (WQTC) during this reporting period. Bypasses were reported for the following WQTCs:

Q24 - Bypass Events			
Type of Bypass	Date	ID	Facility Name
Dry Weather	07/11/2011	MSD0278	MORRIS FORMAN
Dry Weather	07/27/2011	MSD0404	SHADOW WOOD
Dry Weather	08/08/2011	MSD0294	FLOYDS FORK
Dry Weather	08/11/2011	MSD0289	CEDAR CREEK
Dry Weather	08/11/2011	MSD0278	MORRIS FORMAN
Wet Weather	08/13/2011	MSD0247	STARVIEW

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 between July 1, 2011, and September 30, 2011.

Bypass Analysis – July 1, 2011, to September 30, 2011	
Bypass Description	Bypass Corrective Actions
Capacity	
- No Capacity related bypasses occurred during the reporting period.	- N/A
External Power failures (LGE Related-PWR)	
- Starview WQTC (Hansen Discharge WO: 1321027): Bypass (Power Failure) was reported at this WQTC on August 13, 2011. A power failure caused the effluent pump station to fail during the rain event of August 13, 2011.	- MSD installed an alternate power source (temporary generator). - Lake Forest Pump Station, Force Main, and Interceptor (Budget ID E05509) will eliminate this WQTC. The Starview component of this project is anticipated to be complete by December 31, 2012.

Facility Failure (Mechanical -MCH, Electrical - ELE, Structural-SRT)	
- Shadow Wood WQTC (Hansen Discharge WO: 1308246): Bypass (structural) was reported at this WQTC on July 27, 2011. Erosion in the tertiary pond allowed flows to bypass disinfection during dry weather.	- MSD drained the pond and installed a plug to stop the bypass on July 27, 2011. MSD excavated at the leak, then poured concrete in the embankment to prevent a future bypass at this location. - The Shadow Wood plant is to be eliminated as part of the Prospect Elimination Phase 1 (BUDGET ID D94210) prior to December 31, 2015.
- Floyds Fork WQTC (Hansen Discharge WO: 13153518): Bypass (mechanical) was reported at this WQTC on August 8, 2011. Plant UV system shut down due to leak in system coolant line during dry weather.	- MSD repaired the coolant line, and contacted the manufacturer for replacement parts. A low level alarm was added to the SCADA system to alert staff of a future occurrence. Corrective action was completed on August 9, 2011.
- Cedar Creek WQTC (Hansen Discharge WO: 1316305): Bypass (electrical) was reported at this WQTC on August 11, 2011. The UV system shut down due to low flows in the channel during dry weather.	- MSD re-started the UV system manually on August 11, 2011. SOP will be updated to specify one active channel (of two) to be in service during low flow periods to prevent recurrence of the dry weather bypass. Corrective action to be completed prior to December 31, 2011.
Human Error (OPN)	
- No bypasses of this category occurred during the reporting period.	- N/A
Utility Damage	
- Morris Forman WQTC (Hansen Discharge WO: 1297907): Bypass was reported at this WQTC on July 11, 2011. A Louisville Water Company water main break of over 40 MG caused excessive flows to reach the plant, and led to a bypass of secondary treatment during dry weather.	- MSD maximized secondary treatment during the event.

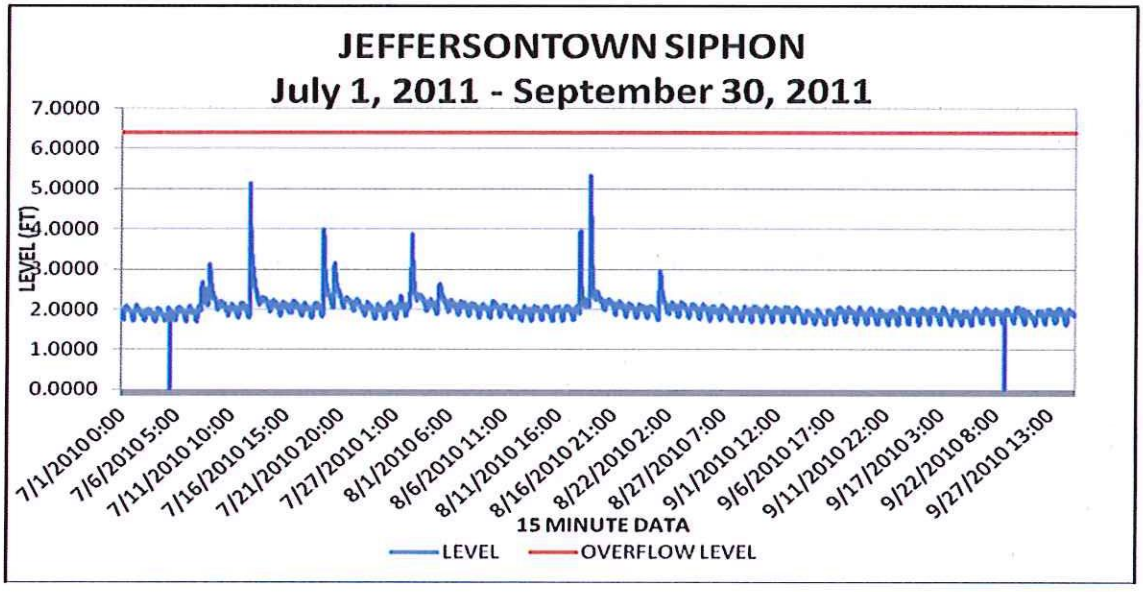
- Morris Forman WQTC (Hansen Discharge WO: 1320542): Bypass was reported at this WQTC on August 11, 2011. A Louisville Water Company water main break caused excessive flows to reach the plant, and led to a bypass of secondary treatment during dry weather.	- MSD maximized secondary treatment during the event.

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:

- Conducted one inspection route as described in **Section 2.2 - Overflow Management and Field Documentation.**
- No overflows were identified as a result of inspections of overflows within 2,000 feet of the Jeffersontown head works, no overflows were identified at the Jeffersontown Siphon.

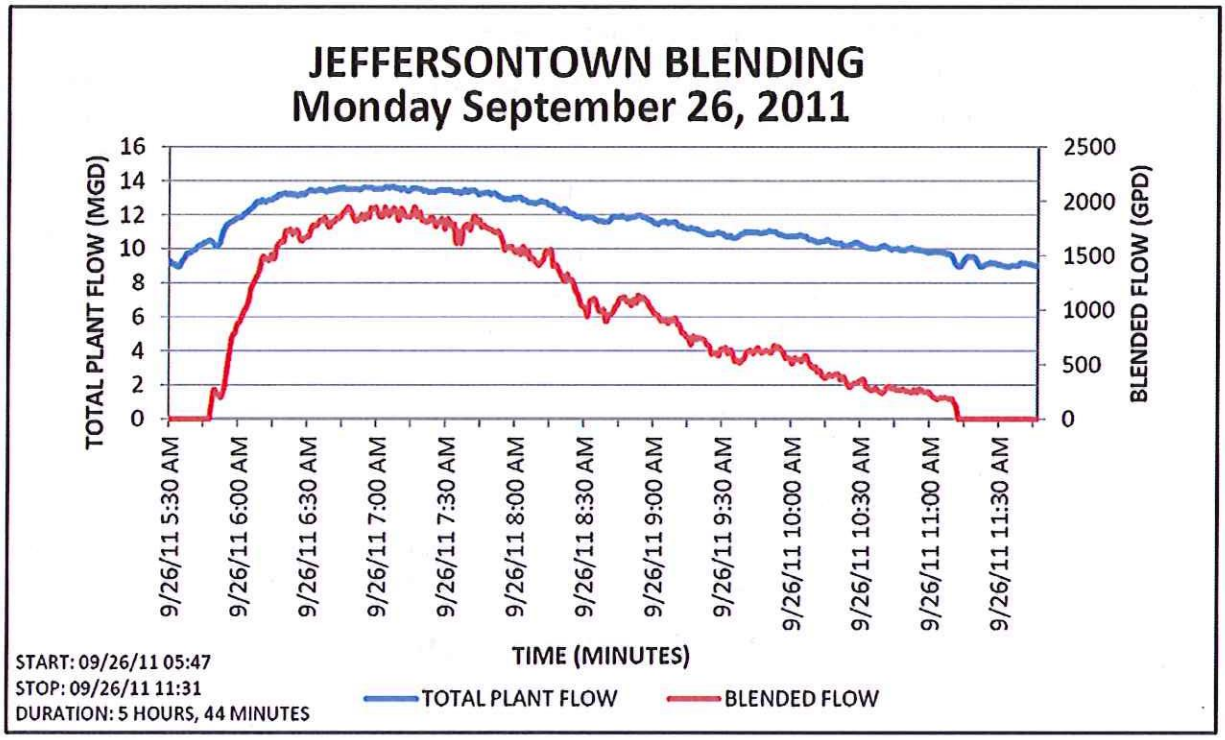


JEFFERSONTOWN SIPHON LEVEL – JULY 1, 2011 TO SEPTEMBER 30, 2011

- One blending event occurred Monday September 26, 2011 at the Jeffersontown

WQTC during this quarter. Included in **Appendix A-3** is a report that lists the details from the blending event. The following chart shows plant flow at the Jeffersontown WQTC when blending began. The data for this event indicates that MSD met the protocols outlined in Jeffersontown Wastewater Treatment Plant Process Control Program for the quarterly reporting period.

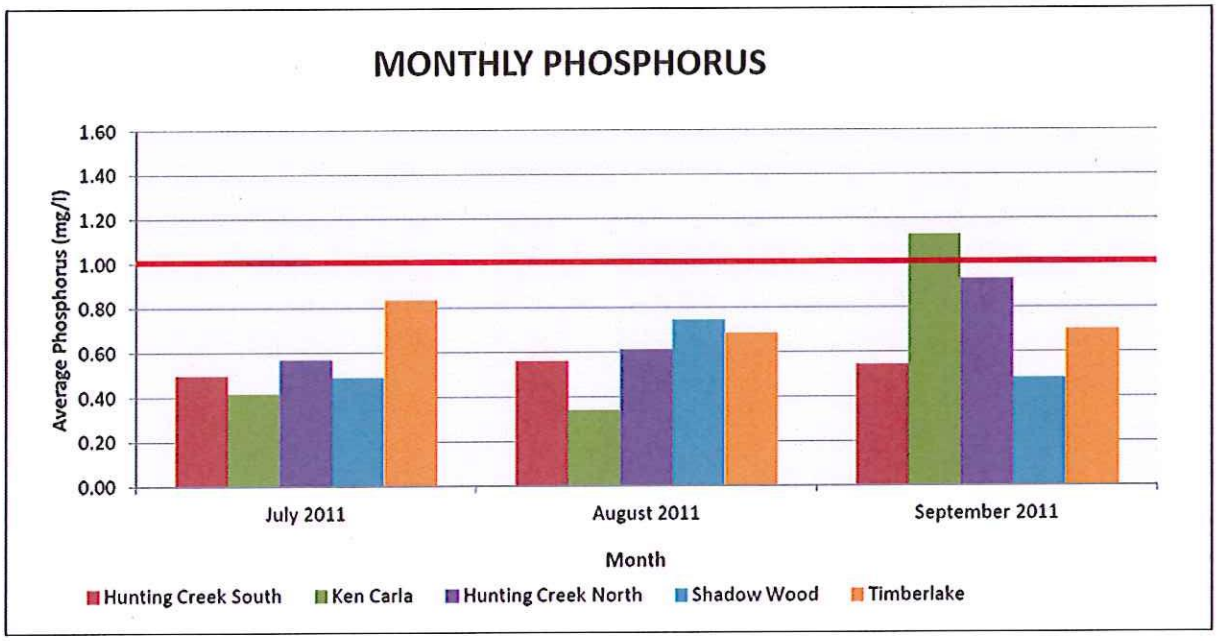
- See Section 5.4.1 for an update on the Comprehensive Performance Evaluations (CPE) /Composite Correction Plans (CCP) projects for the Jeffersontown WQTC.



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, with the exception of Ken Carla WQTC in September 2011. The following chart displays monthly average phosphorus results for the Prospect WQTCs.

The exceedance at Ken Carla WQTC occurred due to the reduced effectiveness of the sodium aluminate because of the age of the chemical. To correct the situation, the contents of the aeration tank were removed, and the plant was re-seeded. To prevent future occurrences, MSD has modified the procedure for delivery and storage of the sodium aluminate at the Prospect WQTCs.


MONTHLY PHOSPHORUS
Average Phosphorus (mg/l)
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
July 2011
August 2011
September 2011
Month
Hunting Creek South
Ken Carla
Hunting Creek North
Shadow Wood
Timberlake

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

APPENDIX A-1
DRY WEATHER CSOs
JULY 1, 2011 THROUGH SEPTEMBER 30, 2011

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	08/17/11 12:08: PM	08/17/11 12:30: PM	22 GAL	Sewer Manhole	CSO113	STREAM	SOUTH FORK BEARGRASS CREEK	OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE / ROOTS	1322426	NO CLEAN UP PERFORMED- PIPE DISCHARGES DIRECTLY INTO STREAM	FLUSHED/VACTORED THE OBSTRUCTION/DEBRIS FROM SEWER
MORRIS FORMAN	KY0022411	984 SWAN ST	08/11/11 8:15: PM	08/12/11 3:15: AM	551,760 GAL	Sewer Manhole	CSO146	STREAM	SOUTH FORK BEARGRASS CREEK	LWC WATER MAIN BREAK AT EASTERN PKY & CRITTENDEN DR CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW	UTILITY DAMAGED MSD ASSET	1320617	NO CLEANUP REQUIRED	LWC REPAIRING WATER MAIN
MORRIS FORMAN	KY0022411	933 GOSS AVE	08/11/11 8:00: PM	08/11/11 9:15: PM	133,708 GAL	Sewer Manhole	CSO174	STREAM	SOUTH FORK BEARGRASS CREEK	LWC WATER MAIN BREAK AT EASTERN PKY & CRITTENDEN DR CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW	UTILITY DAMAGED MSD ASSET	1320616	NO CLEANUP REQUIRED	LWC REPAIRING WATER MAIN
MORRIS FORMAN	KY0022411	1400 CECIL AVE	07/11/11 9:30: PM	07/11/11 11:45: PM	202,188 GAL	Sewer Manhole	CSO211	STREAM	OHIO RIVER	LWC 48" WATER MAIN BREAK CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW, RESULTING IN A DRY WEATHER CSO AT THE MAIN DIVERSION	UTILITY DAMAGED MSD ASSET	1297841	NO CLEANUP REQUIRED, PIPE DISCHARGE SUBMERGED	LWC WORKING ON REPAIRS TO WATER MAIN

Appendix A-2 - Discharge Work Orders – Bypass

APPENDIX A-2
BYPASS EVENTS AT WQTC'S
JULY 1, 2011 THROUGH SEPTEMBER 30, 2011

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
STARVIEW	KY0031712	423 BERMUDA WAY	08/13/11 10:05: PM	08/13/11 10:40: PM	175 GAL	Sewer Treatment Plant	MSD0247	STREAM	CHENOWETH RUN	LG&E POWERFAIL	BYPASS AT WQTC	1321027	NO CLEANUP	PORTABLE GENERATORS WERE INSTALLED
MORRIS FORMAN	KY0022411	4522 ALGONQUIN PKY	07/11/11 8:38: PM	07/12/11 7:00: AM	1,700,000 GAL	Sewer Treatment Plant	MSD0278	STREAM	OHIO RIVER	LWC 48" WATER MAIN BREAK CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW, REQUIRING MFWQTC TO BYPASS SECONDARY	BYPASS AT WQTC	1297907	NO CLEANUP REQUIRED, TOTAL BYPASSED FLOW RECEIVED PRELIMINARY, PRIMARY, DISINFECTION AND DECHLORINATION AS PART OF THE TREATMENT PROCESS	LWC WORKING ON REPAIRS TO WATER MAIN
MORRIS FORMAN	KY0022411	4522 ALGONQUIN PKY	08/11/11 11:03: PM	08/12/11 12:16: AM	1,500,000 GAL	Sewer Treatment Plant	MSD0278	STREAM	OHIO RIVER	LWC WATER MAIN BREAK AT EASTERN PKY & CRITTENDEN DR CAUSED A SUBSTANTIAL INCREASE IN SEWER FLOW, REQUIRING MFWQTC TO BYPASS SECONDARY	BYPASS AT WQTC	1320542	NO CLEANUP REQUIRED, TOTAL BYPASSED FLOW RECEIVED PRELIMINARY, PRIMARY, DISINFECTION AND DECHLORINATION AS PART OF THE TREATMENT PROCESS	LWC REPAIRING WATER MAIN
CEDAR CREEK	KY0098540	8605 CEDAR CREEK RD	08/11/11 3:50: AM	08/11/11 3:56: AM	4,209 GAL	Sewer Treatment Plant	MSD0289	GROUND	CEDAR CREEK	UV3000 PLUS SHUT DOWN	BYPASS AT WQTC	1316305	NO CLEAN UP PERFORMED - PIPES DISCHARGE UNDERWATER, DIRECTLY INTO STREAM	MANUALLY STARTED UV 3000 PLUS
FLOYDS FORK	KY0102784	1100 BLUE HERON RD	08/08/11 11:55: PM	08/09/11 12:15: AM	49,884 GAL	Sewer Treatment Plant	MSD0294	STREAM	FLOYDS FORK	UV SYSTEM FAILURE, COOLANT HOSE BURST & SYSTEM OVERHEATED & SHUT DOWN	BYPASS AT WQTC	1315318	NO CLEAN UP PERFORMED - PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM	RESTARTED UV SYSTEM MANUALLY
SHADOW WOOD	KY0031810	5489 FOREST LAKE DR	07/27/11 12:15: PM	07/27/11 4:39: PM	1,832 GAL	Sewer Treatment Plant	MSD0404	GROUND	HARRODS CREEK	EROSION OF THE LAGOON WALL	BYPASS AT WQTC	1308246	DISCHARGING DIRECTLY TO STREAM, NO CLEANUP POSSIBLE	CHEROKEE CALLED TO MAKE REPAIRS

Appendix A-3 - Discharge Work Orders – Blending

APPENDIX A-3
BLENDING EVENTS AT JEFFERSONTOWN WQTC
JULY 1, 2011 THROUGH SEPTEMBER 30, 2011

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	09/26/11 5:47: AM	09/26/11 11:31 AM	349,988 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN IN AREA	BLENDING AT JTOWN WQTC	1345232	NO CLEAN UP PERFORMED: PIPES DISCHARGE UNDERWATER, DIRECTLY INTO STREAM	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION

Appendix B – CSO Flow Monitoring Data

For the 3rd Quarter of 2011, the following notes explain places on the graphs where an overflow is indicated that does not appear to have a preceding rain.

CSO055 – There were 2 false discharges due to high level and velocity spikes which produced a flow rate, first on 9/27/2011 and second on 9/28/2011. Correction was to replace Flow Meter & A/V sensor on 9/30/2011.

CSO058 – Telog battery ran low on 7/8/2011 and was replaced on 7/22/2011.

CSO088 – The flow meter was uninstalled on 8/16/2011, and a new one was installed on 9/1/2011.

CSO 125 - No rain was detected at the closest gauge (TR05), however, other rain gauges picked up rain that caused the overflow.

CSO126 – The flow meter was installed on 7/26/2011.

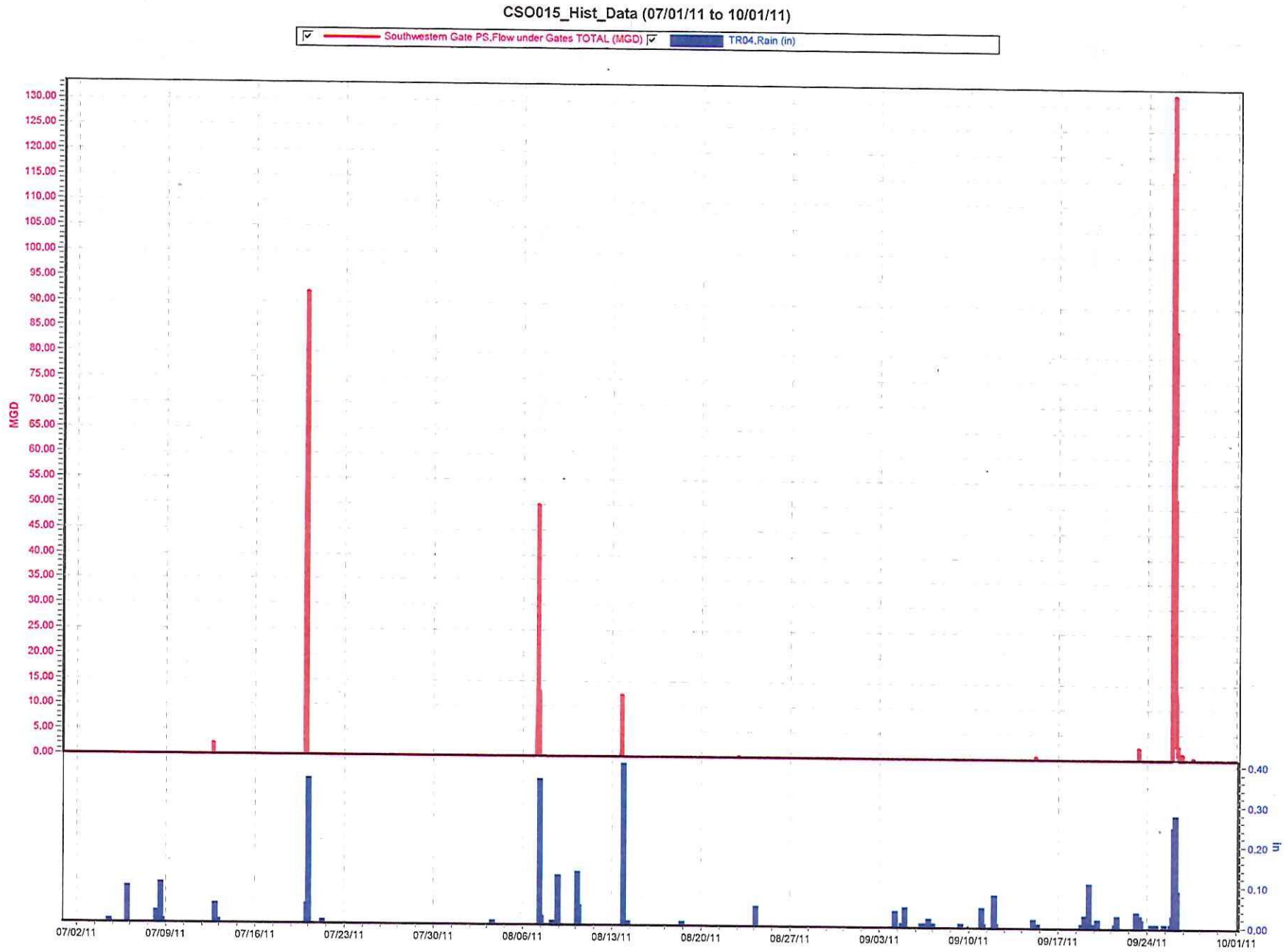
CSO 127 - No rain was detected at the closest gauge (TR05), however, other rain gauges picked up rain that caused the overflow.

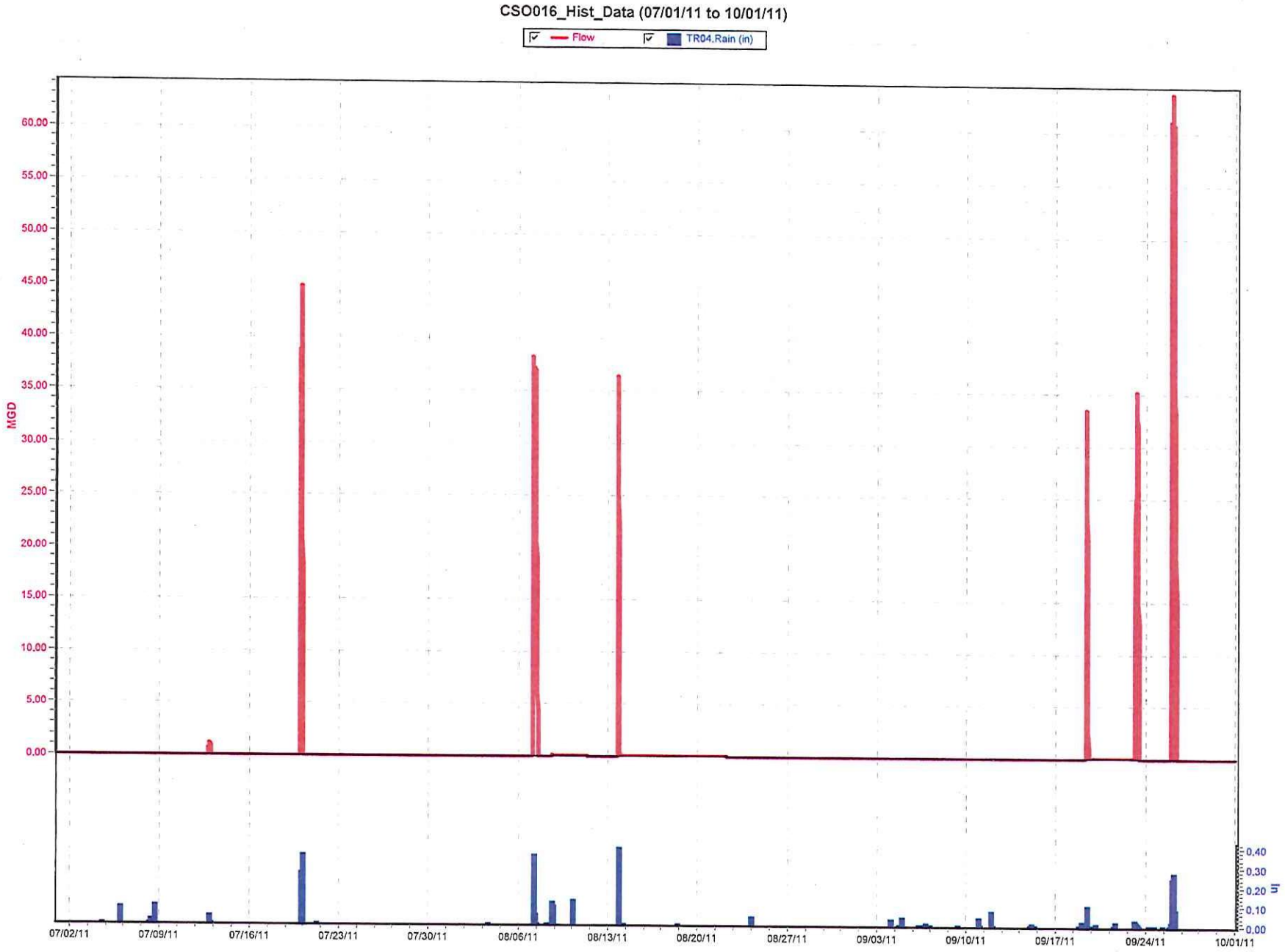
CSO 130 - No rain was detected at the closest gauge (TR05), however, other rain gauges picked up rain that caused the overflow.

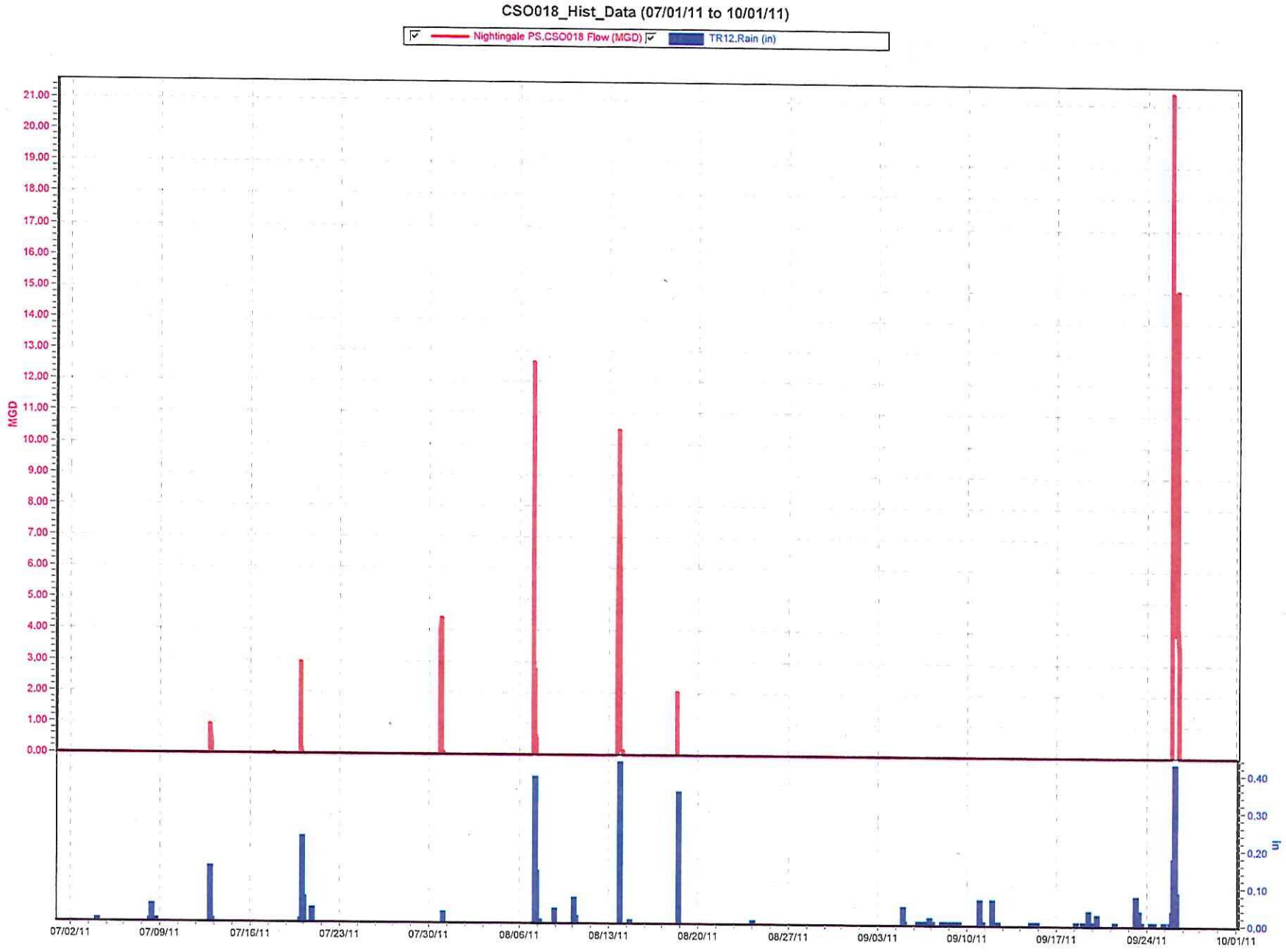
CSO152 – The meter battery malfunctioned from June 20th – July 5th.

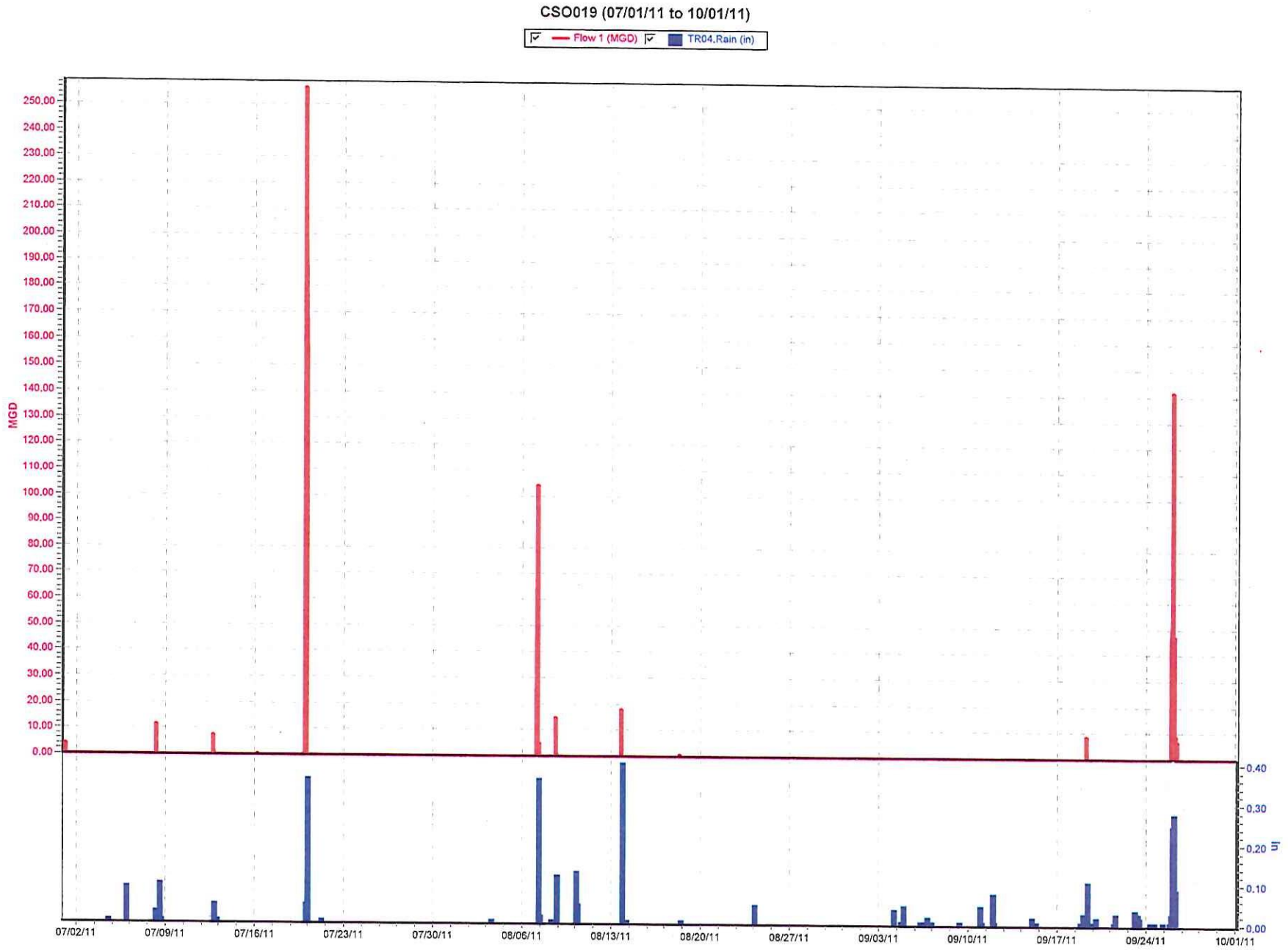
CSO 166 - No rain was detected at the closest gauge (TR05), however, other rain gauges picked up rain that caused the overflow.

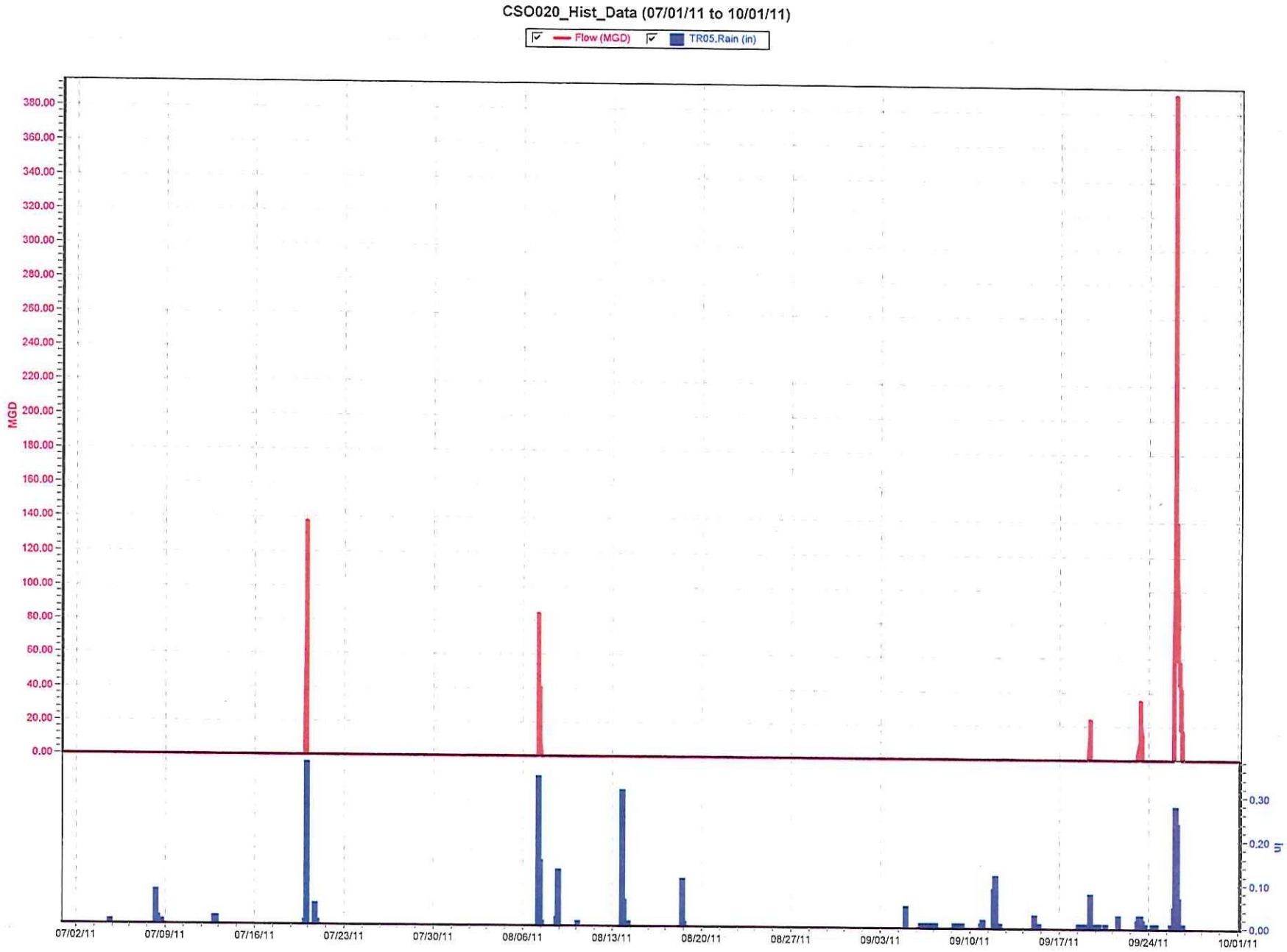
CSO 206 – Some data gaps were caused by a meter malfunction.

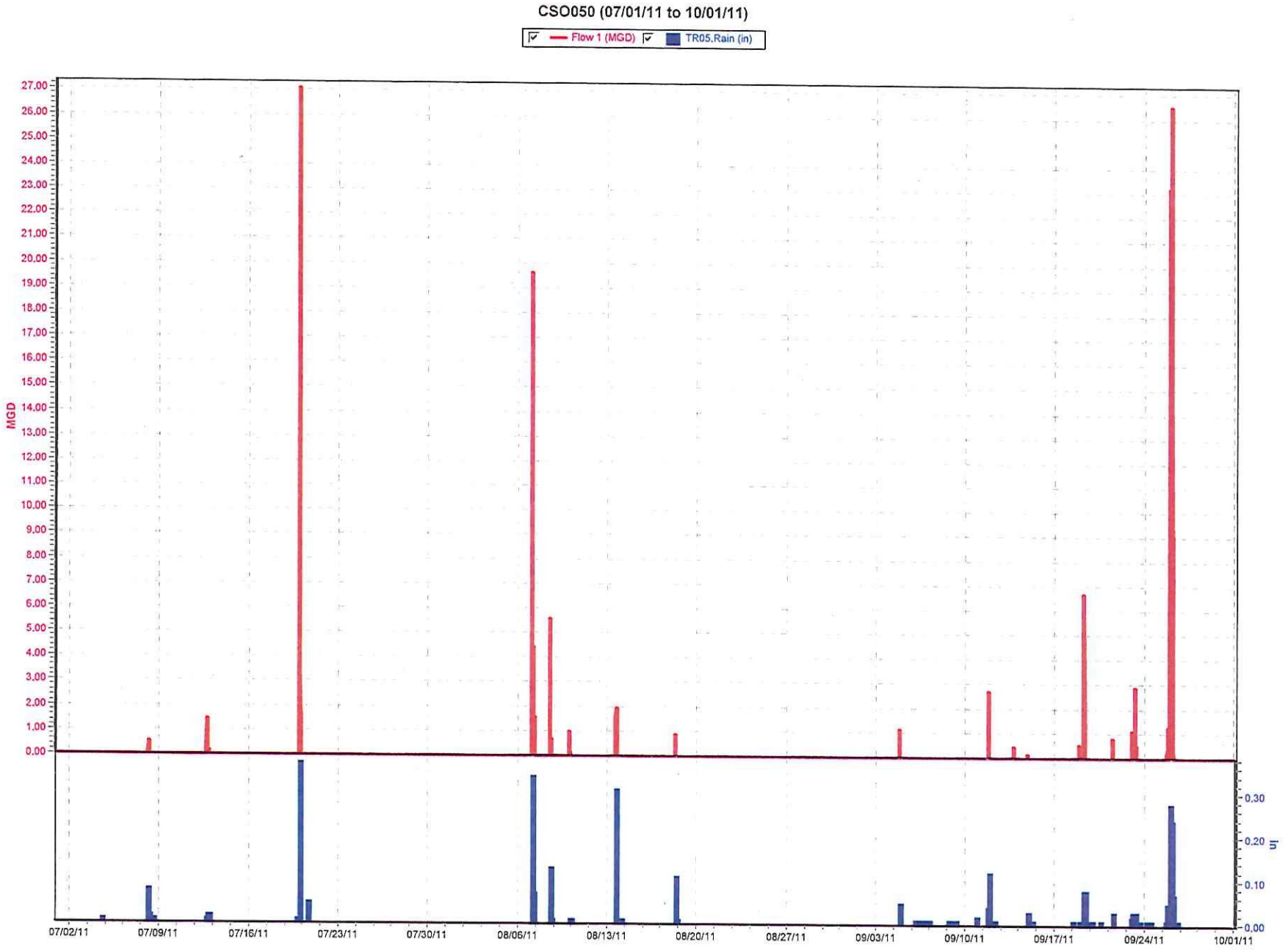

CSO015_Hist_Data (07/01/11 to 10/01/11)
Southwestern Gate PS.Flow under Gates TOTAL (MGD)
TR04.Rain (in)
MGD
IN
130.00
125.00
120.00
115.00
110.00
105.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

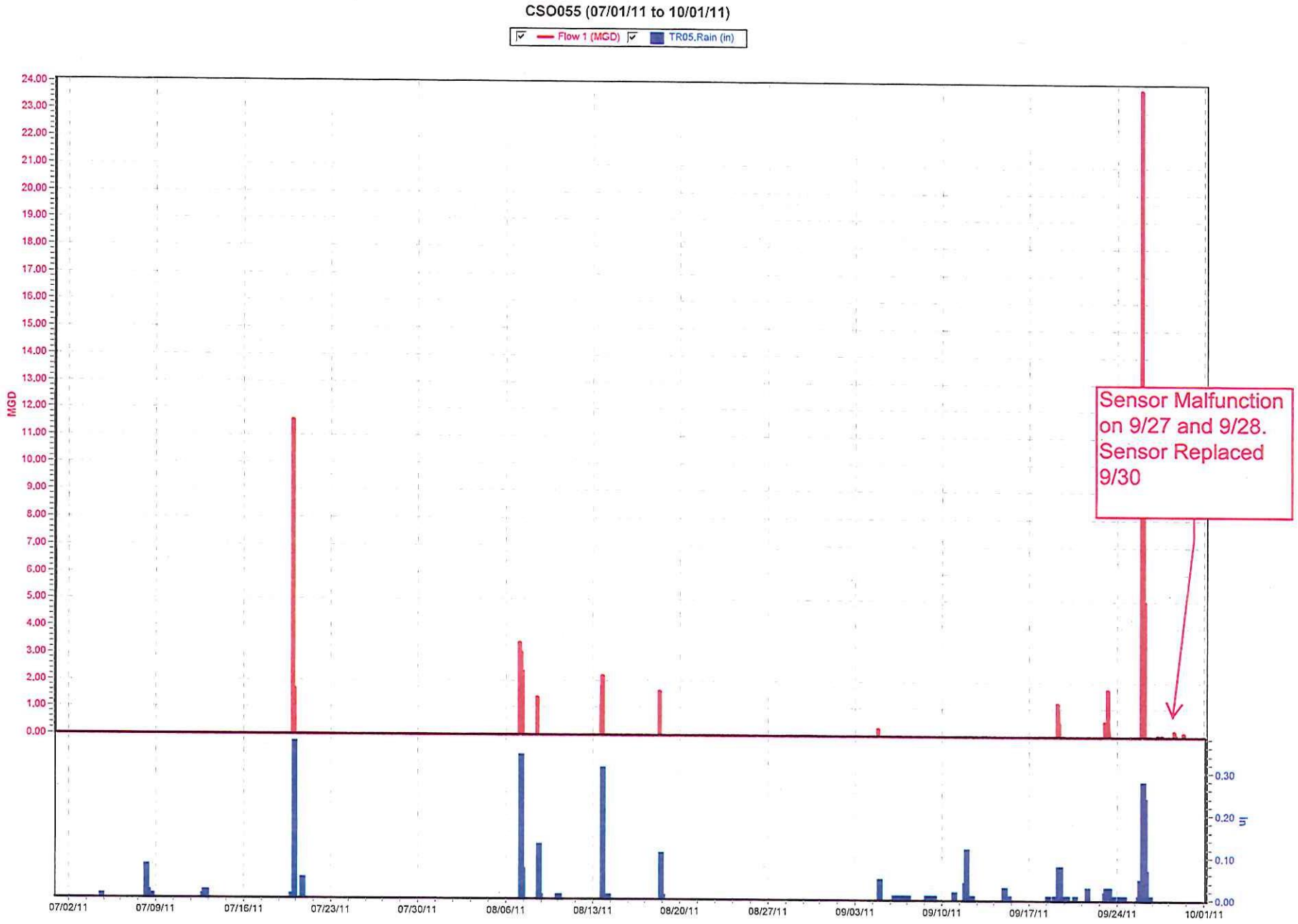

CSO016_Hist_Data (07/01/11 to 10/01/11)
Flow
TR04.Rain (in)
MGD
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.40
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

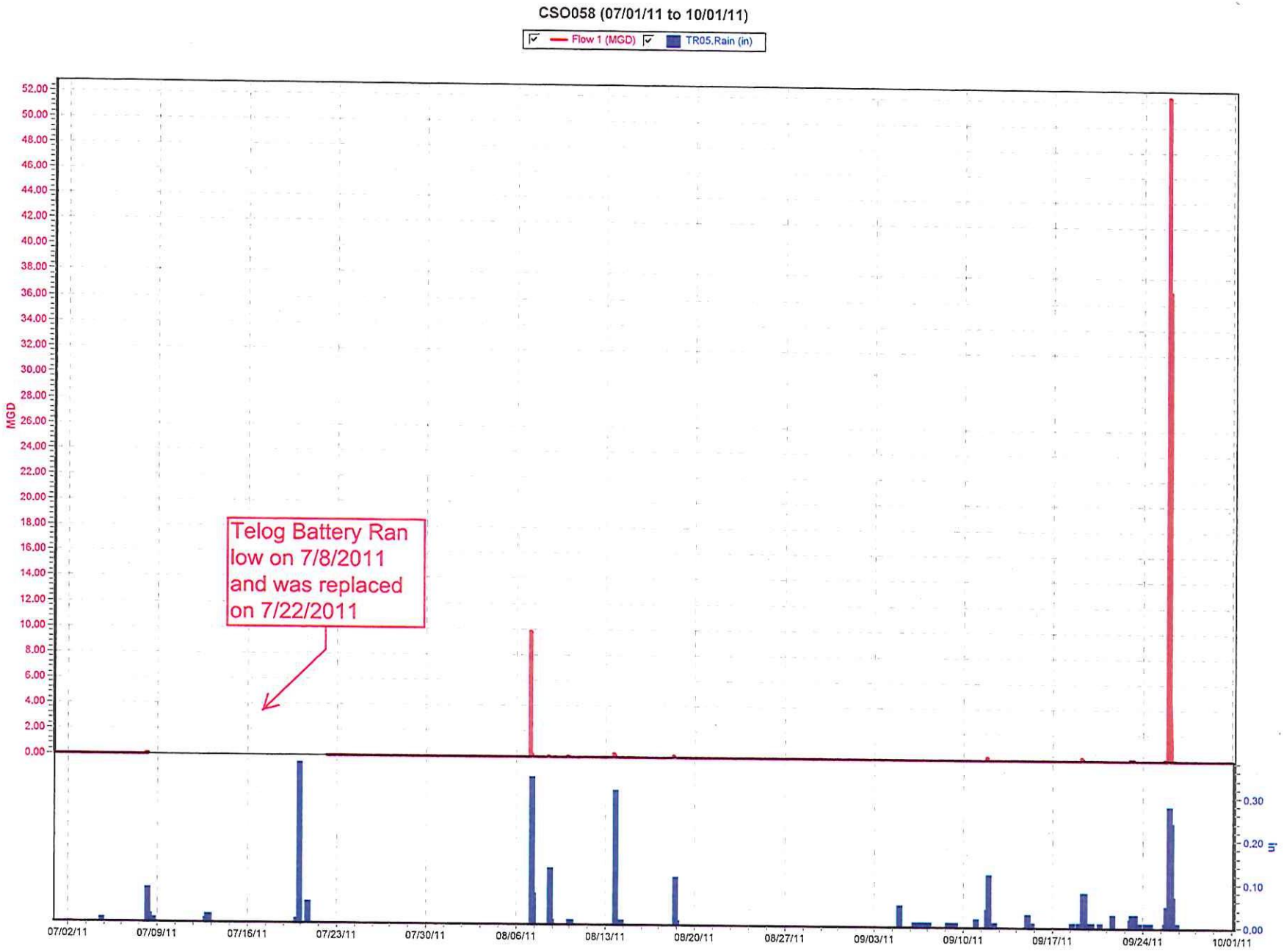

CSO018_Hist_Data (07/01/11 to 10/01/11)
Nightingale PS.CSO018 Flow (MGD)
TR12.Rain (in)
MGD
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.40
0.30
0.20
0.10
0.00
In
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

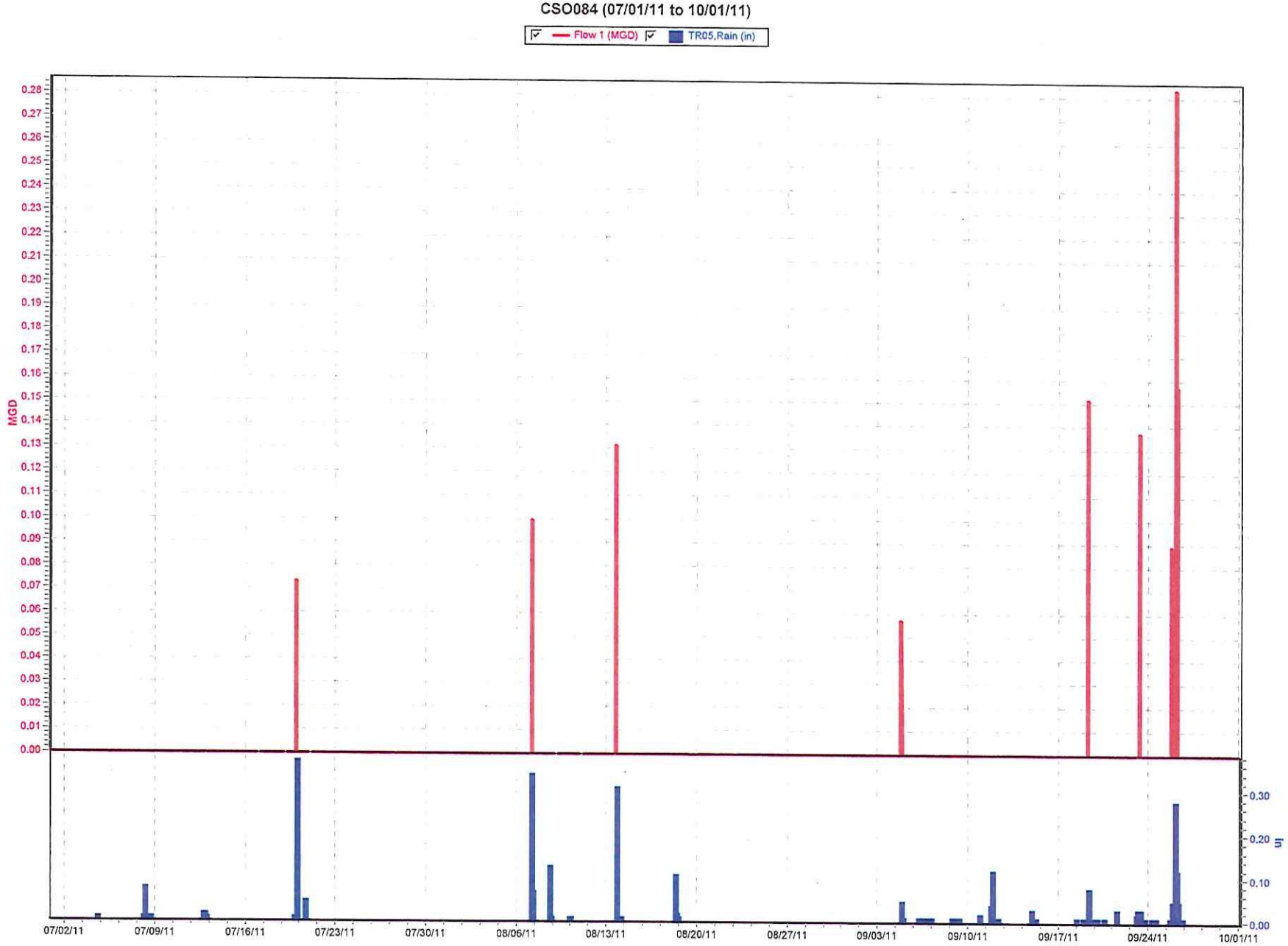

CSO019 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR04.Rain (in)
MGD
250.00
240.00
230.00
220.00
210.00
200.00
190.00
180.00
170.00
160.00
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0.40
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO020_Hist_Data (07/01/11 to 10/01/11)
Flow (MGD)
TR05.Rain (in)
MGD
380.00
360.00
340.00
320.00
300.00
280.00
260.00
240.00
220.00
200.00
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO050 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
27.00
26.00
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO055 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
IN
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11
Sensor Malfunction on 9/27 and 9/28. Sensor Replaced 9/30


CSO058 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
IN
Telog Battery Ran low on 7/8/2011 and was replaced on 7/22/2011
52.00
50.00
48.00
46.00
44.00
42.00
40.00
38.00
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO084 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
IN
0.28
0.27
0.26
0.25
0.24
0.23
0.22
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
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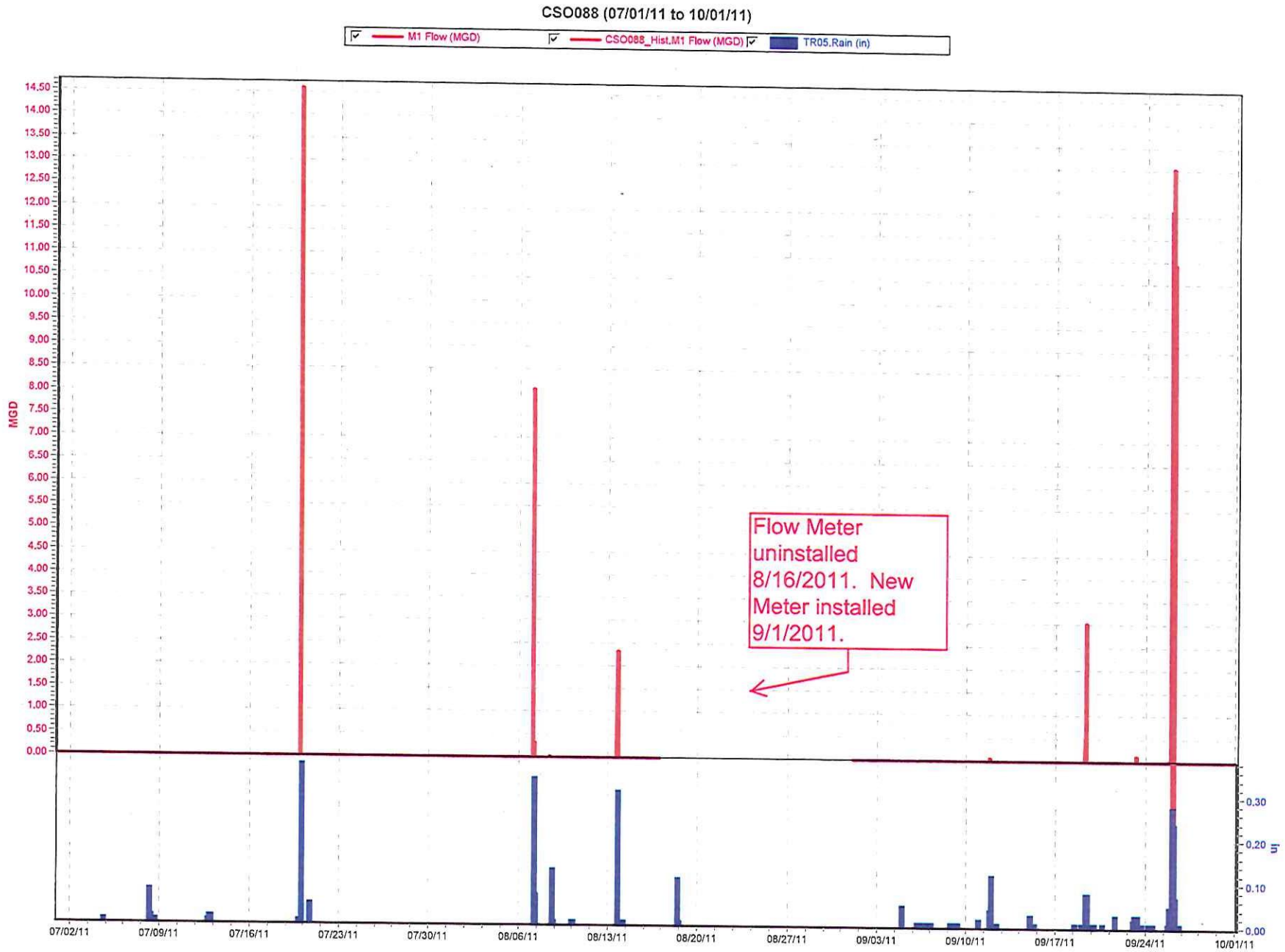
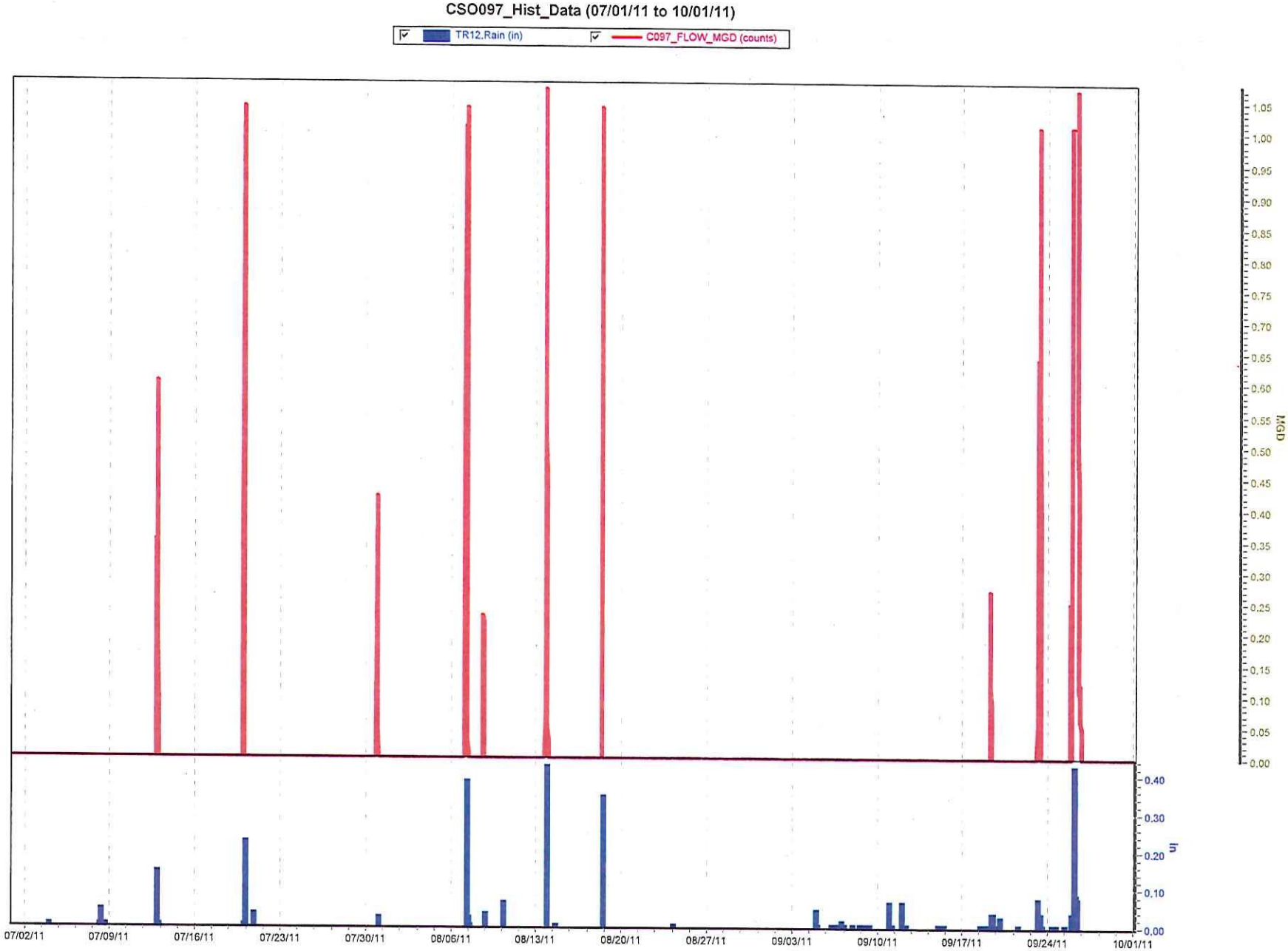
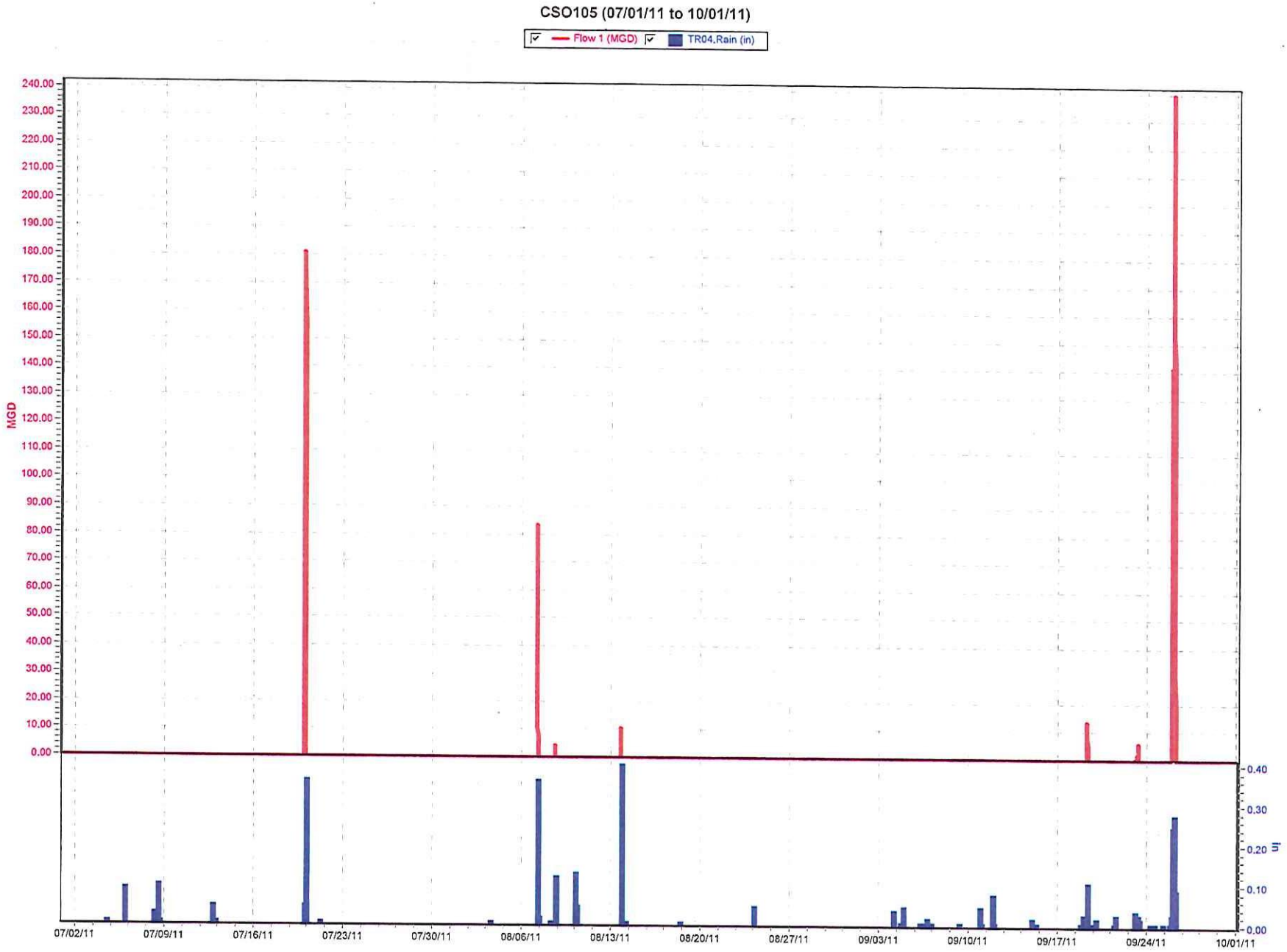
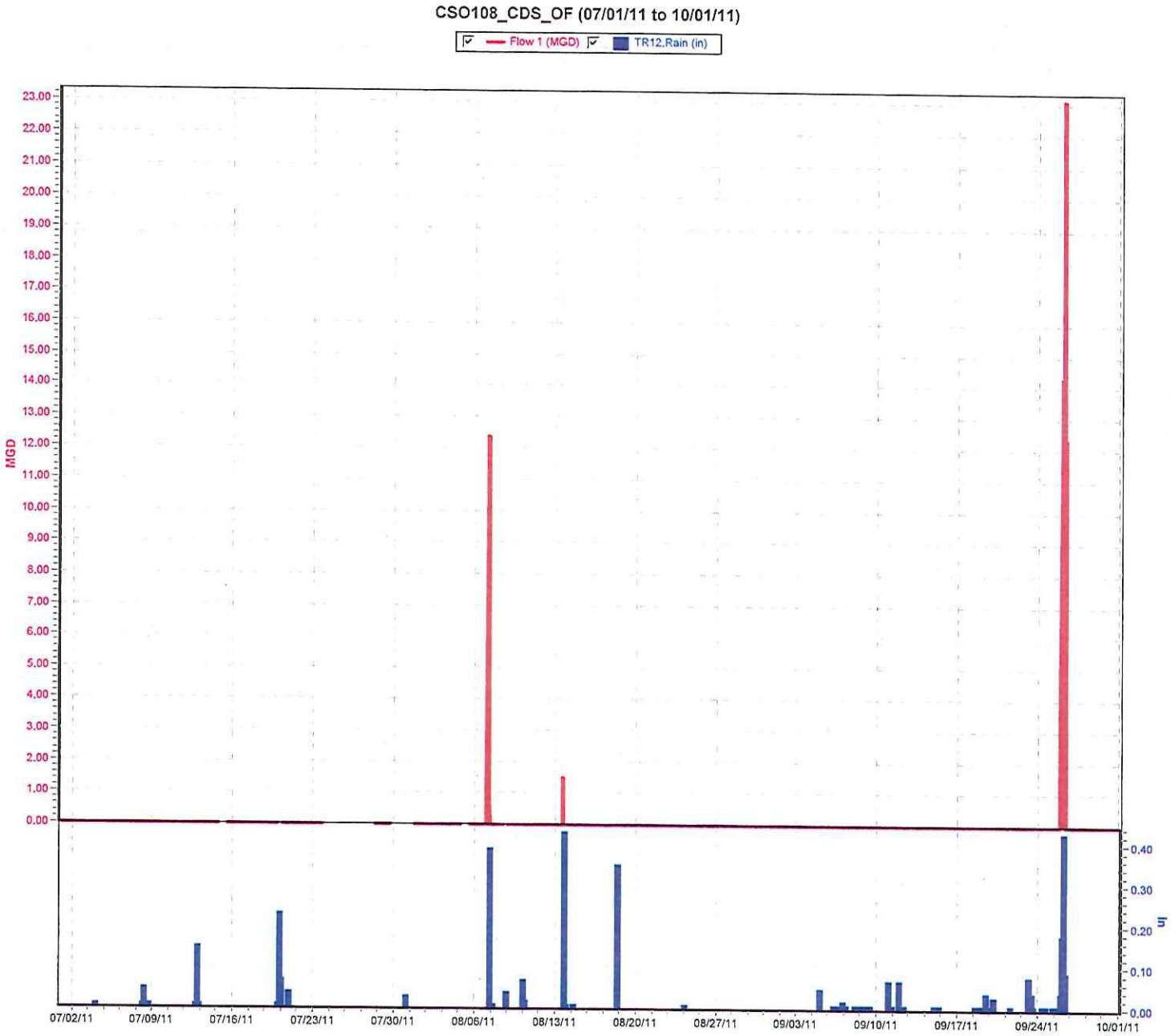
09/10/11
09/17/11
09/24/11
10/01/11


CSO088 (07/01/11 to 10/01/11)
M1 Flow (MGD)
CSO088_Hist.M1 Flow (MGD)
TR05.Rain (in)
MGD
IN
Flow Meter uninstalled 8/16/2011. New Meter installed 9/1/2011.
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO097_Hist_Data (07/01/11 to 10/01/11)
TR12.Rain (in)
C097_FLOW_MGD (counts)
MGD
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
in
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO105 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR04.Rain (in)
MGD
IN
240.00
230.00
220.00
210.00
200.00
190.00
180.00
170.00
160.00
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO108_CDS_OF (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
in
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
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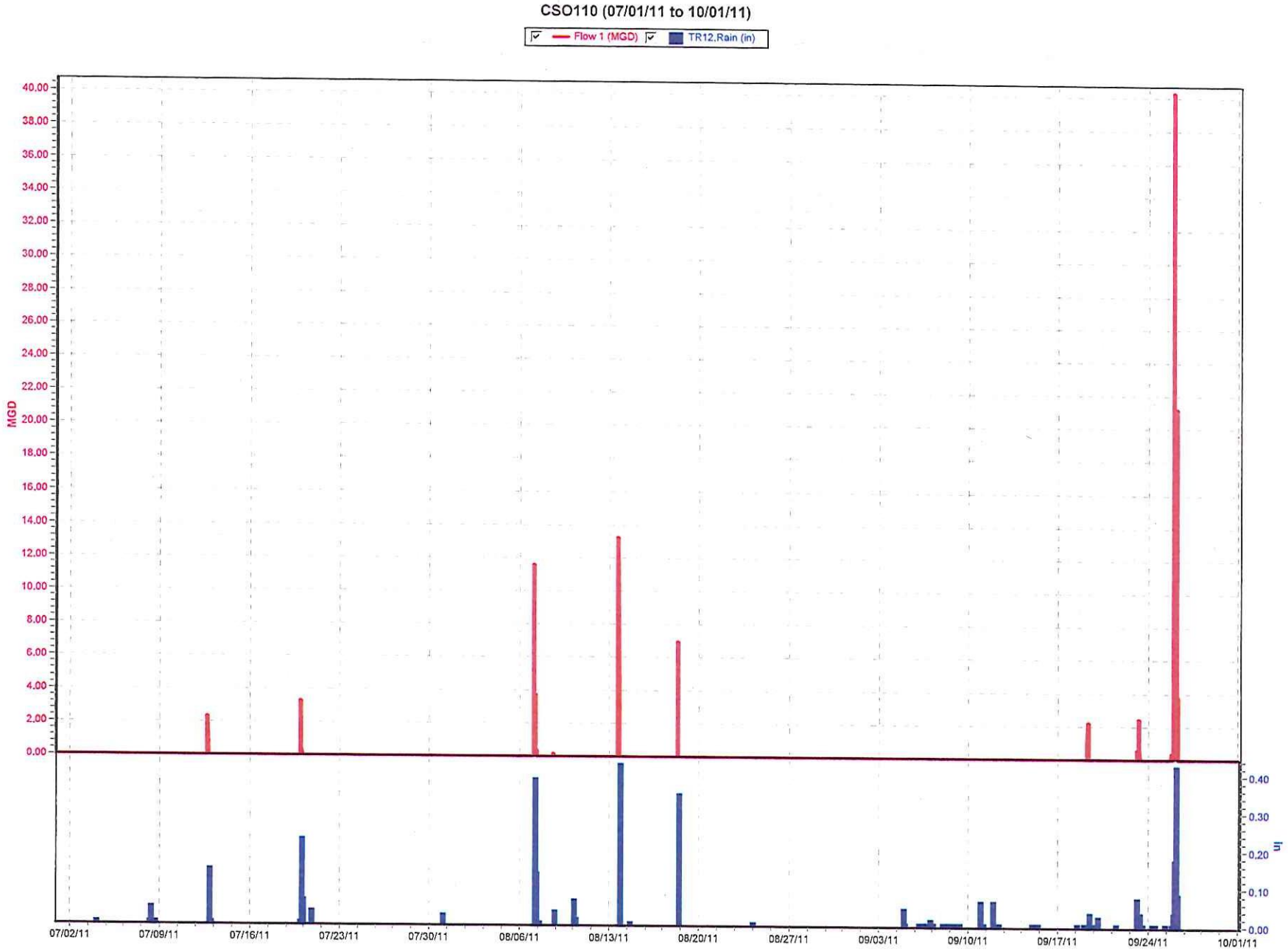
09/10/11
09/17/11
09/24/11
10/01/11


CSO110 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
40.00
38.00
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
in
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
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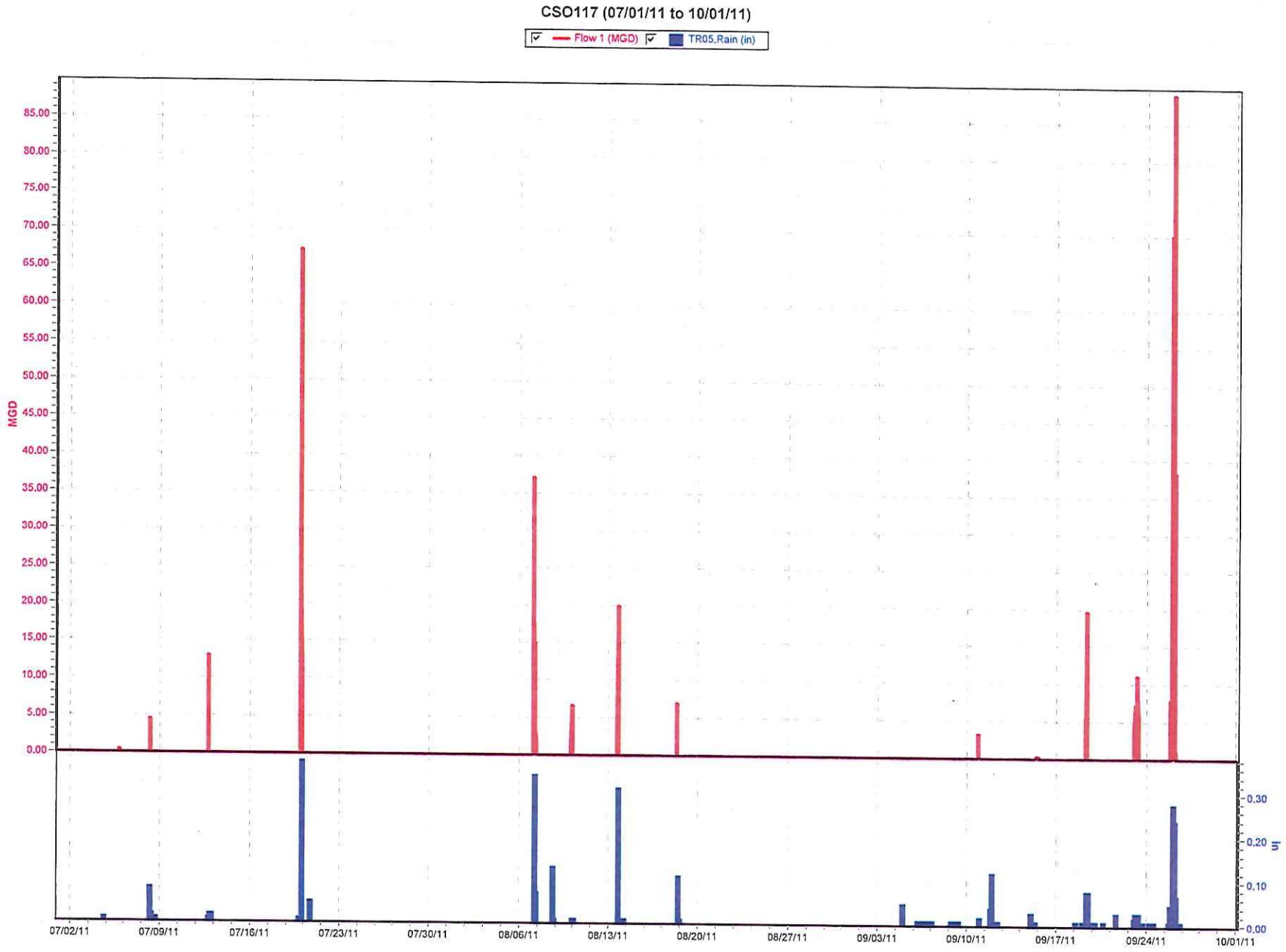
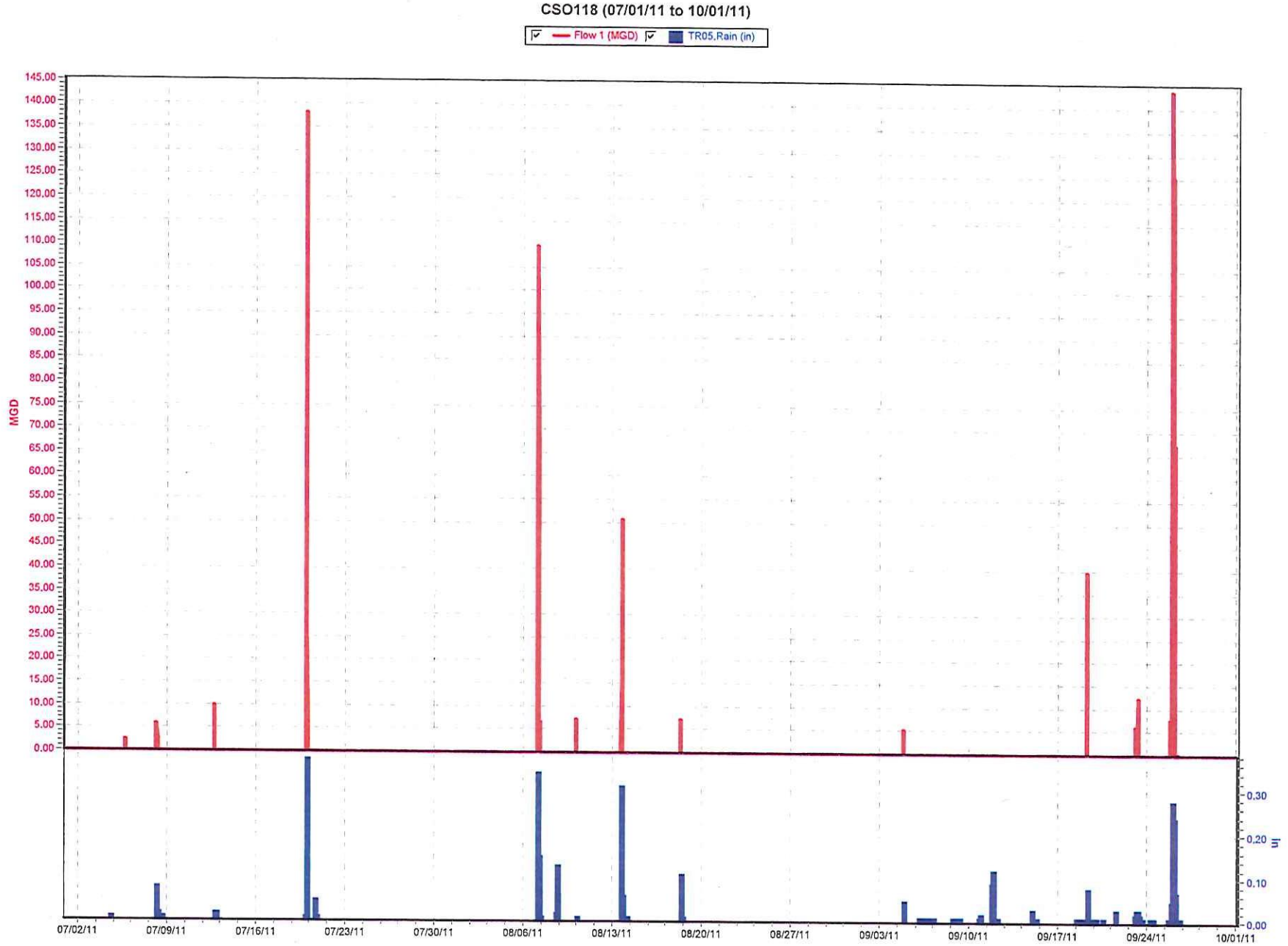
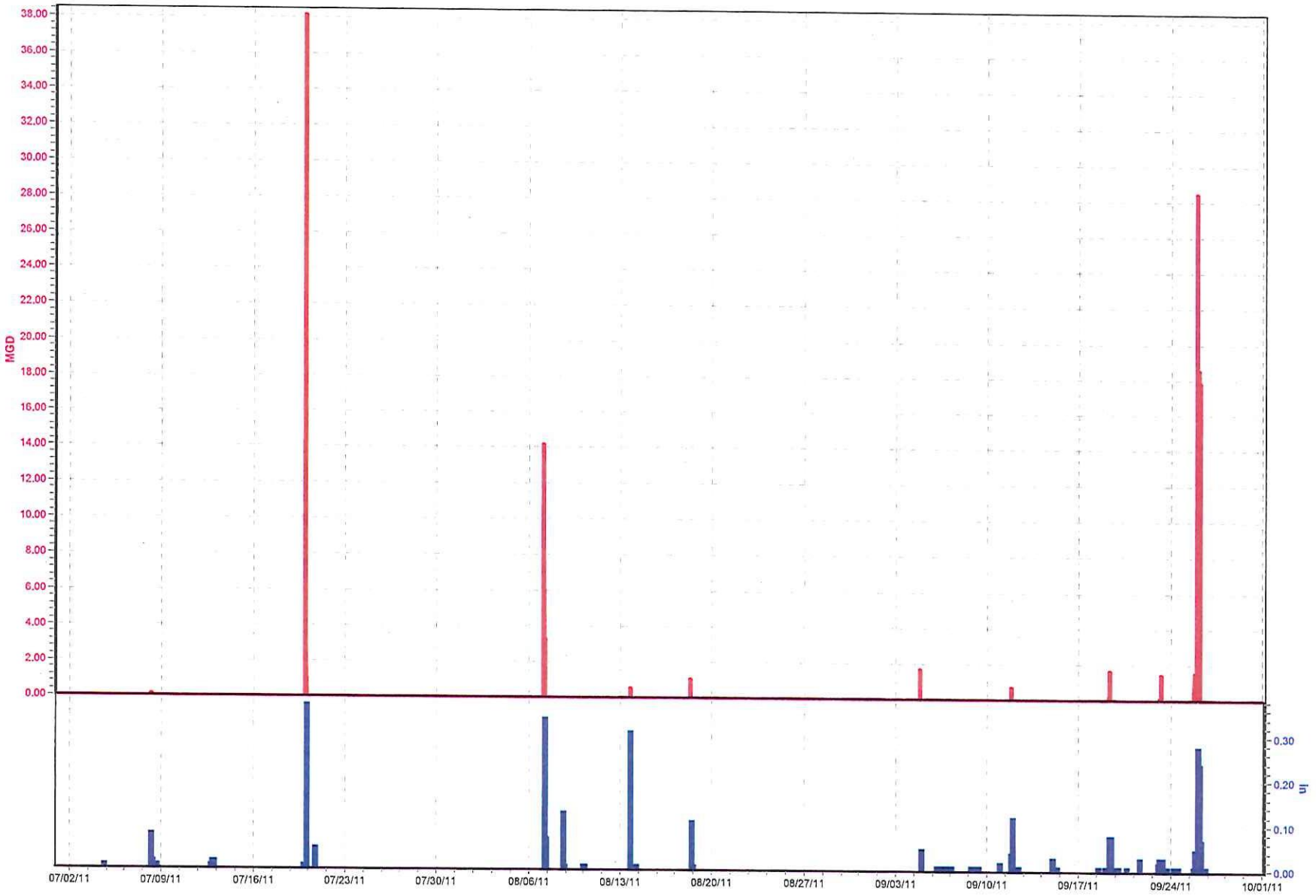
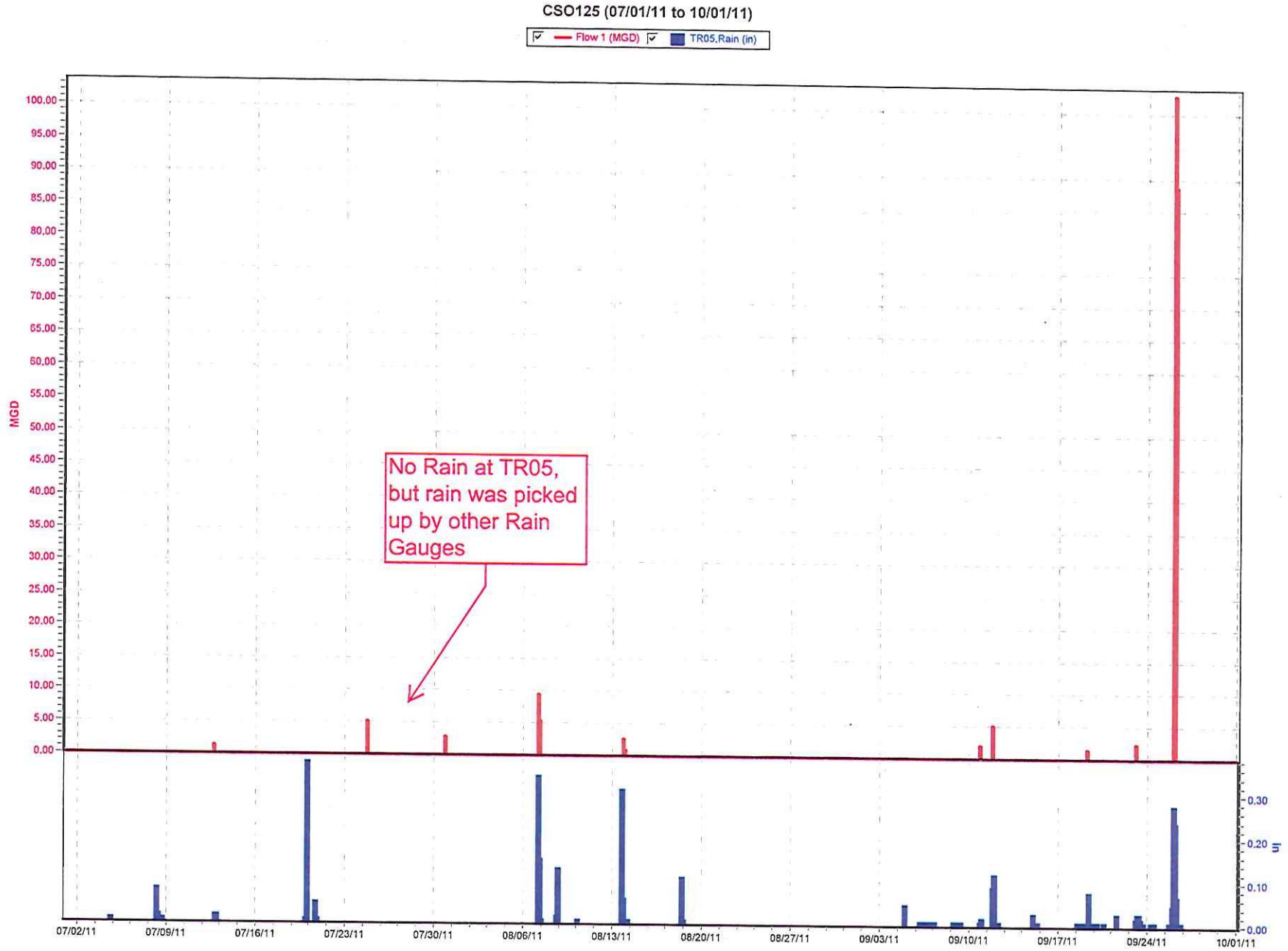
09/10/11
09/17/11
09/24/11
10/01/11

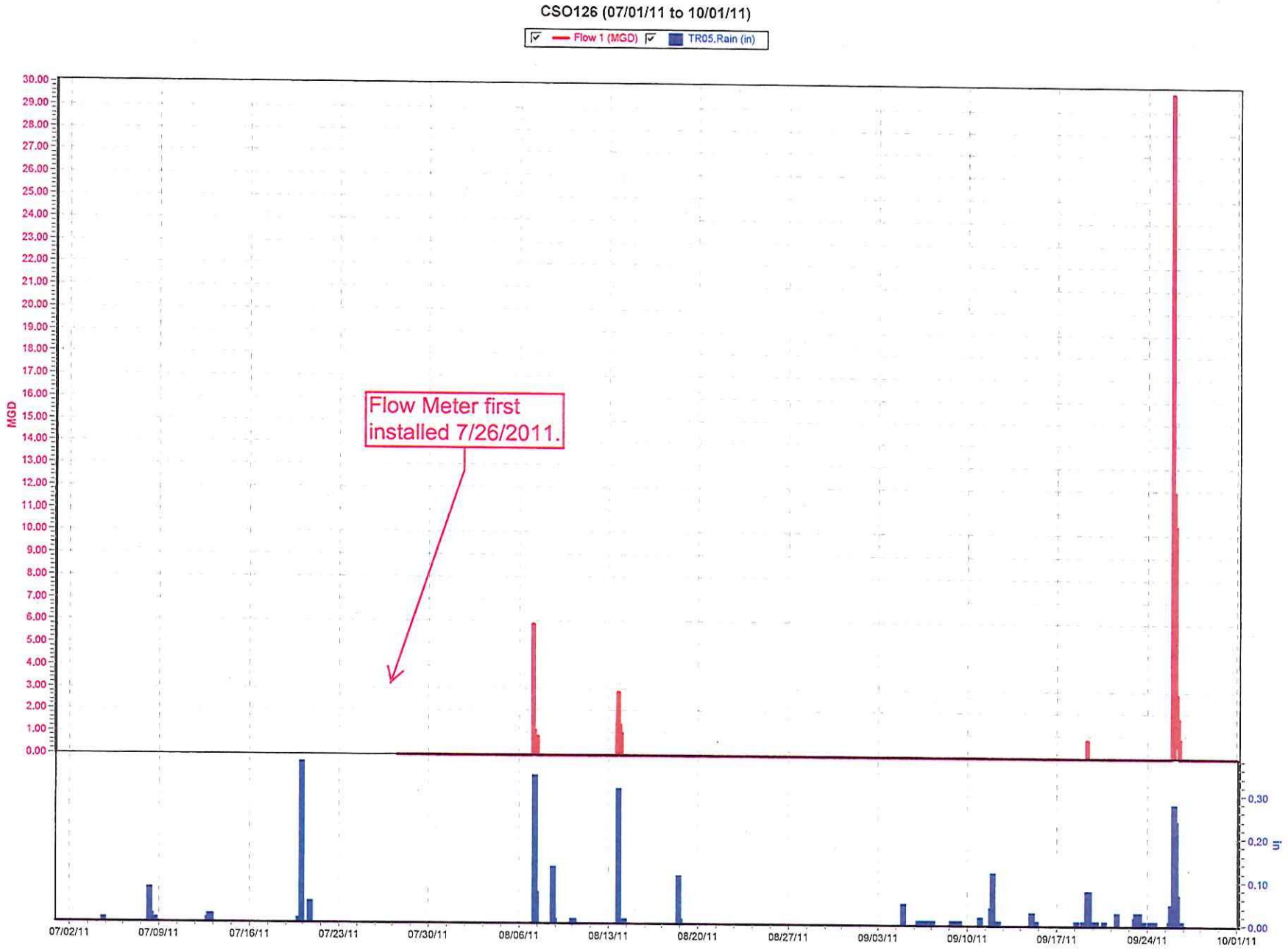

CSO117 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

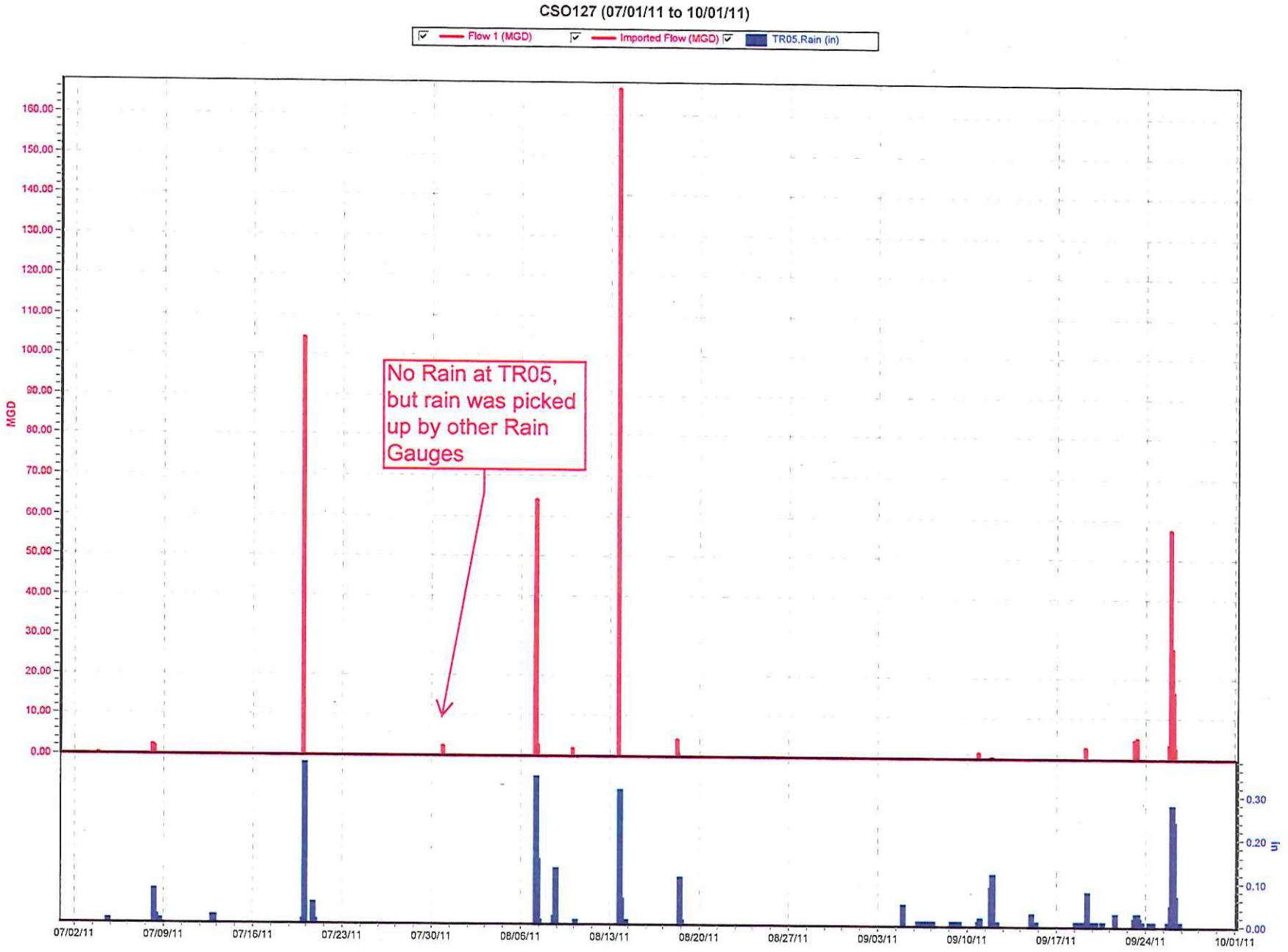

CSO118 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
145.00
140.00
135.00
130.00
125.00
120.00
115.00
110.00
105.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

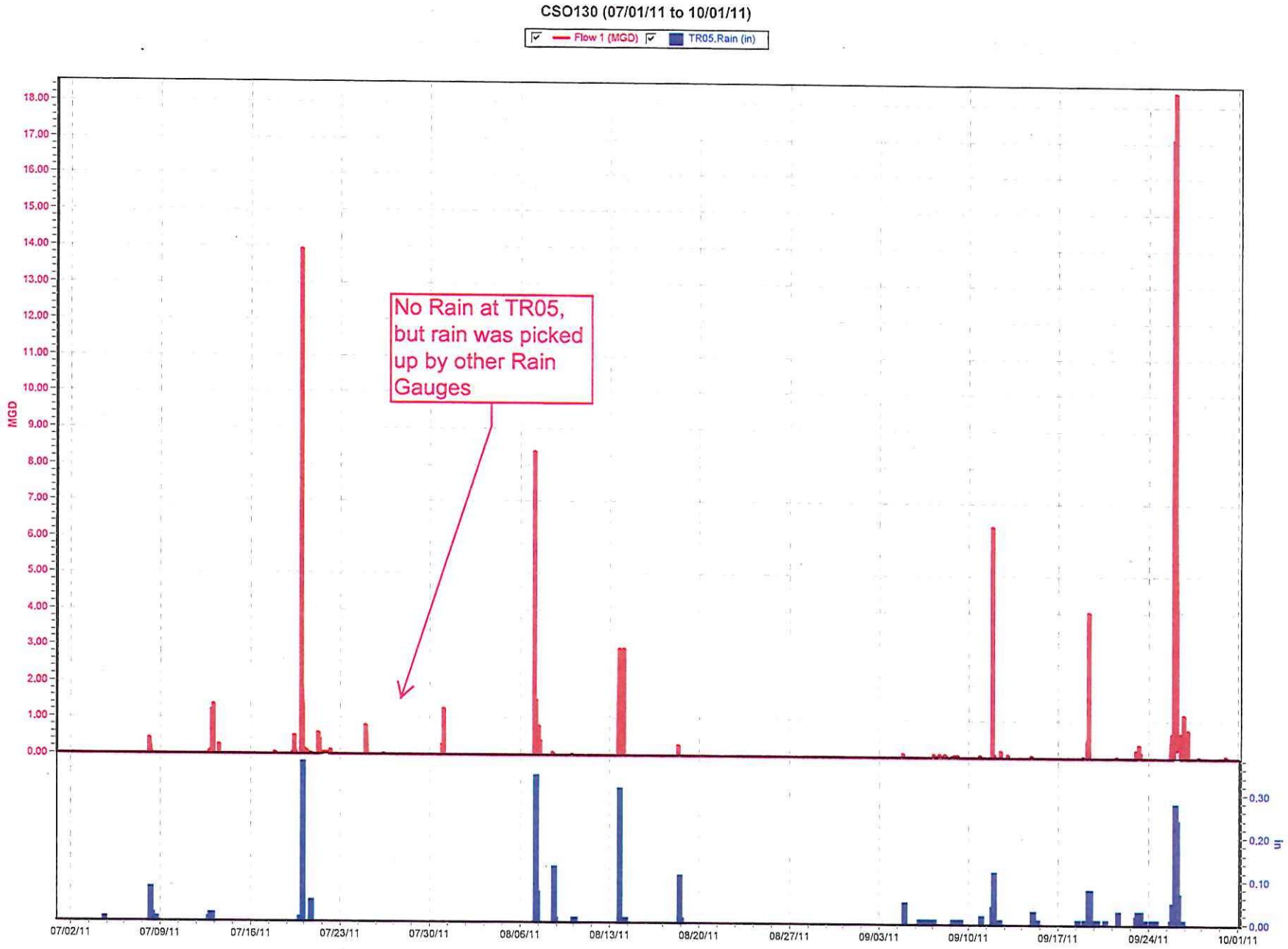
CSO121 (07/01/11 to 10/01/11)

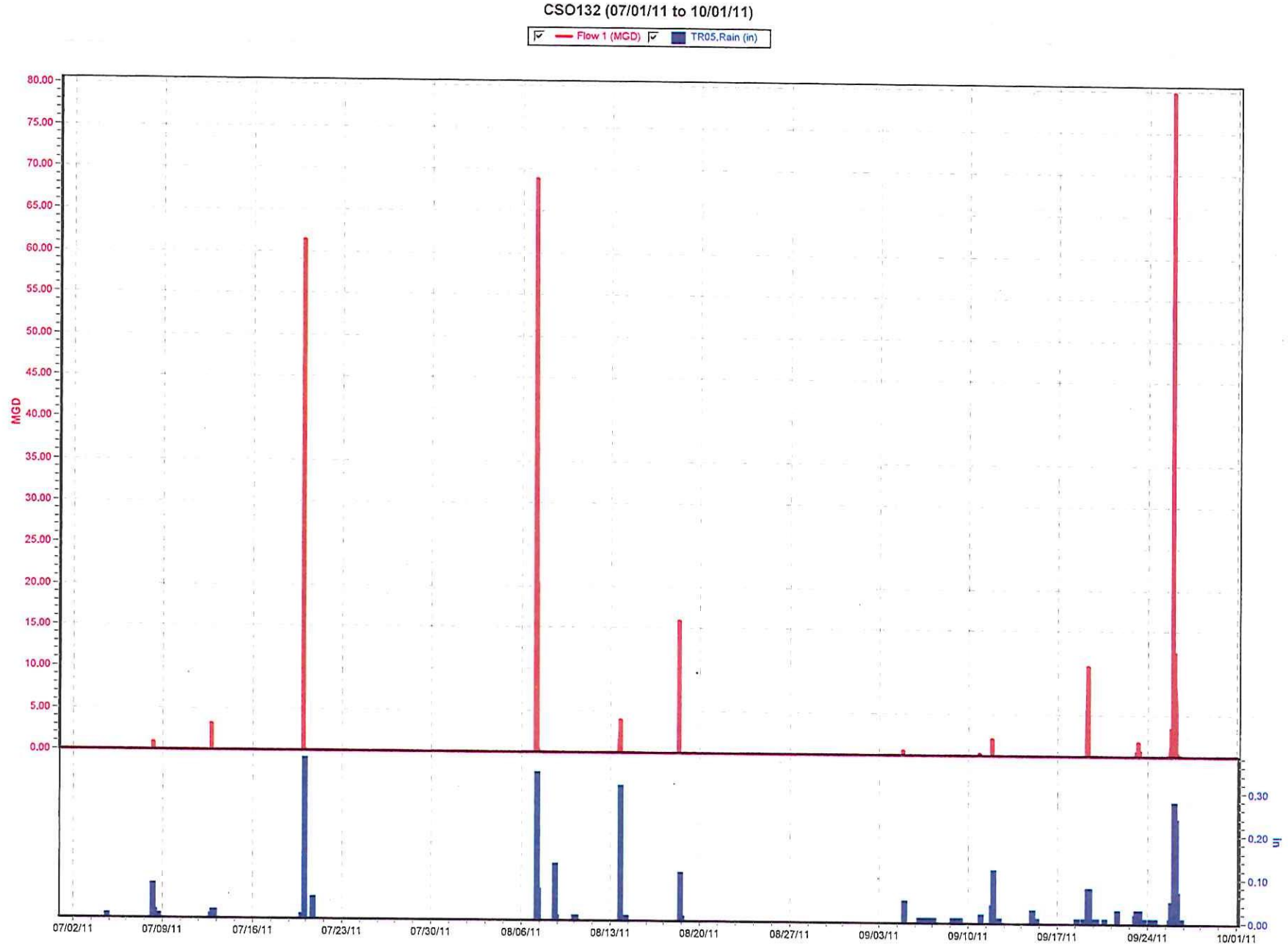


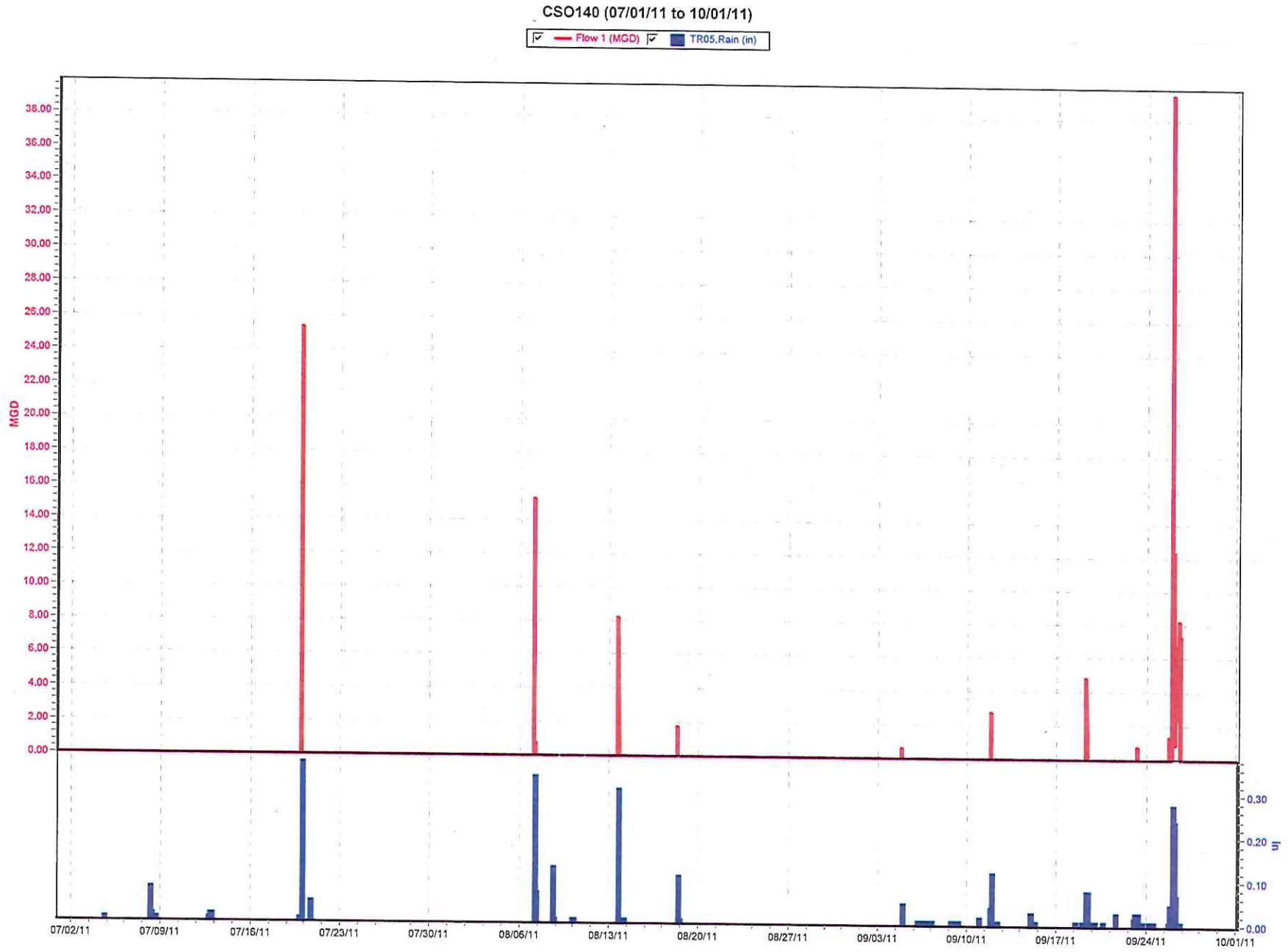

CSO125 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
IN
No Rain at TR05, but rain was picked up by other Rain Gauges
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

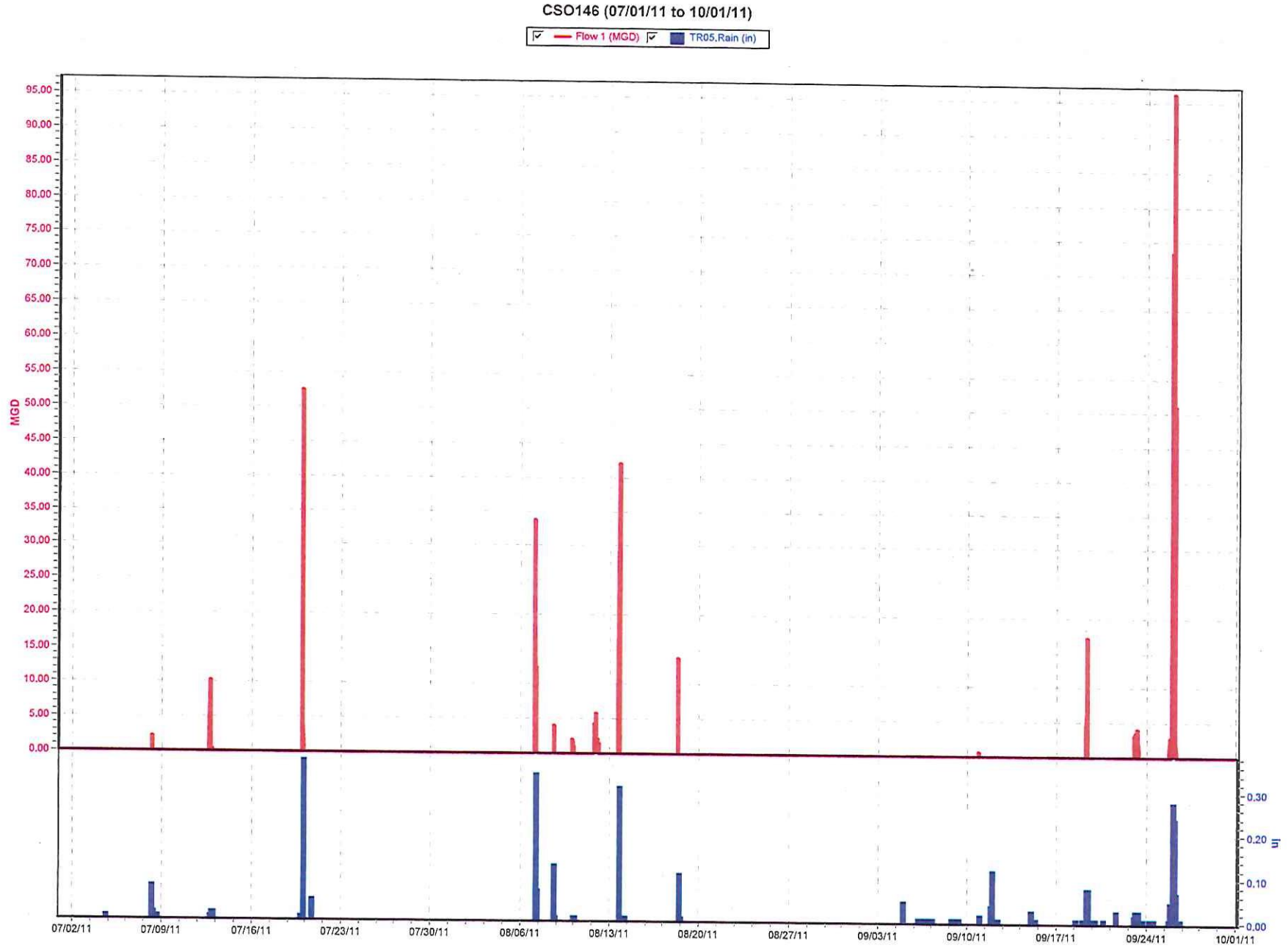

CSO126 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
30.00
29.00
28.00
27.00
26.00
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Flow Meter first installed 7/26/2011.
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

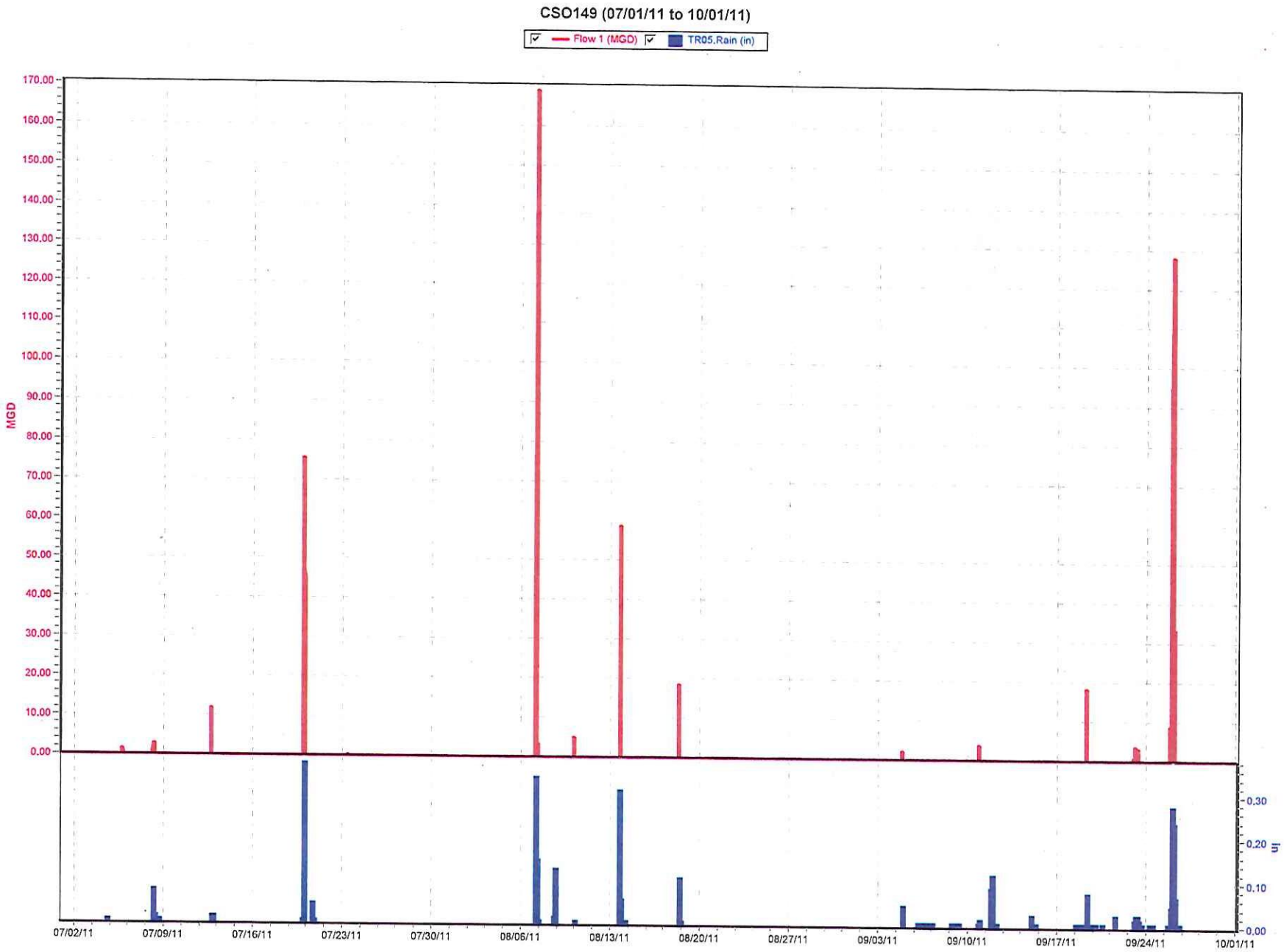

CSO127 (07/01/11 to 10/01/11)
Flow 1 (MGD)
Imported Flow (MGD)
TR05.Rain (in)
MGD
IN
No Rain at TR05, but rain was picked up by other Rain Gauges
160.00
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO130 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
No Rain at TR05, but rain was picked up by other Rain Gauges
MGD
in
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

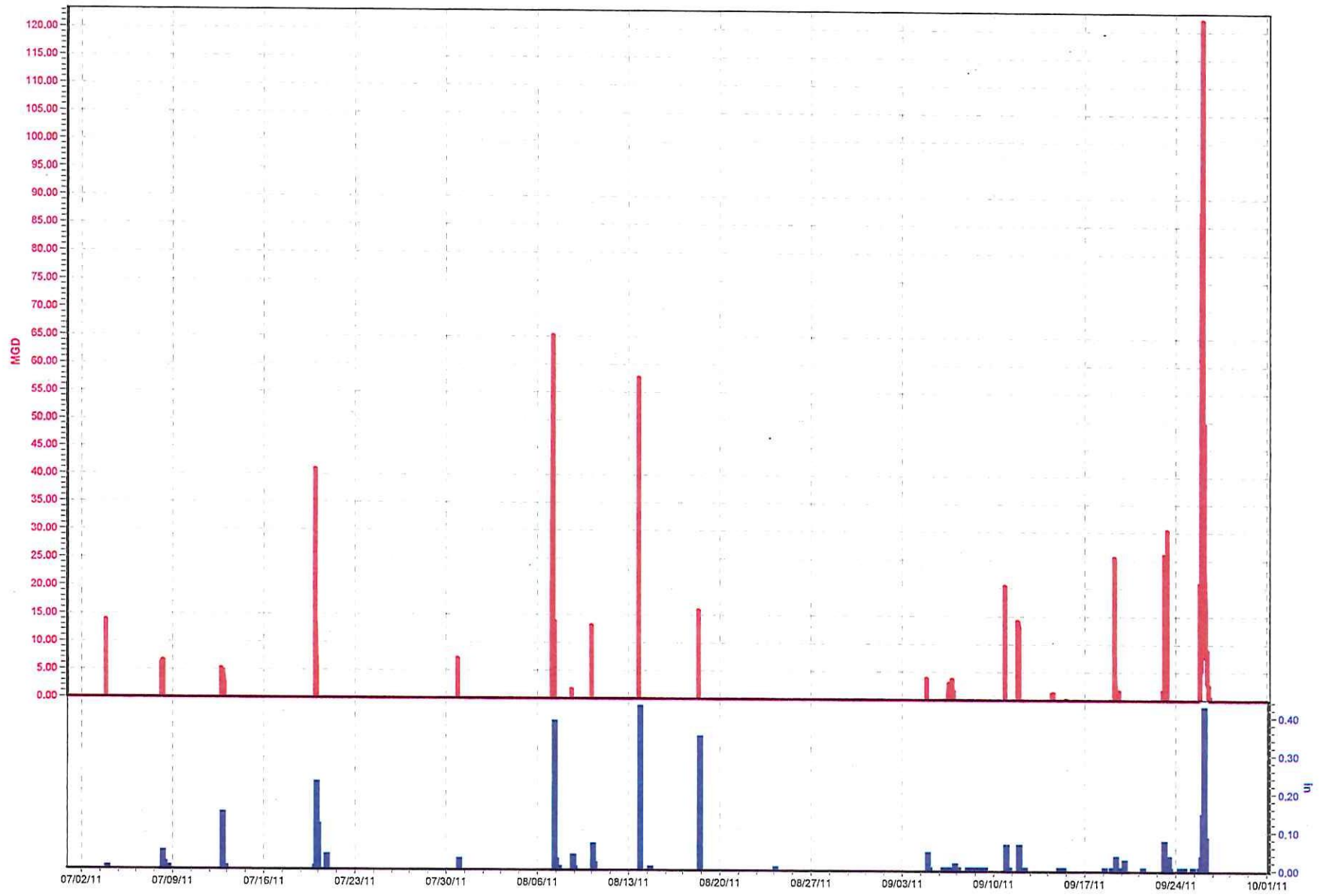

CSO132 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
IN
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

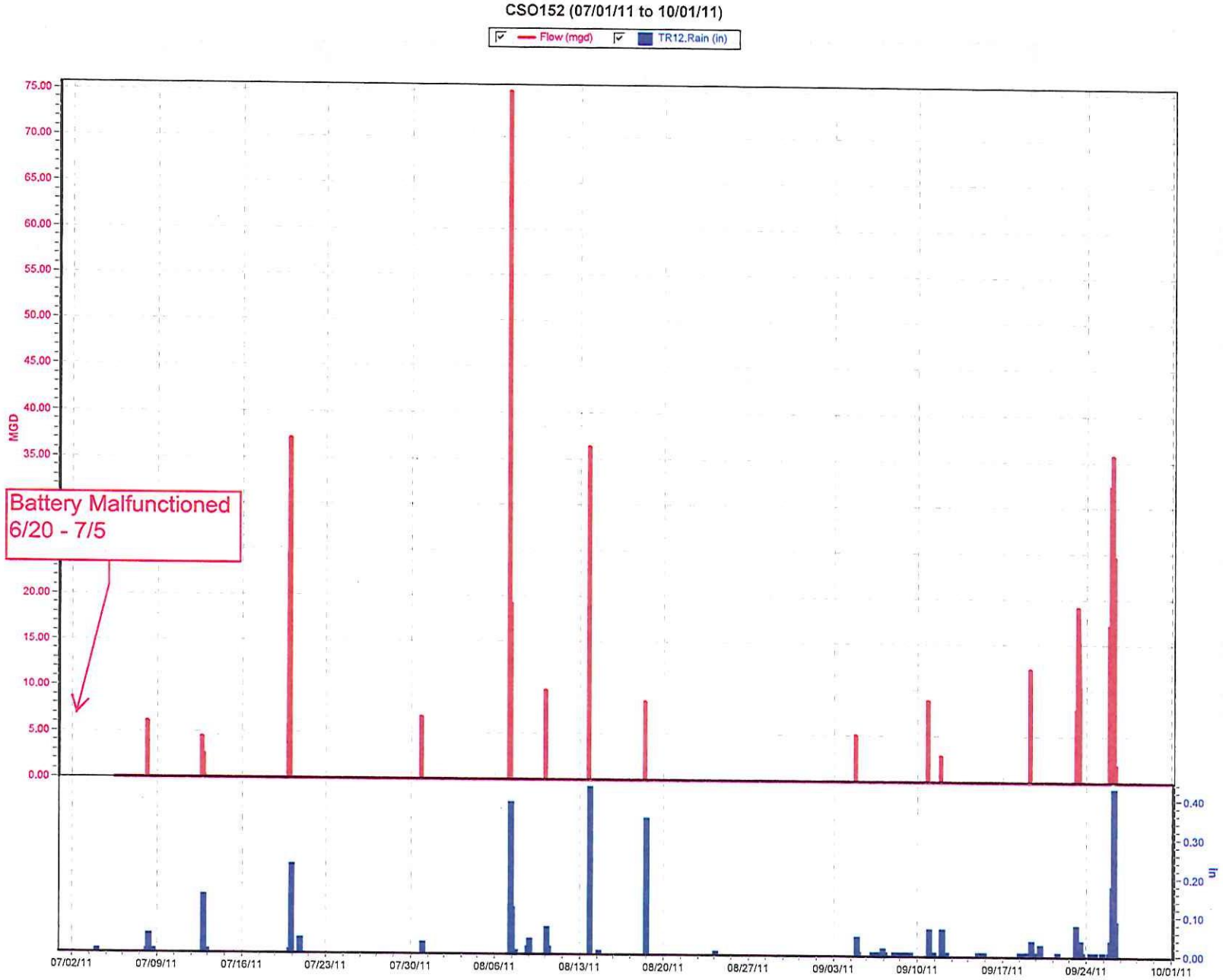

CSO140 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
38.00
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
in
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

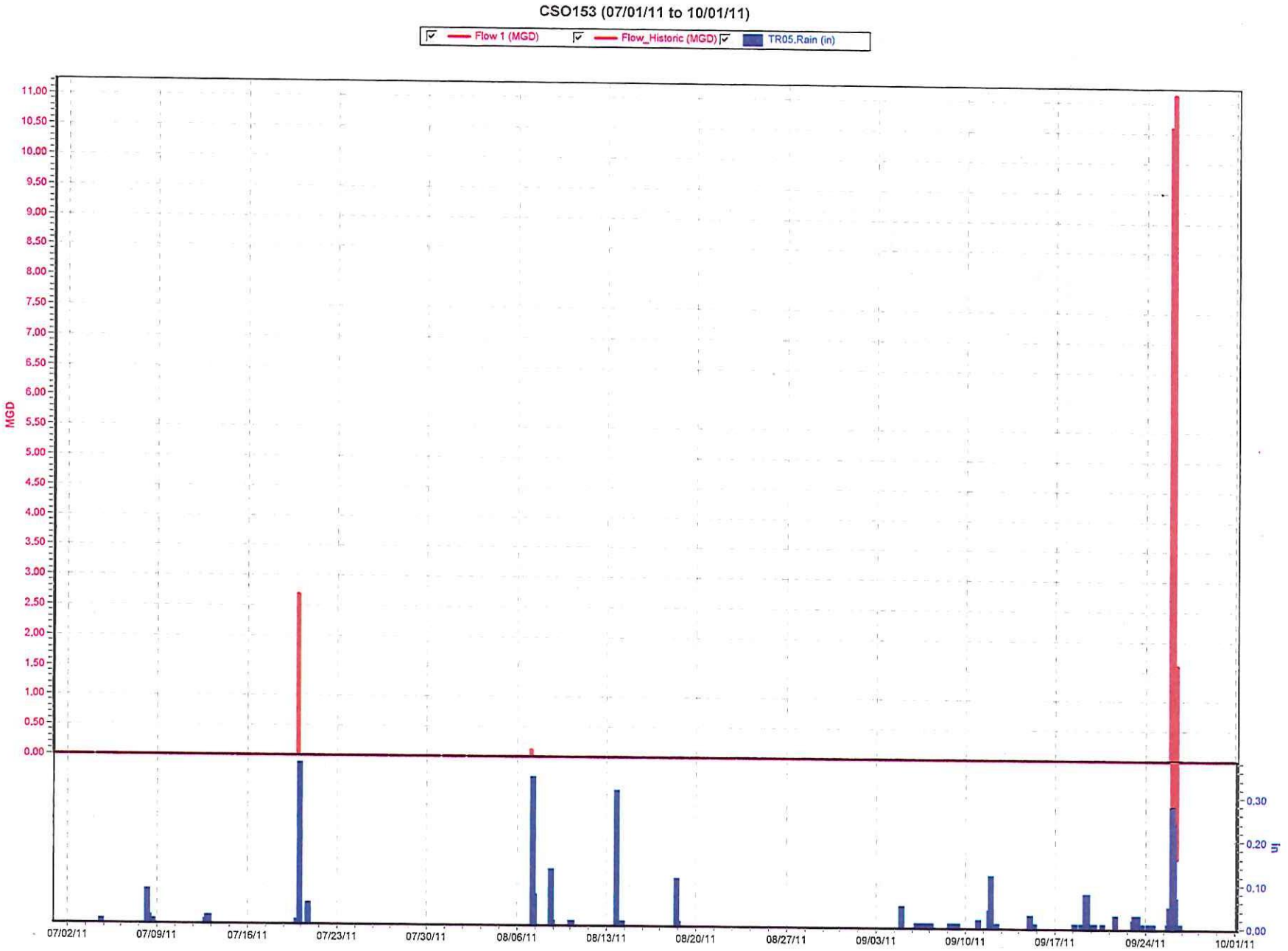

CSO146 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
IN
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

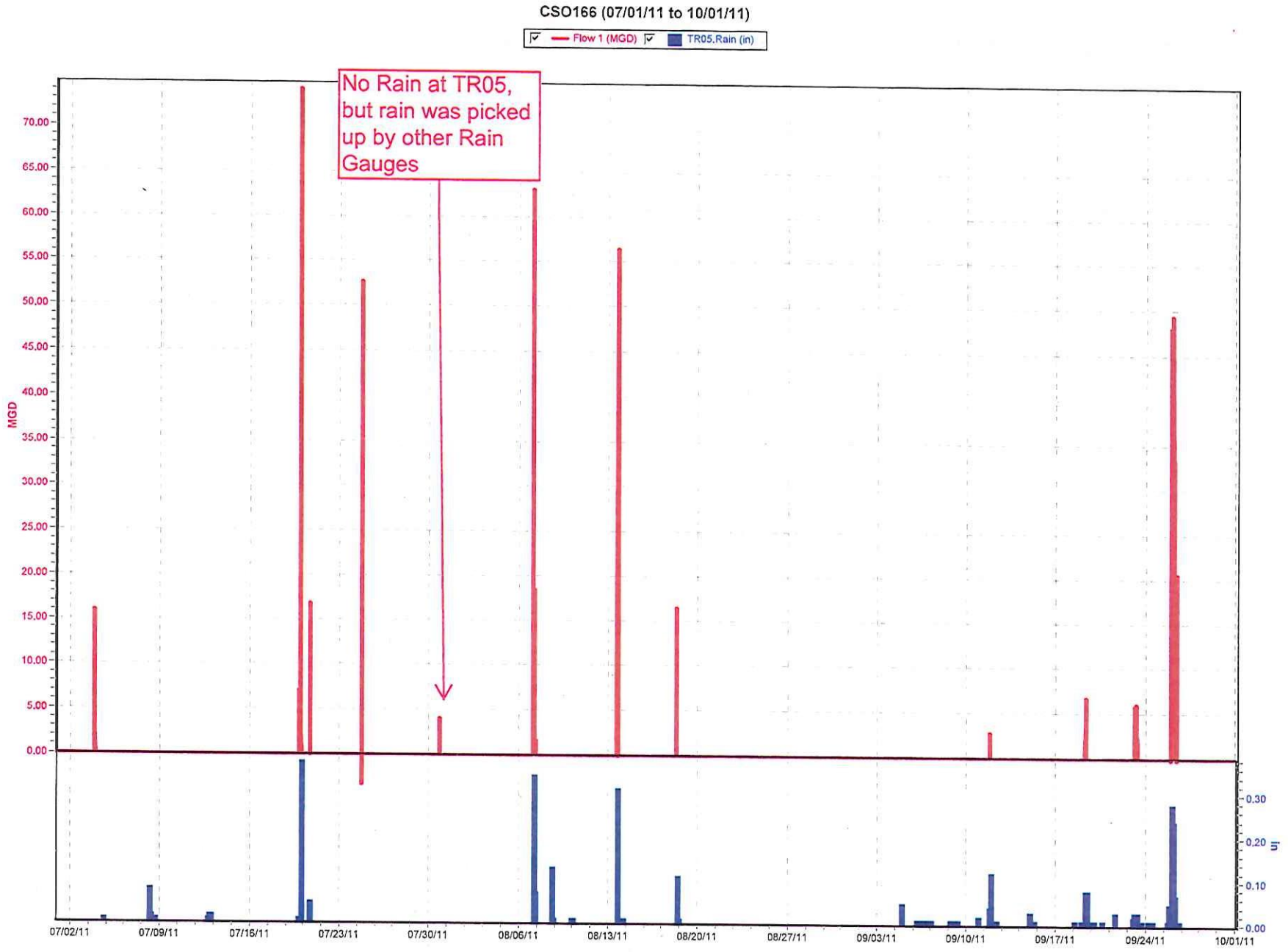

CSO149 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
170.00
160.00
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
in
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

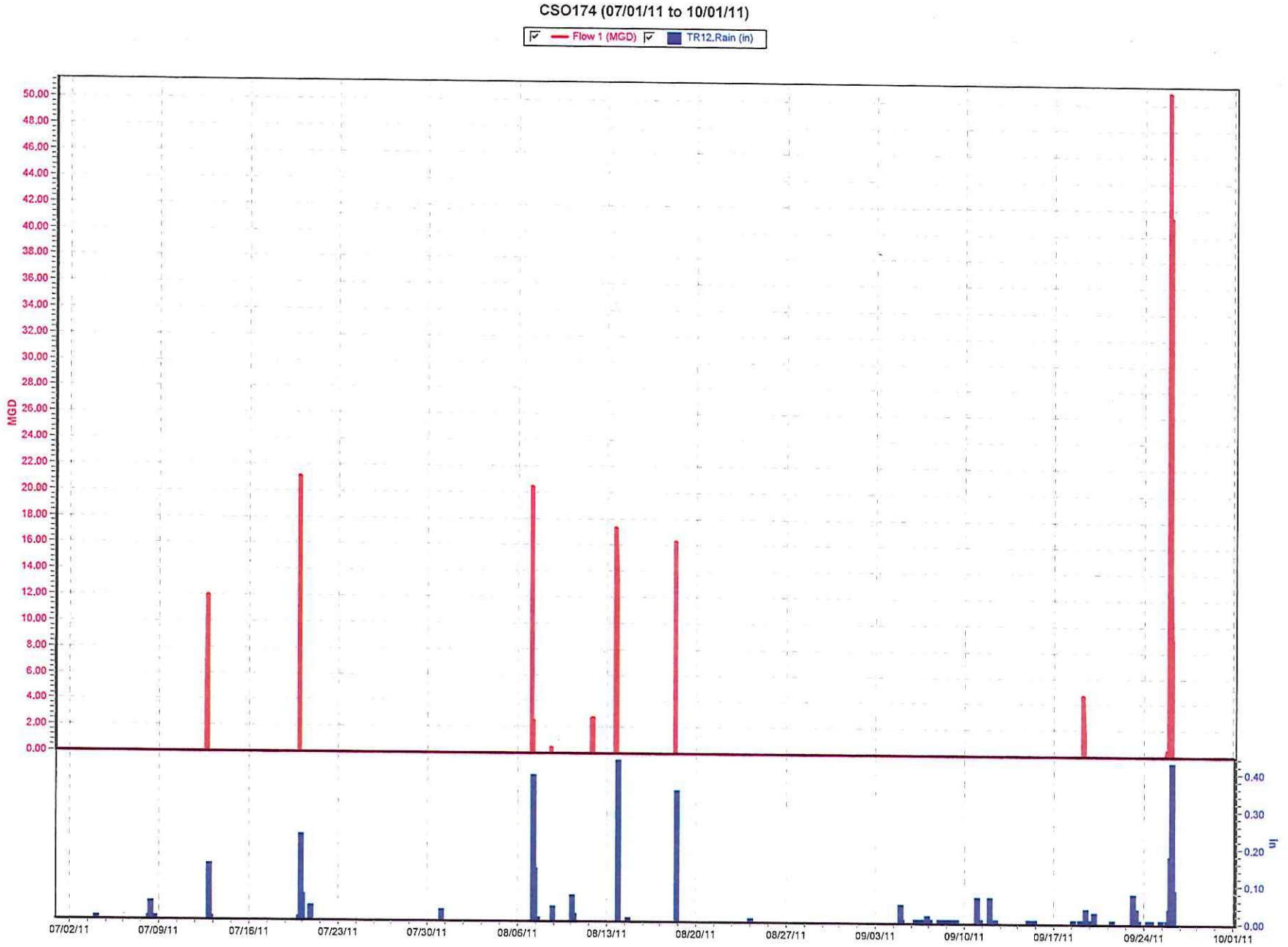
CSO151 (07/01/11 to 10/01/11)

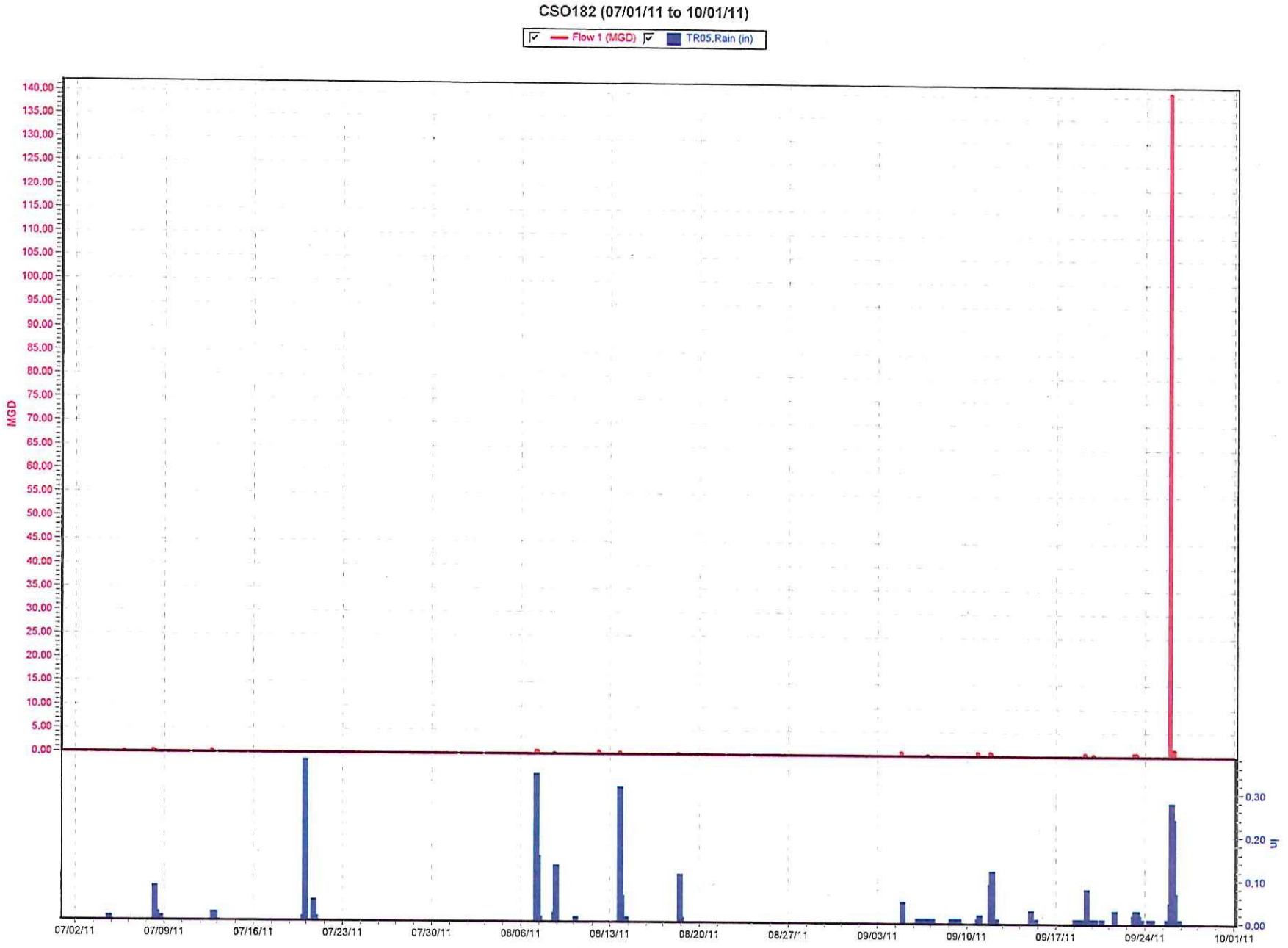


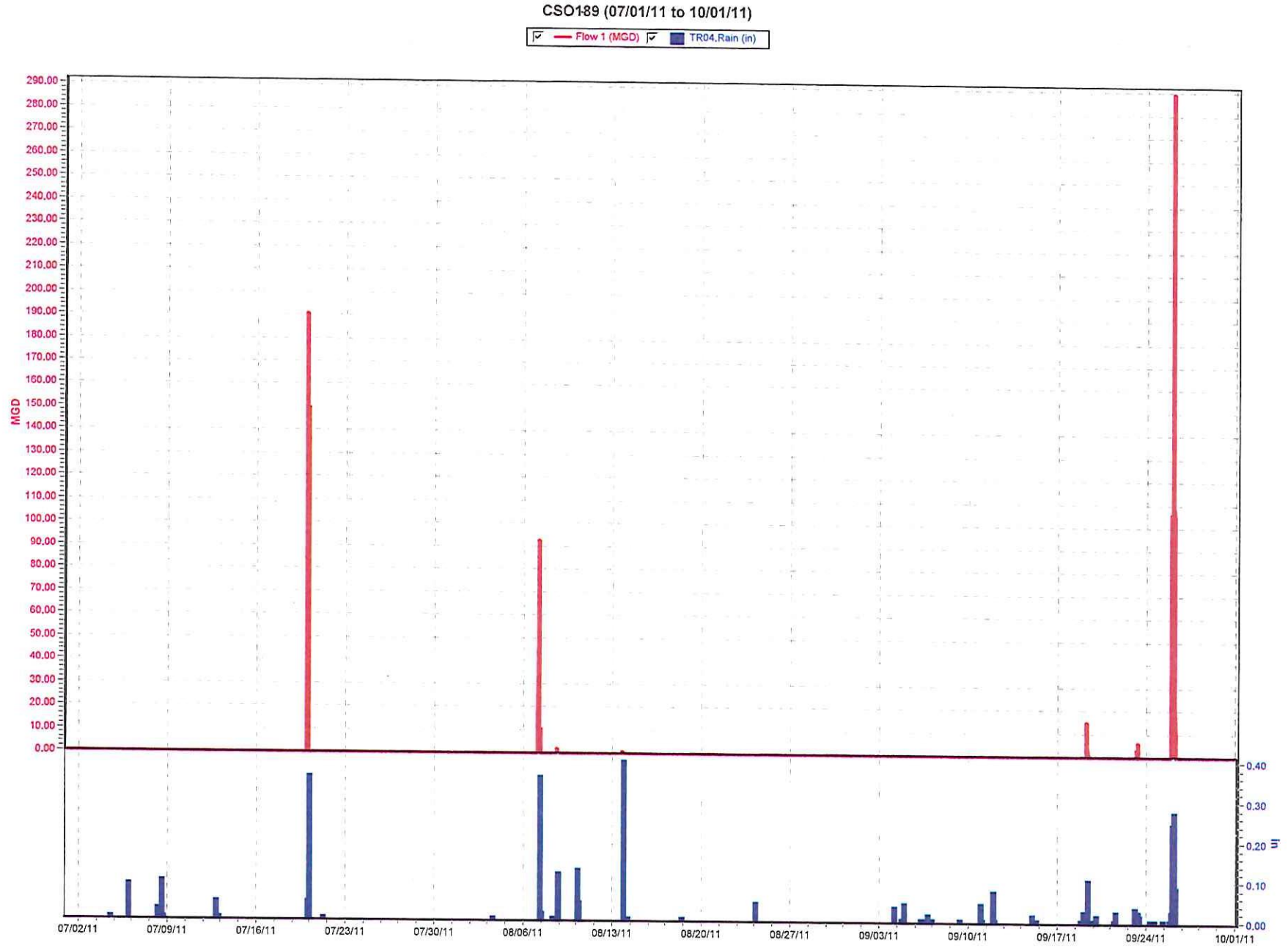

CSO152 (07/01/11 to 10/01/11)
Flow (mgd)
TR12.Rain (in)
MGD
IN
Battery Malfunctioned
6/20 - 7/5
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
20.00
15.00
10.00
5.00
0.00
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

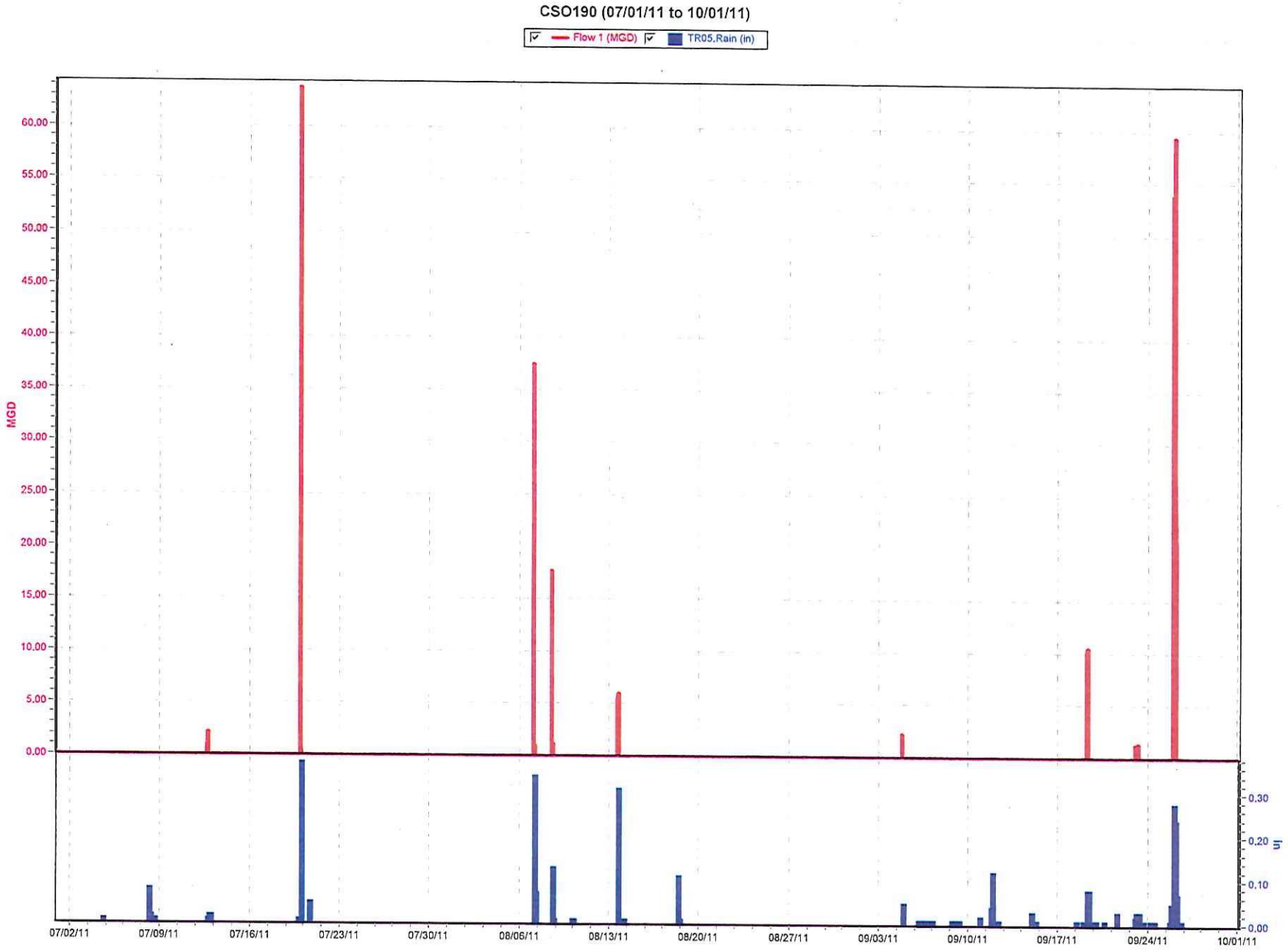

CSO153 (07/01/11 to 10/01/11)
Flow 1 (MGD)
Flow_Historic (MGD)
TR05.Rain (in)
MGD
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

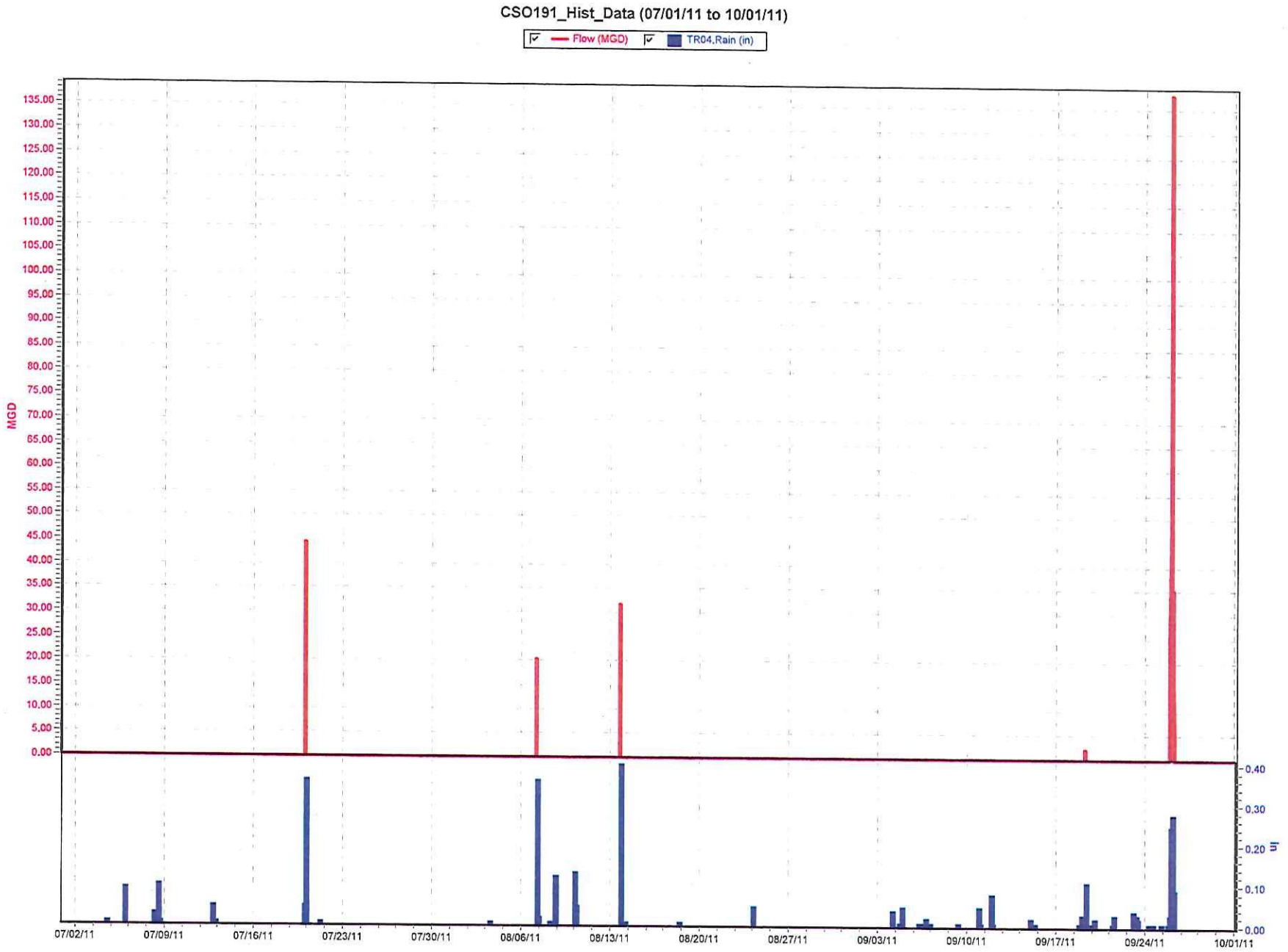

CSO166 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
No Rain at TR05, but rain was picked up by other Rain Gauges
MGD
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO174 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
50.00
48.00
46.00
44.00
42.00
40.00
38.00
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.40
0.30
0.20
0.10
0.00
In
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO182 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
IN
140.00
135.00
130.00
125.00
120.00
115.00
110.00
105.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO189 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR04.Rain (in)
MGD
290.00
280.00
270.00
260.00
250.00
240.00
230.00
220.00
210.00
200.00
190.00
180.00
170.00
160.00
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0.40
0.30
0.20
0.10
0.00
IN
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO190 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO191_Hist_Data (07/01/11 to 10/01/11)
Flow (MGD)
TR04.Rain (in)
MGD
IN
135.00
130.00
125.00
120.00
115.00
110.00
105.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
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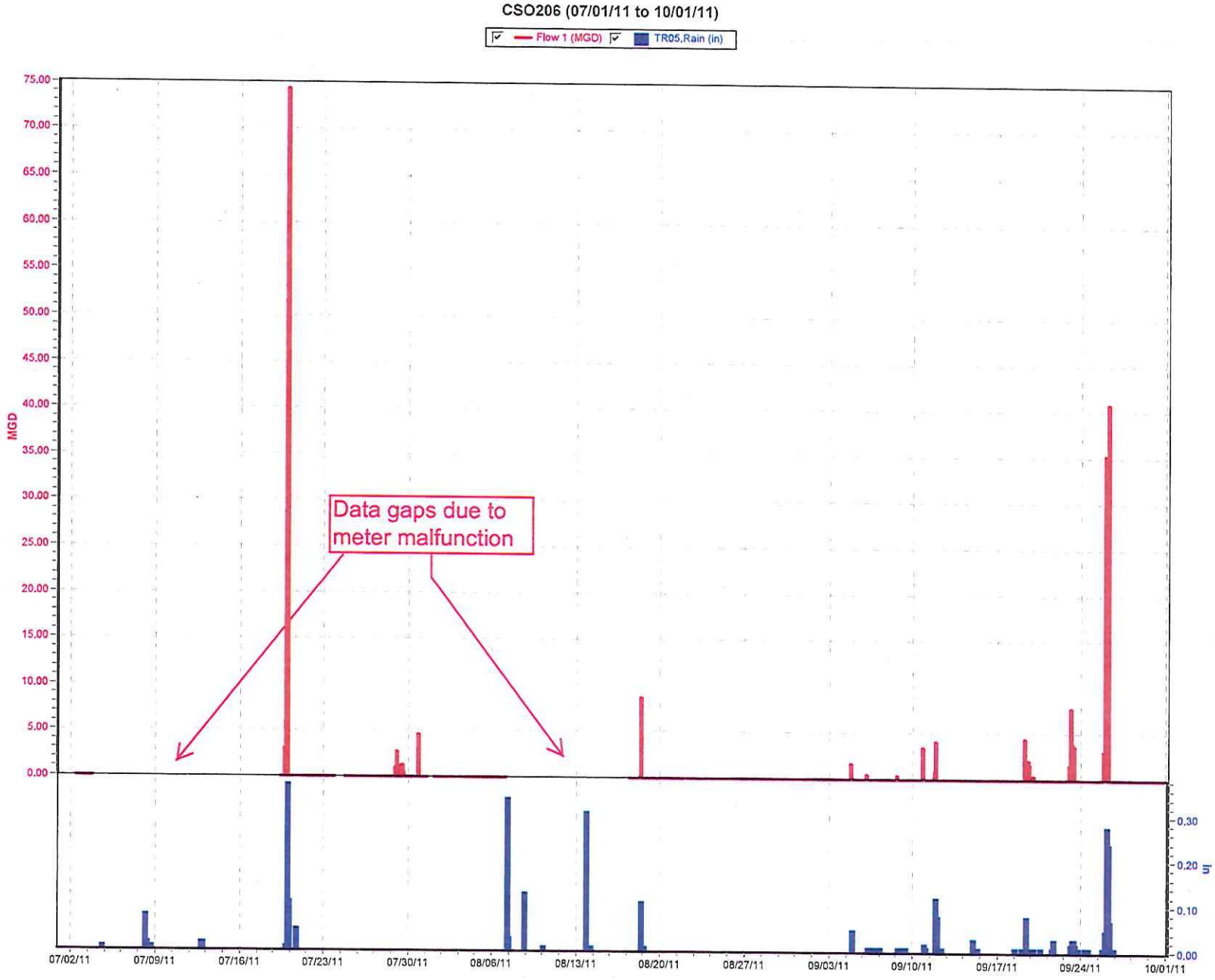
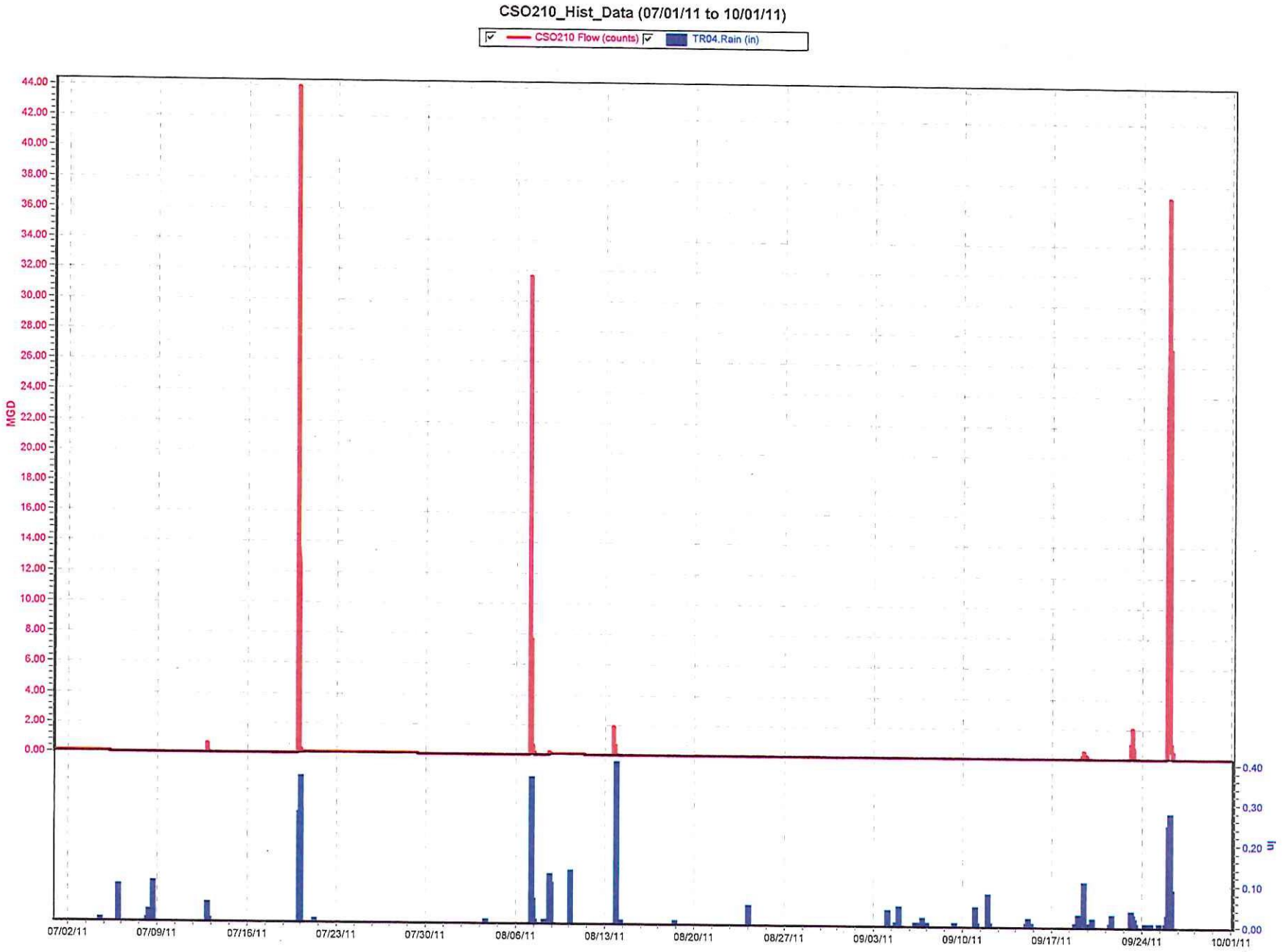
09/10/11
09/17/11
09/24/11
10/01/11


CSO206 (07/01/11 to 10/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Data gaps due to meter malfunction
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11


CSO210_Hist_Data (07/01/11 to 10/01/11)
CSO210 Flow (counts)
TR04.Rain (in)
MGD
IN
44.00
42.00
40.00
38.00
36.00
34.00
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.40
0.30
0.20
0.10
0.00
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
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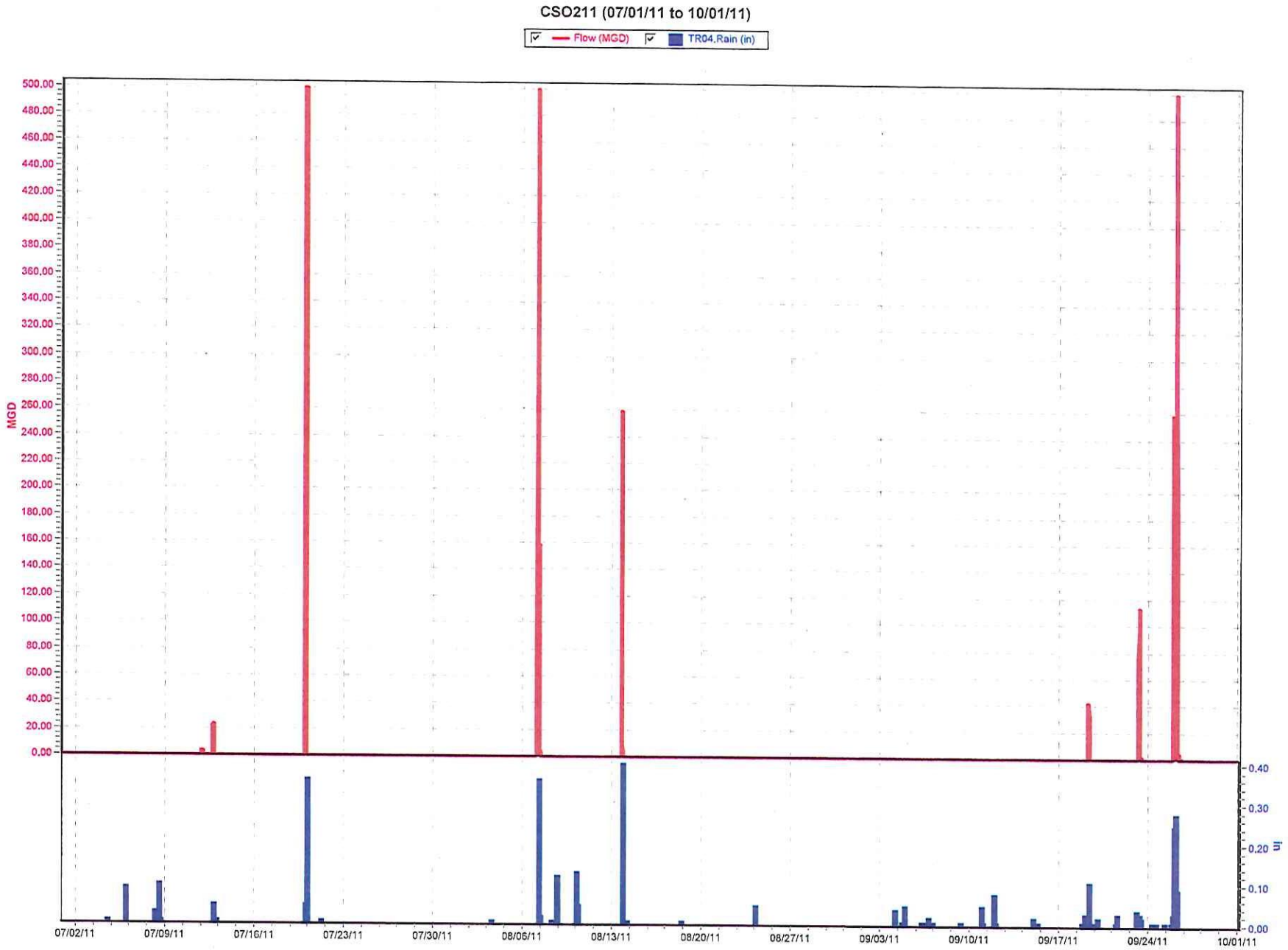
09/10/11
09/17/11
09/24/11
10/01/11


CSO211 (07/01/11 to 10/01/11)
Flow (MGD)
TR04.Rain (in)
MGD
500.00
480.00
460.00
440.00
420.00
400.00
380.00
360.00
340.00
320.00
300.00
280.00
260.00
240.00
220.00
200.00
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.40
0.30
0.20
0.10
0.00
in
07/02/11
07/09/11
07/16/11
07/23/11
07/30/11
08/06/11
08/13/11
08/20/11
08/27/11
09/03/11
09/10/11
09/17/11
09/24/11
10/01/11

Appendix C – Acronyms

Appendix C - Acronyms for Project WIN Quarterly Report

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

Appendix C - Acronyms for Project WIN Quarterly Report

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