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Metropolitan Sewer District

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January 28, 2011

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Subject: Quarterly Report Number 21
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 October 1, 2010 – December 31, 2010. 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, Water Quality Treatment Centers, Performance Overview and CMOM.

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,

H. J. Schardein, Jr.
for Regulatory Services Director

Q21 Certification KDEP 1-28-11
cc: Brian Bingham Paula Purifoy Laurence J. Zielke

Louisville and Jefferson County Wet Weather Consent Decree Quarterly Report #21

Reporting Period:

October 1, 2010 through December 31, 2010

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:

January 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-first Quarterly Report submitted in accordance with Paragraph 29 of the Amended Consent Decree. This report covers the time period from October 1, 2010, through December 31, 2010. **The structure for this report is outlined as follows:**

Section 1: Program Activities for Nine Minimum Controls - This section describes the scope, schedule and status for projects and other activities related to NMC that were active during the reporting period (October 1, 2010, through December 31, 2010), and the anticipated projects and activities that are scheduled to be performed during the next reporting period (January 1, 2011, through March 31, 2011) for continued compliance with the Amended Consent Decree.

Section 2: Program Activities for Sewer Overflow Response Protocol - This section describes the scope, schedule and status for activities related to SORP that were active during the reporting period (October 1, 2010, through December 31, 2010), and the anticipated activities that are scheduled to be performed during the next reporting period (January 1, 2011, through March 31, 2011), for continued compliance with the Amended Consent Decree.

Section 3: Program Activities for Discharge Abatement Plans (DAP) - This section describes the scope, schedule and status for projects and other activities related to DAP that were active during the reporting period (October 1, 2010, through December 31, 2010), and the anticipated projects and activities that are scheduled to be performed during the next reporting period (January 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, education, notification and participation that were active during the reporting period (October 1, 2010, through December 31, 2010), and the anticipated activities that are scheduled to be performed during the next reporting period (January 1, 2011, through March 31, 2011), for continued compliance with the Amended Consent Decree.

Section 5: Capacity Management, Operations and Maintenance Report - The CMOM program activities performed during the reporting period (October 1, 2010, through December 31, 2010), and activities planned for the next reporting period (January 1, 2011, through March 31, 2011), are included in this section for continued compliance with the Amended Consent Decree.

Section 6: Program Activities for Water Quality Treatment Centers - This section describes the scope, schedule and status for projects and other activities related to WQTCs

that were active during the reporting period (October 1, 2010, through December 31, 2010), and the anticipated projects and activities that are scheduled to be performed during the next reporting period (January 1, 2011, through March 31, 2011), for continued compliance with the Amended Consent Decree.

Section 7: Performance Overview - This section provides an accounting of the number of overflow occurrences, including unauthorized discharges, 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.

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 1: Proper Operation and Maintenance Programs

Program Metrics

- Inspected and cleaned 4884 catch basins within the combined sewer system (CSS) during this reporting period.
- Continued to conduct inspections of the catch basin leads within the combined sewer system and other key areas. These inspections involve testing each basin by filling it with water and ensuring it drains properly. During this quarter, 1440 catch basins were inspected with 52 of those inspections resulting in follow-up repair or rehabilitation work orders.
- Continued to inspect, maintain and properly operate the CSS pump stations and the Morris Forman WQTC.
- Performed 1352 weekly inspections on CSOs, 273 creek inspections, and initiated 83 work orders for debris removal and/or repairs as determined to be necessary to allow proper system operation during this reporting period.
- Flushed 104 sewer line segments in the CSS, ranging in size from 6 inches to 15 inches.
- Continued several projects to create improved access to some CSO sites to facilitate cleaning activities. Construction of the access road to CSO151 was completed on October 4, 2010. Construction activities are underway on the access road to CSO152 and its related siphons. This project is scheduled to be completed in January 2011. Planning activities for access to CSO153 and its related siphons are ongoing.

Bending Weir at CSO108

- Achieved the following program metrics:

Target	Result
95% of CSOs inspected weekly.	100% Compliance - 104 CSOs were inspected weekly.
95% of flapgates inspected weekly.	100% Compliance - 14 flapgates on CSOs were inspected weekly.
95% of siphons inspected monthly.	100% Compliance - 10 siphons were inspected weekly and 9 additional siphons were inspected monthly.
95% of Debris or Repair Work Orders on CSO assets created the next work day after the inspection of the asset and open for no more than 5 days.	100% Compliance - There were 83 DEBRIS work orders and 2 CSOMOD work orders. 85 work orders were created and completed within the target range.
95% of the catch basins within the CSSA cleaned every 15 months.	100% Compliance - Currently MSD cleaning routines are performed on a 12 month cycle.

Annual Training

- No CSO training activities occurred between October 1, 2010 and December 31, 2010.

Annual Asset Review and Documentation

- Completed the closure of CSO192, at the intersection of 6th Street and Garland Avenue near Downtown Louisville. This CSO contributes overflow to the Central Relief Drain. Substantial completion of the closure of CSO192 occurred on December 5, 2010.
- Modified the rack bars at CSO153 to better protect the siphon downstream of the CSO diversion.
- Initiated a “hot tap” of the Starkey PS force main for the installation of a valve. During January 2011, the flood protection gate will be closed on the outfall at CSO020 and no overflows will occur at this location during the “hot tapping” process.

1.3 NMC 2: Maximization of Storage in the Collection System

Real Time Control Operation

- Continued operation of Phase 1 and Phase 2 of the Real Time Control system. During this reporting period, approximately 200 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 **Appendix F** for a detailed report.
- Continued the following RTC project:

  Web-Based Training – Developed a beta group with the responsibility of participating in the initial training and attending work groups to review the training modules to determine each module's effectiveness. This beta group includes personnel within each division of MSD. Web-based training is being enhanced concurrently with the system optimization project.

Bending Weir at CSO108

Storage Optimization

CSO108 Dam Modification – Completed the installation of the bending weir on December 15, 2010. The IOAP deadline for substantial completion of the project was December 31, 2010. Project will be certified on January 18, 2011. Flow monitoring of the downstream sewers will continue into the next quarter.

1.4 NMC 3: Review and Modification of Pretreatment Requirements

- Initiated the annual process to collect industrial user sampling and modeling data for Non-Domestic Dischargers (NDDs) of concern and trunk line sewer data contributory to CSOs to determine if they discharge a disproportionate share of pollutants of concern to the CSS.
- Continued to send wet weather alerts to NDD of concern prior to rain events, reminding them of their commitment to implement voluntary controls during wet weather events. During this period, MSD sent email notices to NDDs 15 times prior to a rain event. There were 13 rain events during this quarter. There are currently 9 NDDs that voluntarily implement control during wet weather by alternating their cleaning schedule or by storing during a rain event and releasing later.
- Continued to include specific NMC #3 related language as appropriate, in new and re-issued wastewater discharge permits to facilities located in the CSS, as well as in Unusual Discharge Requests approved for discharge to the CSS. MSD re-issued 8

wastewater discharge permits in the CSS and issued no Unusual Discharge Requests in the CSS.

- Issued letters of commendation to NDDs of concern that implemented voluntary controls.
- Continued to track performance measures to monitor the effectiveness of the implementation of NMC #3 within the Pretreatment Program.

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

- Continued operation of RTC Phase 1 and Phase 2, which minimizes wet weather CSOs by providing an optimized method for delivering more consistent flows into Morris Forman WQTC during and after wet weather events. During this reporting period, approximately 200 MG was stored in the system during rain events and routed to the Morris Forman WQTC once the system was able to handle the flow. See **Appendix F** for a detailed report.
- Continued the RTC System-Wide Optimization Project. The purpose of the project is to develop a holistic operating strategy for MSD's facilities, including pump stations, flow diversions, in-line and off-line storage, and treatment facilities. A series of workshops were held on September 14 - 17, 2010, and September 27 - 29, 2010, to discuss history of the program and build the framework to move forward with enhancement of the RTC program. A series of Technical Memorandums (TMs) have been prepared addressing the following topics:
    - Existing RTC system facilities inventory
    - Future RTC facilities proposed under the IOAP
    - Summary of existing RTC reports, memos and background information
    - Lessons learned from RTC Phase 1 and RTC Phase 2 implementation
    - Review of Csoft agreement and other available RTC software systems
    - Benefit/Cost framework for RTC evaluations
    - Alternative control strategies
    - RTC design standards
- Modified the scope, as a result of the workshops, to extend the use of Csoft to evaluate the benefits of rainfall prediction in system operation, and the impacts of potential inaccuracies in rainfall prediction on the wet weather flows captured by the RTC system. Evaluation of the control strategy alternatives has begun, but full evaluation is dependent on the approval by the MSD Board of the amendment to the Agreement that will allow the additional evaluations to be completed. It is anticipated that Board approval will be received in January 2011, and the evaluation of RTC alternatives will commence in early February 2011. Preliminary evaluation results will be available by the end of March 2011, with work on the final report starting thereafter. Refer to **Section 6.1.1 Morris Forman WQTC** for more details on this initiative.

- Continued the Morris Forman WQTC Wet Weather SOP Enhancements Project. This project will enhance the performance at the Morris Forman WQTC to address some of the underlying dynamics that affect available plant capacity, flow monitoring and wet weather operations. Activities in reporting period include a data analysis of the Southwestern Pump Station to verify the accuracy of the new flow meter on the discharge line, and investigate the suspected loss of pumping capacity. Flow measurements were taken at the East Headworks flumes and West Headworks overflow weir to calibrate the flow calculation algorithms, thereby improving the accuracy of headworks flow measurements. At the secondary clarifiers several flow meter vendors have provided demonstration units, and MSD has conducted clarifier filling "bucket tests" to check the accuracy and repeatability of the meters. Additional testing will continue in January 2011. Meetings have been held with Morris Forman WQTC operating staff to identify current wet weather operating practices and gaps in the current wet weather operating SOP. In addition, brainstorming has been conducted to identify potential approaches to process control enhancement through institutional learning. Refer to **Section 6.1.1 Morris Forman WQTC** for more details on this initiative.

1.6 NMC 5: Elimination of CSOs During Dry Weather

Flood Pump Stations

- Continued a project to update the U.S. Army Corps of Engineers (USACE) Flood Operations and Maintenance Manual. The project will update the four volumes of the operations and maintenance manuals for the Flood Pump Stations (FPS) to reflect current operational procedures and protocols along with revisions related to changes proposed to reduce dry weather overflows. Project to update the manuals is expected to be completed prior to December 31, 2011.
- Pumped approximately 1250 gallons of trapped flow back into the sanitary sewer system to avoid dry weather overflows as a result of operation of the flood protection system from the 34th Street, Starkey, and 4th Street Flood Pump Stations during the reporting period.
- Continued contract administration activities for the 27th Street and Shawnee Flood Pump Stations Dry Weather Overflow (DWO) Elimination projects. On December 20, 2010, a notice-to-proceed was issued to begin final design for both projects. These projects will be completed by June 30, 2013, in accordance with the IOAP schedule and the Amended Consent Decree.

Asset Analysis

- Performed the quarterly evaluation of dry weather unauthorized discharges to the Waters of the United States, with emphasis on the CSS, to determine causes and corrective activities. MSD will continue to report dry weather overflows from the CSS in accordance with the Sewer Overflow Response Protocol (SORP).
- Performed inspection and cleaning of FOG hotspots within the CSS, in accordance with CMOM commitments.
- Performed a review of Louisville Water Company SOPs and practices relative to line

breaks, hydrant flow tests and line flushing that may create DWOs or storm water discharges by hyper-chlorinated releases during the reporting period. In FY11, MSD will request the participation of LWC staff on a workgroup to review the SOPs.

1.7 NMC 6: Control of Solids and Floatable Materials in Combined Sewer Overflows

Field Verification

- Continued to review ground water concerns in the CDS unit at CSO108. The rehabilitation work completed to seal the unit from the ground water issues and reprogramming of the PLC that controls the pumping operations have resolved the dry weather overflow issues to date. Continued planning for the installation of two new hydrostatic level sensors to help with reliability of facility operation. Staff will continue to monitor the ground water issues.
- Continued to monitor and document performance of the CSO108 Solids and Floatables control CDS operation in accordance with the MOU with the Kentucky Nature Preserve. A report of the efficacy of the CDS unit was submitted to the Kentucky Nature Preserve prior to December 31, 2010, and included in **Appendix H – CSO 108 Efficacy Report**.
- Continued to review new S&F technologies for potential incorporation into the program.

Solids and Floatables Debris Removal

- Continued inspection and maintenance procedures for the solids and floatables structures as part of the weekly CSO inspections and PM cleaning routines, outlined under NMC #1. During this period, 58 work orders were issued for debris removal at the solids and floatables structures.
- Continued working with staff to determine the quantity of debris and floatables captured by street sweeping, catch basin cleaning, at the headworks of the Morris Forman WQTC, and at the end of line S&F controls. Reports have been developed to capture the amount of material. Results for the time period of October 1, 2010, and December 31, 2010, are shown in the table below:

Location	Amount of Debris Removed
Catch Basin and Sewer cleaning	516 CY
S&F Controls and Sneads Branch	1.75 CY
Headworks of Morris Forman WQTC	2135 CY
Street Sweeping	1488 Tons

1.8 NMC 7: Pollution Prevention Programs to Reduce Contaminants in CSOs

- Continued coordination of activities performed by Louisville Metro such as: street sweeping, Operation Brightside (trash and litter clean-up), and other Metro pollution prevention programs.

- Continued administration of the Hazardous Materials Ordinance, which requires users with hazardous materials on site to submit a spill prevention and control plan. Continued response to spills of hazardous materials and incidents involving discharges to the sewer system and provided spill mitigation kits to the Louisville Metro Fire Department to use to absorb vehicle fluids rather than flushing to the sewer.
- Continued administration of the Erosion Prevention and Sediment Control (EPSC) Ordinance. Developed a tracking system for EPSC NOVs and Field Correction Notices within the CSS. From October 1, 2010, to December 31, 2010, 6 field correction notices and 7 NOVs were issued for activities within the CSS.
- Continued issuance of Wastewater Discharge Permits under the Industrial Pretreatment Program.
- Continued to coordinate volunteers to remove trash and debris from the waterways in Jefferson County; facilitate rain barrel sales in partnership with the Louisville Nature Center; prepare and distribute informational pieces targeted to inform customers and residents on activities that can be practiced within their homes to assist in the reduction of overflows within the collection system; promote Green Infrastructure initiatives within Jefferson County, such as pervious pavement and aqua pavers; and distribute a rain garden manual outlining design and installation procedures for homeowners.
- Continued preparation of Storm Water Pollution Prevention Plans (SWPPPs) to address the discharge of storm water pollutants from MSD WQTCs, wastewater pump stations, and other operating facilities, including the Morris Forman WQTC.

1.9 NMC 8: Public Notification

- Reduced duplication by reporting public notification information in **Section 4: Project WIN Program Activities for Public Outreach, Education, Notification and Participation.**

1.10 NMC 9: Monitoring to Characterize CSO Impacts and the Efficacy of CSO Controls

- Continued to collect stream flow, sonde and other environmental data sets for use in further characterization of the combined sewer area. Data is centralized in an Oracle database and routinely updated by staff.
- Posted predictive and real-time radar rainfall services with 4-hour predictive rainfall estimates across 700 pixels countywide in addition to MSD's rain gauge network. These services streamline rainfall data transfer between MSD's rainfall data vendor and the Real Time Control interface and model simulation. MSD also receives monthly, calibrated radar rainfall data for use in historical event analysis and modeling simulations. A website was developed that allows MSD staff to view and export rainfall data as well as USGS stream monitoring data.
- Continued the post-construction sampling project around the 'Big Four' SSOs that are being mitigated. MSD is currently evaluating the rainfall tolerances and weather patterns for making decisions on event mobilization.

- Monitored CSOs with an AAOV greater than 10 MG, except for two overflows that have proven to be highly difficult to install monitors (CSO023 and Sneads Branch Relief). The quarterly discharge volume at these sites is generated using the sewer hydraulic model along with each quarter's radar rainfall data.
- Identified monitoring locations and proposed equipment for CSS flow meters in areas that have poor calibration or will be targeted for intensive green infrastructure implementation. This equipment purchase was approved by the MSD Board in October 2010.
- Continued the ecological database design and import of historical biological, macro invertebrate and habitat assessment data.
- Continued the review of RTC performance reports versus modeled site performance and resultant AAOV reductions.
- Continued to monitor for and provide quicker response to dry weather overflows, battery depletion, and meter drift at CSO locations with flow meters installed. Alarms are now set on sewer flow monitoring locations to notify staff of low batteries, unusual flow conditions, and possible dry weather discharges.

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 resubmitted the revised SORP on May 12, 2006, and received an approval letter for the SORP on August 22, 2006. The most recent version is dated November 5, 2008, which received approval on January 14, 2009. The approved SORP document 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

- There were no field reviews of SORP procedures this quarter due to the lack of significant rain events.
- Monitored 4 locations and took preventive measures to reduce basement backups. Work orders are used to track these various activities. During this period, MSD IFP staff mobilized pumps on 4 different days.
- Continued daily, monthly, and quarterly data reviews with staff from Metro Operations, IFP and Regulatory Services.
- Monitored approximately 139 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 13 unauthorized discharges. Inspection routes were run during rain events as described in the following table:
- Monitored over 300 sites via telemetry. There are approximately 20 sites where sewage is routinely hauled from pump stations to prevent overflows during rain events depending on the magnitude and location of the storm. Due to capacity issues during this reporting period, MSD Metro Operations staff hauled approximately 803,000 gallons of sewage.

Date	Route Description
November 25, 2010	RS Middle/Muddy Fork SSO Inspection Route
November 25, 2010	RS Jeffersontown/ Fern Creek SSO Inspection Route
November 25, 2010	RS Hikes Point SSO Inspection Route
November 25, 2010	RS Hikes Point SSO Inspection Route (2nd time)
November 30, 2010	RS Hikes Point SSO Inspection Route

2.3 Regulatory Reporting and Data Management

- Continued to improve the accessibility of data captured by the SCADA system for pump station and Real Time Control information. MSD continues to standardize various environmental data sets in preparation for integration with the SharePoint site.
- Performed the monthly review of discharge work orders. The associated assets in Hansen were updated to track any new overflow locations.
- Performed a detailed data review and trend analysis and incorporated this into the quarterly training sessions and documented the findings in **Section 7: Project WIN Performance Overview**.
- Worked on enhancements to the CSO/SSO Overflow Location Maps found on the Project WIN Website.

2.4 Staff Training and Communication

- Reviewed and updated the training documentation for the 2010 fourth quarter training on overflow field documentation.
- Conducted the following SORP Quarterly training sessions which were attended by 295 employees. The Annual SORP Training was incorporated into these sessions.

Division	Date	Number of Attendees
Eng/Reg.Srvs	11/30/2010	59
Eng/Reg.Srvs	12/09/2010	37
Metro Ops	12/08/2010	26
Metro Ops	12/08/2010	17
Metro Ops	12/09/2010	15
IFP	12/10/2010	23
IFP	12/17/2010	23
MF Ops/Maint	11/18/2010	13
MF Ops/Maint	11/18/2010	13
MF Ops/Maint	11/18/2010	31
MF Ops/Maint	12/01/2010	5
MF Ops/Maint	12/01/2010	8
MF Ops/Maint	12/01/2010	25

- Administered the following annual SORP Training classes for employees, consultants and contractors. These training classes were attended by 374 people.

Date	Location	Number of Attendees
11/8/2010	Main Office	39
11/9/2010	Central Maintenance Facility	39
11/11/2010	Main Office	43
11/16/2010	Central Maintenance Facility	106
11/17/2010	Main Office	26
11/19/2010	Central Maintenance Facility	9
11/23/2010	Main Office	19
12/16/2010	Central Maintenance Facility	72
12/17/2010	Central Maintenance Facility	21

- Continued to enhance the SORP Implementation Manual as new training modules are developed.
- Commenced planning for the 2011 first quarter SORP training that will focus on monitoring, staging, reconnaissance and mobilization.

2.5 Annual Program Review

- Schedule the process to review the FY11 overflow data and update the SORP manual and routes as needed.

2.6 Public Notification and Communication

Reduced duplication by reporting public notification information in **Section 4: Project WIN Program Activities for Public Outreach, Education, Notification and Participation.**

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 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.

Refer to **Appendix A** for a chart showing the schedule of the activities described in this section. **Projects are now listed by Budget ID in the chart.** Note that the schedule in **Appendix A** shows completion dates that are earlier than the dates contained in the ISSDP. 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 ISSDP remain the committed dates for completion of the ISSDP projects.

The following activities were performed during this reporting period or are planned activities for the next period.

- Southeast Interceptor Relief Sewer Phase I & II (Budget ID H08358 & H11022) – The project consists of a new relief interceptor from the Southeast Diversion Structure to the Northern Ditch Interceptor and to the Buechel Basin. The project is being divided into two phases to expedite construction. Phases I and II of the interceptor will consist of 7,800 feet of 60-inch diameter sewer and 600 feet of tunnel. A new junction structure will connect this relief sewer to the proposed Hikes Lane Interceptor, the existing Buechel Branch Interceptor, and the proposed Buechel Basin. As of December 31, 2010, Phase I was under construction with blasting and delivery of pipe material. Phase II was advertised and bids were received on November 3, 2010**.** During the period of January 1, 2011, to March 31, 2011, Phase I construction and pipe installation will continue. Phase II will be awarded for construction. The Southeast Interceptor Relief Sewer will be completed by May 12, 2012, in accordance with the ISSDP schedule and the Amended Consent Decree.

- Hikes Lane Interceptor Phase I & II & Hikes Point Relief (Budget ID H07286, H11026 and Budget ID H07287) - The Hikes Lane Interceptor has been divided into Phase I and Phase II in order to allow bidding and construction to begin on the lower portion of the project while easement acquisition and final design continues on the upper section. Phase I, the lower portion, is under construction. As of December 31, 2010, Phase I is 53% complete with 1579 feet of 72-inch diameter pipe installed and the 240 foot tunnel under Bardstown Road is 95% complete. Phase II of Hikes Lane Interceptor is under easement acquisition and is scheduled to be bid in the first quarter of 2011. During the period of January 1, 2011, to March 31, 2011, Phase I construction will continue and Phase II will be advertised. The Hikes Point Relief Sewer and Carson-Ribble Relief Sewer are two small interceptor improvements that are in the same area as the Hikes Lane Interceptor. The Hikes Point Relief Sewer (ID H07287) is scheduled for bid in the fourth quarter of 2011. The Carson-Ribble Relief Sewer Project (ID H09008) was awarded on June 22, 2009, and construction was substantially completed on November 20, 2009. The entire project package will be completed by November 27, 2012, in accordance with the ISSDP schedule and the Amended Consent Decree.

- Northern Ditch Diversion Interceptor (Budget ID C85017) - Improvements described as part of the ISSDP projects will result in significantly more wet weather flow in the Derek R. Guthrie WQTC and Morris Forman WQTC service areas. The proposed plan will include the installation of a new interceptor parallel to the Northern Ditch drainage channel, allowing wet weather flow to be diverted from the Morris Forman WQTC service area (currently through the Northern Ditch Pump Station) to the Derek R. Guthrie WQTC. This effort will provide and allow relief for the closure of the existing Southeastern Diversion Overflow. The entire project is divided into three phases and the ISSDP related work with this project consist of phases I & II. As of December 31, 2010, construction on Phase I is 100% complete. Phase I consists of 6,910 feet of 84-inch diameter sewer, 102 feet of tunnel at National Turnpike, and the elimination of the Yorktown WQTC. Phase II consist of 4770 ft. of 84 inch sewer pipe and a diversion structure to connect to the existing 72 inch sewer. Phase II pipe installation is 100% complete and the diversion structure is 99% complete with only minor punch list and

testing remaining. During the period of January 1, 2011, to March 31, 2011, the final testing will be completed on the diversion structure and both phases of the project will be certified as substantially complete.

The construction to close the Southeast Diversion overflow is a separate maintenance activity and will be completed by December 2011, in accordance with the revised ISSDP schedule and the Amended Consent Decree.

Phase I & Phase II will be completed by July 31, 2011, in accordance with the ISSDP schedule and the Amended Consent Decree.

Phase III of the project consists of several tributary lines to eliminate 3 existing pump stations. Phase III can only be bid after Phase I is completed. Phase III is not a requirement of the Amended Consent Decree or committed to in the ISSDP. This project is being tracked as part of the Northern Ditch Diversion Interceptor project and should be complete by December 2011.

- Derek R. Guthrie WQTC Wet Weather Equalization and Treatment Project (Budget ID H06302) – The final design is divided into three separate packages, Pumping Package (PP), Wet Weather Treatment Facility (WWTF), and the Equalization Basin. MSD's Board approved the award of a construction contract on the PP Project (H06302) and the WWTF Project (H09561) on April 12, 2010. As of December 31, 2010, construction has continued on the WWTF with concrete for two new clarifiers being completed and two new clarifiers being excavated and concrete pours initiated during this period. Excavation on the new chlorine contact basins and the new Grit Facility is also underway. Completed work has reached the 30% stage. On the PP, the Short Term Detention Basin walls have been poured and the footings for the blower building are being formed. The excavation for the new raw wastewater wet well is complete. The installation of the rock anchors and rebar for the wet well side of the station were completed and the first major pour for the bottom slab was performed. For the Equalization Basin, MSD closed on the contract to purchase additional land

adjacent to the WQTC. In addition, the contract documents have been submitted to the KDOW for review and comment. During the period of January 1, 2011, to March 31, 2011, MSD will advertise for construction bids for the Equalization Basin. Construction will continue on the PP and WWTF Projects in order to complete the expanded secondary treatment facilities which will address the higher peak wet weather flows at the Derek R. Guthrie WQTC. The three projects will be completed by December 31, 2011, in accordance with the ISSDP schedule and the Amended Consent Decree.

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.

This section will report on the progress of the projects identified in the IOAP, Volume 3 – Final SSDP Projects. Refer to **Appendix A** for a chart showing the schedule of the activities described in this section. **Projects are now listed by Budget ID in the chart.** Note that the schedule in **Appendix A** shows completion dates that are earlier than the dates contained in the Final SSDP. 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 submitted Final SSDP remain the committed dates for completion of the Final SSDP projects.

The following activities were performed during this reporting period or are planned activities for the next period.

Cedar Creek Area

- Little Cedar Creek Interceptor Improvements (Budget ID H09163) – The SSES project continued to address observed high wet weather flows and existing SSOs in the project area. As of December 31, 2010, all field activities were complete and final SSES reports for both the Edsel Lane PS and the Little Cedar Creek Interceptor were submitted to MSD. MSD finished review of the rehabilitation recommendations and developed 90% construction documents for a rehabilitation project for the area. During the period of January 1, 2011, to March 31, 2011, MSD will complete the rehabilitation construction documents for the Edsel Lane PS service area and advertise the project for construction. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation for this project. The project will be completed by December 31, 2024, in accordance with the IOAP schedule and the Amended Consent Decree.

Hite Creek Area

- Meadow Stream Pump Station In-line Storage Project (Budget ID H09174) – The SSES contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 688 manhole inspections (75%), 154,123 linear feet of CCTV inspection (84%), 129 private property inspections (86%), 173,829 linear feet of

smoke testing (100%), and four wet weather inspections (100%). Data delivery to MSD continues and the consultant is analyzing the collected data to develop rehabilitation recommendations. A draft SSES report was submitted to MSD. During the period of January 1, 2011, to March 31, 2011, the final SSES report will be submitted to MSD. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation for this project. The project will be completed by December 31, 2016, in accordance with the IOAP schedule and the Amended Consent Decree.

- Floydsburg Road Pump Station I&I Investigation and Rehabilitation (Budget ID H09172) As of December 31, 2010, Operations executed a purchase order to install two new pumps and two new check valves at the pump station. MSD completed rehabilitation construction documents and advertised the project for construction. A notice-to-proceed for construction was issued on October 29, 2010. The project included the following rehabilitation activities: manhole lining, manhole chimney seals, locate and raise manholes, realign manhole frames, pipe point repair and manhole lid replacement. The project was substantially complete on December 17, 2010, and certified on December 22, 2010. The project was completed prior to the December 31, 2010, deadline in accordance with the IOAP schedule and the Amended Consent Decree.
- Kavanaugh Road Pump Station Improvements Project (Budget ID H09171) – Please see the above Meadow Stream Pump Station In-line Storage Project for more details on the Meadow Stream SSES project. The Kavanaugh Road pump station is in the Meadow Stream Pump Station service area. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by December 31, 2024, in accordance with the IOAP schedule and the Amended Consent Decree.

Floyds Fork Area

- Eden Care Pump Station SSO Investigations (Budget ID H09170) - The contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. All field activities were completed as of December 31, 2010. Data delivery to MSD was also completed. The consultant developed rehabilitation recommendations and submitted a draft SSES report. During the period of January 1, 2011, to March 31, 2011, a final SSES report will be submitted. MSD will begin planning rehabilitation activities. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. All phases of the project will be completed by December 31, 2012, in accordance with the IOAP schedule and the Amended Consent Decree.

Jeffersontown Area

- Jeffersontown WQTC Elimination (Budget ID H07293) - The final plan for eliminating blending at the Jeffersontown WQTC was submitted to EPA and KDEP on March 31, 2010. The plan selected was the elimination of the WQTC with a series of interceptors

and pump stations to divert flow from the Jeffersontown plant to both the Morris Forman WQTC and the Cedar Creek WQTC. The plan to eliminate the plant includes a new regional pump station for the majority of the Jeffersontown flow. This new pump station will send flow to the new Hikes Lane Interceptor. The site suitable for the pump station is located about 4000 ft. upstream from the existing plant. Therefore, flow downstream of the new pump station site must be directed south to Cedar Creek WQTC once the plant is eliminated. Prior to June 30, 2010, MSD began the process of selecting and negotiating with several consulting firms to initiate design of the new pump station, force main and interceptors to eliminate the WQTC. Prior to September 30, 2010, negotiations were completed and design was in progress. Due to the size of this project, it has been divided into multiple phases and projects. Below is a summary of the projects and various phases involved in this effort.

Phase I includes Billtown Interceptor, Broad Run Interceptor, Billtown Pump Station & FM, and Fairmount Pump Station Upgrade - scheduled for construction completion by May 2012.

Phase II includes Upper Billtown Interceptor, Lake of the Woods WQTC Elimination, Chenoweth Hills WQTC Elimination, Jeffersontown Pump Station, Jeffersontown Force Main, Jeffersontown WQTC & Siphon Elimination, Jeffersontown Surge Basin, and the Klondike Lane Interceptor – scheduled for construction completion prior to December 31, 2015.

As of December 31, 2010, Phase I design was completed and easement acquisition was in progress. The Broad Run Interceptor was advertised and bid and the Billtown Interceptor was advertised. Phase II projects are nearly complete with the 10% design stage.

During the period of January 1, 2011, to March 31, 2011, Phase I projects will be awarded for construction. Phase II projects will complete the 10% design stage and begin 30% design stage.

The project will be completed by December 31, 2015, in accordance with the IOAP schedule and the Amended Consent Decree.

Beargrass Creek Middle Fork Area

- Upper Middle Fork #1- Buechel Basin (Budget ID H07288) – This project consists of construction of a flow equalization basin on a 96-acre parcel of land in the Jennings Lane/Produce Road area (hereinafter referred to as the Buechel Basin Site). The project will provide an outlet for the ISSDP proposed Southeast Diversion Relief Interceptor and will provide capacity for surcharge from the Northern Ditch Interceptor during wet weather. Property for the basin was purchased on August 27, 2009, and a Phase II Environmental Assessment has been completed. A notice-to-proceed for design was issued on March 10, 2010. As of December 31, 2010, design continued and is complete to the 60% stage. Revisions and changes in the design due to operational comments and budget requirements have delayed the design milestones. During the period of January 1, 2011, to March 31, 2011, MSD will begin permit applications for mitigation of stream and wetland impacts, and design will be finalized. The project bidding is scheduled for 2011. The project will be completed by

December 31, 2013, in accordance with the IOAP schedule and the Amended Consent Decree.

- Hurstbourne I&I Investigation and Rehabilitation (Budget ID H09219) - This project area is described in the Lower Middle Fork Interceptor ICA Phase 2 assessment report that was completed in April 2009. Review of the ICA data is complete and rehabilitation recommendations have been made. The asset management rehabilitation tool was used to review inspection data, prioritize rehabilitation work, prepare bid documents with cost estimates and SCAP credits for the recommended rehabilitation for the area. A section of the Lower Middle Fork Interceptor cannot be rehabilitated and construction plans are being developed in-house to replace the sewer. During the period of January 1, 2011, to March 31, 2011, MSD will complete the construction documents for this project. Once completed, field reviews of the bid documents will be completed. Revisions to the bid documents will be completed for anticipated advertisement for construction in spring 2011. The project will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.

Southeastern Diversion Area

- Beargrass Interceptor Rehabilitation Phase 2 (Budget ID H09239) – As of December 31, 2010, MSD completed final rehabilitation recommendations. The final rehabilitation recommendation included rehabilitation of eight manholes with root removal and heavy cleaning of the interceptor. The root removal work was completed during July, 2010. MSD met with contractors on September 28, 2010, to review manhole rehabilitation and heavy cleaning requirements. MSD issued a notice-to-proceed for construction on October 22, 2010. Manhole rehabilitation included installing water tight frames, lids and chimney seals. The project was substantially complete on December 14, 2010, and certified on December 22, 2010. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.
- Parkview Estates I&I Investigation & Rehabilitation (Budget ID H09198) – As of December 31, 2010, MSD finalized a schedule to have the Parkview system sewer lines inspected as part of the FY11 CSSA Program. During the period of January 1, 2011, to March 31, 2011, MSD will initiate an SSES project. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by June 30, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.

Pond Creek Area

- Government Center Pump Station Elimination (Budget ID H09194) – This project consists of diverting existing sanitary sewer flow from the Government Center Pump Station to an existing 15-inch diameter sanitary sewer line via gravity flow. Decommissioning the existing pump station is also included in this project. In response to maintenance issues with the existing pump station this project has been accelerated to avoid the need for a significant rehabilitation of a pump station

scheduled for elimination. As of December 31, 2010, the project was awarded for construction on November 8, 2010. During the period of January 1, 2011, to March 31, 2011, construction will begin and is expected to be complete by the fourth quarter of 2011. The project is scheduled to be completed by December 31, 2024, in accordance with the IOAP schedule and the Amended Consent Decree.

- Lantana Pump Station Investigation and Rehabilitation (Budget ID H09193) - This project was executed under the Lea Ann Way SSES project (for details, see the Lea Ann Way System Improvements Project). To address observed high wet weather flows and existing SSOs in the project area, the Lantana Pump Station SSES scope was finalized to investigate this sub-basin in the Lea Ann Way Pump Station service area. A final SSES report was submitted to MSD on July 30, 2010. No activities occurred during this reporting period. During the period of January 1, 2011, to March 31, 2011, MSD will review the report and begin the planning phase for any rehabilitation efforts. Any rehabilitation performed will be coordinated with the findings included in the final Lea Ann Way SSES report. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation for this project. The project will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- Edsel Pump Station I&I Investigation and Rehabilitation (Budget ID H09197) – This project will be completed with the Little Cedar Creek SSES project (for details, see the Little Cedar Creek Interceptor Improvements Project). As of December 31, 2010, the final SSES report was submitted to MSD. Rehabilitation recommendations were reviewed and draft construction drawings were completed using MSD'S asset management rehabilitation tool. During the period of January 1, 2011, to March 31, 2011, MSD will complete the construction documents for this project. Once completed, field reviews of the bid documents will be completed. Revisions to the bid documents will be completed for anticipated advertisement for construction in spring 2011. A pump station site assessment will be scheduled and planning will begin to correct any deficiencies found during the assessment. Potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation for this project. The project will be completed by September 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- Lea Ann Way System Improvements (Budget ID C08433) – The SSES project for this area continues to address observed high wet weather flows and existing SSOs in the project area. Due to the large size of the area (over 680,000 feet), the Lea Ann Way SSES Project (Budget ID H09096) was divided into two areas: East and West.

  Lea Ann Way West SSES - The contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. As of December 31, 2010, all field activities and data delivery to MSD was completed. . The consultant finalized analyses of the collected data, developed rehabilitation recommendations and submitted their final SSES report. During the period of January

1, 2011, to March 31, 2011, MSD will begin reviewing the final SSES report and begin the prioritization of rehabilitation recommendations.

Lea Ann Way East SSES - The contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 1,270 manhole inspections (100%), 342,429 linear feet of CCTV inspection (95%), 266 private property inspections (100%), 291,440 linear feet of smoke testing (100%), and four wet weather inspections (100%). Data delivery to MSD began and the consultant started analyzing the collected data to develop rehabilitation recommendations. A draft SSES report was submitted to MSD. During the period of January 1, 2011, to March 31, 2011, all field inspections will be completed. Data delivery to MSD will be completed and the consultant will submit a final SSES report.

The project will be completed by December 31, 2015, in accordance with the IOAP schedule and the Amended Consent Decree.

Ohio River Force Main Area

- Mellwood System 1 - Mellwood Pump Station and Force Main (Budget ID A09556) – The project consists of constructing a new 3 MGD pump station and force main upgrades to replace the existing Mellwood Pump Station. The pump station lies in the Ohio River Floodplain, thus requires significant flood proofing considerations. To address immediate capacity issues with the existing pump station during wet weather conditions and provide for cost-sharing opportunities with a potential developer, this project has been accelerated from the schedule shown in the Final SSDP. The design is at the 100% stage and now is in the property acquisition phase. As of December 31, 2010, condemnation for property acquisition was initiated. During the period of January 1, 2011, to March 31, 2011, advertisement for construction will occur, if right of entry is provided by the courts. The project will be completed by December 31, 2012, in accordance with the IOAP schedule and the Amended Consent Decree.

- Prospect #1 - WQTC Elimination (Budget ID's multiple) – A plan to eliminate the five WQTC's serving the Prospect area was approved by EPA and KDEP on September 24, 2009. This plan included five separate phases of work to accomplish the elimination of the treatment facilities in the Prospect area. The phases include pump stations and force mains to eliminate the Hunting Creek North and Shadow Wood WQTCs, a River Road Interceptor (Budget ID D94210) to transport the Hunting Creek North flow to a new pump station near the existing Ken Carla WQTC, a new Harrods Creek Interceptor (Budget ID D00249) to transport the Hunting Creek South and the Timberlake WQTCs to the proposed pump station (Budget ID D94206). The proposed regional pump station near the Ken Carla WQTC would then be connected to MSD's Hite Creek WQTC via a new force main.

  Notice-to-proceed was issued on July 10, 2009, for the preliminary design of the proposed regional Harrods Creek Pump Station to finalize the needed infrastructure and determine the necessary capacity for the elimination of the Prospect WQTCs. The preliminary design study for the alternate alignments was completed November 30, 2009. Final design will determine the need for easements based on the final alignment

of the Harrods Creek Interceptor and force main. As of December 31, 2010, design is in progress on the interceptors, the site for the regional pump station was selected, and MSD entered into negotiations for purchase of the pump station site. Easement plats have been completed for the River Road Interceptor and appraisals are complete. Notice of easement acquisition has been sent to the property owners and five of twenty easements have been acquired. Environmental studies of potential routes are in progress.

The River Road Interceptor was delayed due to questions by US Fish & Wildlife (USF&W) over the potential for Running Buffalo Clover to be present at the site. USF&W requested a field survey by letter dated October 15, 2009, to determine if the species is present. The survey was conducted between April and the end of June, 2010, during the flowering season. Buffalo clover has been determined to not be present.

During the period of January 1, 2011, to March 31, 2011, easement acquisition on River Road Interceptor will continue and is scheduled for bidding in the third quarter of 2011. Negotiations for purchase of the regional pump station site will continue. Design will proceed and be at various stages of completion for the elimination of the Hunting Creek North WQTC, Shadow Wood WQTC, Ken Carla WQTC, Hunting Creek South WQTC, and Timberlake WQTC. Design of the new regional pump station and force main will also continue and be near 90% completion. The project will be completed by December 31, 2015, in accordance with the IOAP schedule, approved elimination plan, and the Amended Consent Decree.

- Derington Court Pump Station I&I Investigation and Rehabilitation (Budget ID H09091) - Draw down tests performed on September 9, 2010, determined that the Derington Court PS was only pumping at approximately 65% of its original design capacity. As of December 31, 2010, MSD finalized a schedule to have the system's sewer lines inspected as part of the FY11 CSSA Program. During the period of January 1, 2011, to March 31, 2011, MSD will initiate the planning phase for an SSES project. MSD will evaluate the original pump station design to select and order new replacement pumps to bring the PS back to its original design capacity. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by June 30, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- Leland Road Relief SSO Investigation (Budget ID H09189) – Planning for this project will begin in January 2011. The project will be completed by December 31, 2012, in accordance with the IOAP schedule and the Amended Consent Decree.

Mill Creek Area

- East Rockford Lane Pump Station Relocation (Budget ID A09091) - The project consists of relocating the pump station, as well as increasing the size of the existing pumps and force main. In response to maintenance issues with the existing pump station, this project has been accelerated to avoid the need for a significant rehabilitation of a pump station scheduled for replacement. As of December 31, 2010,

advertisement and bidding for construction was complete. During the period of January 1, 2011, to March 31, 2011, the project will be awarded for construction. The project is targeted to be completed prior to December 31, 2021, in accordance with the IOAP schedule and the Amended Consent Decree.

- Shively Interceptor (Budget ID B06208) – This project will eliminate five pump stations within the City of Shively. The project consists of the installation of approximately 19,000 linear feet of interceptor ranging in size from 8-inch to 27-inch diameter. As of December 31, 2010, construction activities continued with a total of 3010 feet of 21-inch diameter sewer installed out of a total of 18,300 feet of proposed new sewer. Construction is scheduled to last 18 months. During the period of January 1, 2011, to March 31, 2011, construction will continue. The project will be completed by December 31, 2014, in accordance with the IOAP schedule and the Amended Consent Decree.

Combined Sewer System Area

- Camp Taylor #1 System Improvements SSES (Budget ID H09288) – The SSES contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 694 manhole inspections (93%), 111,403 linear feet of CCTV inspection (77%), 524 private property inspections (85%), 150,529 linear feet of smoke testing (100%), and four wet weather inspections (100%). Data delivery to MSD continued and the consultant started analyzing the collected data to develop rehabilitation recommendations. Initial investigations have found 14 catch basins and 292 homes in the SSES project area with downspouts connected to the combined system. Plans have begun to address the removal of these connections from the combined system. A draft SSES report was submitted to MSD. During the period of January 1, 2011, to March 31, 2010, CCTV, manhole and private property inspections will be completed. Data delivery to MSD will be completed and the consultant will start analyzing the collected data to develop rehabilitation recommendations. MSD will finalize a plan to start removing the 14 catch basins and the downspouts from the combined system using in-house design and construction resources. A final SSES report will be submitted to MSD by February 28, 2011. The project will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- Camp Taylor #2 Sewer Replacement (Budget ID H09220) - The planning for this project continues. A portion of the condition assessment in this area was performed by the ICA (Interceptor Condition Assessment) Contractor. The ICA contractor completed remaining field inspections and submitted a final report on January 18, 2010. Initial review of the data revealed approximately 1,800 linear feet of 15-inch diameter sewer was in need of replacement. During this reporting period, construction activities were completed to replace this section of interceptor. During the period of January 1, 2011, to March 31, 2011, MSD will review the recommendations from the SSES report and start the planning phase for any required sewer replacement or rehabilitation activities. The project will be completed by December 31, 2013, in accordance with the IOAP schedule and the Amended Consent Decree.

- Sonne Pump Station I&I Investigation and Rehabilitation (Budget ID H09187) – The SSES contractor completed field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 72 manhole inspections (87%), 11,822 linear feet of CCTV inspection (90%), 12 private property inspections (45%), 11,960 linear feet of smoke testing (90%), and two wet weather inspection (50%). Data delivery to MSD continued and the consultant analyzed the collected data to develop rehabilitation recommendations. CCTV investigations found significant roots in the Sonne system and planning was completed to have this area included in the FY11 Root Removal program. A draft SSES report was submitted. MSD completed a site assessment of the pump station and found no station deficiencies. During the period of January 1, 2011, to March 31, 2011, a final SSES report will be submitted to MSD prior to February 28, 2011. MSD will review the rehabilitation recommendations in the SSES report and begin the preparation of rehabilitation bid documents. The project will be completed by June 30, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- Hazelwood Pump Station I&I Investigation and Rehabilitation (Budget ID H09181) - The SSES contractor completed field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 68 manhole inspections (97%), 10,995 linear feet of CCTV inspection (96%), 12 private property inspections (45%), 11,620 linear feet of smoke testing (98%), and two wet weather inspection (50%). Data delivery to MSD continued and the consultant analyzed the collected data to develop rehabilitation recommendations. CCTV investigations found significant roots in the Hazelwood system and planning was completed to have this area included in the FY11 Root Removal program. A draft SSES report was submitted. MSD completed a site assessment of the pump station and found no station deficiencies. During the period of January 1, 2011, to March 31, 2011, a final SSES report will be submitted to MSD prior to February 28, 2011. MSD will review the rehabilitation recommendations in the SSES report and begin the preparation of rehabilitation bid documents. The project will be completed by June 30, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.

Small WQTC Areas

- Lake Forest Pump Station SSO Investigation (Budget ID H09173) - The SSES contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 628 manhole inspections (97%), 204 private property inspections (94%), 11,431 linear feet of smoke testing (100%), and four wet weather inspections (100%). Data delivery to MSD continued and the consultant started analyzing the collected data to develop rehabilitation recommendations. A draft SSES report was submitted to MSD. During the period of January 1, 2011, to March 31, 2011, all field activities will be completed. Data delivery to MSD will be completed and a final SSES report will be submitted to MSD. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by December 31,

2012, in accordance with the IOAP schedule and the Amended Consent Decree.

- Riding Ridge PS Improvements (Budget ID H09175) – The Riding Ridge Pump Station is in the Hunting Creek North WQTC service area in Prospect, Kentucky. The Prospect SSES Project (H09391) will look for sources of I&I reduction for the following SSDP projects: Riding Ridge PS Improvements (Budget ID H09175), the Gunpowder PS Inline Storage Project (Budget ID H09242), the Fox Harbor Inline Storage Project (Budget ID H09176) and the Fairway View PS Improvements Project (Budget ID H09177). The SSES contractor continued field inspection activities to address observed high wet weather flows and existing SSOs in the project area. Field activities completed as of December 31, 2010, include 380 manhole inspections (74%), 91,555 linear feet of CCTV inspection (91%), 325 private property inspections (143%), 97,308 linear feet of smoke testing (100%), and four wet weather inspections (100%). Data delivery to MSD continued and the consultant started analyzing the collected data to develop rehabilitation recommendations. A draft SSES report was submitted to MSD. During the period of January 1, 2011, to March 31, 2011, all field activities will be completed, data delivery to MSD will be completed and a final SSES report will be submitted to MSD. The project will be completed by December 31, 2014, in accordance with the IOAP schedule and the Amended Consent Decree.
- Gunpowder Pump Station In-line Storage Project (Budget ID H0924) – This project is located in the Prospect SSES area. Please see the above Riding Ridge Pump Station Improvements project information for details. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by December 31, 2021, in accordance with the IOAP schedule and the Amended Consent Decree.
- Fox Harbor In-line Storage Project (Budget ID H09176) – This project is located in the Prospect SSES area. Please see the above Riding Ridge Pump Station Improvements project information for details. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by December 31, 2021, in accordance with the IOAP schedule and the Amended Consent Decree.
- Fairway View Pump Station Improvements Project (Budget ID H09177) - This project is located in the Prospect SSES. Please see the above Riding Ridge Pump Station Improvements project information for details. Any potential I&I reduction determined from the SSES project results and any completed remediation will be monitored and included in the final design evaluation of this project. The project will be completed by December 31, 2014, in accordance with the IOAP schedule and the Amended Consent Decree.

Other Projects

- For CPE/CCP modification projects refer to **Section 6.5: Comprehensive Performance Evaluations and Composite Correction Plans**

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.

This section will report on the progress of the projects identified in the IOAP, Volume 2 – Final CSO LTCP. Refer to **Appendix A** for a chart showing the schedule of the activities described in this section. Projects are now listed by Budget ID in the chart. Note that the schedule in **Appendix A** shows completion dates that are earlier than contained in the Final LTCP. These early completion dates represent targets for MSD's project management use, but do not represent a change in schedule commitments.

The following activities were performed during this reporting period or are planned for the next period.

3.3.2.1 Green Demonstration Projects

- MSD Main Office Parking Lot Bioswale (Budget ID H09424) – A sewer flow meter was installed downstream of the project area for pre-construction monitoring. Three types of Best Management Practices (BMPs) have been installed on the MSD site. Pervious concrete has been installed in the main parking lot and pavers in the front of the building along Liberty Street. A bio-swale/rain garden has been installed along the northeast corner of the property. Half of the building's roof drains have been disconnected from the combined sewer system and redirected to the bio-swale/rain garden. These BMPs were monitored and MSD determined no additional BMPs were required. A review of the post construction flow monitoring data for October 2010, and November 2010, demonstrated the effectiveness of the BMPs installed. The project was both substantially complete and certified on December 3, 2010. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.
- Seventh and Cedar Green Parking Lot (Budget ID H09425) – Construction activities were completed and the project was certified substantially complete on December 30,

2010, and a certification letter will be sent on January 4, 2011. Three rain gardens, a bioswale and pavers were installed in the Office of Employment parking lot. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- Scholar House Green Parking Lot (Formerly Second and Broadway Green Parking Lot Project) (Budget ID H09426) – An alternate demonstration project at the Scholar House Green Parking Lot replaced the Second and Broadway Project as a demonstration due to coordination issues with the property owner. Construction activities were completed and the project was certified substantially complete on December 30, 2010, and a certification letter will be sent on January 4, 2011. A green roof was installed on the Scholar House and a bio-swale was installed in their parking lot. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- Third and Ormsby Biofiltration Swales (Budget ID H09427) – The project was substantially completed on December 23, 2010, and certified on December 27, 2010. A bioswale was installed in the right-of-way along Third Street near the intersection with Ormsby Avenue. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- Sixth and Martin Luther King (MLK) Place (Formerly Sixth and Muhammad Ali) (Budget ID H09428) – Construction activities were completed and the project was certified substantially complete on December 28 2010, and a certification letter will be sent on January 4, 2011. The project installed a green roof, bioswale and parking pavers at this location. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- Housing Authority Green Roof at 801 Vine Street (Formerly Sixth and Broadway Rain Garden) (Budget ID H09429) – Construction activities were completed and the project was certified substantially complete on December 30, 2010, and a certification letter will be sent on January 4, 2011. A green roof was installed on the property. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- W. Gaulbert and W. Hill (Formerly Seventeenth and W. Hill) Permeable Alley (Budget ID H09430) – Planning for this project was underway and the site has been determined to be unfavorable due to its steep terrain and an alternate site was located and selected in an adjacent alley between 17th and 18th streets and W. Gaulbert and W. Hill Street. As of December 31, 2010, the construction of the project was substantially complete on October 15, 2010 and certified on October 29, 2010. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- 2300 Block of Congress (Formerly Seventh and Market) Permeable Alley (Budget ID H09431) – During planning for the Seventh and Market project it was determined that a high rise office building and parking structure is currently under construction at this location and the alley is being used for construction staging. This project has been

relocated to another block of the same alley. As of December 31, 2010, the construction of the project was substantially completed on November 9, 2010 and certified on November 11, 2010. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- Billy Goat Strut (Formerly Campbell and Main) Permeable Alley (Budget ID H09432) – The project was renamed the Billy Goat Strut Alley Project. The construction of the project was substantially complete on October 8, 2010, and certified on October 29, 2010. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.
- Swift Parking Lot Bioswale (Formerly Twelfth and Jefferson) Green Street (Budget ID H09433) – The Swift Corporation parking lot was chosen as a replacement to the Twelfth and Jefferson Green Street Project due to favorable site conditions. The construction of the project was completed on December 30, 2010 and certification letter will be sent on January 4, 2011. A bioswale was installed along the west edge of the Swift parking lot. The project was completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.
- Two (2) Additional Rain Garden Projects (Budget ID H10039 and H10040) – As of December 31, 2010, construction activities for both projects were complete. The Brandeis Apartments Rain Garden was substantially complete on November 15, 2010, and certified on November 21, 2010. The Clifton Triangle Area Rain Garden was substantially complete on November 11, 2010, and certified on November 12, 2010. These projects were completed prior to December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.
- I-264 Off-Ramp Dry Well (Budget ID H09442) – Design has been placed on hold, contingent on coordination with EPA Region 4 regarding permitting requirements. MSD is reviewing other possible green opportunities as a replacement for this project. These projects will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- I-264 On-Ramp Dry Well (Budget ID H09443) - Design has been placed on hold, contingent on coordination with EPA Region 4 regarding permitting requirements. MSD is reviewing other possible green opportunities as a replacement for this project. These projects will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- I-264 and Gibson Dry Well (Budget ID H09444) - Design has been placed on hold, contingent on coordination with EPA Region 4 regarding permitting requirements. MSD is reviewing other possible green opportunities as a replacement for this project. These projects will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.
- Russell Lee Drive Dry Well (Budget ID H09445) - Design has been placed on hold, contingent on coordination with EPA Region 4 regarding permitting requirements. MSD is reviewing other possible green opportunities as a replacement for this project.

These projects will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.

- JFK Montessori Area Dry Well (Budget ID H09446) - Design has been placed on hold, contingent on coordination with EPA Region 4 regarding permitting requirements. MSD is reviewing other possible green opportunities as a replacement for this project. These projects will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.

- Two Remaining (2) Additional Rain Garden Projects – During the period January 1, 2011 to March 31, 2011, MSD will continue the selection and planning phases of these projects. These are two remaining, unnamed Green Demonstration Project commitments listed in the IOAP. MSD is reviewing two sites for these projects; Christ the King Church Rain Garden and the Bardstown Road Presbyterian Church Bioswale Projects. During the period of January 1, 2011, to March 31, 2011, MSD will continue to review these sites and conclude whether they are applicable for the two additional rain garden projects. These projects will be completed by December 31, 2011, in accordance with the IOAP schedule and the Amended Consent Decree.

3.3.2.2 Gray Infrastructure Projects

- Logan Street Basin (Budget ID H09142) – This project consists of an 11.83 MG underground storage basin, and approximately 5,000 linear feet of new interceptor sewers. Completed the preliminary design study to evaluate available/alternative technologies and establish design protocols for the other 12 CSO basin designs. This study provided a design of the basin to a 10% stage. Alternatives for the basin site and the CSO interceptor alignment have been investigated. Phase I Environmental Site Assessment, historical and archaeological review, and review of permit requirements have also been completed. Preliminary design has been initiated and is in progress. A Phase II Environmental Site Assessment was initiated. The acquisition of the property for the basin was completed. As of December 31, 2010, 30% design was in progress, negotiations for the basin property and the Phase II Environmental Site Assessment were finalized. During the period of January 1, 2011, to March 31, 2011, design will continue. The project will be completed by December 31, 2017, in accordance with the IOAP schedule and the Amended Consent Decree.

- CSO108 Dam Modification (Budget ID H09128) – The project was substantially complete on December 30, 2010, and certification letter will be sent on January 18, 2011. The project was completed by December 31, 2010, in accordance with the IOAP schedule and the Amended Consent Decree.

- CSO206 Downspout Disconnections (Budget ID H09131) – Continued the project for private property owners to be reimbursed for downspout disconnection in the CSO206 area. During the period of January 1, 2011, to March 31, 2011, inspections and dye tests for property owners expressing an interest in participation of the program will continue. Payment for disconnections will continue, and data will continue to be tracked in HANSEN. The project will be completed by December 30, 2013, in accordance with the IOAP schedule and the Amended Consent Decree.

- CSO123 Downspout Disconnection (Budget ID I04247) – During the period of January 1, 2011, to March 31, 2011, MSD will continue the planning phase of this project. The project will be completed by December 31, 2012, in accordance with the IOAP schedule and the Amended Consent Decree.
- CSO058 Sewer Separation (Budget ID H09130) – During the period of January 1, 2011, to March 31, 2011, MSD will continue the planning phase of this project. The project will be completed by December 31, 2014, in accordance with the IOAP schedule and the Amended Consent Decree.
- CSO140 Sewer Separation (Budget ID H09122) - During the period of January 1, 2011, to March 31, 2011, MSD will continue the planning phase of this project. The project will be completed by December 31, 2015, in accordance with the IOAP schedule and the Amended Consent Decree.
- I-64 and Grinstead Drive Storage Basin (Budget ID H09121) – As of December 31, 2010, the 10% design was completed and negotiations began for the 30% design. The 10% design confirmed that the basin can not be gravity in and gravity out, but must have a pump station to be effective and identified several alternative locations for placement of the basin. During the period of January 1, 2011, to March 31, 2011, the 30% design will be in progress. The project will be completed by December 31, 2014, in accordance with the IOAP schedule and the Amended Consent Decree.
- Paddy's Run Wet Weather Treatment Facility (Budget ID H09124) – As of December 31, 2010, MSD initiated a review of existing utility easements on adjacent property to the proposed Facility site. The purpose of the investigation is to determine any restrictions to the access routes that may be encountered on the properties due to the presence of overhead utilities and pipelines and if MSD has any authority to use alternative access routes. During the period of January 1, 2011, to March 31, 2011, MSD expects to meet with the adjacent property owners regarding possible easement restrictions, expansion of the existing access route and continue with the schematic design. The project will be completed by December 31, 2014, in accordance with the IOAP schedule and the Amended Consent Decree.
- Adams Street Storage Basin (Budget ID H09135) – Design negotiations have been initiated for this project to reduce overflows from CSO172. During this reporting period, it was determined that all storm water connections to this CSO have already been separated, thus eliminating overflows. The project had included a 0.12 MG storage basin. As of December 31, 2010, monitoring of the CSO and watershed was in progress. During the period of January 1, 2011, to March 31, 2011, monitoring will continue and a recommendation on the IOAP project will be compiled. It is anticipated that this project will not be necessary and will be deleted. The monitoring will also determined if CSO172 can be closed.
- Story Avenue & Main Street Storage Basin (Budget ID H09127) – Design negotiations have been initiated for this project to reduce overflows from CSO020. Project includes a 0.13 MG storage basin. During this reporting period, it was determined through additional studies of the South Fork of Beargrass Creek IOAP solutions that this basin may need to be increased in size and scope. Therefore, the design negotiations have

been suspended until the scope is defined. As of December 31, 2010 no activity occurred on this project. During the period of January 1, 2011, to March 31, 2011, it is anticipated MSD will re-start the 10% design negotiations after the results of the review of South Fork of Beargrass Creek IOAP solutions. The project is scheduled to be complete by December 31, 2013, in accordance with the Amended Consent Decree.

Flood Pump Station Projects

- 34th Street Flood Pump Station DWO Elimination (Budget ID H08478) – As of December 31, 2010, the project was advertised for bidding on December 6, 2010. During the period of January 1, 2011, to March 31, 2011, the project will be awarded and a notice-to-proceed for construction will be issued. It is anticipated that the gate and actuators will take 30 weeks for delivery with construction activities starting summer 2011. The project will be completed by December 31, 2012, in accordance with the IOAP schedule and the Amended Consent Decree.
- 4th Street Flood Pump Station DWO Elimination (Budget ID H08477) - As of December 31, 2010,the project was advertised for construction on November 19, 2010. During the period of January 1, 2011, to March 31, 2011, the project will be awarded and a notice-to-proceed for construction will be issued. It is anticipated that the gate and actuators will take 30 weeks for delivery with construction activities starting summer 2011. The project will be completed by December 31, 2012, in accordance with the IOAP schedule and the Amended Consent Decree.
- 27th Street Flood Pump Station DWO Elimination (Budget ID H09126) – A notice-to-proceed for design was issued on December 20, 2010. During the period of January 1, 2011, to March 31, 2011, design activities will begin. The project will be completed by June 30, 2013, in accordance with the IOAP schedule and the Amended Consent Decree.
- Shawnee Flood Pump Station DWO Elimination (Budget ID H09136) – A notice-to-proceed for design was issued on December 20, 2010. During the period of January 1, 2011, to March 31, 2011, design activities will begin. The project will be completed by June 30, 2013, in accordance with the IOAP schedule and the Amended Consent Decree.

3.4 Post Construction Compliance Monitoring Program

Within the Integrated Overflow Abatement Plan, monitoring efforts that will support the impact evaluation of the plan implementation are discussed in Volume 1, Section 6.5 Post Construction Compliance Monitoring. These efforts will be incorporated into MSD's overall system and environmental data management planning and activities, which support various MSD initiatives including operational support, the Municipal Separate Storm Sewer System (MS4) program, hydraulic and water quality modeling, and a range of regulatory reporting and trending requirements as well as overflow abatement impact analyses related to the IOAP.

The following is a brief summary of recent and upcoming activities related to each element:

- Environmental Data Integration Site Development – Pulled in sewer flow and rain gauge data into the integrated site. Tested dry weather flow alarms for CSOs against recorded rainfall. Defined the push database structure for PI data, stream data, and sonde data. Began testing of the mapping capabilities and data pushes to keep data sets current. Continue integration of the data sets and finalize the mapping concept for the site in the next quarter.
- Quality Assurance and Quality Control Definition and Implementation – Used proactive data notification processes at sewer flow meter sites which allow the real-time data sets to notify MSD staff when certain conditions are recorded in the field. MSD executed a contract that will formally establish and document proper quality control measures to be used on MSD's data. The development of these measures is approximately 50% complete. 90% completion of the recommended measures will be delivered by the end of the year. MSD is currently refining the recommended QA/QC measure and will begin work to implement the measures that are reasonable and fit the utility needs.
- Green Demonstration Project & Programmatic Monitoring and Assessment - MSD is currently monitoring those projecting that have been built and has begun work on the gray to green right-sizing effort as outlined in the IOAP in two pilot CSO basins – CSO190 and CSO130.
- Sewer Hydraulic and Stream Water Quality Modeling for Impact Analyses – Executed contracts for sewer modeling services to address model cleanup. Recalibration is currently being completed with cross-quality control for each model to begin in this quarter. Began defining model integration for the Morris Forman and Derek R Guthrie WQTC areas, which will continue in the next reporting period.
- Water Quality Sampling for IOAP Projects and the Long Term Monitoring Network – Recreational contact sampling will continue throughout this network 5 times per month during the recreational contact season. Consultant contracts to provide continued dry and wet weather sampling around the Big 4 SSO project areas have been executed. Prior to September 30, 2010, MSD confirmed a specific timeline for wet weather sampling across the Long Term Monitoring Network as noted in the IOAP. A dry weather sampling event and wet weather event was captured prior to December 31, 2010. Currently reviewing the routine sampling program for possible modifications to fit more rigorous regulatory needs.
- Sewer Flow Monitoring Network Expansion – Sewer flow monitoring network is being maintained and site notifications are being enhanced in MSD's Telog Enterprise system. MSD will be installation of new monitoring sites in the next quarter.
- Stream Flow & Ambient Monitoring – Continued MSD's partnership with the USGS with an annual cost and resource share for the maintenance of stream flow gauges and data sondes that are installed at the Long Term Monitoring Network locations. This data is reported by telemetry to the USGS public website as well as MSD's internal Contrail website. These monitoring efforts will continue through FY11.

- Rain Gauge and Radar Rainfall Data Collection – Continued to operate an established rain gauge network of 18 gauges that report data every 5 minutes through telemetry. In addition, MSD receives 4-hour predictive and real time radar rainfall data from a vendor across approximately 700, 1-square kilometer pixels that cover the county. The vendor also delivers a gauge-adjusted radar rainfall data set at the end of each month. This data is used to support operational decisions as rain events are approaching and are occurring. The Real Time Control system also utilizes the rainfall data to run simulations and develop set points for control sites throughout the combined sewer system. The radar rainfall is also used for modeling simulations that support various planning and design decisions. The radar rainfall data along with rain gauge and stream monitor information is served to users through an internet application.
- Fish, Macroinvertebrate and Habitat Surveys - Fish, macroinvertebrate and habitat surveys for the Long Term Monitoring Network were completed in December 2009 as part of the every other year schedule identified in the IOAP. MSD is currently working to complete an ecological database to house this information as it is collected in order to keep a cleaner historical record of this complex information. This effort will continue through the next year along with contract negotiations with the University of Louisville to complete an algae analysis for collected data. Fish sampling at the LTMN sites occurred before December 31, 2010.

3.5 Green Program Development

The Green Program framework was submitted as part of the IOAP. The following programmatic development activities were underway during this reporting period.

- Completed the IOAP 2010 green infrastructure demonstration projects as described in the IOAP, with completion dates of December 31, 2010.
- Continued the remaining IOAP 2010 green infrastructure demonstration projects as described in the IOAP, with completion dates of December 31, 2011.
- Continued internal discussions on the development of the programmatic elements, including the financial incentives program for government and private (commercial and residential) partners, public information, outreach and education, project identification, prioritization and implementation, etc.
- Continued the green infrastructure effectiveness monitoring for the 19 demonstration projects. Data will be utilized to document the efficacy of the demonstration technologies for “right-sizing” of gray IOAP projects.
- Continued meetings with internal staff and external customers to discuss partnership opportunities and potential green projects.
- Continued development of design guidance documents for green infrastructure including the MSD GMP Manual, and a work plan to update appropriate MSD design documents. GMP Manual is 90% complete and it is anticipated a 100% draft will be completed by the end of the next quarter.
- Continued development of a green infrastructure tracking program followed by an inspection program for those green assets constructed by MSD, its partners, and

private residents; specifically inspect those assets that are being used in impervious area reductions and CSO reduction and project sizing calculations.

- Continued a review of the existing Louisville Metro Land Development Code to identify potential impediments to green infrastructure implementation, and also began to identify proactive measures that could facilitate institutionalizing green practice in typical developments. A plan to present recommended suggested Land Development Code changes to Louisville Metro government for consideration will be developed.
- Awaited the results of the grant submittal for State of Kentucky funding of Green Infrastructure projects. Updates will be provided in future quarterly reports.
- Continued discussions with the EPA Office of Research and Development project for collaborative performance monitoring for the impacts of green infrastructure from a project level to a basin level.

3.6 Green Program Miscellaneous Projects

The following projects are a continuation of the Green Program IOAP commitments to continue to implement and complete green projects until December 31, 2020. These projects are in addition to the 19 Green Demonstration projects. The following projects were active during this reporting period.

- Bardstown Road Presbyterian Church Bioswale (Budget ID H11044) – As of December 31, 2010, 30% design report, drawings and construction estimates were received. The proposed improvements contain a bio-filtration swale, rain gardens, pervious pavement and pavers for the parking areas. The church will also have their downspouts disconnected from the combined system and directed to cisterns for water harvesting. During the period of January 1, 2011, to March 31, 2011, MSD will review the 30% design and will meet with the property owners for final approval. Based on final approvals from both MSD and the property owner, final design will begin. It is anticipated that the project will be under construction early 2011.

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. The following activities occurred within this reporting period or are scheduled to occur during the next reporting period.

4.1.1 Overflow Advisory Signs

- No overflow advisory signs were repaired or replaced between October 1, 2010, and December 31, 2010.

4.1.2 Electronic Notifications

- Notified customers who voluntarily sign up to receive email alerts regarding sewer overflows.
- Provided notification on 4 Dry Weather Unauthorized Discharges of more than 1000 gallons. This event required additional notification due to the volume of dry weather overflow involved.
- Continued the process to evaluate the email alert program and messages and develop an action plan to increase participation in the email program, and to improve retention of those who sign up. Pursuing the use of "Dean", a proprietary e-mail and text notification system, to broadcast messages to the public. Dean has been non responsive due to the limited volume of MSD notifications proposed.

4.1.3 Print Notifications

- Mailed 758 Project WIN information packets to customers who called with questions about the Amended Consent Decree – specifically regarding overflows, discharges, plumbing modification and the surcharge fee.
- Mailed out 168 FOG residential public outreach letters to areas that had FOG issues during this reporting period.

4.2 Public Education Programs

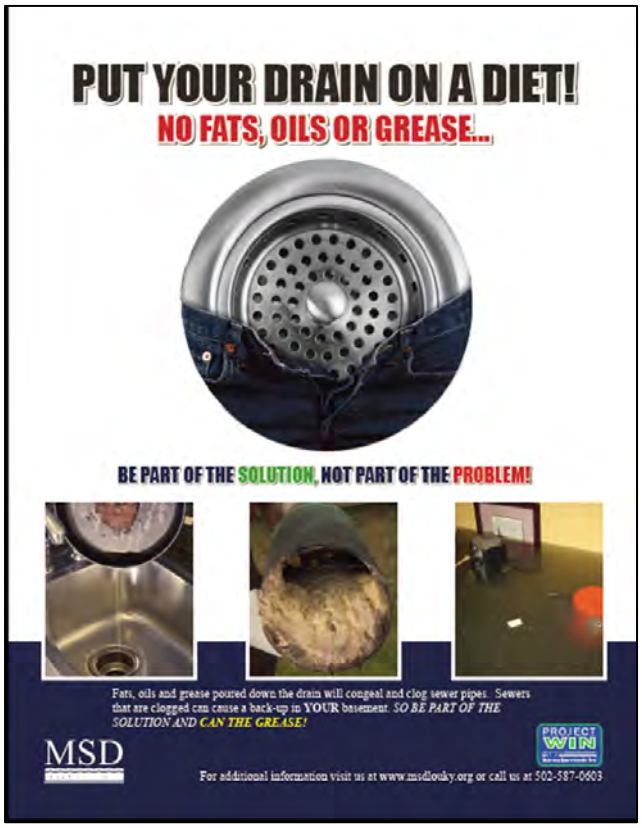
MSD has developed a public education program aimed at disseminating information to the public on MSD's primary business functions with emphasis on wastewater, storm water and flood protection. Efforts continued to utilize various media outlets, including television, radio, magazines, and newspapers to serve as a conduit for circulating information to the public. The following activities occurred within this reporting period or are scheduled to occur.

4.2.1 Radio and Television Activities

- Continued to show on Metro TV (Channel 25) the Project WIN 2008 video series - a series of seven videos to inform the public about MSD, the Amended Consent Decree

and Project WIN. From October 1, 2010, to December 31, 2010, the video was shown 22 times.

4.2.2 Printed Media Activities

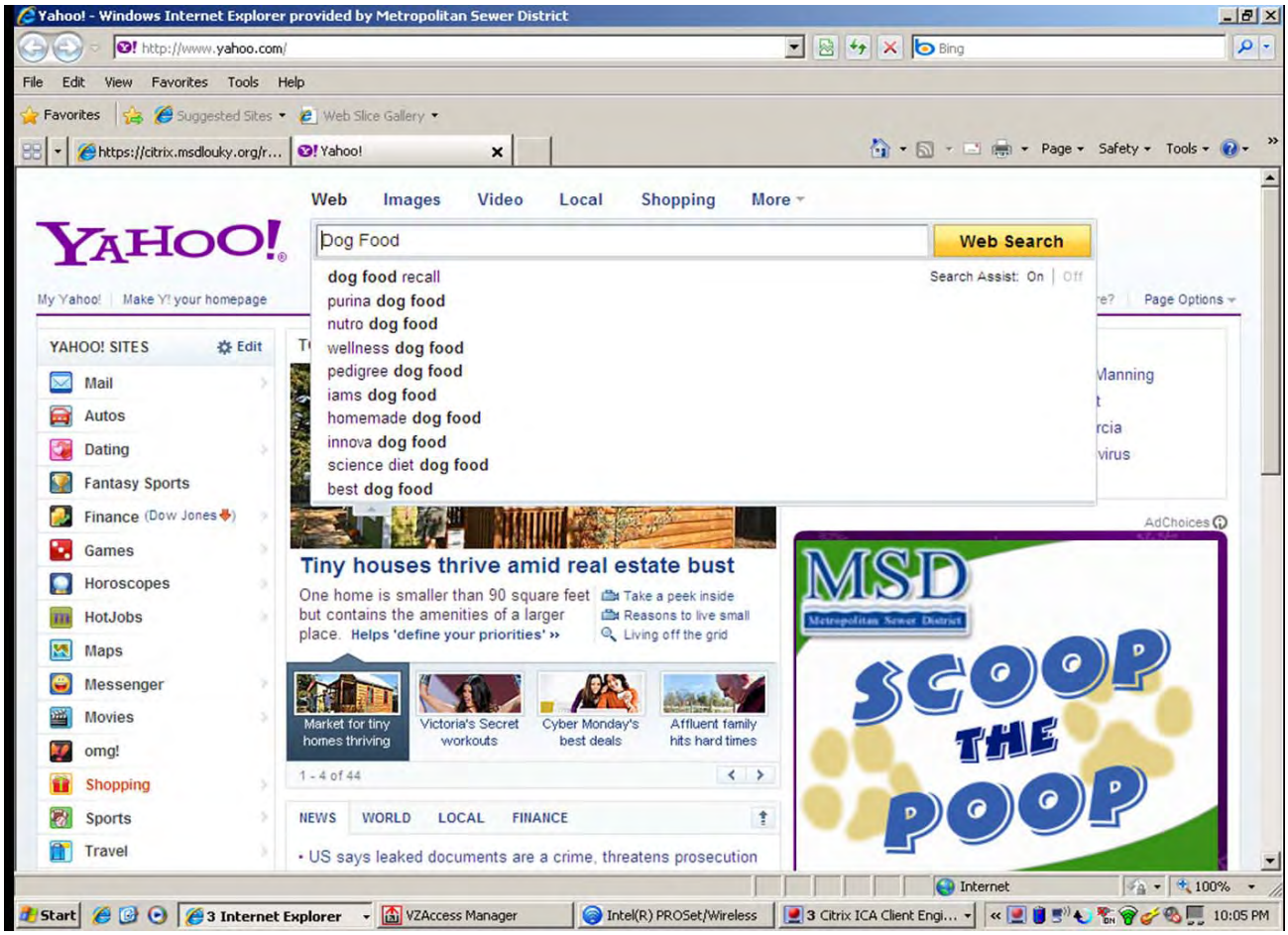


- Advertised to inform the public on Project WIN activities in *Business First (Fast 50* Issue*, and Book of Lists* Issue*),* and *Louisville Magazine*.
- Provided the MSD *Crosscurrents* to elected officials, internal staff, and customers that have contacted MSD with either a drainage or a back-up problem. The majority of the articles relate to Project WIN. On-line copies of *Crosscurrents* can be viewed at http://www.msdlouky.org/aboutmsd/cross/cc_spring10web.pdf
- Provided the MSD *Update* to customers and staff each month. Project WIN related articles are contained in each issue. These publications are available on the MSD Web site. On-line versions of *Update* can be viewed at http://www.msdlouky.org/aboutmsd/updatenews.htm
- Worked with the Courier Journal to run newspaper advertisements educating the public about overflows and pollutants in waterways. Two-page glossy slick inserts were developed and published in the November 2, 2010, and December 19, 2010, Courier Journal. The messages were coordinated with stakeholder priorities and seasonal information. The messages published in the quarter included: Flooding, the FOG program, and conscientious use of washing machines and dishwashers during wet weather. Copies of the inserts are included in **Appendix I – Public Information and Outreach Materials**.

4.2.3 Electronic Media Activities

- Executed a contract and deployed movie theatre advertisements in two theatres in Louisville Metro describing how residents can positively impact water quality by diligent pet waste pickup and proper swimming pool opening and closing procedures. These advertisements will continue to run through May 2011.

- Continued working with the Courier Journal to develop educational advertisements for the on-line edition of the newspaper to warn the public about overflows and pollutants in waterways. Messages are focused at reaching dog owners, families, and the general public. On-line advertisements will direct interested readers to the Project WIN website for additional information. A report from the Courier Journal outlining the web traffic, impressions, and web hits from visitors directed to the Project WIN website from the Courier Journal website for the quarter is summarized below:
  - There were a total of 661,445 impressions. An impression is a page view of how many times the ads were loaded onto the Courier Journal website.
  - During the quarter there were 92 clicks. This makes the average click-through rate .02 (number of times the ad was clicked on per number of impressions). The average click-through rate for the Courier Journal is .05.
  - Worked with the Courier Journal to utilize a partnership between Yahoo and the Courier Journal website to take focus messages based upon searches performed with the Yahoo search engine. Keywords were developed and tagged to MSD messages. When keywords are searched with the Yahoo search engine, MSD advertisements associated with those keywords are presented to users with IP addresses traced back to Louisville Metro. This



partnership and capability allows MSD to deliver messages to the appropriate audiences. There were 112,210 Yahoo! impressions, with 73 clicks. The average click-through rate for the Yahoo impressions was .07.

- Ads can be viewed at the following website links:
  - Courier Journal: www.courierjournal.com
  - Moms Like Me: www.louisville.momslikeme.com
  - Louisville Metromix: www.louisville.metromix.com

4.2.4 Project WIN Website

- Continued to post Project WIN information on the website. On MSD's home page, the Project WIN area provides important information on the condition of area streams and shows a warning if overflows are likely to be happening or have happened in the past 48 hours. Clicking on the Project WIN logo brings up the Project WIN site, which includes a repository of public documents related to Project WIN, tips for customers to help control overflows through their personal actions, information about the history and background of Project WIN and a place to sign up for overflow advisory emails warning when significant precipitation has caused overflows in MSD's system. This website can be found at www.msdlouky.org/projectwin.

- Continued to publish information on suggested behavioral changes on the Project WIN website titled: *How to be Part of the Solution*. This new page includes information on how individuals can help reduce sewer overflows and make a positive impact on stream water quality during their daily activities.

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 Green Infrastructure Workshops and Activities

- Installed a rain garden at 2817 Brownsboro Road on October 18, 2010.
- Presented to the Kentucky/Indiana Master Gardeners final class at the Louisville Nature Center on October 19, 2010.
- Presented on rain barrels, rain gardens and urban reforestation to the Rose Hill Neighborhood Association on November 9, 2010.
- Presented to the Park Terrace Neighborhood Association at 1611 Spring Street on November 17, 2010.
- Planted 100 trees at Slaughter Elementary at 3805 Fern Valley Road on November 20, 2010.

4.3.2 Clean Streams Workshops and Activities

- There were no clean stream activities during the reporting period.

4.3.3 Outreach Activities for Students

- Continued planning for the implementation of outdoor classrooms at the Floyds Fork WQTC.

4.3.4 IOAP Project and Program Meetings

- There were no public IOAP meetings held during the reporting period.
- Facilitated a WWT meeting on November 20, 2010. This meeting included an MSD update on capital projects, green initiatives, and public outreach.
- Provided information to the WWT through the Project WIN website, at www.msdlouky.org/projectwin.

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-D-1 Utility Information Management Systems

This Quarter

- Continued to expand the performance measure tracking system on the PWIN Dashboard.
- Enhanced the project management SharePoint site "*MSD Projects*" Project Control System interfaces to support external fact sheet generation, automatic updating, etc.
- Delivered overview *MSD Projects* SharePoint training to project managers and project teams.
- Began developing customized *MSD Projects* SharePoint training for construction inspectors, project coordinators, and site content managers.
- Identified roles and responsibilities for MSD staff to assume complete ownership and responsibility for *MSD Projects* SharePoint site, including establishing site administrator roles.

- Worked with several MSD Directors to begin process to establish Governance standards for the *MSD Projects* site use and control.
- Assessed user issues/problems with the *MSD Projects* SharePoint site, and addressed as appropriate with training and/or modifications.
- Developed on-going training needs for project management work flows and worked with the Finance Division to develop project manager training programs to be delivered starting in January 2011.
- Began development of programmatic sites not related to capital project management.
- Continued to support special requests for non-standard project site development.
- Continued to work on the Hansen system upgrade to version 8.0.

Next Quarter

- Continue to expand the performance measure tracking system on the PWIN Dashboard.
- Upgrade Crystal Report software to Business Objects and train staff.
- Deliver make-up sessions of overview *MSD Projects* SharePoint training to project managers and project teams who missed the first round of training.
- Deliver customized *MSD Projects* SharePoint training for construction inspectors, project coordinators, and site content managers.
- Develop transition and training plan to facilitate MSD staff to assuming complete ownership and responsibility for *MSD Projects* SharePoint site, including establishing site administrator roles (target completion date of June 30, 2011).
- Finalize, document, and train appropriate staff on Governance standards for the *MSD Projects* site use and control.
- Assess user issues/problems with the *MSD Projects* SharePoint site, and addressed as appropriate with training and/or modifications.
- Deliver training in project management work flows in cooperation with the Finance Division's project manager training.
- Continue development of programmatic sites not related to capital project management.
- Continue to support special requests for non-standard project site development.
- Continue to work on the Hansen System upgrade.

M-E-4 Engineering Programs (Sewer System Design Program)

This Quarter

- Processed an additional 18 customer applications for participation in the Sewer Service Line Replacement Program this quarter. Since the program's inception, 42 applications have been processed totaling over $113,560 in no-interest loans for service line replacement. Several additional customers are currently in the process of applying for the program.

Next Quarter

- Continue implementing the program to finance replacement of private sewer service lines at property owner request.

M-E-8 Continuing Sewer System Assessment

This Quarter

- Continued PACP sewer inspection to set baseline conditions for prioritization. **See S-C-1, 2, 3 & 4 Gravity Line Preventive Maintenance section**.
- Confirmed new priority areas for FY11 Condition Assessment and initiated planning for future inspections.
- Scheduled PACP training for staff and field inspection training for internal MSD CCTV crews.
- Completed the Floydsburg Road Sanitary Sewer Rehabilitation project.
- Bid the East Rockford Lane Pump Station Relocation project.
- Completed Flexidata rollout to additional MSD crews.

Next Quarter

- Continue quality assurance and quality control on the data received from sewer inspections.
- Continue analysis of the data gathered in the ICA, CCTV and SSES efforts to prioritize maintenance and rehabilitation needs. Begin development of bid packages to execute these priorities.
- Continue improvement of the Blockage Abatement Plan to define cyclical maintenance procedures for lines demonstrating recurring blockage abatement needs.
- Prepare bid documents for additional areas/lines for FY11 rehabilitation based upon the need for credits, the data from condition assessments and evaluations, and results from the ICA and SSES data.
- Complete contracting for ICA Phase 4 and targeted SSES projects.
- Finalize the plan for the BGI rehabilitation bid.

M-E-9 Infrastructure Rehabilitation

This Quarter

- Edgewood Separation (Budget ID H09202) - The existing storm and sanitary lines in the area need to be replaced due to their poor condition. A project was created to replace the existing storm line and install new sanitary sewer lines. All existing sewer connections to the drainage facility were located and will be re-directed to the new line. Project was issued a notice-to-proceed for construction on November 23, 2010, and 326 feet of 8-inch pipe was installed out of a total of 349 feet. Between the period of January 1 to March 31, 2011, the remaining pipe will be installed and restoration is expected to be completed.

- Whipps Mill Basin (Budget ID H09202) - This project calls for raising two manholes on the Middle Fork Interceptor to a height two feet above the floodplain along Middle Fork. Chimney seals will also be installed on both manholes. The manholes are located in the Whipps Mill Basin, but soggy ground conditions have restricted access with the appropriate equipment. In the interim, the manholes have been covered with sediment. In the next quarter, MSD will locate the manholes again and raise and seal them if conditions allow.
- Goose Creek Pump Station (Budget ID F07070) Grinder Installation - MSD accepted the project on November 23, 2010. The project is currently complete and under a one year warranty period.
- Lea Ann Way Pump Station (Budget ID F07069) Grinder Installation - Final start-up and acceptance of the grinders took place on October 11, 2010. The start-up of the new hydraulic gates should have taken place in early November 2010, but the gates were not accepted by MSD. The hydraulic gate cylinder limit switches are not rated explosion proof or rated Class 1 Division 1. MSD requires that these switches be explosion proof due to the environment within the pump station. The additional parts needed to upgrade the cylinder limit switches have been ordered and should be installed by the end of January 2011. Once completed the project will be accepted by MSD.
- Brandeis Viaduct #2 Pump and Controls Modifications (Budget ID F04192) - Construction started in January 2010. Change Order No. 1 was approved in May 2010 and consisted of extending the contract completion date by 60 days. The contract has experienced difficulty getting a firm delivery date from the pump supplier. The pumps were delivered on August 14, 2010. Final start-up and acceptance took place on October 20, 2010. However, the contractor is still onsite completing some small change order items requested by MSD maintenance personnel. The contractor should be completed with all work by the end of January 2011.
- Shively Pump Station Grinder Replacement Project Planning (H10151) - The project was advertised on November 2, 2010, with the bid opening taking place on November 18, 2010. The apparent low bidder was Pace Contracting. The Board approved award of the construction on December 13, 2010. A pre-construction meeting is scheduled for January 18, 2011, with a notice-to-proceed to be issued shortly thereafter.
- Fairmount Road Pump Station Expansion (Budget ID E00303) - The project was advertized on November 9, 2010, with the bid opening taking place on November 30, 2010. The apparent low bidder was MAC Construction and Excavating. The Board approved award of the construction on December 13, 2010. A pre-construction meeting is scheduled for January 11, 2011, with a notice-to-proceed to be issued shortly thereafter.
- Gorham Way Pump Station Elimination (C09061) - MSD staff reviewed several sewer alignments to eliminate this station. Substantial rock will likely be encountered in possible routes. A route was selected and final design was completed by September 30, 2010. Approval from the Kentucky Division of Water is currently pending. This project is currently not funded in the five year budget and is not an IOAP project. Any

further action on this project is on hold until funding is available and approval is obtained.

- Anchor Estates Rehab Project (Budget ID F08443) - During the SSES for the Anchor Estates area, multiple defects in the existing clay tile sewer system were discovered. This project was created to make corrections to address these defects. Project will include about 2000 feet of 8-inch cured-in-place pipe, manhole repairs and spot repairs. This work was bid prior to July 31, 2010, and is currently under construction. As of December, 2010 the construction was 90% complete. Between the period of January 1, 2011 and March 31, 2011 the project will be substantially complete.
- Canoe Lane/Fairway Lane Pump Station Elimination (Budget ID F06298) - This project will allow for the elimination of the Canoe Lane and Fairway Lane Pump Stations. The elimination of these pump stations will assist in the elimination of SSO's that currently exist downstream of these facilities. Design and easement acquisition are complete. Project was bid on April 12, 2010. Flow was diverted from Canoe Lane pump station on November 5, 2010 and flow was diverted on Fairway pump station November 11, 2010. The project is substantially complete.
- Lake Forest Pump Station, Force Main, and Interceptor (Budget ID E05509) - This project will allow for the elimination of the Berrytown, Starview, and Chenoweth Run WQTCs. Additionally, the St. Clair Drive and Arnold Palmer Pump Stations will be eliminated with this project. The effluent from these facilities will be directed to a proposed pump station that will pump into the existing Old Henry Force Main sending the wastewater to the Floyds Fork WQTC. Design on this project is complete and easement acquisition is nearly complete with one easement in negotiations for the interceptor construction. The project will be constructed in four phases. Phase I will be the construction of the new pump station and is the critical facility. The pump station completion will dictate the schedule for the completion of the interceptor to eliminate the existing pump stations and treatment plants. Phase I was bid on August 12, 2010. The project was given a notice-to-proceed on October 4, 2010, and is currently under construction. The second phase is the interceptor that will eliminate the existing Arnold Palmer Pump Station and Chenoweth Run/Lake Forest WQTC. This project will be bid between January 1 and March 31, 2011 with construction to be completed by December 31, 2011. The third phase is a section of interceptor that will be completed by developers. The fourth phase will be the interceptor to eliminate St. Clair Pump Station, Starview WQTC and Berrytown WQTC. The third and fourth phases are scheduled to start construction by the end 2011 and should be completed by the end of 2012.
- Jeffersontown Industrial Area 3 Rehabilitation (Budget ID A09227) - Due to a SSES performed in the Jeffersontown sewer shed, a portion of the collection system was identified as priority area for repairs to reduce or eliminate sources of inflow and infiltration. The project includes 10,800 feet of cured in place pipe lining. Also includes lining of manholes, chimney seals and watertight manhole castings and lids. As of December 2010, the project was advertised and bid on October 14, 2010, and awarded on November 8, 2010. Between January 1, 2011 and March 31, 2011, a

public meeting will occur and NTP will be given. Project is expected to be completed September 30, 2011.

Next Quarter

- Continue the Blockage Abatement Program improvement, including a Request for Proposal for time and material sewer and manhole maintenance and rehabilitation activities, both to be based on a fiscal year schedule and budget.
- Continue system rehabilitation projects currently underway as described above. Identify rehabilitation projects to be put out to bid by the end of the fiscal year.

M-E-10 System Capacity Assurance Program

This Quarter

- Coordinated activities related to the System Capacity Assurance Plan with tasks outlined in M-E-8 Continuing Sewer System Assessment, and O-A-1 Pump Station Operations Programs (Routine Operating Programs).
- Continued to collect formula-based defect inspection of significant footage of sewer lines in various sewersheds across the county. In addition, contract arrangements moved forward to increase these efforts. This information is currently being used to prioritize cleaning and rehabilitation efforts that will remove inflow and infiltration from the system and create capacity credits.
- Continued the assessment of Pump Station capacities, reviewed testing results and identified action items pertaining to deficiencies. Critical results of this effort are being documented on each station asset within the Hansen system.
- Completed a gap analysis of the capacity assurance program and initiated reporting improvements that should better address the impacts of internal capital projects.

Next Quarter

- Continue to track WQTC capacities, pump station capacities, and compare to new development flows in accordance with the SCAP, as previously described. Pump station capacity needs resulting from the pump testing and deficiency identification will be refined and remedial actions will be initiated for the highest priority stations.

M-H-1 Spare Parts Inventory Management

This Quarter

- Reviewed security scan control pads access for inventory control measures.
- Reviewed 100 material numbers (original cost of $44,926.86) with department managers to identify obsolete items updated to include photos for Metro review.
- Held third phase of the Bar-Code Scanning Project for quoting and procurement compliance, which is currently pending more SAP information.
- Began regular cycle counting at Hite Creek WQTC Storeroom with new personnel.

- Met with operations and maintenance at Morris Forman treatment center and agreed to set up secured Shift Cages for off-shift employees' supplies to control after-hours access of the storeroom.

Next Quarter

- Review security scan control pads access for inventory control measures.
- Finalize obsolete material process.
- Complete third phase of the Bar-Code Scanning Project for quoting and procurement compliance to implement a portion of the bar-code system.
- Prepare for annual physical inventories at Morris Forman, CMF and Hite Creek Storerooms. Continue working with cycle counting processes at Hite Creek.
- Stock all secured off-shift cages with critical and high-volume materials as determined by supervisors.
- Revise Engineering drawings of all grates and lids in Storeroom for security initiatives throughout the community, where theft is becoming an issue.
- Begin reporting of critical consumables for departments and budget needs.

M-H-2 Equipment and Tools Repair Management

This Quarter

- Prepared Preventive Maintenance schedule for new Silt Filter System around SSO catch basins at CMF. The system has improved the capture of contaminants before they enter the sewer system.
- Finalized and approved Lost Tool Asset SOP and forms. Standard Operating Procedures and forms have been approved by all Union representation.
- Drafted lower level recommendations of Security Asset Policy and SOP for improvements and tighter security.
- Audited tool lists for tight security and improved recordkeeping. Reorganized tool checkout cage in Storeroom.

Next Quarter

- Conduct tool inspections for Metro management and report to supervisors.
- Begin work on non-inventory spare parts to prepare lists for maintenance and support on MSDNet for information purposes throughout MSD.
- Meet with Security Asset group to continue developing recommendations of Security Asset Policy and SOP for improvements and tighter security.

M-H-4 Supplies Management

This Quarter

- Continued lean manufacturing quality improvements, such as 5-S, in the warehouse non-inventory working area at CMF.

- Continued monthly meetings with all locations to better service tool and inventory needs. Considered quarterly meetings in some departments with improved communications. Will schedule meetings for 2011.
- Developed lost, damage or stolen asset process flow for reporting and action.

Next Quarter

- Continue lean manufacturing quality improvements, such as 5-S, in the warehouse non-inventory working area at CMF. 5-S is a system to identify waste and opportunities for improvement, then bring order to the work environment through establishing efficient flow of material, supplies and activities.
- Schedule 2011 Storeroom, Operations and Maintenance meetings as requested by leadership (bi-monthly or quarterly).
- Update all SOP for Storeroom personnel and work with team to access job description for accuracy.

M-J-2 Legal Support Programs (Ordinances)

This Quarter

- Deferred further work on the redraft of the Private Property Ordinance. MSD continues to experience significant increase in participation in the voluntary Plumbing Modification Program, most likely due to backups caused by the August 4, 2009, storm. In addition MSD has initiated a voluntary Sanitary Sewer Line Replacement Program to address many of the issues that are the focus of the draft Private Property Ordinance. Work on this ordinance may be restarted later in calendar year 2011, after the backlog of Plumbing Modification projects has been reduced and the extent of participation in the Sanitary Sewer Line Replacement Program has been assessed.

Next Quarter

- No activity is anticipated on redrafting the Private Property Ordinance. Efforts to address private property I/I will continue to focus on expanding participation in voluntary programs.

M-K-1 Water Quality Monitoring Programs

- Refer to **Section 3.4 Post Construction Monitoring Program** for details on water quality monitoring efforts.

5.2 Operations Programs

O-A-1 Pump Station Operations Programs (Routine Operating Programs)

This Quarter

- Performed 2 electrical repairs and 0 mechanical repairs at various stations.
- Cleaned 15, installed 5 and repaired 69 miscellaneous items at various stations.
- Placed 28 generators at various stations.
- Vactored 257 wet wells at various stations.

- Performed 50 hauling operations during wet weather or during service at various stations.
- Approved the contract for final professional services on January 25, 2010, to update the current U.S. Army Corps of Engineers (USACE) Flood Operations and Maintenance Manual. The project will update the four volumes of the operations and maintenance manuals for the Flood Pump Stations (FPS) that will reflect current operational procedures and protocols along with revisions related to changes proposed to reduce dry weather overflows. Existing as-constructed plans, shop drawings and equipment data sheets were collected for all the facilities which are part of the flood protection system. This information was reviewed and will be updated as needed. A work shop was held December 16, 2010, to review existing SOPs and collect comment for needed revisions for the manual updates.
- Determined capital project priorities and the budgetary needs in monthly meetings with Metro Operations and Regulatory Services staff.
- Continued re-testing pump stations based on the previous draw down deficiency priorities. The study information was used to prioritize the second round of draw down testing. The new draw down data was compared against the 2007 results to update the baseline operations of each pump station. MSD staff completed new draw down tests on 128 pump stations. The testing was expanded to include an assessment of the mechanical and electrical equipment at each station. The data collected to date has been documented in a spreadsheet that uses logic statements to filter the data in an effort to prioritize rehabilitation projects. The data assessment tool will be used to help prioritize rehabilitation projects.

Next Quarter

- Continue meeting with Operations staff to determine capital project priorities and advise on the budgetary needs on a quarterly basis.
- Continue to analyze the pump station draw down database with test results and use the pump station spreadsheet tool to prioritize pump station rehabilitation efforts. These tasks will be coordinated with the Greenline and Emergency Generator Programs. Perform data review meetings with Operations to help prioritize rehabilitation efforts. Work with Operations staff to create purchase orders to complete needed equipment replacement or repair activities.

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

This Quarter

- East Region Emergency Generator Project (Budget ID H10082) – The purpose of this project is to install permanent stand-by generators at the following MSD pump stations: Devondale, Fairway View Court. The generators at both the Devondale and Fairway View Court sites experienced problems. Construction to correct the issues was complete as of October 4, 2010. All generators have been tested and accepted. The project is complete and currently under warranty.
- Central Region Emergency Generator Project (Budget ID H10083) – The purpose of this project is to install permanent stand-by generators at the following MSD pump

stations: Griffytown #1, Middletown Christian Village, Monticello Place and Six Mile Lane. Project has been completed and is currently in the warranty period.

- West Region Emergency Generator Project (Budget ID H10084) - The purpose of this project is to install permanent stand-by generators at the following MSD pump stations: Francell Court, Park Ridge Woods, Sunlight and Tree Line. All generators have been installed. All four generator sites have been tested and approved by MSD. Training has taken place on all four sites. Construction was considered complete as of August 27, 2010. All generators have been tested and accepted. The project is currently under warranty. Bids were received for the West Region Generator (Wathen, Villa Anna and Shady Villa Pump Stations) Phase IV Project on December 15, 2010.
- Finalized and advertised bid documents for the next round of generator sites (Caven, Wathen, Villa Anna and Shady Villa Pump Stations) on November 12, 2010. Bids were received for the Caven Pump Station generator on December 6, 2010. This generator installation was bid separately due to structural improvements required at the pump station for the new generator pad.

Next Quarter

- Continue to review lowest home opening elevations and confirmed pump station as-constructed information for the West Region. Begin planning, based on the field information obtained from the lowest home elevations for all regions and the as-constructed information, to prevent future home back-ups. Adjust pump station operating levels and install level sensors. Evaluate a wet well level gauge with telemetry for each pump station site to help in O&M.
- Award projects for Wathen, Villa Anna and Shady Villa Pump Stations give notice-to-proceeds for construction by February 28, 2011.

O-D-1 Grease Trap Inspection and Enforcement Program (Permitting Program)

This Quarter

- Issued 38 enforcement actions against Food Service Establishments for FOG violations found during reconnaissance and follow-up inspections conducted at Food Service Establishments that recently failed certification by an approved MSD Certified Grease Waste Hauler, as well as collection system grease blockage incidents.
- Sent 168 FOG residential public outreach letters to residents in neighborhoods in the MSD service area that had FOG issues.
- Removed 666,935 gallons of FOG from Grease Control Equipment at Food Service Establishments in the MSD service area.
- Conducted 8 Certified Grease Waste Hauler audits.
- Conducted FOG Hot Spot Reconnaissance in November and December 2010.
- Hosted an informational booth at the Annual Kentucky Restaurant Association Day at the Races Exposition on November 18, 2010. This is a showcase for the Food Service Industry which is attended by local and regional food service professionals. It is an

excellent opportunity to educate the industry on MSD's Consent Decree and Fats, Oils and Grease Program.

- Continued to track and report FOG Program performance measures.

Next Quarter

- Continue to conduct follow-up inspections at Food Service Establishments recently receiving failed grease control equipment certifications from approved MSD Certified Grease Waste Haulers and reconnaissance, as well as collection system grease blockage incidents. MSD will issue enforcement actions, as appropriate, to Food Service Establishments found to be in violation of the MSD Wastewater/Storm Water Discharge Regulations.
- Continue to send FOG residential public outreach letters to residents in neighborhoods in the MSD service area that had FOG issues.
- Continue tracking and reporting FOG Program performance measures.

O-F-1, 2 Flow Monitoring Field Operation Programs (Permanent Stations; Temp Stations)

- Refer to **Section 3.4 Post Construction Monitoring Program** for details on water quality monitoring efforts.

5.3 Maintenance Programs

S-A-1, 2 & 3 Pump Station Preventive Maintenance (Electrical; Mechanical; Physical)

This Quarter

- Continued the process of updating the preventive maintenance and inspection plan for flood pump stations based on a review of the USACE Inspection Guide. Staff is using the Hansen asset management system to track Flood Pump Station work orders as well as associated flood pump station assets such as station related floodgates.
- Continued to use Hansen for preventive maintenance tasks and corrective work orders for Metro Operations staff that maintain sewer pump stations and small water quality treatment centers.
- Continued the inspections on pump station sites that have deficiencies determined during the Draw Down and Greenline Programs. These two programs identify deficiencies in pump performance and evaluate potential improvements possible by modifying set-points in the level controls. Staff proactively inspected critical equipment on site during these inspections. Check lists were created to document the inspection and list corrective actions needed. Corrective work orders were issued as needed.
- Reviewed data collected from the Drawdown and Greenline Programs and start prioritizing pump stations for rehabilitation. Began executing purchase orders to replace equipment and rehabilitation projects to correct site deficiencies.

Next Quarter

- Conduct additional Hansen training for Metro Operations staff, as more PM processes are converted to Hansen.
- Continue to perform inspections on pump station sites that have deficiencies determined during the Draw Down and Greenline Programs.
- Continue review of data collected from the Drawdown and Greenline Programs and continue prioritizing pump stations for rehabilitation. As sites and corrective actions are defined, continue the process of executing purchase orders to replace equipment and rehabilitation projects to correct site deficiencies.

S-B-1 & 2 Force Main Preventive Maintenance (Air Release Valves, Valve Exercise Program)

This Quarter

Completed inspections on the following force mains:

- DRG WQTC Influent Pump Station
- Hillsdale - rescheduled from previous quarter.
- Louisville Boat Club
- Marina View
- Old Brownsboro Crossing
- Held the annual Force Main review meeting on December 9, 2010. Data was analyzed to adjust the inspection schedules for 2011. The inspection schedule was adjusted for three force mains.

Next Quarter

Schedule the following force mains for inspection:

- ORFM
- Radleigh
- Shady Villa
- St.Matthews #4
- Stony Brook
- Windham
- Wolf Pen Woods
- Woods of St. Thomas

S-C-1, 2, 3 & 4 Gravity Line Preventive Maintenance (Routine Hydraulic Cleaning, Routine Mechanical Cleaning, Root Control Program, Manhole Preventive Maintenance)

This Quarter

- Performed 6,828 routine catch basin cleanings.

- Repaired 121 catch basins with deteriorating conditions.
- Performed 273 creek inspections.
- Flushed and cleaned 113,616 linear feet of sewer main.
- Root cut 40,087 linear feet of sewer line.
- Inspected 224,419 linear feet of sewer main with internal MSD resources.
- Inspected 309,086 linear feet of sewer main with external resources
- Performed chemical root treatment on 83,762 linear feet of sewer main.
- Defined target areas for chemical root treatment in FY11 and began contract arrangements for services. Completion has been delayed due to asset prioritization and pending field work.

Next Quarter

- Schedule and begin chemical root treatment on approximately 100,000 feet of sewer main.
- Refine decision matrix and implementation protocol for the BAP, including inspection life cycles and work initiation.
- Review contract, equipment, fleet, and personnel resource needs and availability to allow for completion of tasks developed in the CSSA over the FY11 and assess gaps.
- Continue working with the contracted sewer evaluation, cleaning, and root cutting consultants and contractors and internal personnel to inspect FY11 priority areas and initiate blockage abatement maintenance measures as appropriate.

M-C-1 Safety Committee

This Quarter

- Chaired safety committees representing IF&P, Metro Operations, and the Morris Forman WQTC. The committee meetings are held on a quarterly basis and were conducted in the last quarter with each individual group. The committee membership consisted of both union and management representatives.

Next Quarter

- Continue safety committee meetings, and process improvements, on a quarterly basis to address safety concerns.

M-C-2 Confined Space Entry

This Quarter

- Conducted confined space entry training in accordance with the OSHA Confined Space Entry standard 29 CFR 1910.146 for new employees, and on an "as needed" basis for employees who have job descriptions requiring confined space entry. MSD also maintained and purchased entry equipment and personal protective equipment to provide for safe entry conditions and to maintain compliance with 29 CFR 1910.146.

Next Quarter

- Continue to administer training and monitor procedures on confined space entry in order to maintain compliance with 29 CFR 1910.146. In addition the Health and Safety Department is in the process of purchasing additional multi-gas monitors for Metro Operations Division. Health & Safety will be making recommendations to Metro, IWD, and IFP on replacement of older multi-gas monitors in order to keep the equipment up-to-date.

M-C-3 General Safety Procedures

This Quarter

- Established various general safety procedures based on both 1910 & 1926 OSHA regulations, input from internal personnel, and on the specific needs of the district in order to maintain regulatory compliance and provide safe working procedures for employees.
- Employed Industrial Safety & Training Services to conduct three 5 day (40 hr Hazardous Materials Technician) training courses per 29CFR 1910.120 for (55) MSD employees.
- Employed KYOSHA to conduct three Trench Shoring Awareness training classes per 29CFR 1926.650 for (125) I & FP division employees.

Next Quarter

- Continue to assess the need to update existing procedures and/or create new procedures as conditions and regulatory requirements dictate.
- Work with the IF&P Division to develop a fall protection system to be used during flood gate installation.
- Health & Safety will review all written procedures for the purpose of identifying any necessary updates.

M-C-4 Traffic Management

This Quarter

- Purchased and maintained traffic control equipment to be utilized whenever the control of traffic is required due to operational exposure. MSD provides training on traffic control through licensing and equipment operating training as employees are hired or their job duties require.
- Held VARC meeting to review vehicle accidents and to make recommendations to prevent future accidents.

Next Quarter

- Continue to train on traffic control and audit traffic control equipment.
- VARC chairperson will invite a member of the training department to sit in on VARC meetings in order to identify any training needs for accident prevention.

- VARC chairperson and the Training Department will change the driver improvement course to contain practical backing exercises.

M-C-5 Lock Out/Tag Out

This Quarter

- Established lock out and tag out procedures as required by the OSHA 29 CFR 1910.147 Control of Hazardous Energy standard. Procedures are kept, maintained and communicated to employees.

Next Quarter

- Develop LO/TO procedures as equipment is added/replaced, or as processes are changed.
- Review a LO/TO computer program for implementation purposes.
- Meet with management at Morris Forman WQTC to consider LO/TO recommendation.

M-C-6 Safety Equipment

This Quarter

- Monitored the need for and issued safety equipment as needed.
- Monitored and coordinated the purchase of Automated External Defibrillator (AED) battery replacements for eight MSD locations and purchase of new AEDs for the Main Office Fitness Room.

Next Quarter

- Continue to provide required PPE to employees at no cost to the employees themselves.
- Maintain safety related equipment or replace the equipment per governing policies or as the need arises.
- Monitor the market in order to procure improved safety equipment as technology advances.
- Work with vendor to conduct annual inspections of existing confined space equipment.

M-C-7 Performance Measures

This Quarter

In the 4th quarter of 2010, there were 294,023 hours worked.

- Recorded 33 safety incidents
- Recorded 5 lost time incidents
- 33 Workers' Compensation Claims filed
- MSD staff were off from work a total of 137 days due to work-related issues

Next Quarter

- MSD will continue to track accident statistics in accordance with the OSHA Recordkeeping Standard 29 CFR 1904.

M-B-1 Technical Training

This Quarter

Performed training in the following areas:

Type of Training	Number of Hours	Number of Sessions
Collection System	65	54
Equipment	129	31
Reporting	0	0
Safety & Hazmat	40	22
Wastewater	10	6

- Conducted the Annual Sewer Overflow Response Protocol (SORP) training took place during this period, along with the Quarterly Field SORP training session. Other collection system related training included Pump Station Operation training.
- Conducted 31 training sessions, totaling 129 hours, focusing on the safe and effective operation of equipment necessary to maintain and operate the collection system. This represents a decrease from previous months, as heavy equipment training is reduced during the winter months due to inclement weather (frozen ground, soggy soil at training facility). Equipment training during this quarter included training on combination sewer cleaners, cranes, and commercial driver's license test preparation training.
- Conducted 22 sessions related to safety were conducted, totaling 40 hours of training. These sessions addressed such issues as confined space entry safety, bloodborne pathogens, and CPR & First Aid.
- Conducted 6 CPR and first aid sessions on topics that were primarily related to wastewater treatment processes SOP's at Morris Forman WQTC and Regional WQTC's.

Next Quarter

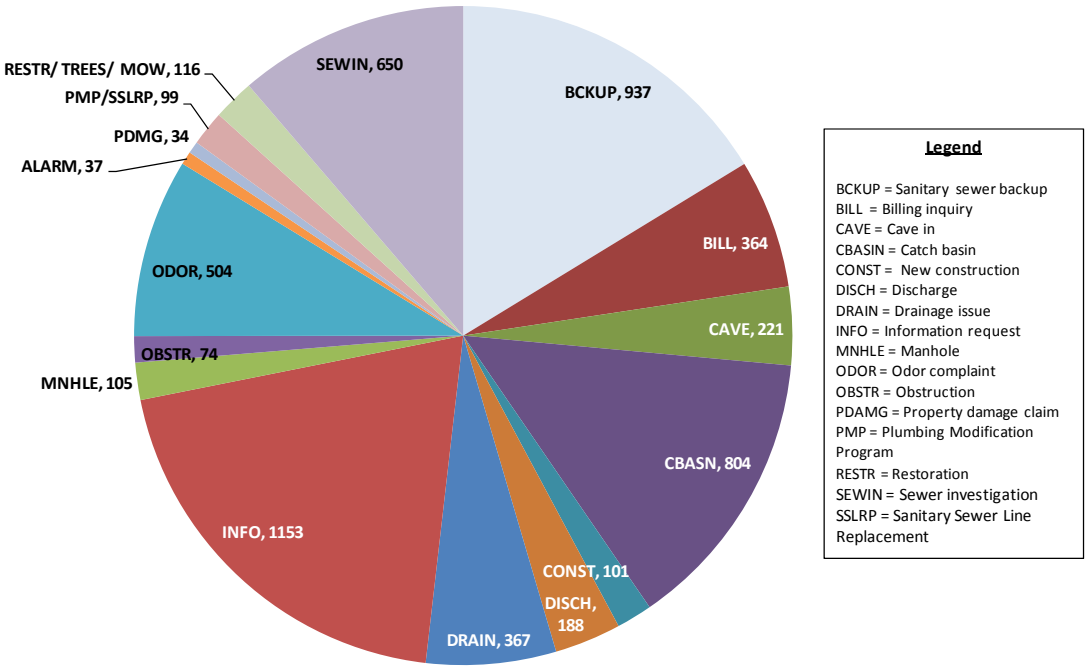
- Conduct "Sampling Basics" training for wastewater operators.
- Conduct quarterly field SORP training for relevant IFP, Operations, Engineering and Regulatory Services employees.
- Conduct 8 hour Operator & Technician level Hazmat refresher courses for employees who must maintain their responder skills.
- Conduct SUSTAIN modeling training for green infrastructure optimization, siting and sizing.

M-I-1 Customer Service

This Quarter

- Received 31,351 calls.
- Distributed 758 Plumbing Modification and Downspout Disconnection packets.
- Attended 4 public meetings.
- Distributed 651 Sanitary Sewer Line Replacement Program packets.
- Distributed 228 Senior Citizens Discount applications.

MSD Customer Relations Department Second Quarter Summary
5,754 MSD Service Requests Entered by Problem Code
October 1 - December 31, 2010



Customer Relations Department FY 2010 Summary Service Center Walk-In Customers October 1- December 31, 2010	
Administrative Fee	19
Assessment Payment/Payoff	99
Auction Items	2
Bill Related Requests	
Capacity Charge Fee	6
Connection Fee Purchased/Paid	19
CSD/ Map Copies	60
Drainage Bill Pmt.	4
Field Staff Assistance	
File Research	98
I & I Fee	8
LOJIC	31
Minor Plat Review	33
Placing Customers O/C	453
Plan Review Fee	1
PMP / Senior Discount/SSLRP	2
Recapture Fees	2
Water Mgmt File Review	6
Total Service Center Customers	843

Next Quarter

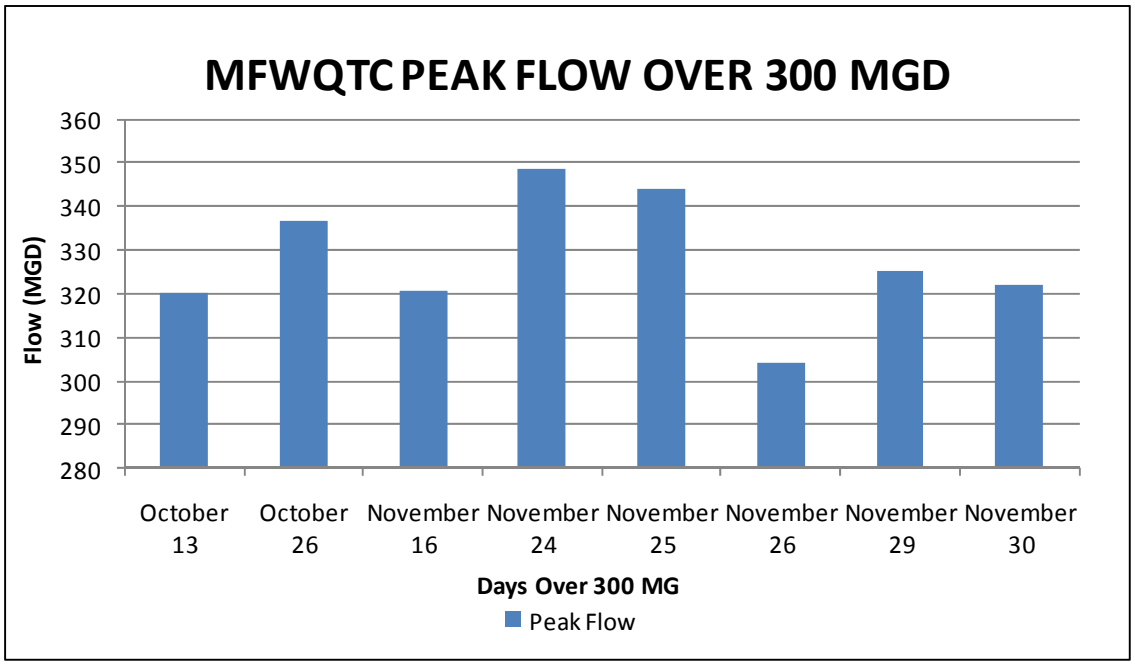
- Continue to track and trend calls received and outcomes associated with customer questions.

SECTION 6: Program Activities for Water Quality Treatment Centers

6.1 Regional Water Quality Treatment Center Updates

6.1.1 Morris Forman Water Quality Treatment Center

- Treated peak flows greater than 300 MGD at Morris Forman WQTC on 8 different days.



Morris Forman WQTC – Flows over 300 MGD

- Recorded no KPDES permit violations at Morris Forman WQTC in October.
- Recorded No KPDES permit violations at Morris Forman WQTC in November.
- Invalidated five days of BOD samples (December 16-20, 2010) due to contaminated deionized water used for processing samples. No KPDES permit violations at Morris Forman WQTC were recorded.

Continued the project to update the Morris Forman WQTC Wet Weather Operations Standard Operating Procedures (SOPs). The SOPs are being updated to improve plant reliability and to put procedures in place to maximize plant flow during wet weather events. This work is a phase of the RTC System Wide Optimization Project. For additional details on this effort please see **Section 1.5 - NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC).**

During this reporting period, the following activities were completed:

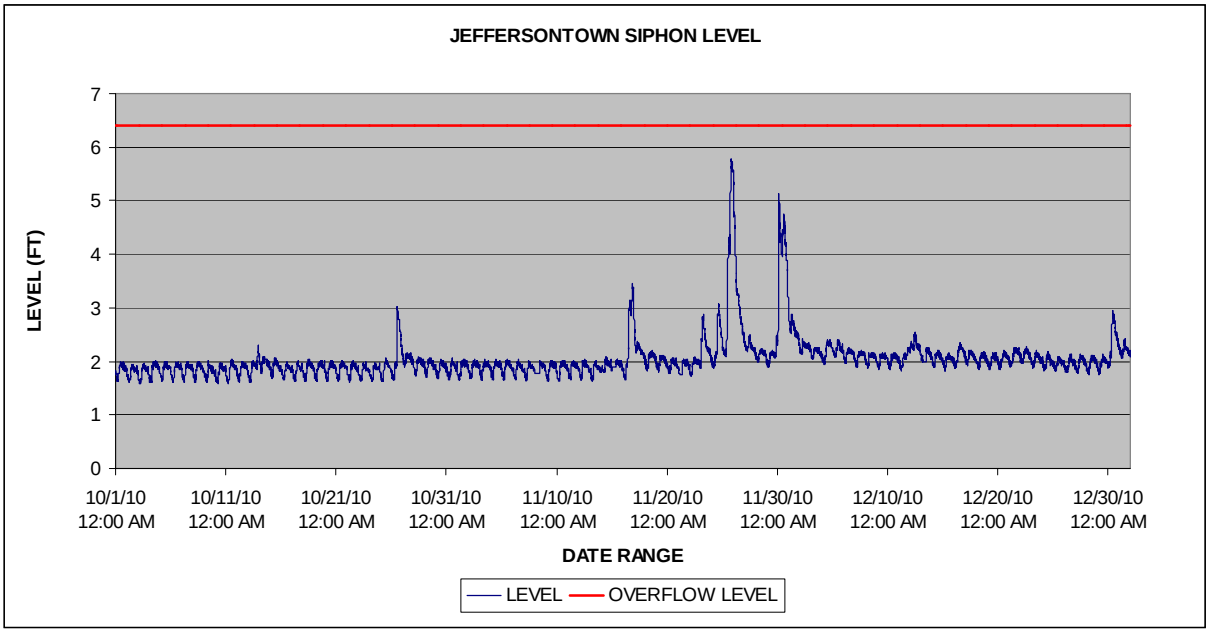
- Headworks Flow Measurement Calibration and FEPS Pump Tests - Continued conducting field measurements of new headworks flumes at various flow ranges to determine impact of approach channel and aeration on turbulence, and to develop new rating curve for flumes. Conducted field measurements of old head works weir gate at various flow ranges to develop new rating curve for weir gate. Reviewed plant flow data for several dry and wet weather days and compared head works flow to final effluent flow measurements. Reviewed various types of rating curves for flumes.
- Wet Weather Operational Plan - Reviewed existing control points and current SOPs the control strategy for the SWPS and the MDS by RTC. Conducted flow tests on SWPS pumps. Reviewed the New and Old Headworks to determine the current problems related to capacity and efficiency with each.
- Finalize in the next reporting period the flow measurements of the headwork flumes and weir gates during wet weather events. This data will be utilized to prepare rating curves for flumes and weir gates, and conduct final flow test of FEPS pumps to determine minimum acceptable depth of wet well. Staff will also complete draft of SOPs. Staff will conduct the final flow test of SWPS pumps and recommend improvements if needed. Staff will draft technical memorandum on revised control strategy for RTC sites and begin discussions to develop a format for post wet weather event analysis. A technical memorandum on new and old head works startup recommendations at Morris Forman WQTC will also be drafted. Final SOPs and planning for training on these SOPs are targeted for completion by June 30, 2011.

6.1.2 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:

- Reported two blending events at the Jeffersontown WQTC during this reporting period. The first was November 25, 2010. The total blended amount from this event, reported and documented on the Project WIN webpage, was 2,838,171 gallons. The second was November 30, 2010. The total blended amount from this event, reported and documented on the Project WIN webpage, was 1,067,355 gallons.
- Conducted one inspection route for the Jeffersontown siphon during this reporting period on November 25, 2010. No overflows were identified during the inspection from the siphon or associated manholes.
- See Section 6.5.1 for an update on the Comprehensive Performance Evaluations (CPE) /Composite Correction Plans (CCP) projects for the Jeffersontown WQTC.



Jeffersontown Siphon Level – October 1, 2010 to December 31, 2010

6.1.3 Hite Creek Water Quality Treatment Center

A waste load allocation request for the Hite Creek WQTC was submitted to the KDOW on March 30, 2009. This allocation is necessary to allow elimination of the Prospect Area WQTCs by December 15, 2015, as required by the Amended Consent Decree. Approval for this new allocation was received from the KDEP on June 10, 2009. Prior to June 30, 2010, MSD initiated negotiations with a consultant to assist in developing an amendment to the North County Action Plan Update. During the next reporting period, MSD will finalize negotiations and issue a notice-to-proceed for the action plan update by March 31, 2011.

- See Section 6.5.4 for an update on the CPE/CCP projects for the Hite Creek WQTC.

6.1.4 Floyds Fork Water Quality Treatment Center

MSD received Board approval to award a contract for design services to complete the design of the Phase 2 Expansion of the Floyds Fork WQTC, to an average daily design flow of 6.5 MGD in January 2010. MSD requested an updated waste load allocation from the KDOW which was received during this reporting period. MSD also submitted an application for a new KPDES permit for the proposed expansion to KDOW. The design reached the 100% stage and MSD advertised for construction bids and held a mandatory pre-bid meeting in December 2010. During the next reporting period, MSD plans to open bids on the Phase 2 Expansion and award the contract to the successful bidder. In addition, MSD expects to receive approval of the KDOW Construction Permit and the local Community Facility Review prior to issuing a notice-to-proceed.

6.1.5 Derek R. Guthrie Water Quality Treatment Center

- See Section 3.2.2 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).

6.1.6 Cedar Creek Water Quality Treatment Center

- See Section 6.5.3 for an update on the CPE/CCP projects for the Cedar Creek WQTC.

6.2 Prospect Area Water Quality Treatment Center Updates

Submitted the elimination plan for the five WQTCs serving Prospect (Hunting Creek North, Hunting Creek South, Ken Carla, Shadow Wood and Timberlake), 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 3.2.3 for an update on the design phase of the Prospect #1 - WQTC Elimination Project (Budget ID multiple).
- Hunting Creek South WQTC – Continued discussions with KDEP requesting approval for the elimination of the polishing pond and the relocation of the chlorine contact tank. To obtain final approval, MSD will be required to complete and submit engineered certified construction documents for the proposed improvements. During the next reporting period, MSD will issue a design work order to a consultant to complete the construction documents. These documents will be submitted to KDEP for final approval. Upon receipt of approval for the elimination of the polishing pond, MSD will advertise for construction for the elimination by June 30, 2011.
- Included the phosphorus monitoring data for the five WQTCs, including the calculation of monthly averages, in **Appendix G**.

6.3 Other Small Water Quality Treatment Center Updates

- McNeely Lake WQTC Influent Pump Station – Held a pre-bid meeting with contractors on August 23, 2010, to review the proposed influent screenings box and bar screen design. MSD received bids on September, 6, 2010 and issued a construction notice-to-proceed on September 22, 2010. The new screenings box was completed on November 19, 2010. Following the August 23, 2010, meeting, MSD held a meeting on site with a structural consultant and discussed having a detailed structural condition assessment of the site. The consultant was asked to submit a proposal to review the existing process tankage and prepare a technical memorandum recommending solutions to repair the tanks. The consultant submitted a revised proposal fee on November 2, 2010. During the next reporting period MSD will finalize negotiations for the structural assessment services and issue a notice-to-proceed.
- Silver Heights WQTC – Conducted meetings in September, 2010, to discuss replacing the existing aeration system and installing mechanical aeration. A work order was issued to a consultant to complete a site assessment including recommendations and proposed costs for plant system improvements. During the next reporting period, MSD will continue to review the memorandum and analyze the benefits of completing capital improvements at the plant site versus elimination.

6.4 Monitoring, Record-Keeping and Reporting

In July 2008, MSD started posting, on the Project WIN website, a Discharge Monitoring Report (DMR) packet for each WQTC. Historical DMR data are available back through January 2007. The posted DMR packets include the DMR, Monthly Operating Report (MOR), discharge report and the 5-day follow up letter for any bypass events that occurred during that period.

The information on the DMRs may be found in the section labeled Wastewater Treatment Plant Reports at www.msdlouky.org/projectwin<http://www.msdlouky.org/projectwin/ .

MSD continued to work towards the creation of electronically generated DMRs. This requires coordination with KDOW, upgrades to the LIMS system and the modification to internal tools. The LIMS upgrade started in September 2009. The new software has been installed and MSD staff has entered the testing and troubleshooting phase of this project. Electronic generation of paper copies of the DMRs for the regional and small WQTCs began in January 2010. MSD is working towards installation of an upgraded LIMS software version that is expected to simplify generation of the electronic DMRs. As of September 30, 2010, MSD was working with the LIMS vendor to correct system "bugs" that have inhibited MSD's ability to use the upgraded LIMS version. Prior to December 31, 2010, MSD facilitated training on NetDMR, which may allow full electronic submittal of DMRs, subject to acceptance of this approach by the State. Pending a decision on the use of NetDMR, MSD will continue to work with the LIMS vendor to upgrade the LIMS software and if successful will begin to expand the use of LIMS-generated paper DMRs to include the non-regional WQTCs on a prioritized basis.

6.5 Comprehensive Performance Evaluations and Composite Correction Plans

In accordance with paragraphs 26.b and 26.c of the Amended Consent Decree, MSD submitted the required Comprehensive Performance Evaluations (CPE) and Composite Correction Plans (CCP) as part of the IOAP on December 19, 2008. Based on comments MSD received from EPA/KDEP, these plans were re-submitted as part of the IOAP Volume 1 on June 19, 2009. Verbal approval of the CPEs was received on September 23, 2009. The CPEs and CCPs were 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 describes progress on the Type 1 and Type 2 activities required in the approved CPEs.

6.5.1 Jeffersontown Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.2 Chenoweth Run Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.3 Cedar Creek Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen

by the CPE scheduled date of December 31, 2010.

6.5.4 Hite Creek Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.5 Timberlake Water Quality Treatment Center

- Continued discussions with KDEP requesting approval for the elimination of the polishing pond and the relocation of the chlorine contact tank. To obtain final approval, MSD will be required to complete and submit engineered certified construction documents for the proposed improvements. During the next reporting period, MSD will issue a design work order to a consultant to complete the construction documents. These documents will be submitted to KDEP for final approval. Upon receipt of approval for the elimination of the polishing pond, MSD will advertise for construction for the elimination by March 31, 2011.
- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.6 Hunting Creek North Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.7 Hunting Creek South Water Quality Treatment Center

- Continued discussions with KDEP requesting approval for the elimination of the polishing pond and the relocation of the chlorine contact tank. To obtain final approval, MSD will be required to complete and submit engineered certified construction documents for the proposed improvements. During the next reporting period, MSD will issue a design work order to a consultant to complete the construction documents. These documents will be submitted to KDEP for final approval. Upon receipt of approval for the elimination of the polishing pond, MSD will advertise for construction for the elimination by June 30, 2011.
- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.8 Starview Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.9 Berrytown Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.10 Ken Carla Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.

6.5.11 Chenoweth Hills Water Quality Treatment Center

- Completed the process to convert asset management activities from SAP to Hansen by the CPE scheduled date of December 31, 2010.
- Completed the work to flood proof the effluent pump station on December 10, 2010. The contractor raised the wet well structure 24 inches above the existing grade. The new elevation will ensure a creek running parallel to the plant site will not flood the pump station. This work was completed by the CPE scheduled date of December 31, 2010.

6.5.12 Other Water Quality Treatment Centers

- Continued the planning to complete the structure and equipment condition assessment for the remaining MSD WQTCs that were not included as a part of the CPE process to convert asset management activities from SAP to Hansen. This will complete the process for MSD's WQTCs. Prior to March 31, 2011, MSD will complete the review of equipment for these remaining WQTCs: Floyds Fork, Cedar Creek, Hite Creek, Silver Heights, Bancroft, McNeely Lake, Shadow Wood, Lake of the Woods, and the Derek R. Guthrie WQTCs.

6.6 Bypass Corrective Actions

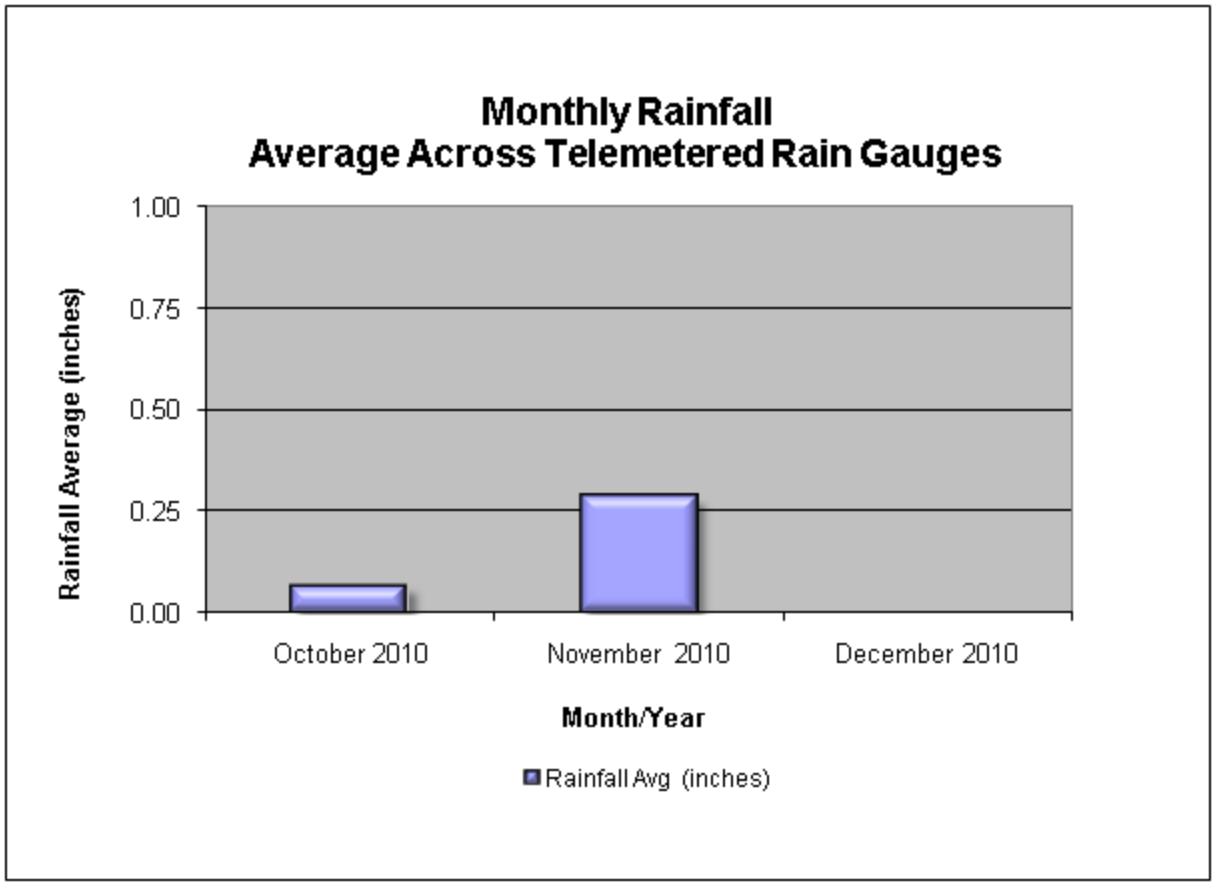
Each quarter, an assessment of bypasses will occur to determine the root cause of the bypass, the failure category, corrective actions to be taken, possible programmatic solutions, and corrective action completion date. Refer to the table below for causes of bypasses and respective corrective actions that occurred between October 1, 2010, and December 31, 2010.

Bypass Analysis – October 1, 2010 to December 31, 2010	
Bypass Description	**Bypass Corrective Actions**
Capacity	
- Chenoweth Hills WQTC (Hansen Discharge WO: 1170737): Bypass (capacity) was reported at this WQTC on November 25, 2010, when solids flowed over the clarifier weirs during high flows. Investigation revealed that excessive plant flows (3 times design daily flow) occurred during the rain event of November 25, 2010.	- Initiated a project to install an auto-shutoff system for blowers at small package plants when flows are elevated, to be completed prior to June 30, 2011.
External Power failures (LGE Related – PWR)	
- No bypasses of this category occurred during the reporting period	- N/A
Facility Failure (Mechanical -MCH, Electrical - ELE, Structural-SRT)	
- Cedar Creek WQTC (Hansen Discharge Wo: 1165777): Bypass (facility/structural) was reported at this WQTC on November 16, 2010, when a gate to the UV influent channel failed and flows bypassed the gate without receiving disinfection.	- UV channel gate was temporarily repaired on November 16, 2010. The gate was replaced with a stainless steel sluice gate, and new seals. Action was completed by December 31, 2010.
Human Error (OPN)	
- No bypasses of this category occurred during the reporting period	- N/A

SECTION 7: Project WIN Performance Overview

7.1 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.



7.2 Unauthorized Discharges to Waters of the United States

7.2.1 Bypass Events at Water Quality Treatment Centers

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

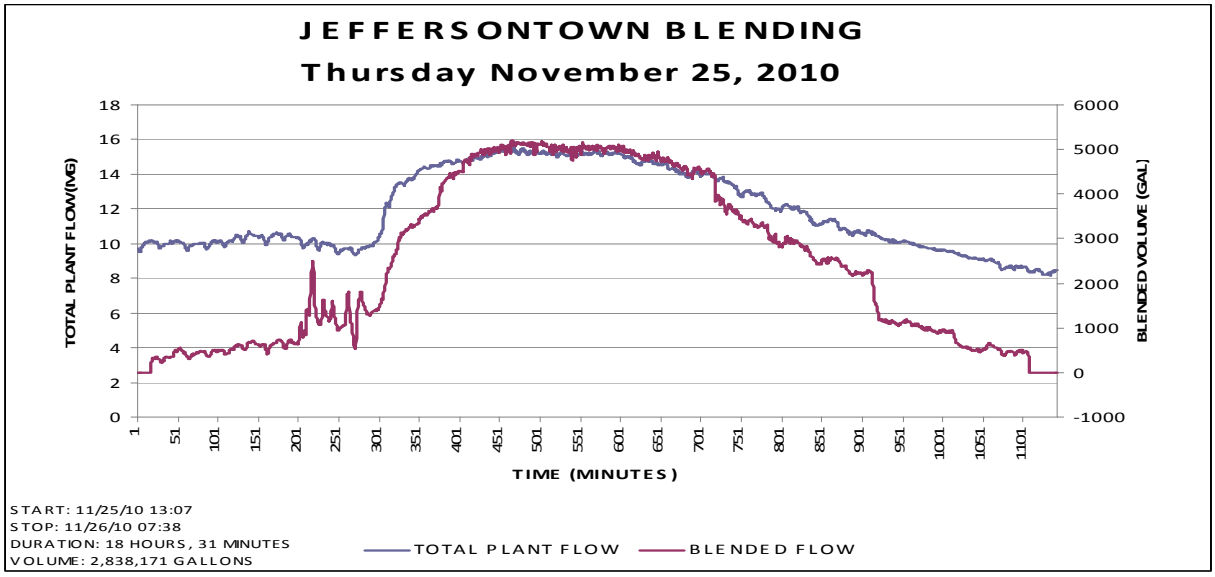
- Cedar Creek (MSD0289) - KPDES Permit No. KY0098540
- Chenoweth Hills (MSD0263) - KPDES Permit No. KY0029459

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 Section 6.6 for detailed review of this quarter's bypass events.

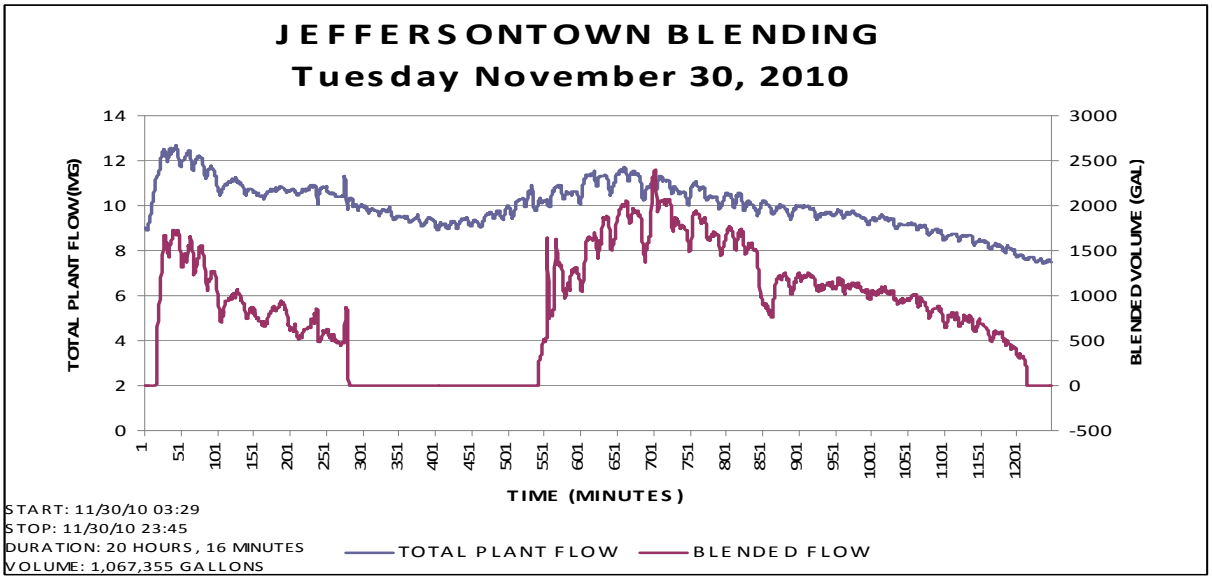
7.2.2 Blending Events

Included in **Appendix B-3** is a report that lists the details from the two blending events that occurred at the Jeffersontown WQTC during this quarter.

- Started blending on November 25, 2010. The total blended amount, from events, reported and documented on the Project WIN webpage was 2,838,171 gallons.



- Started blending on November 30, 2010. The total blended amount, from events, reported and documented on the Project WIN webpage was 1,067,355 gallons.



7.2.3 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. These overflows will be included in the Annual Report for the period of July 1, 2010, through June 30, 2011.

7.3 Overflows to Ground

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.

7.4 Overflows to Interior

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.

7.5 CSO Reductions

Included in **Appendix C** is an updated version of the modeled Annual Average Overflow Volume (AAOV) for the permitted CSOs.

Included in **Appendix D** 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.

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

- Closed CSO192 on December 5, 2010.
- Completed the CSO108 Dam Modification Project (Budget ID H09128) on December 15, 2010.

7.6 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.

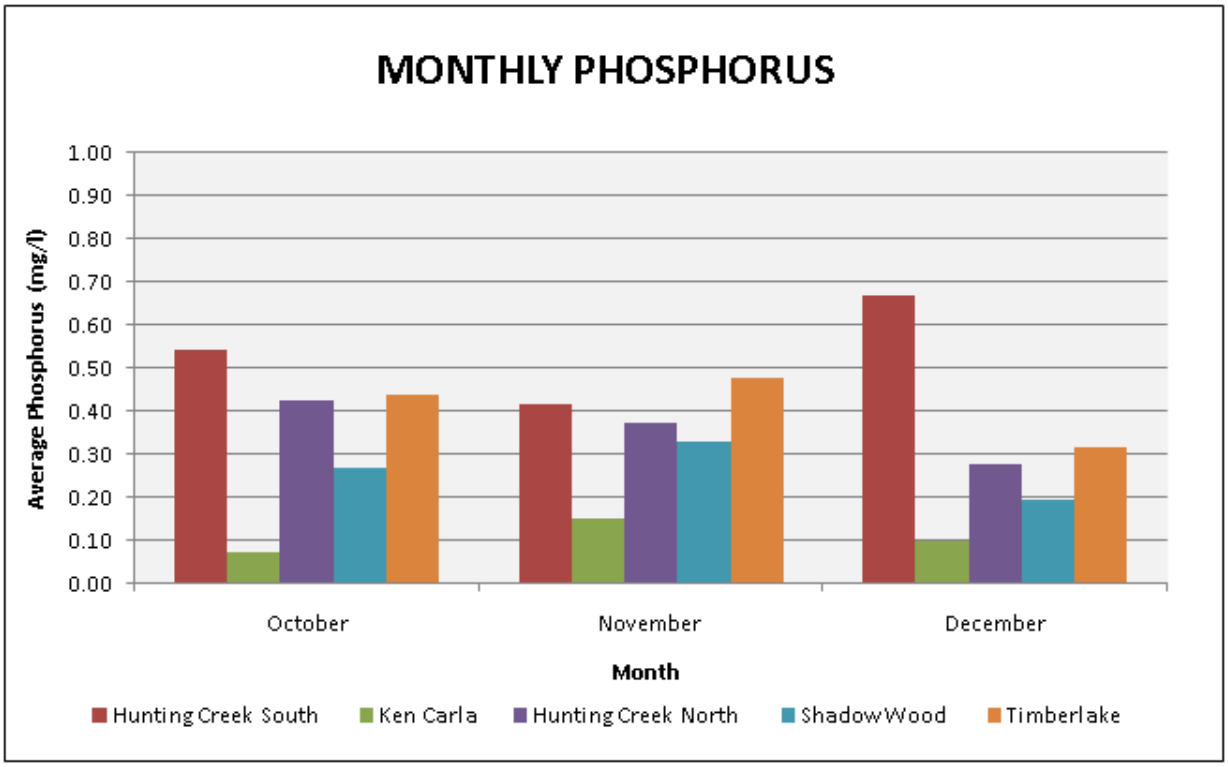
The following projects that impacted SSOs were completed during this reporting period:

- Diverted flow from the Canoe Lane Pump Station on November 5, 2010.
- Diverted flow from the Fairway Lane Pump Station on November 11, 2010.

- Completed the Beargrass Interceptor Rehabilitation Project (Budget ID H09239) on December 14, 2010.
- Completed the Floydsburg Road I/I Investigation/Rehabilitation Project (Budget ID H09172) on December 17, 2010.
- Completed Phase 1 of Northern Ditch Diversion Interceptor, which eliminated Yorktown WQTC, December 6, 2010 (Budget ID C85017).

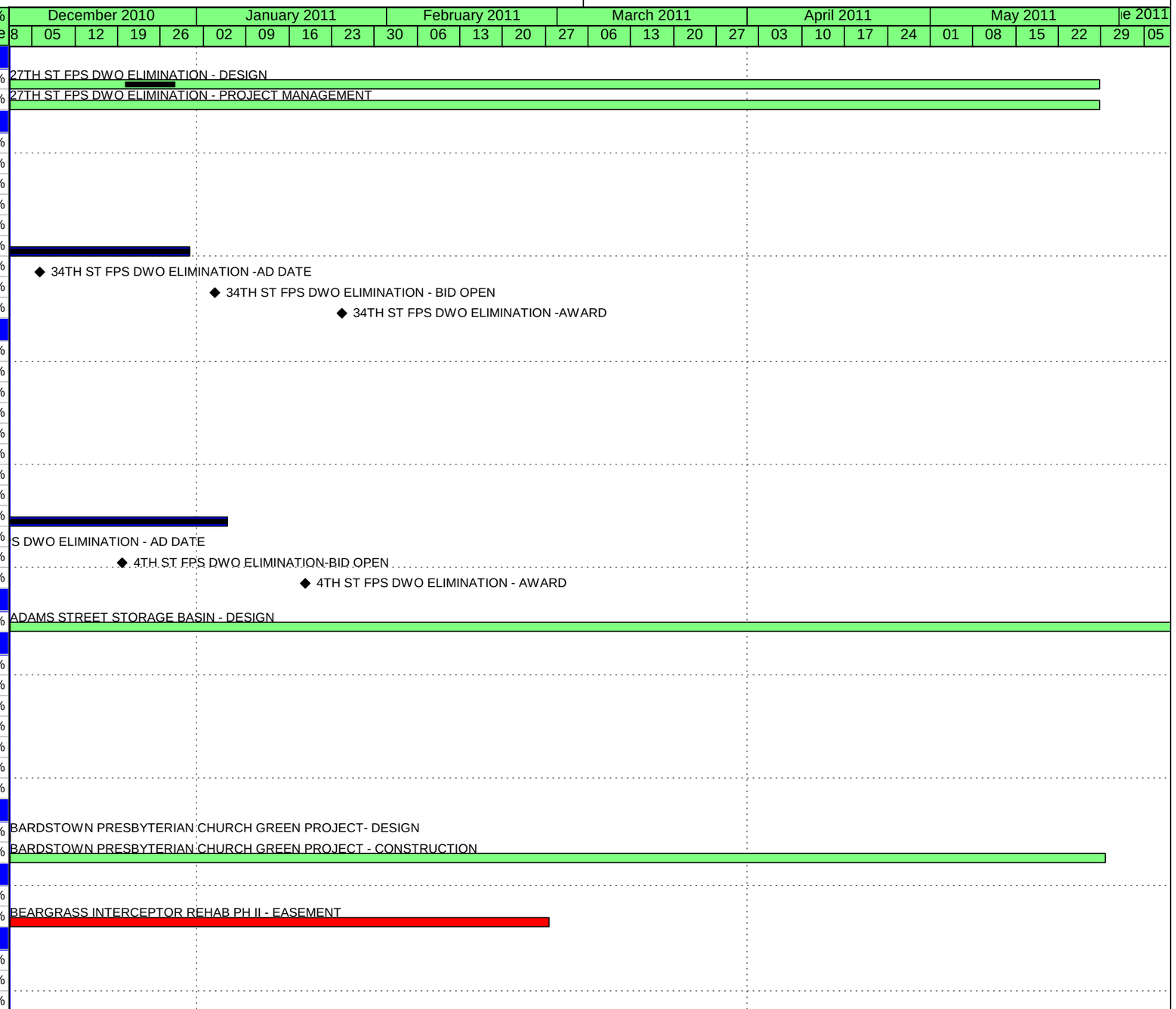
7.7 Phosphorus Monitoring at the Prospect WQTCs

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. See **Appendix G** for this quarter's report.



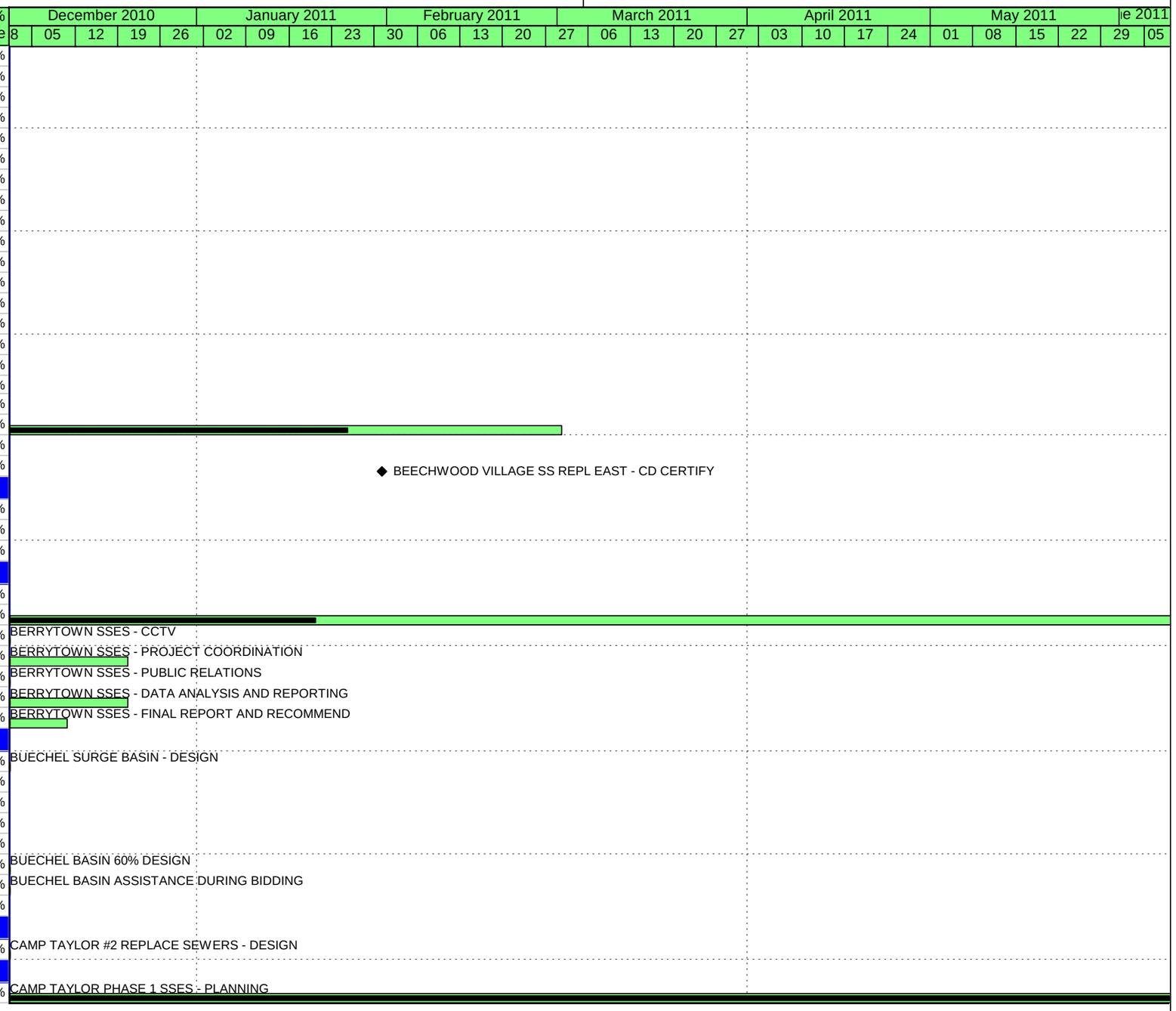
Appendix A – Activity Schedules

Activity ID	Activity Name	Physical % Complete
27th STREET FLOOD PUMP STATION		
H091262000	27TH ST FPS DWO ELIMINATION - DESIGN	5%
H091262901	27TH ST FPS DWO ELIMINATION - PROJECT MANAGEMENT	0%
34th STREET FPS DWO ELIMINATION		
H084782000	34TH ST FPS DWO ELIMINATION - DESIGN	100%
H084782001	34TH ST FPS DWO ELIMINATION - NTP	100%
H084782901	34TH ST FPS DWO ELIM DESIGN FEES 50%	100%
H084782902	34TH ST FPS DWO ELIM DESIGN FEES 80%	100%
H084782903	34TH ST FPS DWO ELIM DESIGN FEES 95%	100%
H084782904	34TH ST FPS DWO ELIM DESIGN FEES 100%	100%
H084784000	34TH ST FPS DWO ELIMINATION -AD DATE	100%
H084784050	34TH ST FPS DWO ELIMINATION - BID OPEN	100%
H084784500	34TH ST FPS DWO ELIMINATION -AWARD	100%
4th STREET FPS DWO ELIMINATION		
H084772000	4TH ST FPS DWO ELIMINATION - DESIGN	100%
H084772001	4TH ST FPS DWO ELIMINATION - NTP	100%
H084772901	4TH ST FPS DWO ELIMINATION - DATA COLLECTION	100%
H084772902	4TH ST FPS DWO ELIMINATION - DRAFT TM	100%
H084772903	4TH ST FPS DWO ELIMINATION - FINAL TM	100%
H084772904	4TH ST FPS DWO ELIM - FINAL DESIGN SUBMITTAL 50%	100%
H084772905	4TH ST FPS DWO ELIM - FINAL DESIGN SUBMITTAL 80%	100%
H084772906	4TH ST FPS DWO ELIM - FINAL DESIGN SUBMITTAL 95%	100%
H084772907	4TH ST FPS DWO ELIM - FINAL DESIGN SUBMITTAL 100%	100%
H084774000	4TH ST FPS DWO ELIMINATION - AD DATE	100%
H084774050	4TH ST FPS DWO ELIMINATION-BID OPEN	0%
H084774500	4TH ST FPS DWO ELIMINATION - AWARD	0%
ADAMS STREET STORAGE BASIN		
H091352000	ADAMS STREET STORAGE BASIN - DESIGN	0%
ASHBURTON PS IMPROVEMENTS/DIVERSION		
A090922000	ASHBURTON PS IMPROVEMENTS/DIVERSION - DESIGN	100%
A090924000	ASHBURTON PS IMPROVEMENTS/DIVERSION - AD DATE	100%
A090924050	ASHBURTON PS IMPROVEMENTS/DIVERSION - BID OPEN	100%
A090924500	ASHBURTON PS IMPROVEMENTS/DIVERSION - AWARD	100%
A090926000	ASHBURTON PS IMPROVEMENTS/DIVERSION - CONSTRUCT	100%
A090926950	ASHBURTON PS IMPROVEMENTS/DIVERSION - AS-BUILTS	100%
A090928050	ASHBURTON PS IMPROVEMENTS/DIVERSION - CD CERTIFY	100%
BARDSTOWN PRESBYTERIAN CHURCH GREEN PROJECT		
H110442000	BARDSTOWN PRESBYTERIAN CHURCH GREEN PROJECT-...	30%
H110446000	BARDSTOWN PRESBYTERIAN CHURCH GREEN PROJECT ...	0%
BEARGRASS INTERCEPTOR REHABILITATION PH II		
H092392000	BEARGRASS INTERCEPTOR REHAB PH II - DESIGN	100%
H092393000	BEARGRASS INTERCEPTOR REHAB PH II - EASEMENT	0%
BEECHWOOD VILLAGE SS REPL - EAST PORTION		
E072612000	BEECHWOOD VILLAGE SS REPL EAST - DESIGN	100%
E072612001	BEECHWOOD VILLAGE SS REPL EAST - NTP	100%
E072612901	BEECHWOOD VILLAGE SS EAST - PUBLIC MTGS	100%



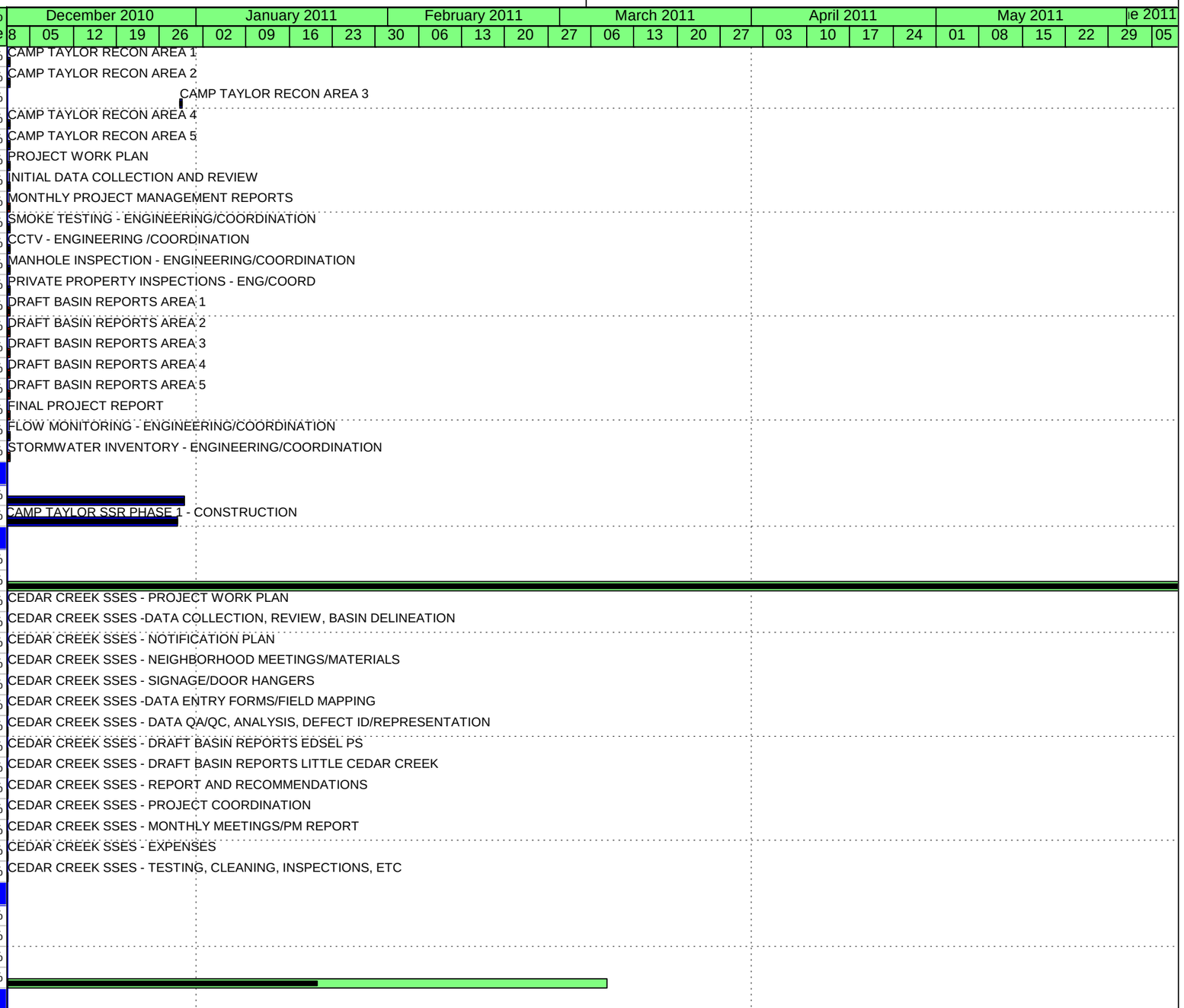
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
E072612902	BEECHWOOD VILLAGE SS EAST-50% SURVEY/PVMTCORE	100%
E072612903	BEECHWOOD VILLAGE SS EAST -30% PLAN SUBMITTAL	100%
E072612904	BEECHWOOD VILLAGE SS EAST -100% SEWER SURVEY	100%
E072612905	BEECHWOOD VILLAGE SS EAST -50% PLAN SUBMITTAL	100%
E072612906	BEECHWOOD VILLAGE SS EAST -80% PLAN SUBMITTAL	100%
E072612907	BEECHWOOD VILLAGE SS EAST-100% PLAN SUBMITTAL	100%
E072612908	BEECHWOOD VILLAGE SS EAST-HOUSE SURVEYS	100%
E072612909	BEECHWOOD VILLAGE SS EAST-PREPARE LTRS TO PO'S	100%
E072612910	BEECHWOOD VILLAGE SS EAST-RES REQ FOR SPEC	100%
E072612911	BEECHWOOD VILLAGE SS EAST-PSC CONNECTION DWGS	100%
E072612912	BEECHWOOD VILLAGE SS EAST-RESIDENTIAL PHOTOS	100%
E072612913	BEECHWOOD VILLAGE SS EAST-C&R'S	100%
E072612914	BEECHWOOD VILLAGE SS EAST-COORD W/VENHOFF	100%
E072612915	BEECHWOOD VILLAGE SS EAST-95% PLAN SUBMITTAL	100%
E072613000	BEECHWOOD VILLAGE SS REPL EAST - EASEMENT	100%
E072614000	BEECHWOOD VILLAGE SS REPL EAST - AD DATE	100%
E072614050	BEECHWOOD VILLAGE SS REPL EAST - BID OPEN	100%
E072614500	BEECHWOOD VILLAGE SS REPL EAST - AWARD	100%
E072616000	BEECHWOOD VILLAGE SS REPL EAST - CONSTRUCTION	95%
E072616900	BEECHWOOD VILLAGE SS REPL EAST-SUBST COMPLETE	100%
E072618050	BEECHWOOD VILLAGE SS REPL EAST - CD CERTIFY	0%
BEECHWOOD VILLAGE SS REPL - WEST PORTION		
E080344000	BEECHWOOD VILLAGE SS REPL WEST - AD DATE	100%
E080344050	BEECHWOOD VILLAGE SS REPL WEST - BID OPEN	100%
E080344500	BEECHWOOD VILLAGE SS REPL WEST - AWARD	100%
BERRYTOWN SSES		
H093871000	BERRYTOWN SSES - PLANNING	100%
H093871220	BERRYTOWN SSES REPORT	50%
H093872901	BERRYTOWN SSES - CCTV	0%
H093872902	BERRYTOWN SSES - PROJECT COORDINATION	0%
H093872903	BERRYTOWN SSES - PUBLIC RELATIONS	0%
H093872904	BERRYTOWN SSES - DATA ANALYSIS AND REPORTING	0%
H093872905	BERRYTOWN SSES - FINAL REPORT AND RECOMMEND	0%
BUECHEL SURGE BASIN		
H072882000	BUECHEL SURGE BASIN - DESIGN	60%
H072882901	BUECHEL BASIN 5% DESIGN	100%
H072882902	BUECHEL BASIN 10% DESIGN	100%
H072882903	BUECHEL BASIN 20% DESIGN	100%
H072882904	BUECHEL BASIN 30% DESIGN	100%
H072882905	BUECHEL BASIN 60% DESIGN	100%
H072882908	BUECHEL BASIN ASSISTANCE DURING BIDDING	0%
H072883000	BUECHEL SURGE BASIN - EASEMENTS	100%
CAMP TAYLOR #2 - REPLACE SEWERS		
H092202000	CAMP TAYLOR #2 REPLACE SEWERS - DESIGN	100%
CAMP TAYLOR PHASE 1 SSES		
H093881000	CAMP TAYLOR PHASE 1 SSES - PLANNING	95%



Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H093882901	CAMP TAYLOR RECON AREA 1	100%
H093882902	CAMP TAYLOR RECON AREA 2	100%
H093882903	CAMP TAYLOR RECON AREA 3	100%
H093882904	CAMP TAYLOR RECON AREA 4	100%
H093882905	CAMP TAYLOR RECON AREA 5	100%
H093882906	PROJECT WORK PLAN	100%
H093882907	INITIAL DATA COLLECTION AND REVIEW	100%
H093882908	MONTHLY PROJECT MANAGEMENT REPORTS	95%
H093882909	SMOKE TESTING - ENGINEERING/COORDINATION	100%
H093882910	CCTV - ENGINEERING /COORDINATION	100%
H093882911	MANHOLE INSPECTION - ENGINEERING/COORDINATION	100%
H093882912	PRIVATE PROPERTY INSPECTIONS - ENG/COORD	100%
H093882913	DRAFT BASIN REPORTS AREA 1	95%
H093882914	DRAFT BASIN REPORTS AREA 2	95%
H093882915	DRAFT BASIN REPORTS AREA 3	95%
H093882916	DRAFT BASIN REPORTS AREA 4	95%
H093882917	DRAFT BASIN REPORTS AREA 5	95%
H093882918	FINAL PROJECT REPORT	80%
H093882919	FLOW MONITORING - ENGINEERING/COORDINATION	100%
H093882920	STORMWATER INVENTORY - ENGINEERING/COORDINATION	90%
CAMP TAYLOR SSR PHASE 1		
H094071000	CAMP TAYLOR SSR PHASE 1 - PLANNING	100%
H094076000	CAMP TAYLOR SSR PHASE 1 - CONSTRUCTION	100%
CEDAR CREEK SSES		
H093891000	CEDAR CREEK SSES - PLANNING	100%
H093891220	CEDAR CREEK SSES REPORT	95%
H093892901	CEDAR CREEK SSES - PROJECT WORK PLAN	100%
H093892902	CEDAR CREEK SSES -DATA COLLECTION, REVIEW, BASIN ...	100%
H093892903	CEDAR CREEK SSES - NOTIFICATION PLAN	100%
H093892904	CEDAR CREEK SSES - NEIGHBORHOOD MEETINGS/MATE...	100%
H093892905	CEDAR CREEK SSES - SIGNAGE/DOOR HANGERS	100%
H093892906	CEDAR CREEK SSES -DATA ENTRY FORMS/FIELD MAPPING	95%
H093892907	CEDAR CREEK SSES - DATA QA/QC, ANALYSIS, DEFECT ID...	95%
H093892908	CEDAR CREEK SSES - DRAFT BASIN REPORTS EDSEL PS	95%
H093892909	CEDAR CREEK SSES - DRAFT BASIN REPORTS LITTLE CE...	95%
H093892910	CEDAR CREEK SSES - REPORT AND RECOMMENDATIONS	95%
H093892911	CEDAR CREEK SSES - PROJECT COORDINATION	95%
H093892912	CEDAR CREEK SSES - MONTHLY MEETINGS/PM REPORT	95%
H093892913	CEDAR CREEK SSES - EXPENSES	95%
H093892914	CEDAR CREEK SSES - TESTING, CLEANING, INSPECTIONS...	95%
CENTRAL REGION EMERGENCY GENERATOR PHASE III		
H100834000	CENTRAL REGION EMERG GENERATOR PH3 - AD DATE	100%
H100834050	CENTRAL REGION EMERG GENERATOR PH3 - BID OPEN	100%
H100834500	CENTRAL REGION EMERG GENERATOR PH3 - AWARD	100%
H100836000	CENTRAL REGION EMERG GENERATOR PH3-CONST	90%
CHARLESWOOD SUBDIVISION INT. #23		

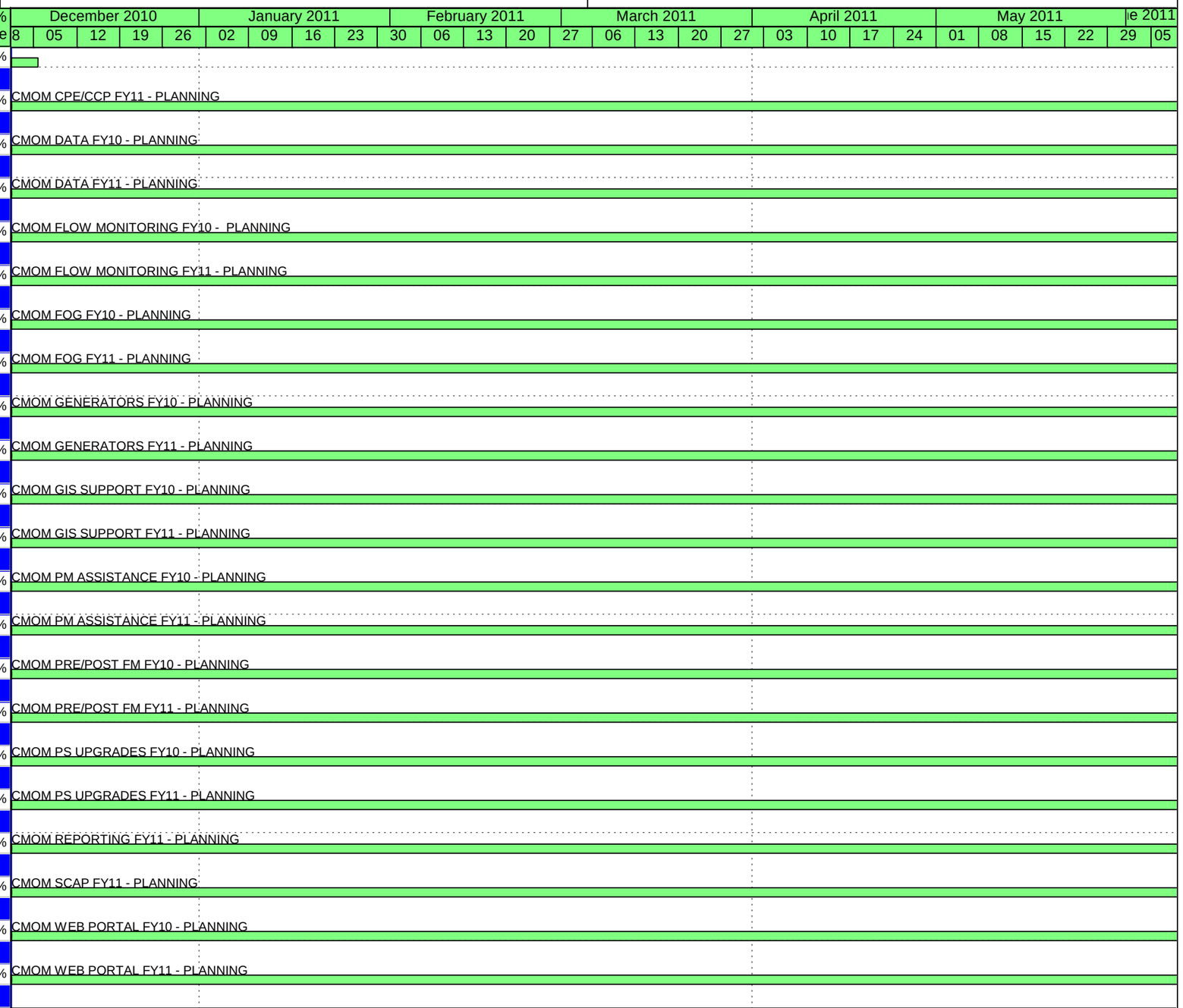


Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
C941030500	CHARLESWOOD SUBD. INT. #23 - CONS. SEL.	100%
C941031000	CHARLESWOOD SUBD. INT. #23 - DESIGN	100%
C941032000	CHARLESWOOD SUBD. INT. #23 - DESIGN	100%
C941032005	CHARLESWOOD SUBD. INT. #23 - NTP	100%
C941032010	CHARLESWOOD SUBD. INT. #23 - 50% PRELIM. DESIGN	100%
C941032020	CHARLESWOOD SUBD. INT. #23 - 100% PRELIM. DESIGN	100%
C941032040	CHARLESWOOD SUBD. INT. #23 - RED MEETING	100%
C941032100	CHARLESWOOD SUBD. INT. #23 - SURVEYING	100%
C941032110	CHARLESWOOD SUBD. INT. #23 - AMMEND NTP	100%
C941032500	CHARLSEWOOD SUBD. INT. #23 - 50% FINAL DESIGN	100%
C941032510	CHARLESWOOD SUBD. INT. #23 - 80% FINAL DESIGN	100%
C941032520	CHARLESWOOD SUBD. INT. #23 - 95% FINAL DESIGN	100%
C941032530	CHARLESWOOD SUBD. INT. #23 - 100% FINAL DESIGN	100%
C941032901	50% PRELIMINARY DESIGN SUBMITTAL	100%
C941032902	100% PRELIMINARY DESIGN SUBMITTAL	100%
C941032903	SURVEY COMPLETE	100%
C941032904	50% FINAL DESIGN SUBMITTAL	100%
C941032905	CHARLESWOOD SUBD #23 -80% FINAL DESIGN SUBMITTAL	100%
C941032906	CHARLESWOOD #23 95% FINAL DESIGN SUBMITTAL	100%
C941032907	CHARLESWOOD #23 - 100% FINAL DESIGN SUBMITTAL	100%
C941032908	SURVEY COMPLETE/AMEND	100%
C941032909	50% FINAL DESIGN SUBMITTAL/AMEND	100%
C941032910	CHARLESWOOD #23 - 80% FINAL DESIGN SUBMIT/AMEND	100%
C941032911	CHARLESWOOD # 23 95% FINAL DESIGN SUBMIT/AMEND	100%
C941032912	CHARLESWOOD # 23 -100% FINAL DESIGN SUBMIT/AMEND	100%
C941032913	CHARLESWOOD # 23 -25% DESIGN COOPER C WIDENING	100%
C941032914	CHARLESWOOD # 23 -50% DESIGN COOPER C WIDENING	100%
C941032915	CHARLESWOOD # 23 -75% DESIGN COOPER C WIDENING	100%
C941032916	CHARLESWOOD # 23 -90% DESIGN COOPER C WIDENING	100%
C941032917	CHARLESWOOD # 23 -100% DESIGN COOPER C WIDENING	100%
C941032918	CHARLESWOOD SUBD. INT. #23 - DESIGN Revision	100%
C941033000	CHARLESWOOD SUBD. INT. #23 - EASEMENTS	96%
C941034000	CHARLESWOOD SUBD. INT. #23 - AD DATE	0%
C941038050	CHARLESWOOD SUBD. INT. EXTENSION - CD CERTIFY	0%
CHEN HILLS WWTP ELIMINATION & PUMP STATION ELIMINATION		
H092382000	CHEN HILLS WWTP ELIMINATION & PUMP STATION ELIMIN...	0%
CHEROKEE SSES		
H093901000	CHEROKEE SSES - PLANNING	100%
H093901220	CHEROKEE SSES REPORT	0%
CLIMATE CHANGE STORM INTENSITY IMPACTS		
H101341000	CLIMATE CHANGE STORM INTENSITY IMPACTS - PLANNING	0%
CMOM AAM FY10		
H093431000	CMOM AAM FY10 - PLANNING	0%
CMOM AAM FY11		
H093571000	CMOM AAM FY11 - PLANNING	0%
CMOM CPE/CCP FY10		

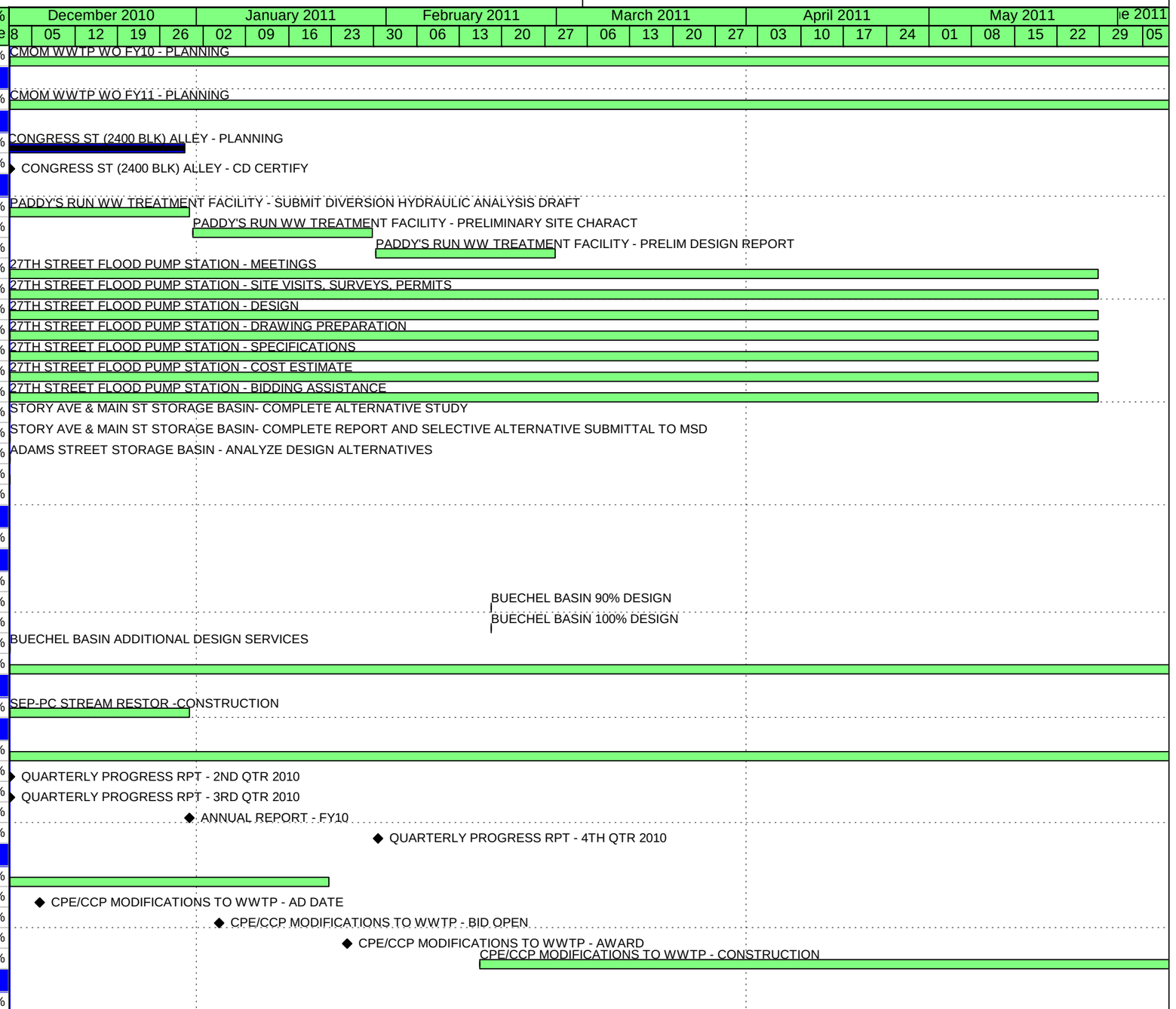
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H093461000	CMOM CPE/CCP FY10 - PLANNING	0%
CMOM CPE/CCP FY11		
H093601000	CMOM CPE/CCP FY11 - PLANNING	0%
CMOM DATA FY10		
H093401000	CMOM DATA FY10 - PLANNING	0%
CMOM DATA FY11		
H093541000	CMOM DATA FY11 - PLANNING	0%
CMOM FLOW MONITORING FY10		
H093471000	CMOM FLOW MONITORING FY10 - PLANNING	0%
CMOM FLOW MONITORING FY11		
H093611000	CMOM FLOW MONITORING FY11 - PLANNING	0%
CMOM FOG FY10		
H093361000	CMOM FOG FY10 - PLANNING	0%
CMOM FOG FY11		
H093501000	CMOM FOG FY11 - PLANNING	0%
CMOM GENERATORS FY10		
H093371000	CMOM GENERATORS FY10 - PLANNING	0%
CMOM GENERATORS FY11		
H093511000	CMOM GENERATORS FY11 - PLANNING	0%
CMOM GIS SUPPORT FY10		
H093421000	CMOM GIS SUPPORT FY10 - PLANNING	0%
CMOM GIS SUPPORT FY11		
H093561000	CMOM GIS SUPPORT FY11 - PLANNING	0%
CMOM PM ASSISTANCE FY10		
H093491000	CMOM PM ASSISTANCE FY10 - PLANNING	0%
CMOM PM ASSISTANCE FY11		
H093631000	CMOM PM ASSISTANCE FY11 - PLANNING	0%
CMOM PRE/POST FM FY10		
H093481000	CMOM PRE/POST FM FY10 - PLANNING	0%
CMOM PRE/POST FM FY11		
H093621000	CMOM PRE/POST FM FY11 - PLANNING	0%
CMOM PS UPGRADES FY10		
H093381000	CMOM PS UPGRADES FY10 - PLANNING	0%
CMOM PS UPGRADES FY11		
H093526000	CMOM PS UPGRADES FY11 - PLANNING	0%
CMOM REPORTING FY11		
H093551000	CMOM REPORTING FY11 - PLANNING	0%
CMOM SCAP FY11		
H093581000	CMOM SCAP FY11 - PLANNING	0%
CMOM WEB PORTAL FY10		
H093451000	CMOM WEB PORTAL FY10 - PLANNING	0%
CMOM WEB PORTAL FY11		
H093591000	CMOM WEB PORTAL FY11 - PLANNING	0%
CMOM WWTP WO FY10		



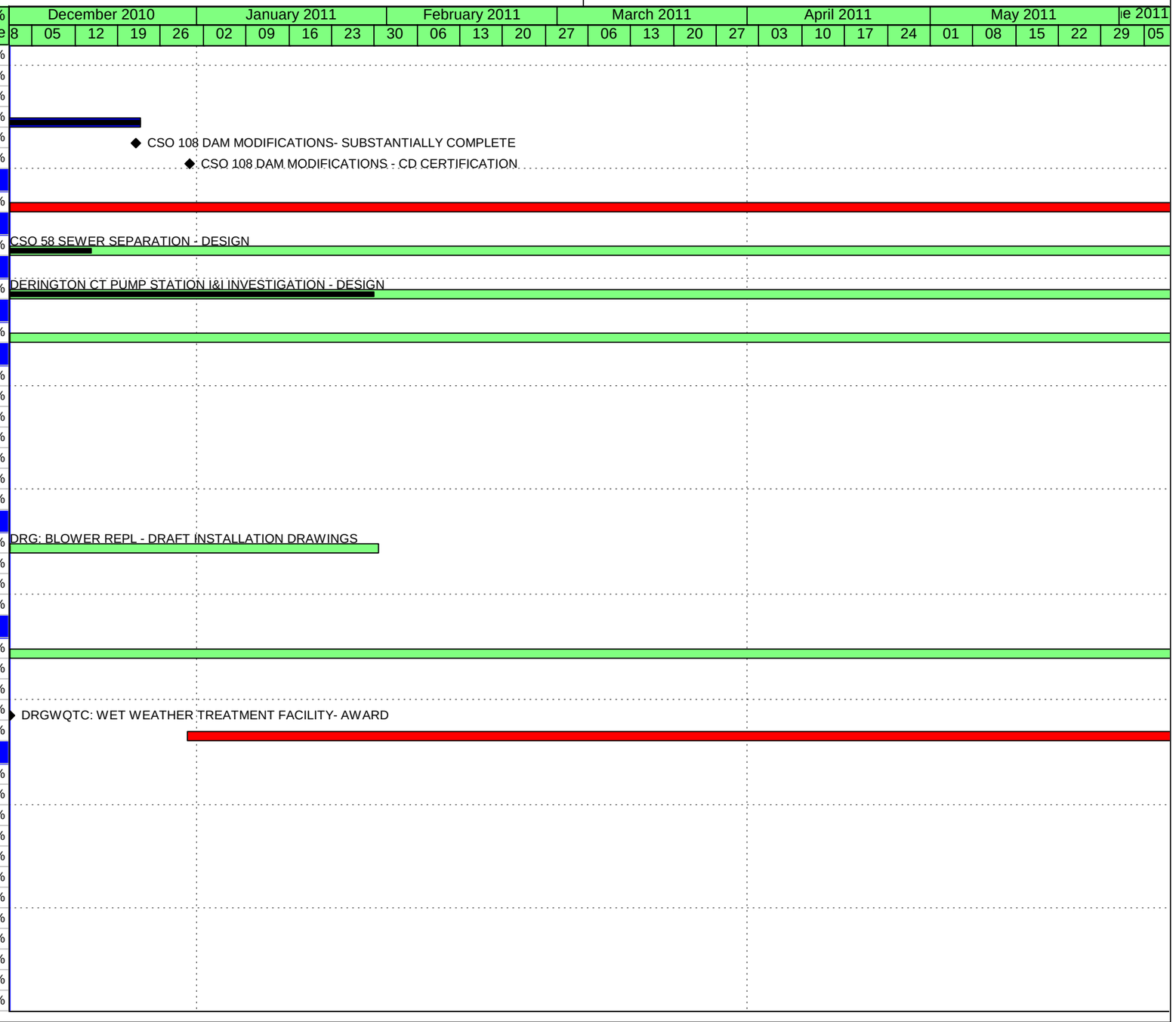
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H093391000	CMOM WWTP WO FY10 - PLANNING	0%
CMOM WWTP WO FY11		
H093531000	CMOM WWTP WO FY11 - PLANNING	0%
CONGRESS ST (2400 BLK) ALLEY		
H110311000	CONGRESS ST (2400 BLK) ALLEY - PLANNING	100%
H110318050	CONGRESS ST (2400 BLK) ALLEY - CD CERTIFY	100%
CONSENT DECREE - LONG TERM CONTROL PLAN (LTCP)		
H091242901	PADDY'S RUN WW TREATMENT FACILITY - SUBMIT DIVER...	0%
H091242902	PADDY'S RUN WW TREATMENT FACILITY - PRELIMINARY ...	0%
H091242903	PADDY'S RUN WW TREATMENT FACILITY - PRELIM DESIG...	0%
H091262902	27TH STREET FLOOD PUMP STATION - MEETINGS	0%
H091262903	27TH STREET FLOOD PUMP STATION - SITE VISITS, SURV...	0%
H091262904	27TH STREET FLOOD PUMP STATION - DESIGN	0%
H091262905	27TH STREET FLOOD PUMP STATION - DRAWING PREPAR...	0%
H091262906	27TH STREET FLOOD PUMP STATION - SPECIFICATIONS	0%
H091262907	27TH STREET FLOOD PUMP STATION - COST ESTIMATE	0%
H091262908	27TH STREET FLOOD PUMP STATION - BIDDING ASSISTAN...	0%
H091272901	STORY AVE & MAIN ST STORAGE BASIN- COMPLETE ALTE...	0%
H091272902	STORY AVE & MAIN ST STORAGE BASIN- COMPLETE REP...	0%
H091352901	ADAMS STREET STORAGE BASIN - ANALYZE DESIGN ALT...	0%
H094322901	GI CAMPBELL & MAIN ALLEY - DRILLING	0%
H094328050	GI CAMPBELL & MAIN ALLEY - CD CERTIFY	100%
CONSENT DECREE - NINE MINIMUM CONTROLS (NMC)		
H110052000	CSO 210-216 CONVEYANCE LINE EMERGENCY REPAIR-DE...	100%
CONSENT DECREE - SANITARY SEWER DISCHARGE PLAN (SSDP)		
B062082917	SHIVELY- ADDITIONAL DESIGN SERVICES	100%
H072882906	BUECHEL BASIN 90% DESIGN	0%
H072882907	BUECHEL BASIN 100% DESIGN	0%
H072882909	BUECHEL BASIN ADDITIONAL DESIGN SERVICES	0%
H095612901	DRGWQTC: WET WEATHER TREATMENT FACILITY- PM/IN...	0%
CONSENT DECREE - SUPPLEMENTAL ENVIRONMENT PROJECTS (SEP)		
H101416000	SEP-PC STREAM RESTOR -CONSTRUCTION	0%
CONSENT DECREE REPORTING		
R000001000	CONSENT DECREE REPORTING	0%
R000002923	QUARTERLY PROGRESS RPT - 2ND QTR 2010	0%
R000002924	QUARTERLY PROGRESS RPT - 3RD QTR 2010	0%
R000002925	ANNUAL REPORT - FY10	0%
R000002926	QUARTERLY PROGRESS RPT - 4TH QTR 2010	0%
CPE/CCP MODIFICATIONS TO WWTP		
H092212000	CPE/CCP MODIFICATIONS TO WWTP - DESIGN	75%
H092214000	CPE/CCP MODIFICATIONS TO WWTP - AD DATE	0%
H092214050	CPE/CCP MODIFICATIONS TO WWTP - BID OPEN	0%
H092214500	CPE/CCP MODIFICATIONS TO WWTP - AWARD	0%
H092216000	CPE/CCP MODIFICATIONS TO WWTP - CONSTRUCTION	0%
CSO 108 DAM MODIFICATIONS		
H091282000	CSO 108 DAM MODIFICATIONS - DESIGN	100%



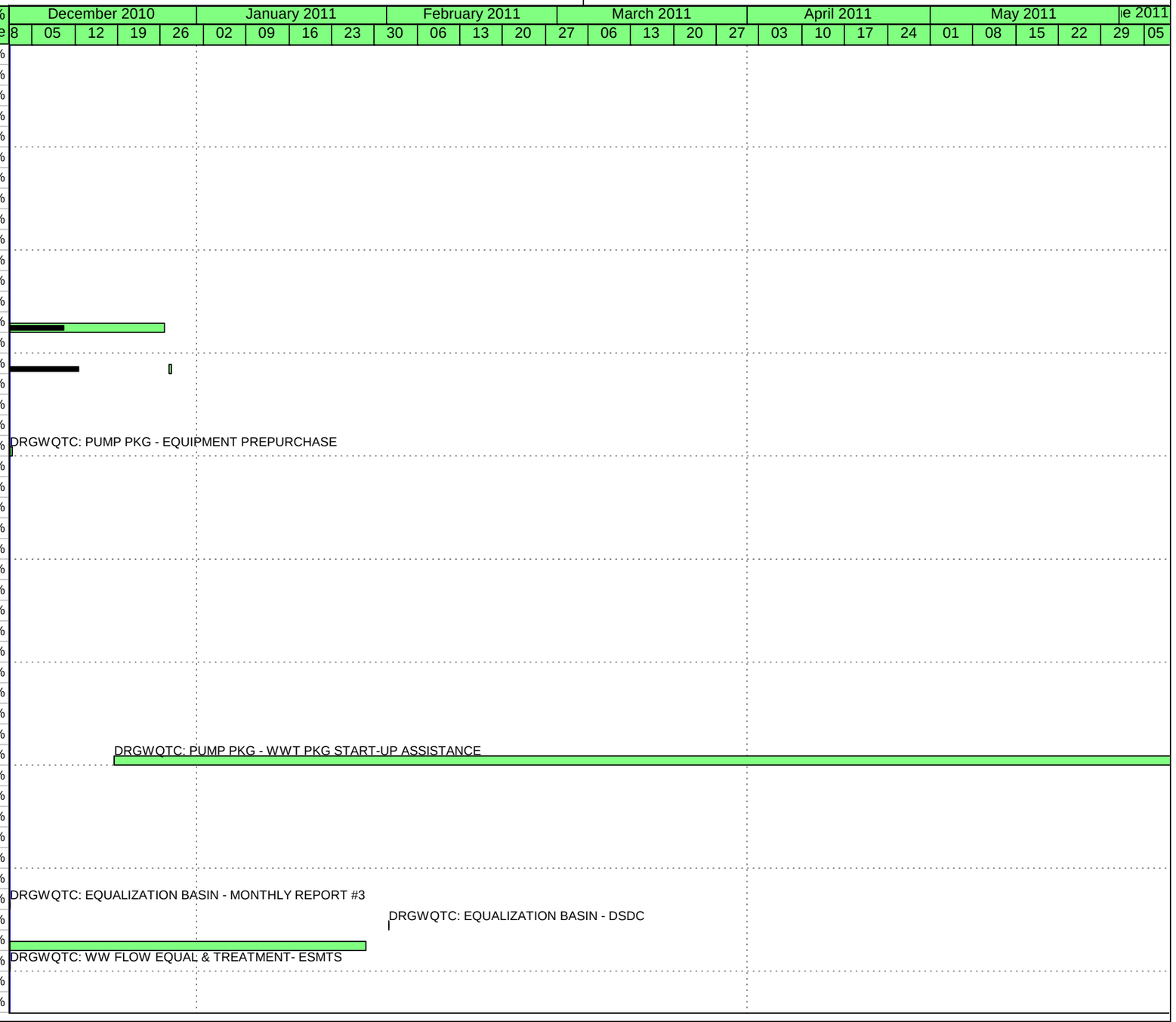
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H091284000	CSO 108 DAM MODIFICATIONS - AD DATE	100%
H091284050	CSO 108 DAM MODIFICATIONS - BID OPEN	100%
H091284500	CSO 108 DAM MODIFICATIONS - AWARD	100%
H091286000	CSO 108 DAM MODIFICATIONS - CONSTRUCTION	100%
H091286900	CSO 108 DAM MODIFICATIONS- SUBSTANTIALLY COMPLETE	100%
H091288050	CSO 108 DAM MODIFICATIONS - CD CERTIFICATION	0%
CSO 206 SEWER SEPARATION		
H091312000	CSO 206 SEWER SEPARATION - DESIGN	10%
CSO 58 SEWER SEPARATION		
H091302000	CSO 58 SEWER SEPARATION - DESIGN	5%
DERINGTON COURT PUMP STATION I&I INVESTIGATION		
H091902000	DERINGTON CT PUMP STATION I&I INVESTIGATION - DESI...	20%
DOWNSPOUT DISCONNECT CSO 123		
I042472000	DOWNSPOUT DISCONNECT CSO 123 - DESIGN	5%
DOWNSPOUT DISCONNECT CSO 206		
I042492000	DOWNSPOUT DISCONNECT CSO 206 - DESIGN	100%
I042492901	DOWNSPOUT DISCONNECT CSO 206 - CLOSURE STARTUP	100%
I042494000	DOWNSPOUT DISCONNECT CSO 206 PHASE 1 - AD DATE	100%
I042494050	DOWNSPOUT DISCONNECT CSO 206 PHASE 1 - BID OPEN	100%
I042494500	DOWNSPOUT DISCONNECT CSO 206 PHASE 1 - AWARD	100%
I042496000	DOWNSPOUT DISCONNECT CSO 206 PHASE 1 - CONST	100%
I042496900	DOWNSPOUT DISCONNECT CSO 206 P1- SUBST COMPLETE	100%
DRGWQTC: BLOWER PACKAGE		
H095622914	DRG: BLOWER REPL - DRAFT INSTALLATION DRAWINGS	0%
H095624000	DRGWQTC: BLOWER EQUIPMENT PKG - AD DATE	100%
H095624050	DRGWQTC: BLOWER EQUIPMENT PKG - BID OPEN	100%
H095624500	DRGWQTC: BLOWER EQUIPMENT PKG - AWARD	100%
DRGWQTC: WET WEATHER TREATMENT FACILITY		
H095613000	DRGWQTC: WET WEATHER TREATMENT FACILITY-ESM'TS	10%
H095614000	DRGWQTC: WET WEATHER TREATMENT FACILITY- AD DA...	100%
H095614050	DRGWQTC: WET WEATHER TREATMENT FACILITY-BID OP...	100%
H095614500	DRGWQTC: WET WEATHER TREATMENT FACILITY- AWARD	0%
H095616000	DRGWQTC: WET WEATHER TREATMENT FACILITY- CONS...	0%
DRGWQTC: WW FLOW EQUALIZATION & TREATMENT		
H063021000	WCWTP: WW FLOW EQ & TREATMENT - PRELIM ENG'G	100%
H063021001	WCWTP: WW FLOW EQ & TREATMENT - NTP	100%
H063022000	WCWTP: WW FLOW EQ & TREATMENT - DESIGN	100%
H063022001	DRGWQTC: WET WEATHER TRMT FAC-NTP	100%
H063022901	WCWTP: WW FLOW EQ & TREATMENT - KICK OFF MTG	100%
H063022903	WCWTP: WW FLOW EQ & TREATMENT - TM REGS & PERMIT	100%
H063022904	WCWTP: WW FLOW EQ & TREATMENT - TM FLOWS & LOA...	100%
H063022905	WCWTP: WW FLOW EQ & TREATMENT-100% PROCESS AL...	100%
H063022906	WCWTP: WW FLOW EQ & TREATMENT - TM SELECTED AL...	100%
H063022907	WCWTP: WW FLOW EQ & TREATMENT - TM SITE ASSM'T	100%
H063022908	WCWTP: WW FLOW EQ & TREATMENT - TM COST ESTIMA...	100%
H063022909	WCWTP: WW FLOW EQ & TREATMENT - TM PD EVALUATI...	100%



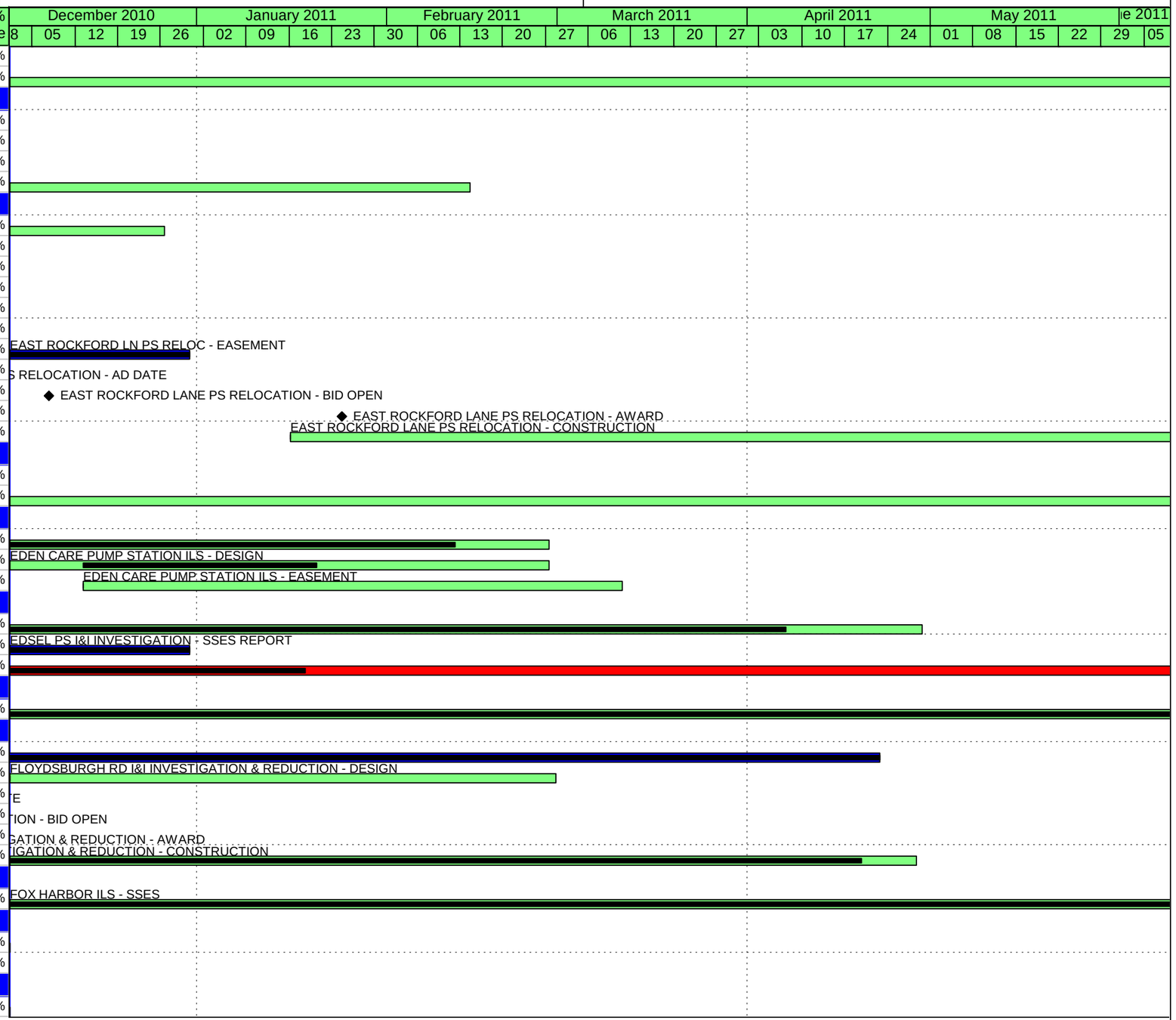
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H063022910	WCWTP: WW FLOW EQ & TREATMENT - FINAL REPORT	100%
H063022912	DRG: BLOWER REPL - DRAFT SPECIFICATIONS	100%
H063022913	DRG: BLOWER REPL - FINAL SPECIFICATIONS	100%
H063022916	DRGWQTC: WET WEATHER TRMT FAC-GEOTECH	100%
H063022917	DRGWQTC: WET WEATHER TRMT FAC-OPS STRATEGY TM	100%
H063022918	DRGWQTC: WET WEATHER TRMT FAC-PROGRESS RPT 3	100%
H063022919	DRGWQTC: WET WEATHER TRMT FAC-60% SUBMITTAL	100%
H063022920	DRGWQTC: WET WEATHER TRMT FAC-KDOW SUBMITTAL	100%
H063022921	DRGWQTC: WET WEATHER TRMT FAC-PROGRESS RPT 6	100%
H063022922	DRGWQTC: WET WEATHER TRMT FAC-PROGRESS RPT 7	100%
H063022923	DRGWQTC: WET WEATHER TRMT FAC-KDOW COMMENT ...	100%
H063022924	DRGWQTC: WET WEATHER TRMT FAC-90% SUBMITTAL	100%
H063022925	DRGWQTC: WET WEATHER TRMT FAC-100% SUBMITTAL	100%
H063022926	DRGWQTC: WET WEATHER TRMT FAC-BID ASSISTANCE	95%
H063022927	DRGWQTC: WET WEATHER TRMT FAC-BID EVALUATION	100%
H063022928	DRGWQTC: PUMP PKG - PROJECT MANAGEMENT	95%
H063022929	DRGWQTC: PUMP PKG - SUBSURFACE INVESTIGATION	100%
H063022930	DRGWQTC: PUMP PKG - SITE SURVEY	100%
H063022932	DRGWQTC: PUMP PKG - PRELIM ENGINEERING UPDATES	100%
H063022933	DRGWQTC: PUMP PKG - EQUIPMENT PREPURCHASE	0%
H063022934	DRGWQTC: PUMP PKG - HM - NTP FOR EXISTING PS HYD	100%
H063022935	DRGWQTC: PUMP PKG - HM - NTP FOR NEW PS	100%
H063022936	DRGWQTC: PUMP PKG-HM-TEST'G COMP FOR EXIST'G PS	100%
H063022937	DRGWQTC: PUMP PKG-HM-TEST'G COMP FOR NEW PS	100%
H063022938	DRGWQTC: PUMP PKG-HM-FINAL RPT FOR EXISTING PS	100%
H063022939	DRGWQTC: PUMP PKG-HM-FINAL RPT FOR NEW PS	100%
H063022940	DRGWQTC: PUMP PKG - CFD SET-UP	100%
H063022941	DRGWQTC: PUMP PKG - CFD FINAL REPORT	100%
H063022942	DRGWQTC: PUMP PKG - PROC/MECH 60% COMPLETE	100%
H063022943	DRGWQTC: PUMP PKG - STRUCTURAL 60% COMPLETE	100%
H063022944	DRGWQTC: PUMP PKG - COMPLETE 60% SUBMITTAL	100%
H063022945	DRGWQTC: PUMP PKG - 90% DESIGN	100%
H063022946	DRGWQTC: PUMP PKG - 100% DESIGN	100%
H063022947	DRGWQTC: PUMP PKG - BID ASSIST	100%
H063022949	DRGWQTC: PUMP PKG - WWT PKG START-UP ASSISTANCE	0%
H063022950	DRGWQTC: EQUALIZATION BASIN - MONTHLY REPORT #1	100%
H063022951	DRGWQTC: EQUALIZATION BASIN - FIELD SURVEY	100%
H063022952	DRGWQTC: EQUALIZATION BASIN - 30% DESIGN	100%
H063022953	DRGWQTC: EQUALIZATION BASIN - 60% DESIGN	100%
H063022954	DRGWQTC: EQUALIZATION BASIN - MONTHLY REPORT #2	100%
H063022955	DRGWQTC: EQUALIZATION BASIN - 90% DESIGN	100%
H063022956	DRGWQTC: EQUALIZATION BASIN - MONTHLY REPORT #3	0%
H063022959	DRGWQTC: EQUALIZATION BASIN - DSDC	0%
H063022962	DRGWQTC: EQ BASIN EASEMENT ACQUISITION	50%
H063023000	DRGWQTC: WW FLOW EQUAL & TREATMENT- ESMTS	0%
H063024000	DRGWQTC: PUMPING PACKAGE - AD DATE	100%
H063024050	DRGWQTC: PUMPING PACKAGE - BID OPEN	100%



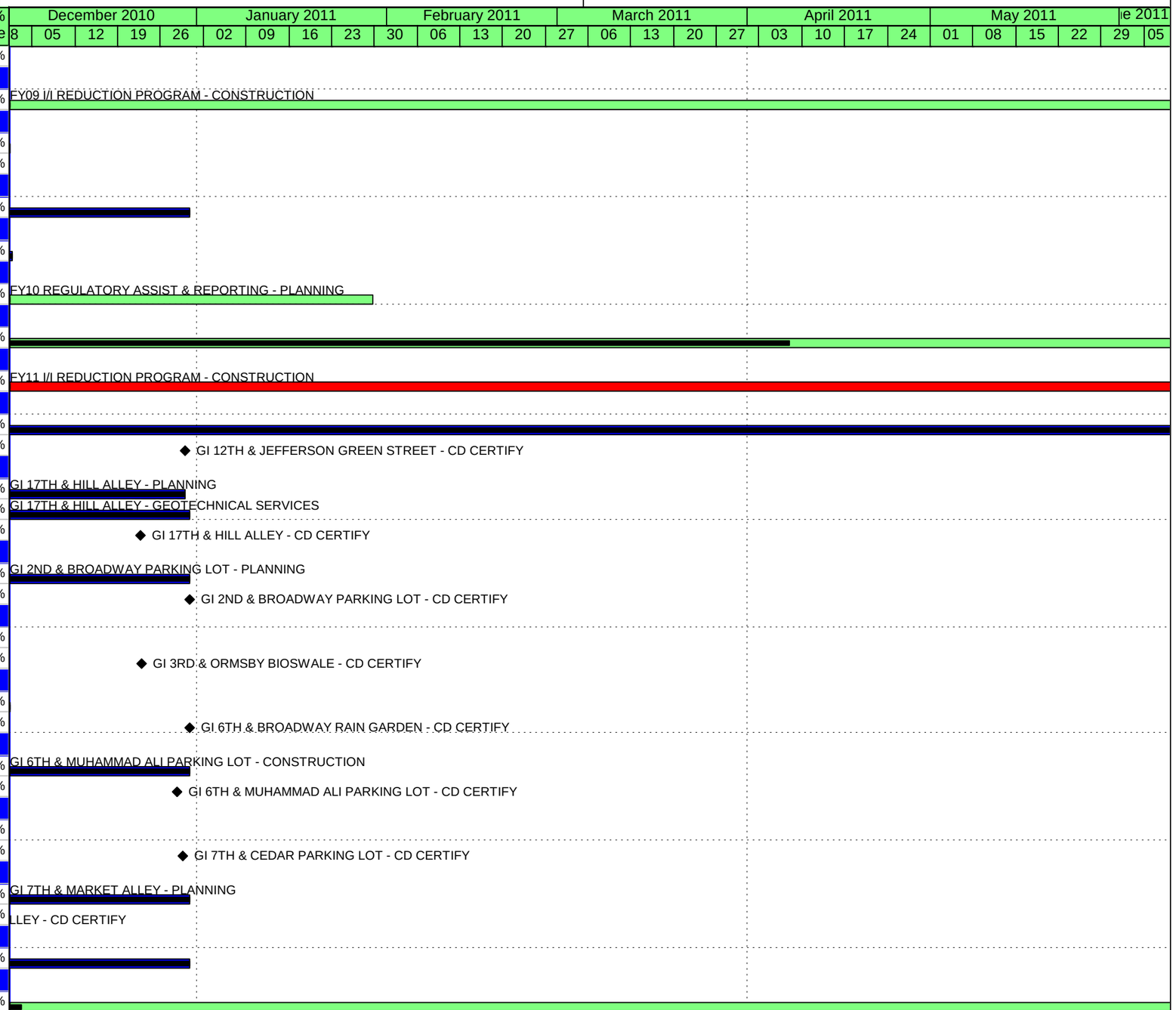
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H063024500	DRGWQTC: PUMPING PACKAGE - AWARD	100%
H063026000	DRGWQTC: PUMPING PACKAGE - CONSTRUCT	5%
EAST REGION EMERGENCY GENERATOR PHASE III		
H100824000	EAST REGION EMERG GENERATORS PH3 - AD DATE	100%
H100824050	EAST REGION EMERG GENERATORS PH3 - BID OPEN	100%
H100824500	EAST REGION EMERG GENERATORS PH3 - AWARD	100%
H100826000	EAST REGION EMERG GENERATORS PH3-CONST	80%
EAST ROCKFORD LANE PS RELOCATION		
A090912000	EAST ROCKFORD LANE PS RELOCATION - DESIGN	95%
A090912901	EAST ROCKFORD LN PS RELOC 10% DESIGN	100%
A090912902	EAST ROCKFORD LN PS RELOC 30% DESIGN	100%
A090912903	EAST ROCKFORD LN PS RELOC 60% DESIGN	100%
A090912904	EAST ROCKFORD LN PS RELOC 90% DESIGN	100%
A090912905	EAST ROCKFORD LN PS RELOC 100% DESIGN	100%
A090913000	EAST ROCKFORD LN PS RELOC - EASEMENT	100%
A090914000	EAST ROCKFORD LANE PS RELOCATION - AD DATE	100%
A090914050	EAST ROCKFORD LANE PS RELOCATION - BID OPEN	100%
A090914500	EAST ROCKFORD LANE PS RELOCATION - AWARD	100%
A090916000	EAST ROCKFORD LANE PS RELOCATION - CONSTRUCTION	0%
EAST ROCKFORD SSES		
H093931000	EAST ROCKFORD SSES - PLANNING	100%
H093931220	EAST ROCKFORD SSES REPORT	25%
EDEN CARE PUMP STATION INLINE STORAGE		
H091701200	EDEN CARE PUMP STATION ILS - SSES	95%
H091702000	EDEN CARE PUMP STATION ILS - DESIGN	50%
H091703000	EDEN CARE PUMP STATION ILS - EASEMENT	0%
EDSEL PUMP STATION I&I INVESTIGATION		
H091971200	EDSEL PUMP STATION I&I INVESTIGATION - SSES	95%
H091971220	EDSEL PS I&I INVESTIGATION - SSES REPORT	100%
H091972000	EDSEL PUMP STATION I&I INVESTIGATION - DESIGN	80%
FAIRWAY VIEW PUMP STATION IMPROVEMENT		
H091771200	FAIRWAY VIEW PUMP STATION IMPROVEMENT - SSES	95%
FLOYDSBURGH ROAD I&I INVESTIGATION & REDUCTION		
H091721000	FLOYDSBURGH RD I&I INVESTIG & REDUCTION-SSES PLA...	100%
H091722000	FLOYDSBURGH RD I&I INVESTIGATION & REDUCTION - DE...	0%
H091724000	FLOYDSBURGH RD I&I INVESTIGATION & REDUCTION- AD ...	100%
H091724050	FLOYDSBURGH RD I&I INVESTIGATION & REDUCTION - BI...	100%
H091724500	FLOYDSBURGH RD I&I INVESTIGATION & REDUCTION - A...	100%
H091726000	FLOYDSBURGH RD I&I INVESTIGATION & REDUCTION - CO...	95%
FOX HARBOR INLINE STORAGE		
H091761200	FOX HARBOR ILS - SSES	95%
FY08 SSOP UPDATE		
H062291000	FY08 SSOP UPDATE - PLANNING	75%
H062298050	FY08 SSOP UPDATE - CD CERTIFICATION	100%
FY09 BGC/OR LTCP		
I062331000	FY09 BGC/OR LTP - PLANNING	0%



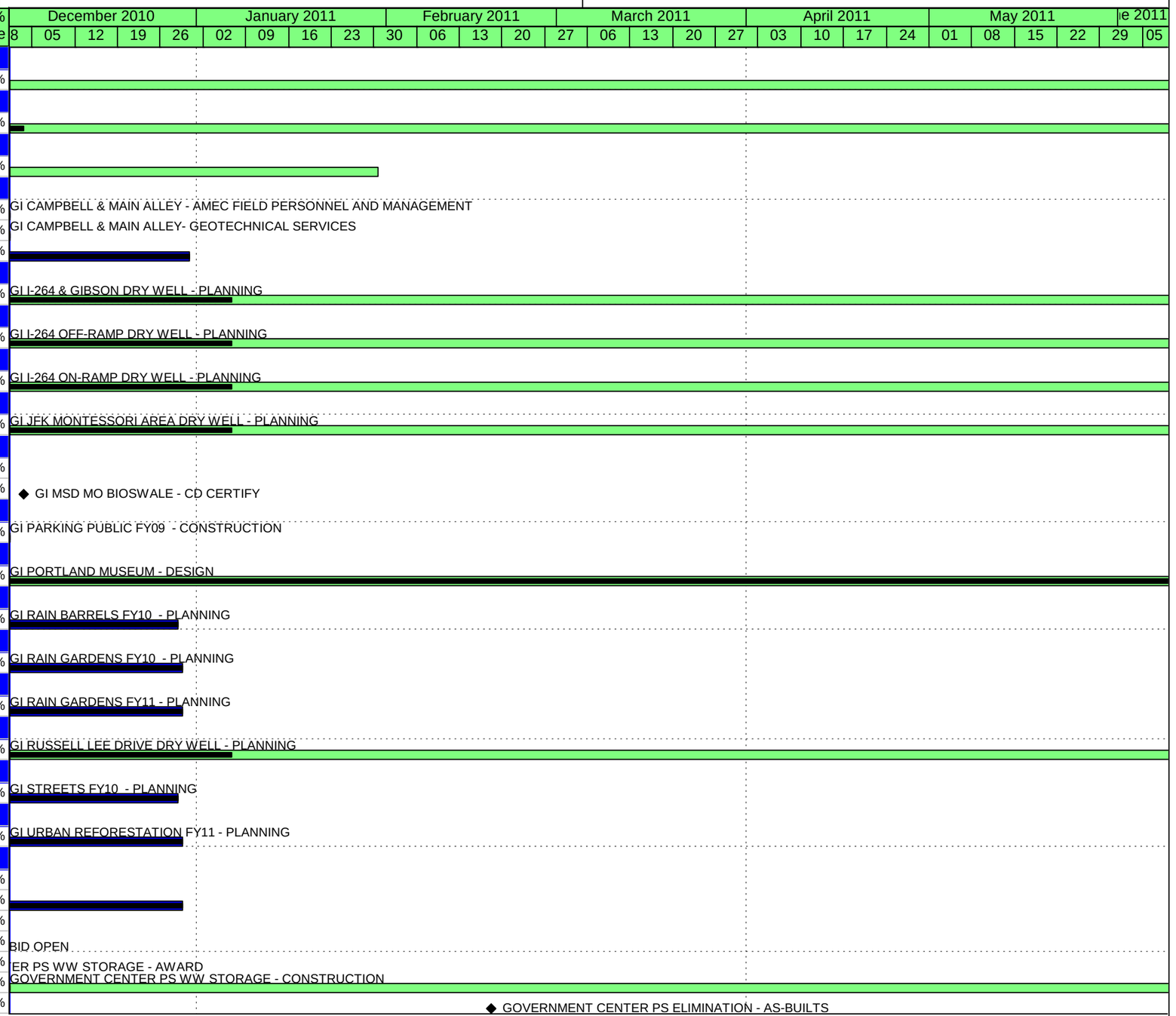
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
I062338050	FY09 BGC/OR LTP - CD CERTIFICATION	100%
FY09 I&I REDUCTION PROGRAM		
H092026000	FY09 I/I REDUCTION PROGRAM - CONSTRUCTION	0%
FY09 SSOP UPDATE		
H062321000	FY09 SSOP UPDATE - PLANNING	0%
H062328050	FY09 SSOP UPDATE - CD CERTIFICATION	100%
FY10 GREEN INFRASTRUCTURE PROJECTS		
H091486000	FY10 GREEN INFRASTRUCTURE PROJECTS - PLANNING	100%
FY10 I&I REDUCTION PROGRAM		
H092036000	FY10 I/I REDUCTION PROGRAM - CONSTRUCTION	100%
FY10 REGULATORY ASSISTANCE & REPORTING		
H101321000	FY10 REGULATORY ASSIST & REPORTING - PLANNING	0%
FY11 GREEN INFRASTRUCTURE PROJECTS		
H091496000	FY11 GREEN INFRASTRUCTURE PROJECTS - CONSTRUC...	40%
FY11 I&I REDUCTION PROGRAM		
H092046000	FY11 I/I REDUCTION PROGRAM - CONSTRUCTION	0%
GI 12th & JEFFERSON GREEN STREET		
H094336000	GI 12TH & JEFFERSON GREEN STREET - CONSTRUCTION	100%
H094338050	GI 12TH & JEFFERSON GREEN STREET - CD CERTIFY	100%
GI 17th & HILL ALLEY		
H094301000	GI 17TH & HILL ALLEY - PLANNING	100%
H094302901	GI 17TH & HILL ALLEY - GEOTECHNICAL SERVICES	100%
H094308050	GI 17TH & HILL ALLEY - CD CERTIFY	100%
GI 2nd & BROADWAY PARKING LOT		
H094261000	GI 2ND & BROADWAY PARKING LOT - PLANNING	100%
H094268050	GI 2ND & BROADWAY PARKING LOT - CD CERTIFY	100%
GI 3rd & ORMSBY BIOSWALE		
H094271000	GI 3RD & ORMSBY BIOSWALE - PLANNING	100%
H094278050	GI 3RD & ORMSBY BIOSWALE - CD CERTIFY	100%
GI 6th & BROADWAY RAIN GARDEN		
H094296000	GI 6TH & BROADWAY RAIN GARDEN - PLANNING	100%
H094298050	GI 6TH & BROADWAY RAIN GARDEN - CD CERTIFY	100%
GI 6th & MUHAMMAD ALI PARKING LOT		
H094286000	GI 6TH & MUHAMMAD ALI PARKING LOT - CONSTRUCTION	100%
H094288050	GI 6TH & MUHAMMAD ALI PARKING LOT - CD CERTIFY	100%
GI 7th & CEDAR PARKING LOT		
H094251000	GI 7TH & CEDAR PARKING LOT - PLANNING	100%
H094258050	GI 7TH & CEDAR PARKING LOT - CD CERTIFY	0%
GI 7th & MARKET ALLEY		
H094311000	GI 7TH & MARKET ALLEY - PLANNING	100%
H094318050	GI 7TH & MARKET ALLEY - CD CERTIFY	100%
GI ADD'L RAIN GARDENS PH 1 FY10		
H100391000	GI ADD'L RAIN GARDENS PH 1 FY10 - PLANNING	100%
GI ADD'L RAIN GARDENS PH 1 FY11		
H100411000	GI ADD'L RAIN GARDENS PH 1 FY11 - PLANNING	30%



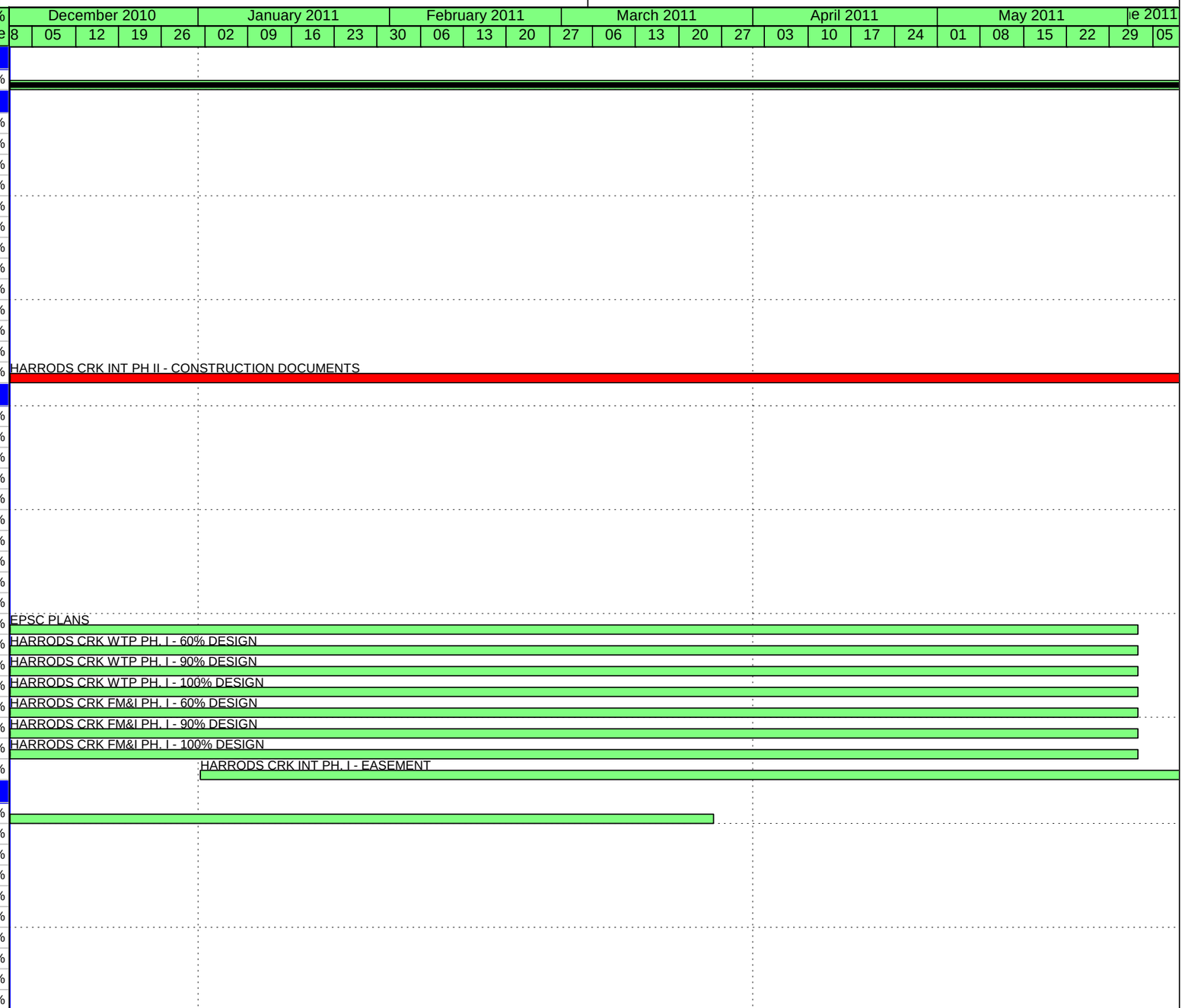
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
GI ADD'L RAIN GARDENS PH 2 FY10		
H100401000	GI ADD'L RAIN GARDENS PH 2 FY10 - PLANNING	30%
GI ADD'L RAIN GARDENS PH 2 FY11		
H100421000	GI ADD'L RAIN GARDENS PH 2 FY11 - PLANNING	30%
GI ALLEYS FY09		
H094131000	GI ALLEYS FY09 - PLANNING	50%
GI CAMPBELL & MAIN ALLEY		
H094322902	GI CAMPBELL & MAIN ALLEY - AMEC FIELD PERSONNEL A...	100%
H094322903	GI CAMPBELL & MAIN ALLEY- GEOTECHNICAL SERVICES	100%
H094326000	GI CAMPBELL & MAIN ALLEY - PLANNING	100%
GI I-264 & GIBSON DRY WELL		
H094441000	GI I-264 & GIBSON DRY WELL - PLANNING	10%
GI I-264 OFF-RAMP DRY WELL		
H094421000	GI I-264 OFF-RAMP DRY WELL - PLANNING	10%
GI I-264 ON-RAMP DRY WELL		
H094431000	GI I-264 ON-RAMP DRY WELL - PLANNING	10%
GI JFK MONTESSORI AREA DRY WELL		
H094461000	GI JFK MONTESSORI AREA DRY WELL - PLANNING	10%
GI MSD MO BIOSWALE		
H094241000	GI MSD MO BIOSWALE - PLANNING	100%
H094248050	GI MSD MO BIOSWALE - CD CERTIFY	100%
GI PARKING PUBLIC FY09		
H094156000	GI PARKING PUBLIC FY09 - CONSTRUCTION	100%
GI PORTLAND MUSEUM		
H101822000	GI PORTLAND MUSEUM - DESIGN	80%
GI RAIN BARRELS FY10		
H094191000	GI RAIN BARRELS FY10 - PLANNING	100%
GI RAIN GARDENS FY10		
H094201000	GI RAIN GARDENS FY10 - PLANNING	100%
GI RAIN GARDENS FY11		
H094411000	GI RAIN GARDENS FY11 - PLANNING	100%
GI RUSSELL LEE DRIVE DRY WELL		
H094451000	GI RUSSELL LEE DRIVE DRY WELL - PLANNING	10%
GI STREETS FY10		
H094171000	GI STREETS FY10 - PLANNING	100%
GI URBAN REFORESTATION FY11		
H094381000	GI URBAN REFORESTATION FY11 - PLANNING	100%
GOVERNMENT CENTER PUMP STATION WET WEATHER STORAGE BASIN		
H091942000	GOVERNMENT CENTER PS WW STORAGE - DESIGN	100%
H091943000	GOVERNMENT CENTER PS WW STORAGE - EASEMENT	100%
H091944000	GOVERNMENT CENTER PS WW STORAGE - AD DATE	100%
H091944050	GOVERNMENT CENTER PS WW STORAGE - BID OPEN	100%
H091944500	GOVERNMENT CENTER PS WW STORAGE - AWARD	100%
H091946000	GOVERNMENT CENTER PS WW STORAGE - CONSTRUCTI...	0%
H091946950	GOVERNMENT CENTER PS ELIMINATION - AS-BUILTS	0%



Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
GUNPOWDER PUMP STATION INLINE STORAGE		
H092421200	GUNPOWDER PUMP STATION ILS - SSES	95%
HARRODS CREEK INT PHASE II		
D002492005	PRELIMINARY FIELD WALK-THRU	100%
D002492040	OBTAIN UTILITY COMMENTS	100%
D002492045	FEILD WALK-THRU TO REVIEW UTILITY COMMENTS	100%
D002492055	MSD PLAN & PLAT REVIEW	100%
D002492070	REVISE PLANS/PLATS PER MSD COMMENTS	100%
D002492090	HARRODS CRK INT PHASE II - PLATS	100%
D002492901	50% SURVEY COMPLETE	100%
D002492902	30% PLANS SUBMITTAL	100%
D002492903	50% PLAN UTILITY SUBMITTAL	100%
D002492904	80% PLANS SUBMITTAL	100%
D002492905	100% PLANS & CONTRACT DOCUMENTS	100%
D002492907	HARRODS CRK INT PH II - EASEMENT PLATS	100%
D002492908	HARRODS CRK INT PH II - CONSTRUCTION DOCUMENTS	0%
HARRODS CREEK INTERCEPTOR		
D942072000	HARRODS CRK INT PH. I - DESIGN	100%
D942072005	PRELIMINARY FIELD WALK-THRU	100%
D942072040	OBTAIN UTILITY COMMENTS	100%
D942072045	FEILD WALK-THRU TO REVIEW UTILITY COMMENTS	100%
D942072055	MSD PLAN & PLAT REVIEW	100%
D942072901	50% SURVEY COMPLETE	100%
D942072902	30% PLANS SUBMITTAL	100%
D942072903	50% PLAN UTILITY SUBMITTAL	100%
D942072904	80% PLANS SUBMITTAL	100%
D942072905	100% PLANS & CONTRACT DOCUMENTS	100%
D942072906	EPSC PLANS	0%
D942072907	HARRODS CRK WTP PH. I - 60% DESIGN	0%
D942072908	HARRODS CRK WTP PH. I - 90% DESIGN	0%
D942072909	HARRODS CRK WTP PH. I - 100% DESIGN	0%
D942072910	HARRODS CRK FM&I PH. I - 60% DESIGN	0%
D942072911	HARRODS CRK FM&I PH. I - 90% DESIGN	0%
D942072912	HARRODS CRK FM&I PH. I - 100% DESIGN	0%
D942073000	HARRODS CRK INT PH. I - EASEMENT	0%
HARRODS CREEK PS & FM		
D942062000	HARRODS CREEK P.S. & F.M. - DESIGN	0%
D942062005	PRELIMINARY FIELD WALK-THRU	100%
D942062010	PRELIMINARY DESIGN	100%
D942062046	FINAL ALIGNMENT WALK-THRU	100%
D942062047	FINAL ALIGNMENT APPROVAL	100%
D942062901	HARRODS CREEK - 50% SURVEY COMPLETE	100%
D942062902	MILESTONE #2	100%
D942062903	HARRODS CREEK - CONCEPTUAL DESIGN	100%
D942062904	HARRODS CREEK - 30% PLAN SUBMITTAL	100%
D942062905	MILESTONE #5	100%



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Activity ID	Activity Name	Physical % Complete
D942062906	HARRODS CREEK - R.E.D. MEETING	100%
D942062907	PRELIMINARY PLANS	100%
D942062908	STORAGE	100%
D942062909	HARRODS CREEK - VALUE ENGINEERING	100%
D942062913	HARRODS CREEK - 50% PLAN UTILITY SUBMITTAL	100%
D942062914	HARRODS CREEK - 80% PLANS SUBMITTAL	0%
D942062915	HARRODS CREEK - 100% PLANS & CONTRACT DOCS	0%
D942062918	HC/PROSPECT AREA STUDY-TASK 1.1 & 2.1	100%
D942062919	HC/PROSPECT AREA STUDY-TASK 2.1	100%
D942062920	HC/PROSPECT AREA STUDY-TASK 2.2	100%
D942062921	HC/PROSPECT AREA STUDY-TASK 2.3-2.4	100%
D942062922	HC/PROSPECT AREA STUDY-TASK 3.1-3.2	100%
D942062923	HC/PROSPECT AREA STUDY-TASK 3.3	100%
D942062924	HC/PROSPECT AREA STUDY-TASK 4.1-4.3	100%
D942062925	HC/PROSPECT AREA STUDY-TASK 4.4	100%
D942062926	HC/PROSPECT AREA STUDY-SURVEYING	0%
D942062927	HC/PROSPECT AREA STUDY-GUARANTEED MAXIMUM ASS...	0%
D942062928	HC/PROSPECT AREA STUDY-PRELIMINARY DESIGN AND S...	0%
D942062929	HC/PROSPECT AREA STUDY-FINAL DESIGN	0%
D942062930	HC/PROSPECT AREA STUDY-EASEMENT PLATS	0%
D942062931	HC/PROSPECT AREA STUDY-MEETINGS AND REPORTS	0%
D942062932	HC/PROSPECT AREA STUDY-DIRECT EXPENSES	0%
D942062933	HC/PROSPECT AREA STUDY-FIELD DELINEATION	0%
D942062934	HC/PROSPECT AREA STUDY-THREATENED/ENDANGERED...	0%
D942062935	HC/PROSPECT AREA STUDY-CULTURAL RESOURCES OV...	0%
D942062936	HC/PROSPECT AREA STUDY-WATER/WETLAND PERMITTI...	0%
D942062937	HC/PROSPECT AREA STUDY-THREATENED/ENDANGERED...	0%
D942062938	HC/PROSPECT AREA STUDY-TASK MEETINGS/COORDINA...	0%
D942063000	HARRODS CREEK P.S. & F.M. - EASEMENT	0%
HAZELWOOD PUMP STATION I&I INVESTIGATION		
H091811200	HAZELWOOD PUMP STATION I&I INVESTIGATION - SSES	90%
H091811220	HAZELWOOD PS I&I INVESTIGATION - SSES REPORT	90%
H091812000	HAZELWOOD PUMP STATION I&I INVESTIGATION - DESIGN	10%
H091813000	HAZELWOOD PUMP STATION I&I INVESTIGATION - EASEM...	0%
H091814000	HAZELWOOD PUMP STATION I&I INVESTIGATION- AD DATE	0%
H091814050	HAZELWOOD PUMP STATION I&I INVESTIGATION - BID OPEN	0%
HIKES POINT INTERCEPTOR		
H072862000	HIKES POINT INTERCEPTOR - DESIGN	90%
H072862001	HIKES POINT INTERCEPTOR - NTP	100%
H072862901	HIKES POINT INTERCEPTOR - 10% DESIGN SUBMITTAL	100%
H072862902	HIKES POINT INTERCEPTOR - 30% DESIGN SUBMITTAL	100%
H072862903	HIKES POINT INTERCEPTOR - ENVIRON/SURVEY	100%
H072862904	HIKES POINT INTERCEPTOR - 60% DESIGN SUBMITTAL	100%
H072862905	HIKES POINT INTERCEPTOR - 90% DESIGN SUBMITTAL	100%
H072862906	HIKES POINT INTERCEPTOR - 100% DESIGN SUBMITTAL	90%
H072863000	HIKES POINT INTERCEPTOR - EASEMENTS	90%
HIKES POINT RELIEF EFFORT		

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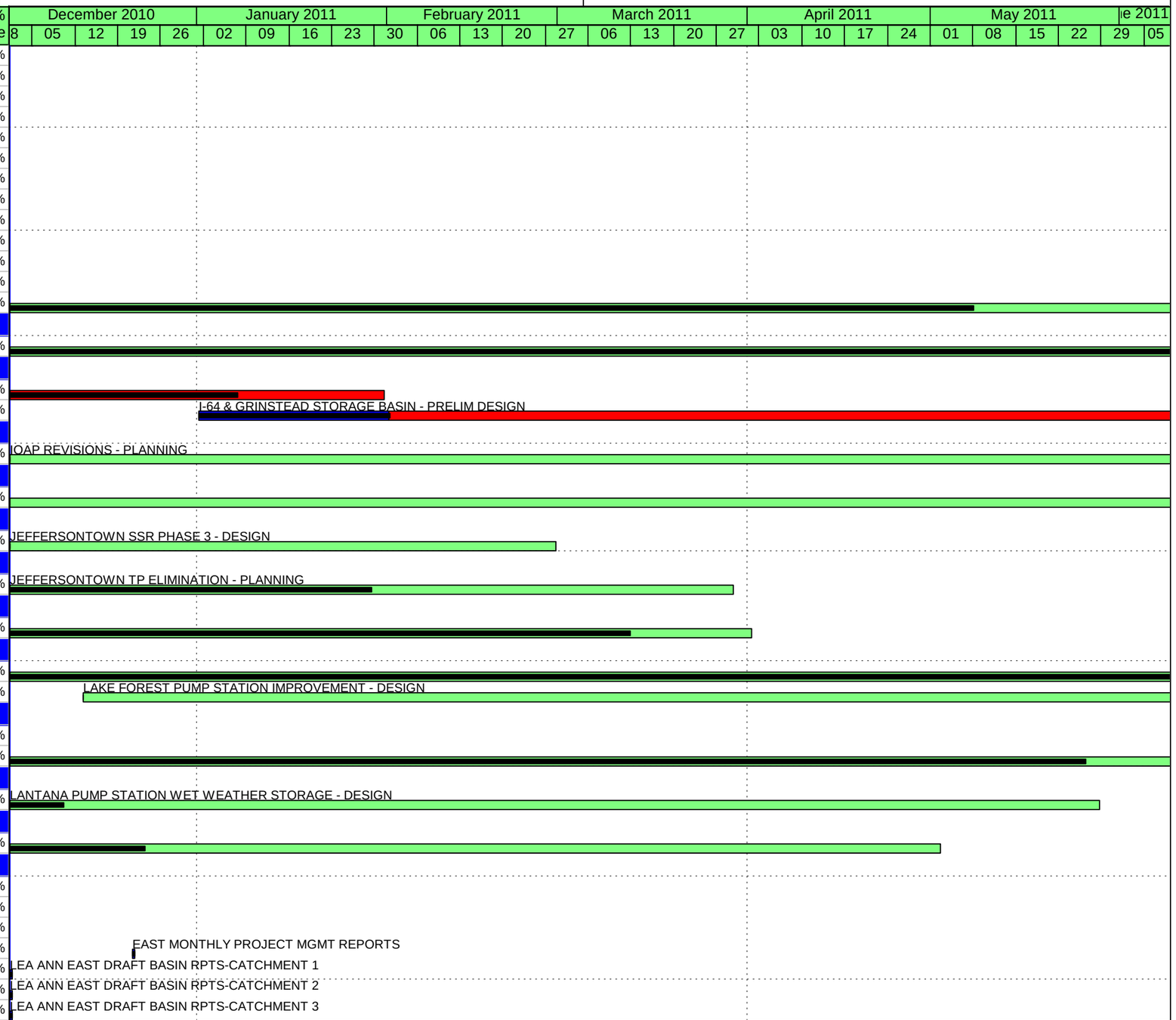
Activity ID	Activity Name	Physical % Complete
H072872000	HIKES POINT RELIEF SEWER EFFORT - DESIGN	100%
H072872001	HIKES POINT INT - NTP	100%
H072872901	HIKES POINT INT - BACKGROUND & STDS	100%
H072872902	HIKES POINT INT - GEOTECH REPORT	100%
H072872903	HIKES POINT INT - TRAFFIC ANALYSIS	100%
H072872904	HIKES POINT INT - PROPERTY RESEARCH	100%
H072872905	HIKES POINT INT - PIPE MATERIAL RECM & TECH MEMO	100%
H072872906	HIKES POINT INT - STRUCTURAL MEMO & PRELIM DRAWG	100%
H072872907	HIKES POINT INT - HYDRAULIC HOR/VER ALIGN TM	100%
H072872908	HIKES POINT INT - TRAFFIC ANALYSIS TECH MEMO	100%
H072872909	HIKES POINT INT - CONSTRUCTABILITY; COST & SCHED	100%
H072872910	HP INT REPORT W/PRESENTATION-100%	100%
H072873000	HIKES POINT RELIEF SEWER EFFORT - EASEMENTS	85%
HURSTBOURNE I&I INVEST & REHAB		
H092192000	HURSTBOURNE I&I INVEST & REHAB - DESIGN	90%
I-64 & GRINSTEAD STORAGE BASIN		
H091211000	I-64 & GRINSTEAD STORAGE BASIN - PLANNING	95%
H091212000	I-64 & GRINSTEAD STORAGE BASIN - PRELIM DESIGN	10%
IOAP REVISIONS		
H094551000	IOAP REVISIONS - PLANNING	0%
JEFFERSONTOWN SSES		
H093951000	JEFFERSONTOWN SSES - PLANNING	5%
JEFFERSONTOWN SSR PHASE 3		
H094092000	JEFFERSONTOWN SSR PHASE 3 - DESIGN	0%
JEFFERSONTOWN TP ELIMINATION		
H072931000	JEFFERSONTOWN TP ELIMINATION - PLANNING	50%
KAVANAUGH ROAD PUMP STATION IMPROVEMENT		
H091711000	KAVANAUGH RD PUMP STATION IMP - SSES PLANNING	95%
LAKE FOREST PUMP STATION IMPROVEMENT		
H091731200	LAKE FOREST PUMP STATION IMPROVEMENT - SSES	75%
H091732000	LAKE FOREST PUMP STATION IMPROVEMENT - DESIGN	0%
LAKE FOREST SSES		
H093961000	LAKE FOREST SSES - PLANNING	100%
H093961220	LAKE FOREST SSES REPORT	95%
LANTANA PUMP STATION WET WEATHER STORAGE BASIN		
H091932000	LANTANA PUMP STATION WET WEATHER STORAGE - DE...	5%
LEA ANN WAY PHASE 2 ICA		
H093981000	LEA ANN WAY PHASE 2 ICA - PLANNING	80%
LEA ANN WAY PS SYSTEM SSES		
H090962902	EAST PROJECT WORK PLAN	100%
H090962903	EAST DATA, COLLECTION, REVIEW&BASIN DELINEATION	100%
H090962904	LEA ANN SSES EAST NOTIFICATION PLAN	100%
H090962905	EAST MONTHLY PROJECT MGMT REPORTS	100%
H090962907	LEA ANN EAST DRAFT BASIN RPTS-CATCHMENT 1	100%
H090962908	LEA ANN EAST DRAFT BASIN RPTS-CATCHMENT 2	100%
H090962909	LEA ANN EAST DRAFT BASIN RPTS-CATCHMENT 3	100%



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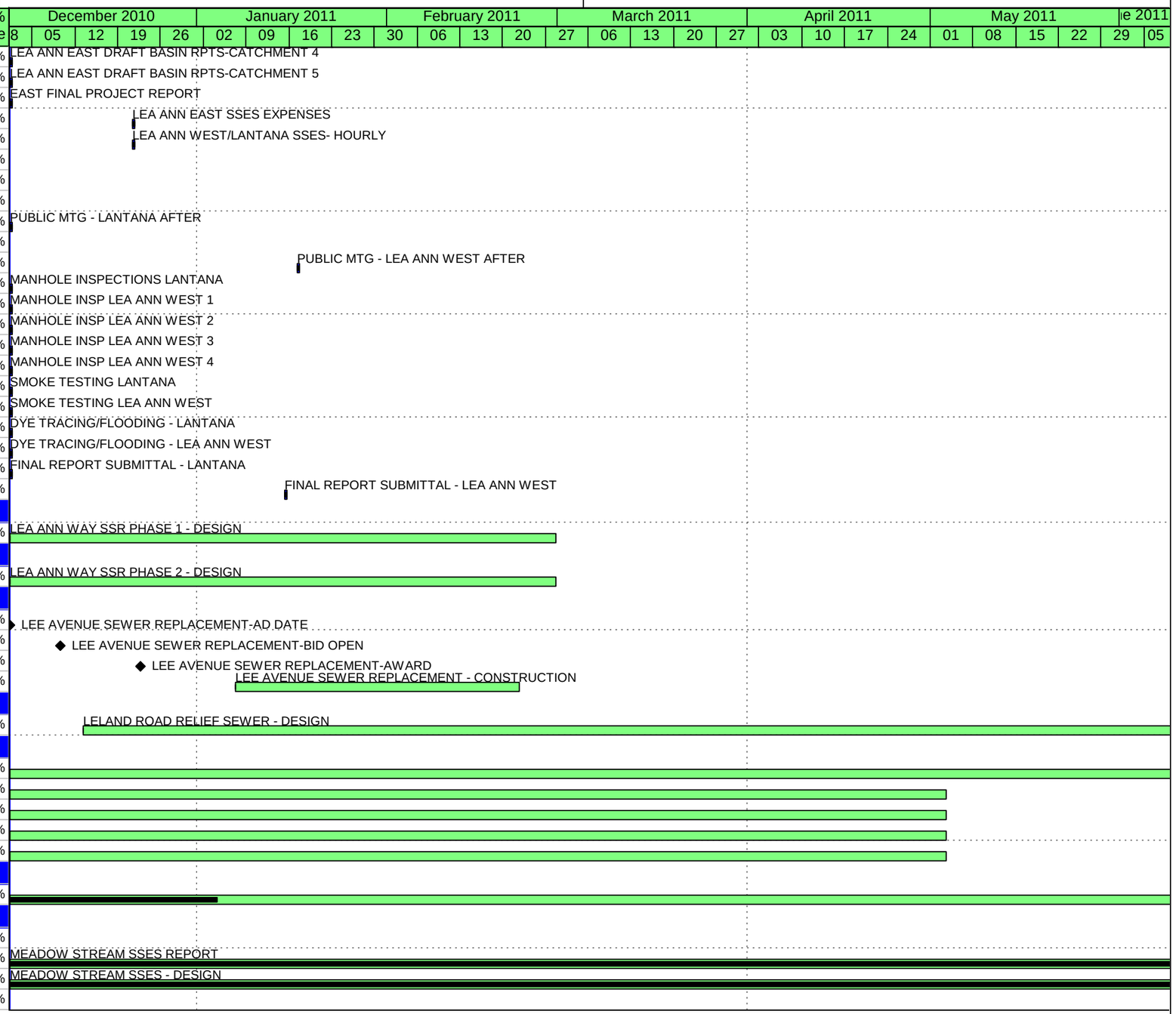
Activity ID	Activity Name	Physical % Complete
H090962910	LEA ANN EAST DRAFT BASIN RPTS-CATCHMENT 4	100%
H090962911	LEA ANN EAST DRAFT BASIN RPTS-CATCHMENT 5	100%
H090962912	EAST FINAL PROJECT REPORT	100%
H090962913	LEA ANN EAST SSES EXPENSES	100%
H090962914	LEA ANN WEST/LANTANA SSES- HOURLY	100%
H090962915	LA WEST/LANTANA KICKOFF MTG	100%
H090962916	LEA ANN WEST/LANTANA WORK PLAN	100%
H090962917	PUBLIC MTG - LANTANA BEFORE	100%
H090962918	PUBLIC MTG - LANTANA AFTER	100%
H090962919	PUBLIC MTG - LEA ANN WEST BEFORE	100%
H090962920	PUBLIC MTG - LEA ANN WEST AFTER	100%
H090962921	MANHOLE INSPECTIONS LANTANA	100%
H090962922	MANHOLE INSP LEA ANN WEST 1	100%
H090962923	MANHOLE INSP LEA ANN WEST 2	100%
H090962924	MANHOLE INSP LEA ANN WEST 3	100%
H090962925	MANHOLE INSP LEA ANN WEST 4	100%
H090962926	SMOKE TESTING LANTANA	100%
H090962927	SMOKE TESTING LEA ANN WEST	100%
H090962928	DYE TRACING/FLOODING - LANTANA	100%
H090962929	DYE TRACING/FLOODING - LEA ANN WEST	100%
H090962930	FINAL REPORT SUBMITTAL - LANTANA	100%
H090962931	FINAL REPORT SUBMITTAL - LEA ANN WEST	100%
LEA ANN WAY SSR PHASE 1		
H094052000	LEA ANN WAY SSR PHASE 1 - DESIGN	0%
LEA ANN WAY SSR PHASE 2		
H094062000	LEA ANN WAY SSR PHASE 2 - DESIGN	0%
LEE AVE SEWER REPLACEMENT		
A101944000	LEE AVENUE SEWER REPLACEMENT-AD DATE	0%
A101944050	LEE AVENUE SEWER REPLACEMENT-BID OPEN	0%
A101944500	LEE AVENUE SEWER REPLACEMENT-AWARD	0%
A101946000	LEE AVENUE SEWER REPLACEMENT - CONSTRUCTION	0%
LELAND ROAD RELIEF SEWER		
H091892000	LELAND ROAD RELIEF SEWER - DESIGN	0%
LOGAN STREET & BRECKINRIDGE STREET STORAGE BASIN		
H091422000	LOGAN ST & BRECKENRIDGE ST STORAGE BASIN - DESIGN	10%
H091422901	LOGAN ST STOR BASIN-BUILD TEAM	50%
H091422902	LOGAN ST STOR BASIN-INFO COLLECTION	50%
H091422903	LOGAN ST STOR BASIN-SITE & TECH SELECT	50%
H091422904	LOGAN ST STOR BASIN-PRELIM DESING & PRMT	50%
MEADOW STREAM PUMP STATION INLINE STORAGE		
H091741200	MEADOW STREAM PUMP STATION ILS - SSES	50%
MEADOW STREAM/HITE CREEK SSES		
H093941000	MEADOW STREAM SSES - PLANNING	100%
H093941220	MEADOW STREAM SSES REPORT	95%
H093942000	MEADOW STREAM SSES - DESIGN	95%
H093942901	MEADOW STREAM SSES PROJECT WORK PLAN	100%



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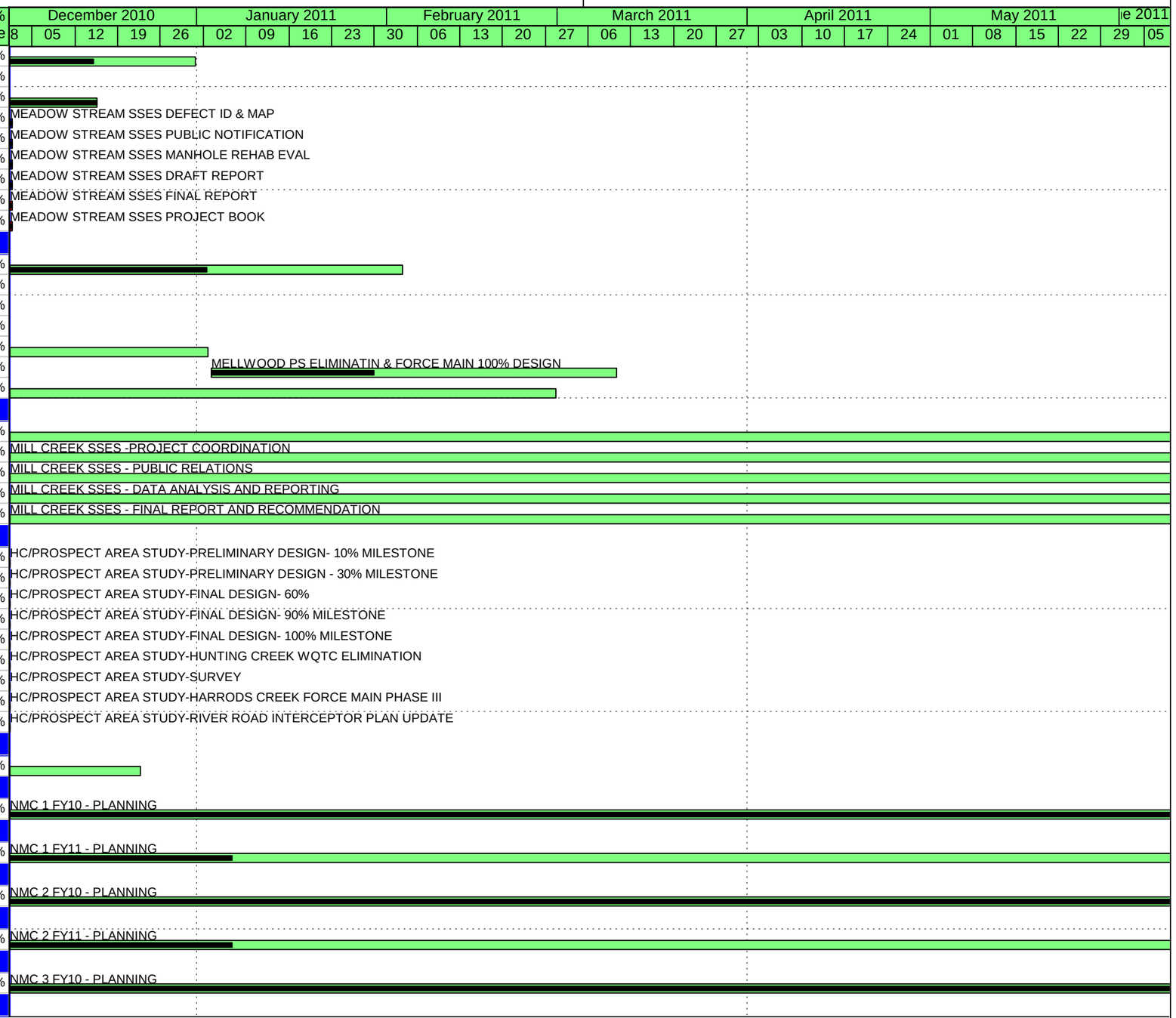
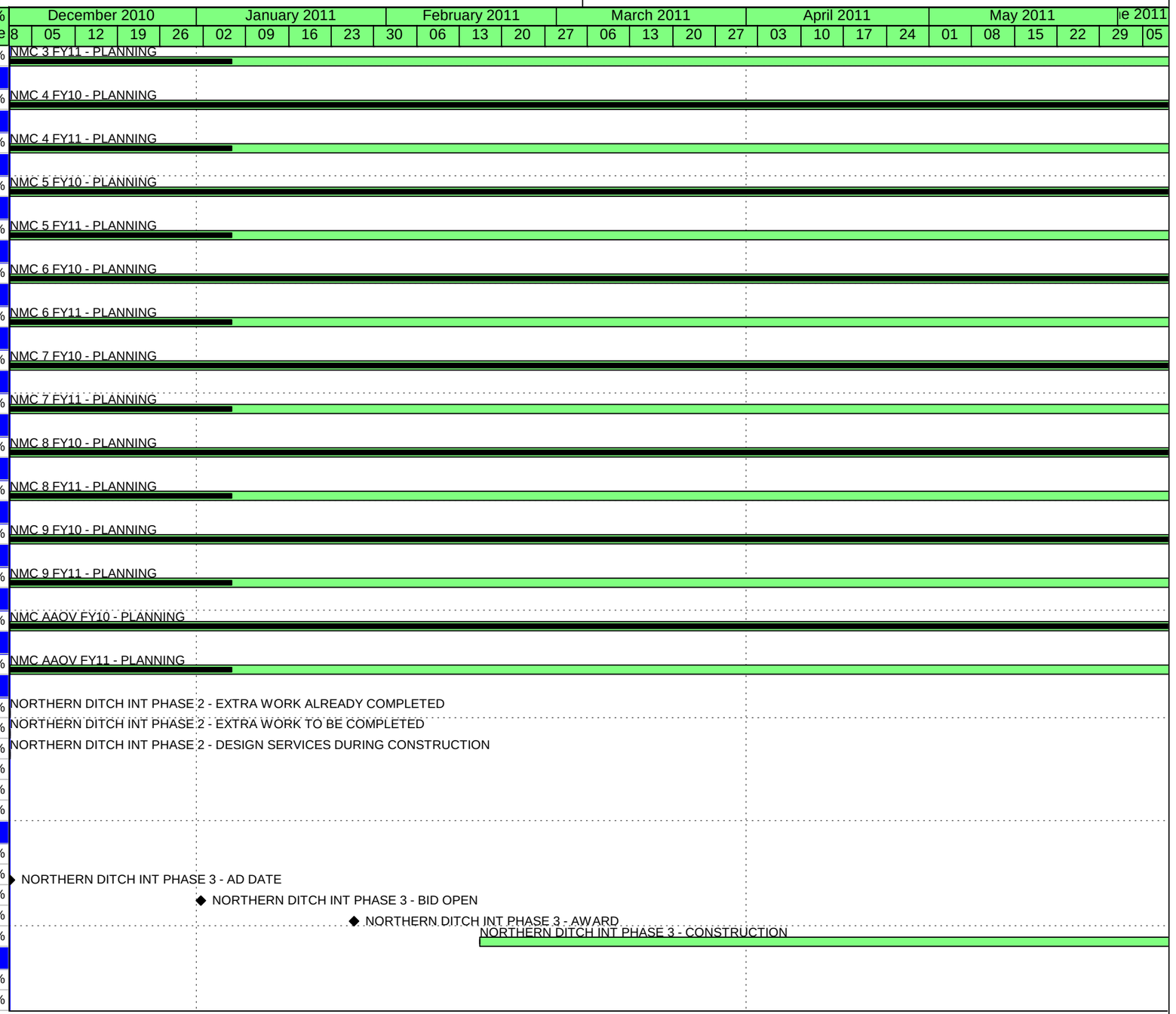
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H093942902	MEADOW STREAM SSES MONTHLY MTG&MGMT	95%
H093942903	MEADOW STREAM SSES INITIAL FIELD REVIEW	100%
H093942905	MEADOW STREAM SSES CCTV DATA ANALYSIS	100%
H093942908	MEADOW STREAM SSES DEFECT ID & MAP	100%
H093942909	MEADOW STREAM SSES PUBLIC NOTIFICATION	100%
H093942910	MEADOW STREAM SSES MANHOLE REHAB EVAL	100%
H093942911	MEADOW STREAM SSES DRAFT REPORT	100%
H093942912	MEADOW STREAM SSES FINAL REPORT	95%
H093942913	MEADOW STREAM SSES PROJECT BOOK	95%
MELLWOOD PS ELIMINATION & FORCE MAIN		
A095562000	MELLWOOD PS ELIMINATION & FORCE MAIN - DESIGN	95%
A095562901	MELLWOOD PS ELIMINATION & FORCE MAIN 10% DESIGN	100%
A095562902	MELLWOOD PS ELIMINATION & FORCE MAIN 30% DESIGN	100%
A095562903	MELLWOOD PS ELIMINATION & FORCE MAIN 60% DESIGN	100%
A095562904	MELLWOOD PS ELIMINATION & FORCE MAIN 90% DESIGN	50%
A095562905	MELLWOOD PS ELIMINATIN & FORCE MAIN 100% DESIGN	40%
A095563000	MELLWOOD PS ELIMINATION & FORCE MAIN - EASEMENTS	0%
MILL CREEK SSES		
H093991000	MILL CREEK SSES - PLANNING	5%
H093992901	MILL CREEK SSES -PROJECT COORDINATION	0%
H093992902	MILL CREEK SSES - PUBLIC RELATIONS	0%
H093992903	MILL CREEK SSES - DATA ANALYSIS AND REPORTING	0%
H093992904	MILL CREEK SSES - FINAL REPORT AND RECOMMENDATION	0%
MSD UPD Current Schedule		
D942062939	HC/PROSPECT AREA STUDY-PRELIMINARY DESIGN- 10% ...	0%
D942062940	HC/PROSPECT AREA STUDY-PRELIMINARY DESIGN - 30% ...	0%
D942062941	HC/PROSPECT AREA STUDY-FINAL DESIGN- 60%	0%
D942062942	HC/PROSPECT AREA STUDY-FINAL DESIGN- 90% MILESTO...	0%
D942062943	HC/PROSPECT AREA STUDY-FINAL DESIGN- 100% MILEST...	0%
D942062944	HC/PROSPECT AREA STUDY-HUNTING CREEK WQTC ELI...	0%
D942062945	HC/PROSPECT AREA STUDY-SURVEY	0%
D942062946	HC/PROSPECT AREA STUDY-HARRODS CREEK FORCE MA...	0%
D942062947	HC/PROSPECT AREA STUDY-RIVER ROAD INTERCEPTOR ...	0%
MUNCIE AVENUE ACCESS ROAD FOR ISO 05		
B101486000	MUNCIE AVE ACCESS ROAD FOR ISO 05 -CONSTRUCT	0%
NMC 1 FY10		
H093061000	NMC 1 FY10 - PLANNING	99%
NMC 1 FY11		
H093161000	NMC 1 FY11 - PLANNING	10%
NMC 2 FY10		
H093071000	NMC 2 FY10 - PLANNING	90%
NMC 2 FY11		
H093171000	NMC 2 FY11 - PLANNING	10%
NMC 3 FY10		
H093081000	NMC 3 FY10 - PLANNING	90%
NMC 3 FY11		



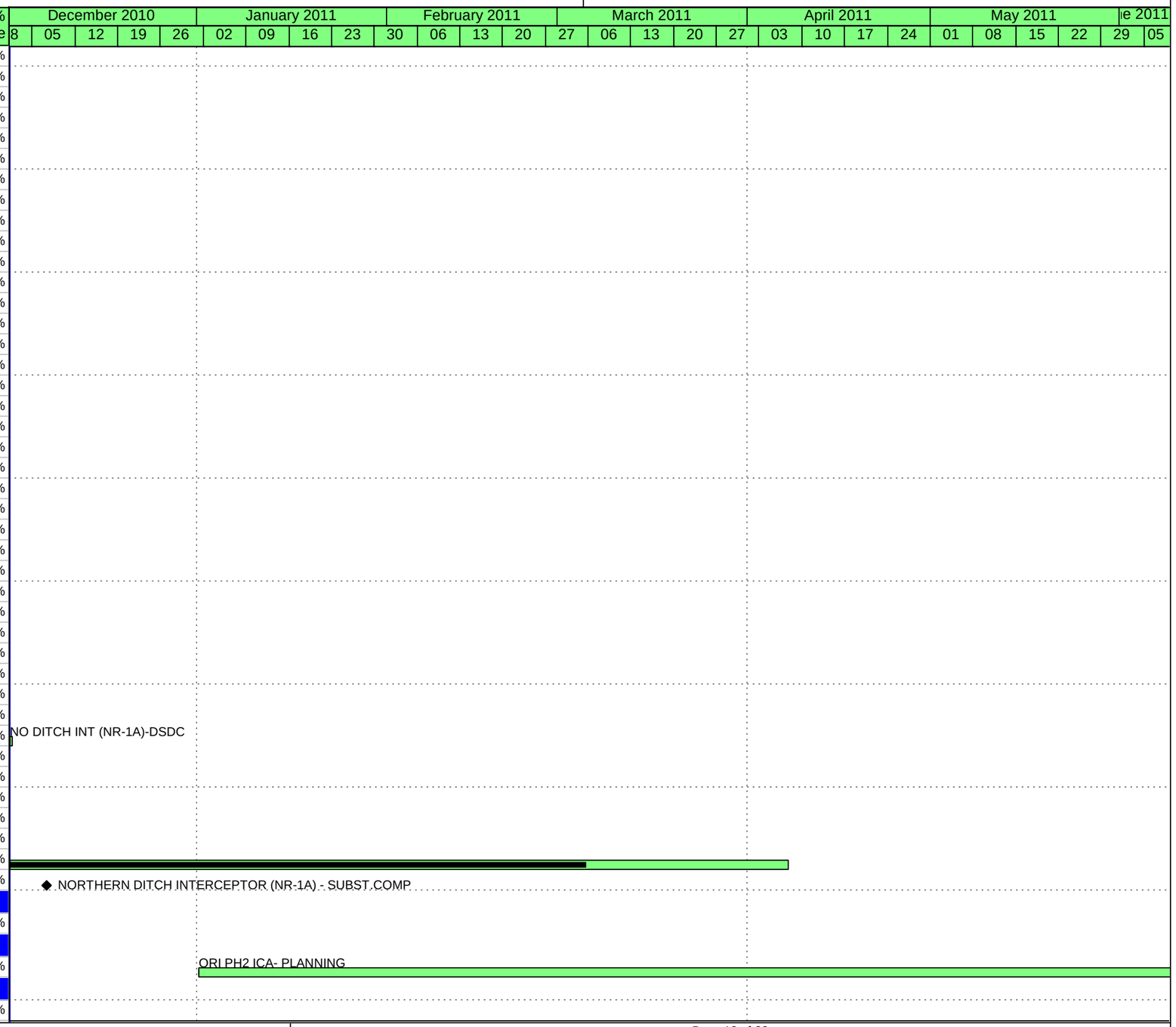
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H093181000	NMC 3 FY11 - PLANNING	10%
NMC 4 FY10		
H093091000	NMC 4 FY10 - PLANNING	90%
NMC 4 FY11		
H093191000	NMC 4 FY11 - PLANNING	10%
NMC 5 FY10		
H093101000	NMC 5 FY10 - PLANNING	90%
NMC 5 FY11		
H093201000	NMC 5 FY11 - PLANNING	10%
NMC 6 FY10		
H093111000	NMC 6 FY10 - PLANNING	90%
NMC 6 FY11		
H093211000	NMC 6 FY11 - PLANNING	10%
NMC 7 FY10		
H093121000	NMC 7 FY10 - PLANNING	90%
NMC 7 FY11		
H093221000	NMC 7 FY11 - PLANNING	10%
NMC 8 FY10		
H093131000	NMC 8 FY10 - PLANNING	90%
NMC 8 FY11		
H093231000	NMC 8 FY11 - PLANNING	10%
NMC 9 FY10		
H093141000	NMC 9 FY10 - PLANNING	90%
NMC 9 FY11		
H093241000	NMC 9 FY11 - PLANNING	10%
NMC AAOV FY10		
H093151000	NMC AAOV FY10 - PLANNING	90%
NMC AAOV FY11		
H093251000	NMC AAOV FY11 - PLANNING	10%
NORTHERN DITCH INT PHASE 2		
A092262901	NORTHERN DITCH INT PHASE 2 - EXTRA WORK ALREADY ...	50%
A092262902	NORTHERN DITCH INT PHASE 2 - EXTRA WORK TO BE CO...	50%
A092262903	NORTHERN DITCH INT PHASE 2 - DESIGN SERVICES DURI...	50%
A092264000	NORTHERN DITCH INT PHASE 2 - AD DATE	100%
A092264050	NORTHERN DITCH INT PHASE 2 - BID OPEN	100%
A092264500	NORTHERN DITCH INT PHASE 2 - AWARD	100%
NORTHERN DITCH INT PHASE 3		
A095003000	NORTHERN DITCH INT PHASE 3 - EASEMENT	100%
A095004000	NORTHERN DITCH INT PHASE 3 - AD DATE	0%
A095004050	NORTHERN DITCH INT PHASE 3 - BID OPEN	0%
A095004500	NORTHERN DITCH INT PHASE 3 - AWARD	0%
A095006000	NORTHERN DITCH INT PHASE 3 - CONSTRUCTION	0%
NORTHERN DITCH INTERCEPTOR (NR-1A)		
C850171000	NORTHERN DITCH INTERCEPTOR (NR-1A) - PLANNING	100%
C850172000	NORTHERN DITCH INTERCEPTOR (NR-1A) - REDESIGN	100%



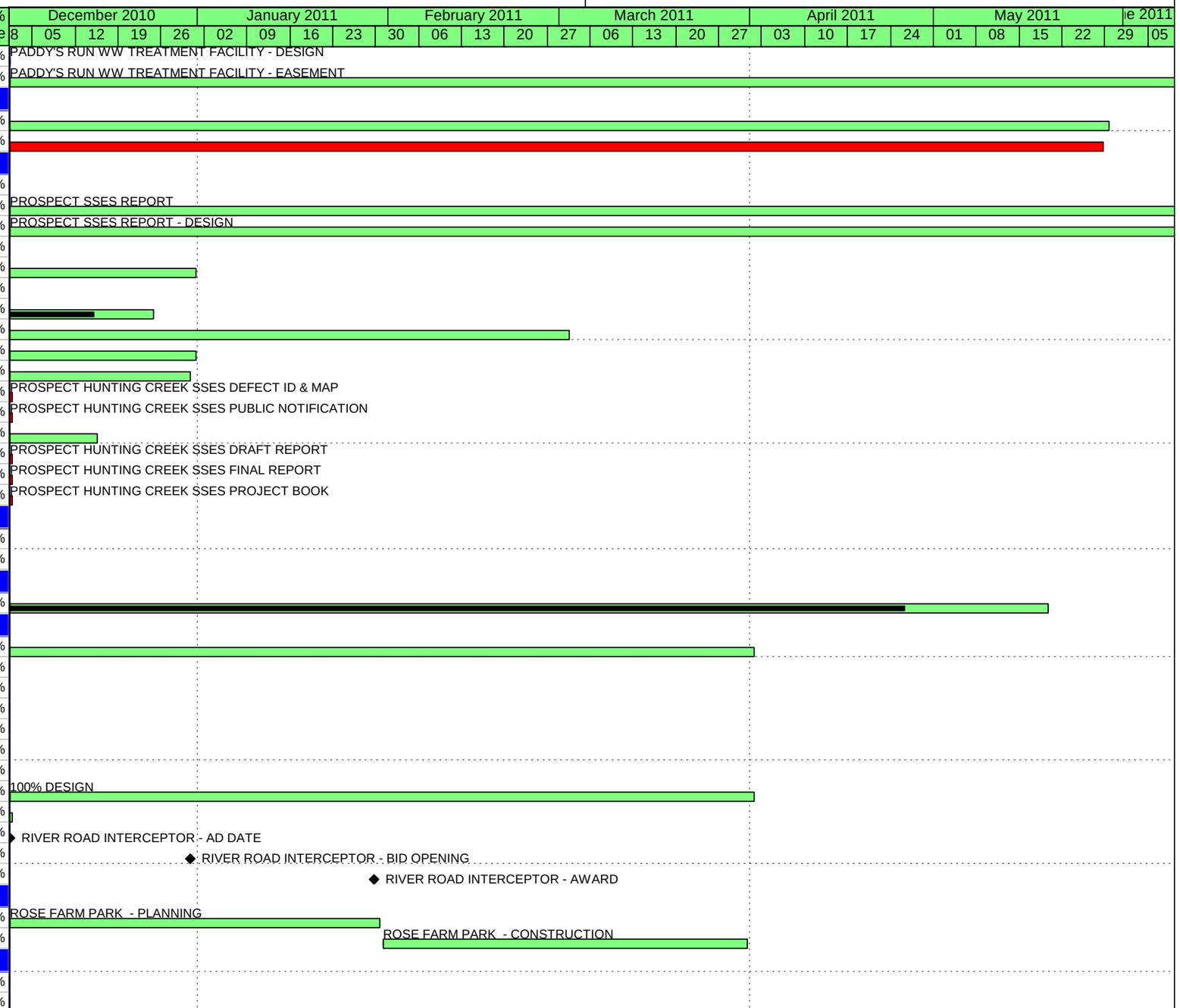
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
C850172010	NORTHERN DITCH INTERCEPTOR (NR-1A) - 60% SURVEY	100%
C850172020	NORTHERN DITCH INTERCEPTOR (NR-1A) - 30% DESIGN	100%
C850172030	NORTHERN DITCH INT (NR-1A) - 50% & PRELIM REPORT	100%
C850172040	NORTHERN DITCH INT (NR-1A) - 90% SURVEY	100%
C850172050	NORTHERN DITCH INT (NR-1A) - GEOTECH EXPLORATION	100%
C850172060	NORTHERN DITCH INT (NR-1A) - 80% & ESMT PLATS	100%
C850172070	NORTHERN DITCH INT (NR-1A)- 95% DESIGN	100%
C850172080	NORTHERN DITCH INT (NR-1A) - 100% DESIGN	100%
C850172090	NORTHERN DITCH INTERC. (NR-1A) - EASEMENT PLATS*	100%
C850172901	NORTHERN DITCH INTERCEPTOR (NR-1A) - 60% SURVEY	100%
C850172902	NORTHERN DITCH INTERCEPTOR (NR-1A) - 30% DESIGN	100%
C850172903	NORTHERN DITCH INT (NR-1A) - 50% & PRELIM REPORT	100%
C850172904	NORTHERN DITCH INT (NR-1A) - 90% SURVEY	100%
C850172905	NORTHERN DITCH INT (NR-1A) - GEOTECH EXPLORATION	100%
C850172906	NORTHERN DITCH INT (NR-1A) 0 80% & ESMT PLATS	100%
C850172907	NORTHERN DITCH INT (NR-1A) - 95% DESIGN	100%
C850172908	NORTHERN DITCH INT (NR-1A) - 100% DESIGN	100%
C850172909	NORTHERN DITCH INT (NR-1A) - 10% DESIGN	100%
C850172910	NORTHERN DITCH INT (NR-1A) - DRILLING/ESA/W'LAND	100%
C850172911	NORTHERN DITCH INT (NR-1A) - ECO/GEOTECH TESTING	100%
C850172912	NO DITCH INT (NR-1A)-25% SURVEY/GWATER/BIOLOGIC	100%
C850172913	NO DITCH INT (NR-1A)-30% DESIGN/FINAL GEOTECH	100%
C850172914	NO DITCH INT (NR-1A)-50% SURVEY/ND ESMT PLATS	100%
C850172915	NO DITCH INT (NR-1A)-75% SURVEY	100%
C850172916	NO DITCH INT (NR-1A)-TRIB ESM'T PLATS/60% DESIGN	100%
C850172917	NO DITCH INT (NR-1A)-100% SURVEY	100%
C850172918	NO DITCH INT (NR-1A)-90% DESIGN	100%
C850172919	NO DITCH INT (NR-1A)-100% DESIGN	100%
C850172920	NO DITCH FLOW CONTROL STRUCTURE-90% PLANS	100%
C850172921	NO DITCH FLOW CONTROL STRUCTURE-100% PLANS	100%
C850172922	NO DITCH INT (NR-1A)-PARTITION PLANS INTO 3 PROJ	100%
C850172923	NO DITCH INT (NR-1A)-ADD DIVERSION STR TO PLANS	100%
C850172924	NO DITCH INT (NR-1A)-BIDDING SERVICES	100%
C850172925	NO DITCH INT (NR-1A)-DSDC	0%
C850173000	NORTHERN DITCH INTERCEPTOR (NR-1A) - EASEMENTS *	100%
C850173050	NORTHERN DITCH INT (NR-1A) - EASMENTS - 2	100%
C850174000	NORTHERN DITCH INTERCEPTOR (NR-1A) - AD DATE	100%
C850174050	NORTHERN DITCH INTERCEPTOR (NR-1A) - BID OPEN	100%
C850174500	NORTHERN DITCH INTERCEPTOR (NR-1A) - AWARD	100%
C850176000	NORTHERN DITCH INTERCEPTOR (NR-1A) - CONSTR.	95%
C850176900	NORTHERN DITCH INTERCEPTOR (NR-1A) - SUBST.COMP	0%
ORI ICA		
H094001000	OHIO RIVER INTERCEPTOR ICA - PLANNING	100%
ORI PH 2 ICA		
H113231000	ORI PH2 ICA- PLANNING	0%
PADDY'S RUN WW TREATMENT FACILITY		
H091241000	PADDY'S RUN WW TREATMENT FACILITY - PLANNING	100%



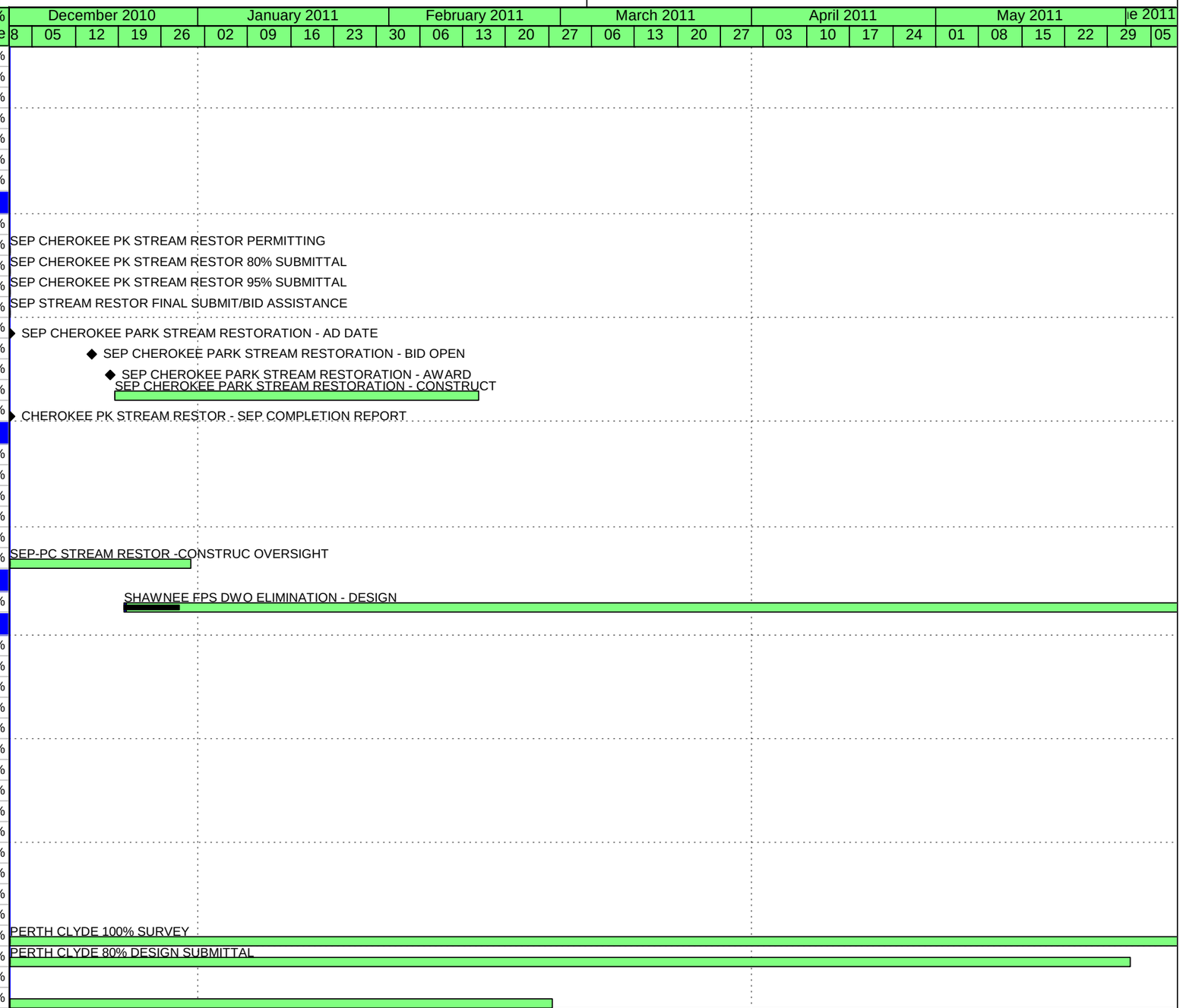
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H091242000	PADDY'S RUN WW TREATMENT FACILITY - DESIGN	0%
H091243000	PADDY'S RUN WW TREATMENT FACILITY - EASEMENT	0%
PARKVIEW ESTATES I&I INVESTIGATION		
H091981200	PARKVIEW ESTATES I&I INVESTIGATION - SSES	15%
H091982000	PARKVIEW ESTATES I&I INVESTIGATION - DESIGN	5%
PROSPECT SSES		
H093911000	PROSPECT SSES - PLANNING	100%
H093911220	PROSPECT SSES REPORT	0%
H093912000	PROSPECT SSES REPORT - DESIGN	0%
H093912901	PROSPECT HUNTING CREEK SSES PROJECT WORK PLAN	100%
H093912902	PROSPECT HUNTING CREEK SSES MONTHLY MTG&MGMT	50%
H093912903	PROSPECT HUNTING CREEK SSES INITIAL FIELD REVIEW	100%
H093912904	PROSPECT HUNTING CREEK SSES SMOKE TESTING	95%
H093912905	PROSPECT HUNTING CREEK SSES CCTV DATA ANALYSIS	25%
H093912906	PROSPECT HUNTING CREEK SSES MANHOLE INSPECTION	70%
H093912907	PROSPECT HUNTING CREEK SSES PRIVATE PROP INSP	55%
H093912908	PROSPECT HUNTING CREEK SSES DEFECT ID & MAP	0%
H093912909	PROSPECT HUNTING CREEK SSES PUBLIC NOTIFICATION	0%
H093912910	PROSPECT HUNTING CREEK SSES MANHOLE REHAB EVAL	5%
H093912911	PROSPECT HUNTING CREEK SSES DRAFT REPORT	0%
H093912912	PROSPECT HUNTING CREEK SSES FINAL REPORT	0%
H093912913	PROSPECT HUNTING CREEK SSES PROJECT BOOK	0%
RAINTREE & MARIAN COURT PUMP STATION ELIMINATION		
H091801200	RAINTREE & MARIAN CT PUMP STATION ELIMINATION - SS...	100%
H091802000	RAINTREE & MARIAN CT PUMP STATION ELIMINATION - DE...	100%
RIDING RIDGE PUMP STATION IMPROVEMENT		
H091751200	RIDING RIDGE PUMP STATION IMP - SSES PLANNING	95%
RIVER ROAD INTERCEPTOR		
D942102000	RIVER ROAD INTERCEPTOR - DESIGN	95%
D942102005	PRELIMINARY FIELD WALK-THRU	100%
D942102901	50% SURVEY COMPLETE	100%
D942102902	30% PLANS SUBMITTAL	100%
D942102903	50% PLANS UTILITY SUBMITTAL	100%
D942102904	80% PLANS SUBMITTAL	100%
D942102906	90% DESIGN	100%
D942102907	100% DESIGN	0%
D942103000	RIVER RD INT - EASEMENT	0%
D942104000	RIVER ROAD INTERCEPTOR - AD DATE	0%
D942104050	RIVER ROAD INTERCEPTOR - BID OPENING	0%
D942104500	RIVER ROAD INTERCEPTOR - AWARD	0%
ROSE FARM PARK		
H101951000	ROSE FARM PARK - PLANNING	0%
H101956000	ROSE FARM PARK - CONSTRUCTION	0%
RUNNING FOX PUMP STATION ELIMINATION		
H091782000	RUNNING FOX PUMP STATION ELIMINATION - DESIGN	100%
H091783000	RUNNING FOX PUMP STATION ELIMINATION - EASEMENTS	100%



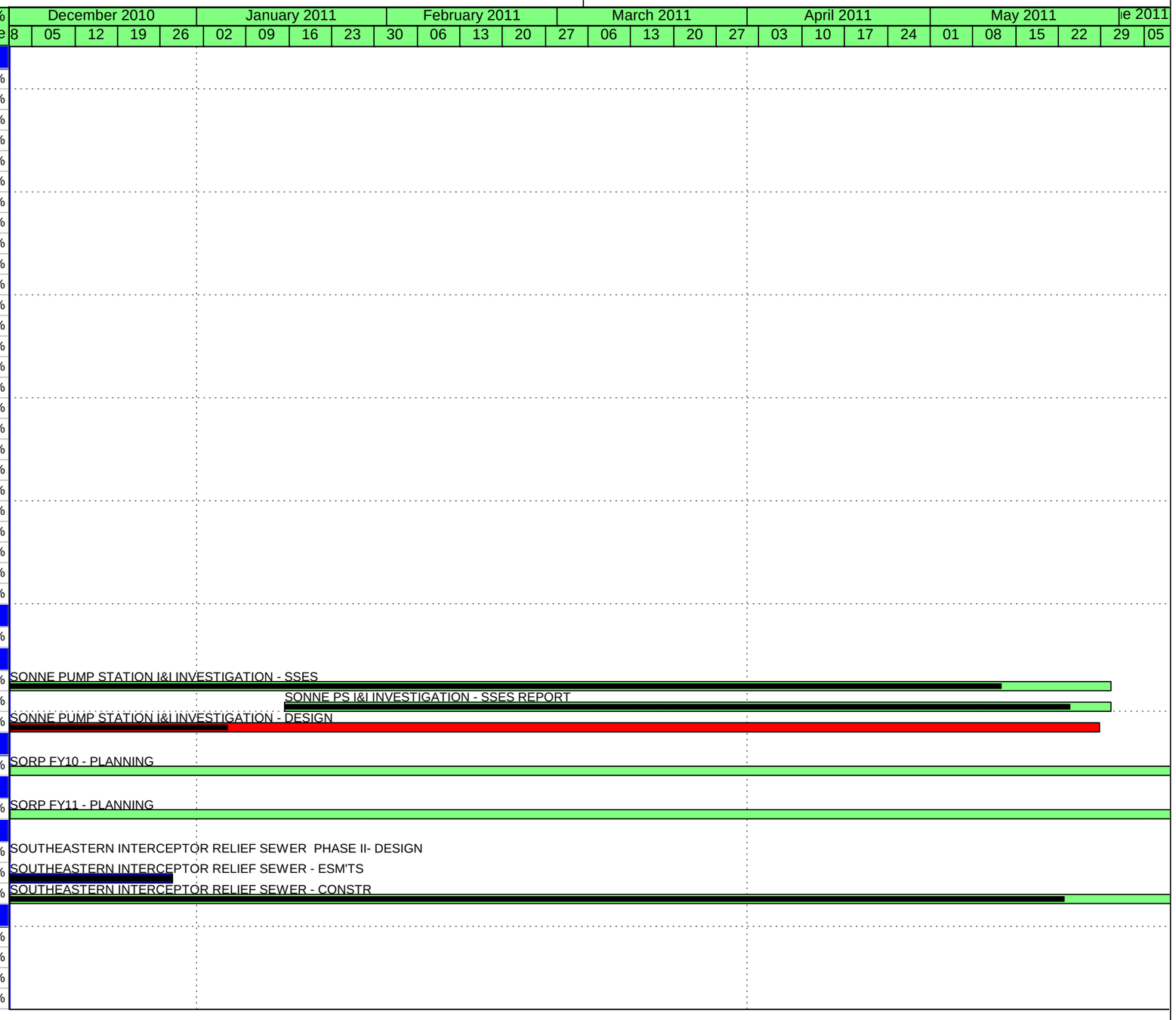
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H091784000	RUNNING FOX PUMP STATION ELIMINATION - AD DATE	100%
H091784050	RUNNING FOX PUMP STATION ELIMINATION - BID OPEN	100%
H091784500	RUNNING FOX PUMP STATION ELIMINATION - AWARD	100%
H091786000	RUNNING FOX PUMP STATION ELIMINATION - CONSTRUC...	100%
H091786900	RUNNING FOX PUMP STATION ELIMINATION - SUBSTANTI...	100%
H091786950	RUNNING FOX PUMP STATION ELIMINATION - AS-BUILTS	100%
H091788050	RUNNING FOX PUMP STATION ELIMINATION - CD CERTIFI...	100%
SEP - CHEROKEE PARK STREAM RESTORATION PROJECT		
H101402000	SEP CHEROKEE PARK STREAM RESTORATION - PLANNING	100%
H101402901	SEP CHEROKEE PK STREAM RESTOR PERMITTING	0%
H101402902	SEP CHEROKEE PK STREAM RESTOR 80% SUBMITTAL	0%
H101402903	SEP CHEROKEE PK STREAM RESTOR 95% SUBMITTAL	0%
H101402904	SEP STREAM RESTOR FINAL SUBMIT/BID ASSISTANCE	0%
H101404000	SEP CHEROKEE PARK STREAM RESTORATION - AD DATE	0%
H101404050	SEP CHEROKEE PARK STREAM RESTORATION - BID OPEN	0%
H101404500	SEP CHEROKEE PARK STREAM RESTORATION - AWARD	0%
H101406000	SEP CHEROKEE PARK STREAM RESTORATION - CONSTR...	0%
H101408050	CHEROKEE PK STREAM RESTOR - SEP COMPLETION REP...	0%
SEP - POND CREEK TRAIL STREAM RESTORATION PROJECT		
H101412000	SEP - PC TRAIL STREAM RESTORATION-DESIGN	100%
H101412901	PERMIT/CONCEPTUAL STREAM RESTORE DESIGN	100%
H101412902	SEP - PC STREAM RESTORATION - 80% DESIGN	100%
H101412903	SEP - PC STREAM RESTORATION -95% DESIGN	100%
H101412904	SEP - PC STREAM RESTORATION -100% DESIGN	100%
H101412905	SEP-PC STREAM RESTOR -CONSTRUC OVERSIGHT	0%
SHAWNEE FLOOD PUMP STATION		
H091362000	SHAWNEE FPS DWO ELIMINATION - DESIGN	5%
SHIVELY INTERCEPTOR		
B062082000	SHIVELY INTERCEPTOR - DESIGN	100%
B062082001	SHIVELY INTERCEPTOR - NTP	100%
B062082901	SHIVELY INT - PRELIM ENG 100%	100%
B062082902	SHIVELY INT - SURVEY 20%	100%
B062082903	SHIVELY INT - DESIGN 30%	100%
B062082904	SHIVELY INT - SURVEY 50%	100%
B062082905	SHIVELY INT - FINAL DESIGN 50%	100%
B062082906	SHIVELY INT - SURVEY 80%	100%
B062082907	SHIVELY INT - FINAL DESIGN 80%	100%
B062082908	SHIVELY INT - SURVEY 100%	100%
B062082909	SHIVELY INT - FINAL DESIGN 100%	100%
B062082910	PERTH CLYDE 50% SURVEY	100%
B062082911	PERTH CLYDE PREL ENG PLANS/REPORT	100%
B062082912	PERTH CLYDE 50% DESIGN SUBMITTAL	100%
B062082913	PERTH CLYDE 100% SURVEY	0%
B062082914	PERTH CLYDE 80% DESIGN SUBMITTAL	0%
B062082916	SHIVELY-VAC, EXCAV, GROUNDWATER WELLS	100%
B062083000	SHIVELY INTERCEPTOR - EASEMENT	80%



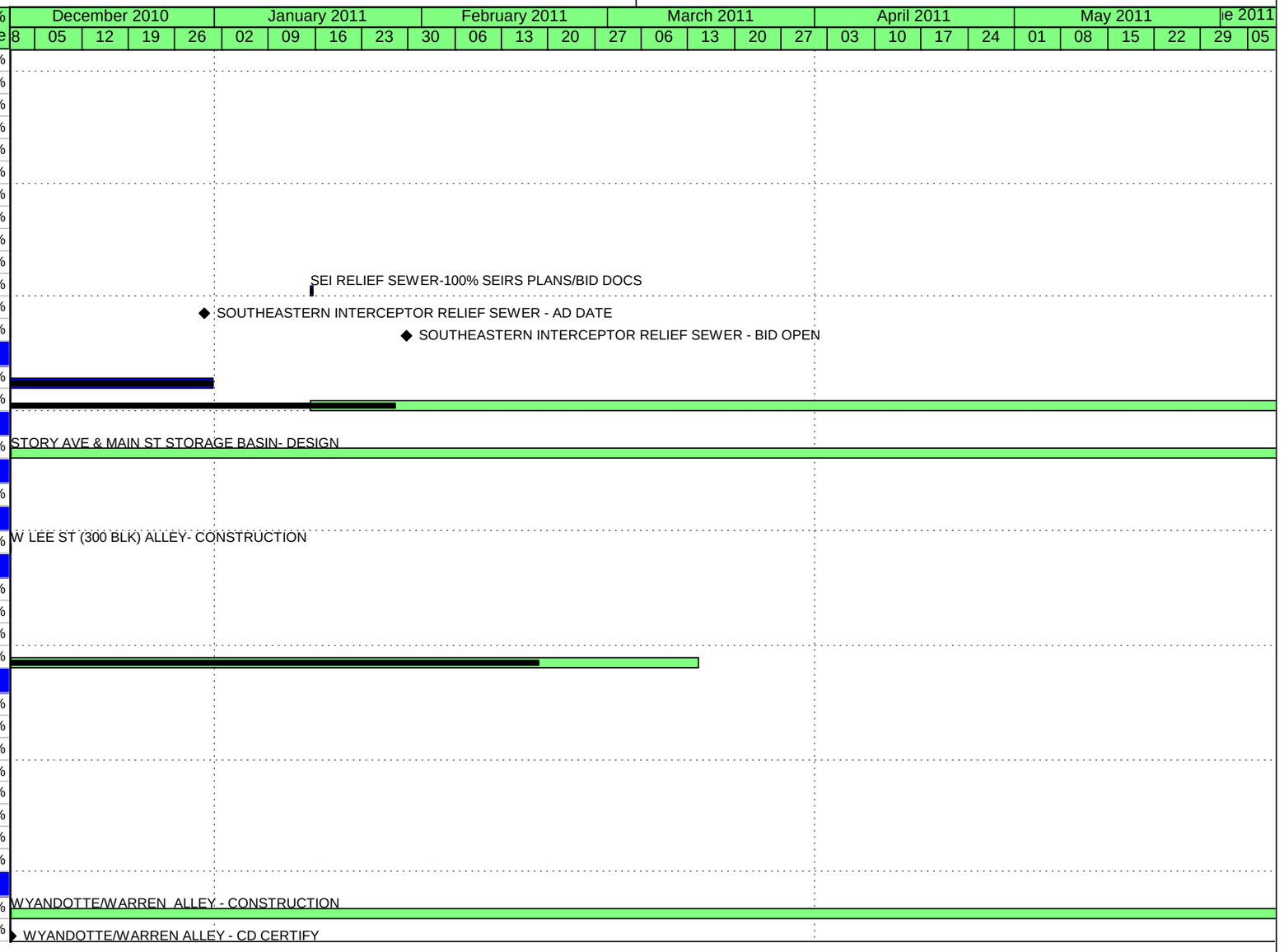
Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
SINKING FORK INTERCEPTOR RELIEF SEWER		
H083571000	SINKING FORK INTERCEPTOR RELIEF SEWER - PLANNING	100%
H083572000	SINKING FORK INTERCEPTOR RELIEF SEWER - DESIGN	100%
H083572001	SINKING FORK INTERCEPTOR RELIEF SEWER - NTP PREL	100%
H083572002	SINKING FORK INTERCEPTOR RELIEF SEWER- NTP FINAL	100%
H083572901	SINKING FORK INT RELIEF SEWER- 50% PRELIM DESIGN	100%
H083572902	SINKING FORK INT RELIEF SEWER-100% PRELIM DESIGN	100%
H083572903	BWV - PLAN & BASEMENT REVISIONS	100%
H083572904	BWV - ROCK CORES	100%
H083572905	BWV - 80% PLAN SUBMITTAL	100%
H083572906	BWV - 100% PLAN SUBMITTAL	100%
H083572907	BWV - CONTRACT DOCS	100%
H083572908	BWV - MYLARS	100%
H083572909	SINKING FORK INT RS - EASEMENT APPRAISAL	100%
H083572910	SINKING FORK INT RS - 50% PLAN SUBMITTAL	100%
H083572911	SINKING FORK INT RS - 80% PLAN SUBMITTAL	100%
H083572912	SINKING FORK INT RS - 100% PLAN SUBMITTAL	100%
H083572913	SINKING FORK INT RS - CONTRACT DOCS	100%
H083572914	SINKING FORK INT RS - MYLARS	100%
H083572915	SURVEYING MILESTONES - SURVEYING	100%
H083572916	SURVEYING MILESTONES - EASEMENTS PLATS	100%
H083573000	SINKING FORK INTERCEPTOR RELIEF SEWER - ESM'TS	100%
H083574000	SINKING FORK INTERCEPTOR RELIEF SEWER - AD DATE	100%
H083574050	SINKING FORK INTERCEPTOR RELIEF SEWER - BID OPEN	100%
H083574500	SINKING FORK INTERCEPTOR RELIEF SEWER - AWARD	100%
H083576900	SINKING FORK INTERCEPTOR RELIEF SEWER-SUBST COMP	100%
H083578050	SINKING FORK INTERCEPTOR RELIEF SEWER-CD CERTIFY	100%
SNEADS BRANCH ICA		
H094021000	SNEADS BRANCH ICA - PLANNING	100%
SONNE PUMP STATION I&I INVESTIGATION		
H091871200	SONNE PUMP STATION I&I INVESTIGATION - SSES	90%
H091871220	SONNE PS I&I INVESTIGATION - SSES REPORT	95%
H091872000	SONNE PUMP STATION I&I INVESTIGATION - DESIGN	20%
SORP FY10		
H093781000	SORP FY10 - PLANNING	0%
SORP FY11		
H093791000	SORP FY11 - PLANNING	0%
SOUTHEASTERN INTERCEPTOR RELIEF PHASE II		
H110222000	SOUTHEASTERN INTERCEPTOR RELIEF SEWER PHASE II...	100%
H110223000	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - ESM'TS	100%
H110226000	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - CONSTR	30%
SOUTHEASTERN INTERCEPTOR RELIEF SEWER PHASE 1		
H083581000	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - PLANNI...	100%
H083582001	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - NTP	100%
H083582901	SEI RELIEF SEWER - PD - SUBMIT 10% DRAFT RPT	100%
H083582902	SEI RELIEF SEWER - PD - PHASE 1 5% DRAFT REPORT	100%



Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Activity ID	Activity Name	Physical % Complete
H083582903	SEI RELIEF SEWER - PD - FINAL REPORT	100%
H083582904	SEI RELIEF SEWER - 10% DESIGN	100%
H083582905	SEI RELIEF SEWER-SURVEY &DRAFT PLATS	100%
H083582906	SEI RELIEF SEWER-30%DIVERSION STRUCTURE PLANS	100%
H083582907	SEI RELIEF SEWER-30% SEIRS PLANS/REPORTS	100%
H083582908	SEI RELIEF SEWER-SUBSURFACE INVEST. REPORT	100%
H083582909	SEI RELIEF SEWER-60% DIVERSION STRUC PLANS/BID DO...	100%
H083582910	SEI RELIEF SEWER-90% DIVERSION STRUCT PLANS/BID D...	100%
H083582911	SEI RELIEF SEWER-60% SEIRS PLANS/FNL PLANS/BID DOCS	100%
H083582912	SEI RELIEF SEWER-100% DIVERSION STRUCT PLANS/BID ...	100%
H083582914	SEI RELIEF SEWER-100% SEIRS PLANS/BID DOCS	100%
H083584000	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - AD DATE	100%
H083584050	SOUTHEASTERN INTERCEPTOR RELIEF SEWER - BID OPEN	0%
STARVIEW SSES		
H094031000	STARVIEW SSES - PLANNING	100%
H094031220	STARVIEW SSES REPORT	60%
STORY AVENUE & MAIN STREET STORAGE BASIN		
H091272000	STORY AVE & MAIN ST STORAGE BASIN- DESIGN	0%
UDRT SSES		
H094041000	UDRT SSES - PLANNING	100%
W. LEE ST (300 BLK) ALLEY		
H110766000	W LEE ST (300 BLK) ALLEY- CONSTRUCTION	100%
WEST REGION EMERGENCY GENERATOR PHASE III		
H100844000	WEST REGION EMERG GENERATORS PH3 - AD DATE	100%
H100844050	WEST REGION EMERG GENERATORS PH3 - BID OPEN	100%
H100844500	WEST REGION EMERG GENERATORS PH3 - AWARD	100%
H100846000	WEST REGION EMERG GENERATORS PH3-CONST	95%
WOODLAND HILLS PUMP STATION DIVERSION		
H091692000	WOODLAND HILLS PUMP STATION DIVERSION - DESIGN	100%
H091693000	WOODLAND HILLS PUMP STATION DIVERSION - EASEMENT	100%
H091694000	WOODLAND HILLS PUMP STATION DIVERSION - AD DATE	100%
H091694050	WOODLAND HILLS PUMP STATION DIVERSION - BID OPEN	100%
H091694500	WOODLAND HILLS PUMP STATION DIVERSION - AWARD	100%
H091696000	WOODLAND HILLS PUMP STATION DIVERSION - CONSTRU...	100%
H091696900	WOODLAND HILLS PUMP STATION DIVERSION - SUBSTAN...	100%
H091698050	WOODLAND HILLS PUMP STATION DIVERSION - CD CERTI...	100%
WYANDOTTE/WARREN AVE ALLEY DIP		
C101846000	WYANDOTTE/WARREN ALLEY - CONSTRUCTION	0%
C101848050	WYANDOTTE/WARREN ALLEY - CD CERTIFY	0%



Remaining Level of Effort | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

Appendix B-1 - Discharge Work Orders – Waters of the United States

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	28173	3258 RUCKRIEGEL PKY		CHENOWETH RUN	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170747	11/25/10 08:47 PM	MITCHELL	GRIFFITH	DOCUMENTED	03/04/08	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 12:15 PM	

Spot Inspections:

Discharge Amount:	2,550 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171071
Control Zone:	CAUTION TAPE AND TEMP SIGNS PLACED AROUND DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	LOCATION IS INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 12:59 PM	DISPUB	PUBLIC NOTIFIED THROUGH TEMPORARY SIGNS AND DOOR HANGERS TO AVOID DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194 (Cont'd)	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	64096	4710 CHENOWETH RUN RD		CHENOWETH RUN	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170760	11/26/10 12:01 AM	ELDER	LANGFORD	DOCUMENTED	03/19/08	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 04:20 AM	

Spot Inspections:

Discharge Amount:	2,600 GAL
Cause:	LACK OF SYSTEM CAPACITY - HEAVY RAIN IN AREA
Clean Up:	MSD CLEANED & SANITIZED THE AREA
Control Zone:	PERMANENT SIGNS POSTED IN AREA SUPPLEMENTED BY TEMPORARY SIGNS
Impact:	SEWAGE & DEBRIS AROUND DISCHARGE SITE
Repair:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA

Notifications:

	DISPUB	PERMANENT SIGNS POSTED IN AREA SUPPLEMENTED BY TEMPORARY SIGNS
11/26/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:00 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194 (Cont'd)	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SV Sewer Valve	72418-V	4108 CHENOWETH RUN RD		CHENOWETH RUN	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1177794	12/09/10 07:00 PM	MARKS JR	MARKS JR	REPAIRED - ISSUE RESOLVED	12/09/10	STRUCTURAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	12/09/10 10:30 PM	

Spot Inspections:

Discharge Amount:	630 GAL
Cause:	LEAKY ARV
Clean Up:	MSD CLEANED & SANITIZED THE AREA
Control Zone:	MSD USED BARRICADES AND TEMPORARY SIGNS TO WARN PUBLIC
Impact:	SEWAGE AND DEBRIS OBSERVED
Repair:	MSD HAULED STATION UNTIL REPAIRS WERE COMPLETE. MAC CONST. & MSD REPLACED EIGHT AIR RELEIF VALVES.

Notifications:

12/09/10 11:29 PM	DISPUB	MSD used temporary signs to warn public
12/09/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194 (Cont'd)	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1177851	12/10/10 08:50 AM	ELDER	WRIGHT	REPAIRED - ISSUE RESOLVED	12/10/10	STRUCTURAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	12/10/10 05:00 PM	

Spot Inspections:

Discharge Amount:	4,800 GAL
Cause:	STRUCTURAL FAILURE OF VALVE.
Clean Up:	MSD CLEANED & SANITIZED THE AREA
Control Zone:	TEMPORARY SIGNS POSTED AROUND AREA & PO NOTIFIED IN PERSON
Impact:	CLEAR SEWAGE WATER ON THE GROUND TO THE CREEK
Repair:	MAC CONST. & MSD REPLACED EIGHT AIR RELIEF VALVES.

Notifications:

	DISPUB	TEMPORARY SIGHN POSTED AROUND AREA & PO NOTIFIED IN PERSON by D.Wright
12/10/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
12/10/10 01:00 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194 (Cont'd)	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPL Sewer Treatment Plant	MSD0255	10725 OLD TAYLORSVILLE RD		CHENOWETH RUN	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170698	11/25/10 01:07 PM	ELDER	CLARK	DOCUMENTED	01/14/07	BLENDING AT JTOWN WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 07:38 AM	

Spot Inspections:

Peak Plant Flow when Blending:	16,689,000 GPD
Total Plant Flow when Blending:	16,658,000 GAL
Discharge Amount:	2,838,171 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	CLEANUP NOT POSSIBLE DUE TO ELEVATED CREEK LEVEL
Control Zone:	NO CONTROL ZONE WAS SET UP - PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM
Impact:	NO IMPACT OBSERVED - FACILITY DISCHARGE UNDER ELEVATED CREEK LEVEL
Repair:	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION

Notifications:

11/25/10 01:57 PM	DISPUB	Notification by http://www.msdlouky.org/projectwin/ Also,PERMANENT SIGNS POSTED IN AREA
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194 (Cont'd)	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171634	11/30/10 03:29 AM	ELDER	SPENCER	DOCUMENTED	01/14/07	BLENDING AT JTOWN WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 11:45 PM	

Spot Inspections:

Peal Plant Flow when Blending:	13,127,000 GPD
Total Plant Flow when Blending:	9,436,000 GAL
Discharge Amount:	1,067,355 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	CLEANUP NOT POSSIBLE DUE TO ELEVATED CREEK LEVEL
Control Zone:	NO CONTROL ZONE WAS SET UP - PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM
Impact:	NO IMPACT OBSERVED - FACILITY DISCHARGE UNDER ELEVATED CREEK LEVEL
Repair:	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION

Notifications:

11/30/10 06:03 AM	DISPUB	Notification by http://www.msdlouky.org/projectwin/ Also,PERMANENT SIGNS POSTED IN AREA
11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0029459	MSD0263	CHENOWETH HILLS	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPL Sewer Treatment Plant	MSD0263	4305 ST RENE CT		CHENOWETH RUN	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170737	11/25/10 08:45 PM	MARKS JR	BRAZEL	DOCUMENTED	09/27/02	BYPASS AT WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/25/10 11:40 PM	

Spot Inspections:

Discharge Amount:	77,800 GAL
Cause:	RAIN EVENT CAUSED BYPASS LACK OF SYSTEM CAPACITY
Clean Up:	NO CLEANUP REQUIRED SUBMERGED DISCHARGE PIPE
Control Zone:	TEMPORARY SIGNS POSTED
Impact:	NO IMPACT OBSERVED SUBMERGED DISCHARGE
Repair:	RAIN SUBSIDED

Notifications:

11/25/10 09:42 PM	DISPUB	public notified by temporary signs and msd web sites
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0029459 (Cont'd)	MSD0263	CHENOWETH HILLS	CHENOWETH RUN	CENT

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1176712	12/08/10 11:26 AM	ELDER	WRIGHT	DOCUMENTED	09/27/02	MECHANICAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	12/08/10 11:28 AM	

Spot Inspections:

Discharge Amount:	500 GAL
Cause:	HOSE ON B&H VAC TRUCK BROKE
Clean Up:	NO DEBRIS
Control Zone:	TEMPORARY SIGNS PLACED AROUND IMPACTED AREA
Impact:	NO IMPACT OBSERVED
Repair:	REATTACHED WITH NEW HOSE

Notifications:

12/08/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
	DISPUB	Temoprary signs placed around area
12/08/10 01:00 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0078956	MSD0277	DEREK R. GUTHRIE	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	10272	9903 DANIEL DR		LITTLE BEE LICK CREEK	DITCH

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1143224	10/03/10 09:39 AM	KIMBROUGH	KIMBROUGH	REPAIRED - ISSUE RESOLVED	10/03/10	ROOTS	UNAUTHORIZED DISCHAGE - WATERS	10/03/10 10:30 AM	MAIN

Spot Inspections:

Discharge Amount:	17 GAL
Cause:	OBSTRUCTION IN MAIN SEWER
Clean Up:	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA
Control Zone:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA
Impact:	SEWAGE/WATER DISCHARGING FROM MANHOLE INTO DITCH
Repair:	WORK ORDERS 1143228 AND 1143618 - ROOT CUT AND OPEN MAIN SEWER

Notifications:

10/03/10 09:39 AM	DISPUB	ADVISED CUSTOMER ON SITE
10/05/10 09:48 AM	DISNOT	Manual email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0078956 (Cont'd)	MSD0277	DEREK R. GUTHRIE	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	31899	8809 TRANQUIL VALLEY LN		FERN CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1172627	12/01/10 05:30 PM	FERRELL	FERRELL	REPAIRED - ISSUE RESOLVED	12/01/10	ROOTS	UNAUTHORIZED DISCHAGE - WATERS	12/01/10 05:49 PM	MAIN

Spot Inspections:

Discharge Amount:	50 GAL
Cause:	ROOTS IN MAIN SEWER
Clean Up:	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA
Control Zone:	MSD PERSONNEL ADVISED CUSTOMER TO AVOID CONTACT WITH SEWAGE
Impact:	SEWAGE DISCHARGING FROM MANHOLE
Repair:	WORK ORDERS 1172622 AND 1172925 - ROOTCUT MAIN SEWER

Notifications:

12/01/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
12/01/10 05:31 PM	DISPUB	ADVISED CUSTOMER ON SITE
12/01/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	08935-SM	1001 BRECKENRIDGE LN		MIDDLE FORK BEARGRASS CREEK	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170725	11/25/10 06:43 PM	GRIFFITH	GRIFFITH	DOCUMENTED	11/29/01	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 03:21 AM	

Spot Inspections:

Discharge Amount:	1,126,398 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	MAGNITUDE OF STORM RESULTED IN NO DEBRIS REMAINING
Control Zone:	NONE NEEDED-MSD PROPERTY
Impact:	NO IMPACT OBSERVED-PIPE SUBMERGED
Repair:	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE ISSDP

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:22 PM	DISPUB	PUBLIC NOTIFIED THROUGH PERMANENT SIGNS TO AVOID DIRECT CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	104231	4119 LEE AVE		CAMP TAYLOR DITCH	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170745	11/25/10 05:28 PM	MITCHELL	GRIFFITH	DOCUMENTED	10/23/07	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 06:16 AM	

Spot Inspections:

Discharge Amount:	1,200 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171068
Control Zone:	CAUTION TAPE AND DOOR HANGERS PLACED AROUND DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	LOCATION INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:06 PM	DISPUB	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND TEMPORARY SIGNS TO AVOID CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171845	11/30/10 04:00 AM	MITCHELL	GRIFFITH	DOCUMENTED	10/23/07	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	12/08/10 06:45 AM	

Spot Inspections:

Discharge Amount:	9,000 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1172250
Control Zone:	CAUTION TAPE, TEMP SIGNS, AND DOOR HANGERS PLACED AROUND DISCHARGE AREA
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	THIS LOCATION IS INCLUDED IN THE ISSDP

Notifications:

11/30/10 09:05 AM	DISPUB	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND TEMPORARY SIGNS TO AVOID DIRECT CONTACT WITH DISCHARGE
11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	13943	4119 LEE AVE		SOUTH FORK BEARGRASS CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170746	11/25/10 05:29 PM	MITCHELL	GRIFFITH	DOCUMENTED	03/19/08	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 06:18 AM	

Spot Inspections:

Discharge Amount:	780 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171070
Control Zone:	CAUTIONS TAPE AND DOOR HANGERS PLACED AROUND DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	LOCATION INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:02 PM	DISPUB	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND TEMPORARY SIGNS TO AVOID CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	16649	1726 FRASER DR		SOUTH FORK BEARGRASS CREEK	DITCH

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170727	11/25/10 07:15 PM	GRIFFITH	GRIFFITH	DOCUMENTED	01/24/02	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 01:02 AM	

Spot Inspections:

Discharge Amount:	1,350 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171058
Control Zone:	CAUTION TAPE AND DOOR HANGERS PLACED AROUND DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	LOCATION INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:15 PM	DISPUB	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND CAUTION TAPE TO AVOID CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171841	11/30/10 04:12 AM	MITCHELL	GRIFFITH	DOCUMENTED	01/24/02	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 03:30 PM	

Spot Inspections:

Discharge Amount:	2,635 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1172270
Control Zone:	DOOR HANGERS AND PERMANENT SIGNS ARE PLACED AROUND DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	THIS LOCATION IS INCLUDED IN THE ISSDP

Notifications:

11/30/10 09:07 AM	DISPUB	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND PERMANENT SIGNS TO AVOID CONTACT WITH DISCHARGE
11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	24721	503 NOTTINGHAM PKY		MIDDLE FORK BEARGRASS CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1170805	11/26/10 11:00 AM	RICHARDSON	RICHARDSON	REPAIRED - ISSUE RESOLVED	11/26/10	OBSTRUCTION-NOT GREASE / ROOTS	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 11:31 AM	MAIN

Spot Inspections:

Discharge Amount:	125 GAL
Cause:	OBSTRUCTION IN MAIN SEWER
Clean Up:	MSD PERSONNELL CLEANED AND SANITIZED THE IMPACTED AREA
Control Zone:	MSD PERSONNEL ADVISED CUSTOMER TO AVOID CONTACT WITH SEWAGE
Impact:	SEWER WATER COMING FROM THE MSD MANHOLE DISCHARGING INTO STORM DRAINS
Repair:	WORK ORDER 1170811 - ROOTCUT AND OPEN THE MAIN SEWER

Notifications:

11/26/10 11:00 AM	DISPUB	ADVISED CUSTOMER BY DOOR CARDS
12/15/10 08:29 AM	DISNOT	Manual email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	27005	1012 ALTA CIR		MIDDLE FORK BEARGRASS CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170754	11/25/10 07:15 PM	JOHNSON	GRIFFITH	DOCUMENTED	09/02/03	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/29/10 12:00 PM	

Spot Inspections:

Discharge Amount:	1,550 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171075
Control Zone:	BARRICADES, CAUTION TAPE, AND TEMPORARY SIGNS PLACE AROUND DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	THIS LOCATION IS INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 12:46 PM	DISPUB	PUBLIC NOTIFIED THROUGH TEMPORARY SIGNS TO AVOID DIRECT CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	40871	2120 INDIAN HILLS TRL		MUDDY FORK BEARGRASS CREEK	DITCH

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170712	11/25/10 03:40 PM	ELDER	ANDERSON	DOCUMENTED	03/04/08	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 05:30 PM	

Spot Inspections:

Discharge Amount:	38,750 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	MSD CLEANED & SANITIZED THE AREA
Control Zone:	TEMPORARY SIGNS AROUND AFFECTED AREA
Impact:	CLEAR SEWAGE WATER
Repair:	PLACED TEMPORARY SIGNS AROUND AREA

Notifications:

	DISPUB	temporary signs placed around affected area
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171640	11/30/10 05:00 AM	ELDER	SPENCER	DOCUMENTED	03/04/08	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	12/01/10 01:25 PM	

Spot Inspections:

Discharge Amount:	97,500 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	BARRICADES & TEMPORARY SIGNS POSTED
Control Zone:	TEMPORARY SIGNS AROUND AFFECTED AREA
Impact:	CLEAR SEWAGE WATER
Repair:	PLACED TEMPORARY SIGNS AROUND AREA

Notifications:

	DISPUB	temporary signs placed around affected area
11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	40872	2105 INDIAN HILLS TRL		MUDDY FORK BEARGRASS CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170711	11/25/10 03:40 PM	ELDER	ANDERSON	DOCUMENTED	12/15/07	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 05:30 PM	

Spot Inspections:

Discharge Amount:	310,000 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	MSD CLEANED & SANITIZED THE AREA
Control Zone:	BARRICADES, CONES, TEMPORARY SIGNS
Impact:	CLEAR SEWAGE WATER
Repair:	POSTED SIGNS , BARRICADES & CONES AROUND AFFECTED AREA

Notifications:

	DISPUB	barricades, cones, temporary signs around affected area
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171638	11/30/10 05:00 AM	ELDER	SPENCER	DOCUMENTED	12/15/07	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	12/01/10 01:25 PM	

Spot Inspections:

Discharge Amount:	146,250 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	BARRICADES,TEMPORARY SIGNS
Control Zone:	BARRICADES & TEMPORARY SIGNS WERE POSTED.
Impact:	CLEAR SEWAGE WATER
Repair:	POSTED SIGNS , BARRICADES & CONES AROUND AFFECTED AREA

Notifications:

11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 05:00 AM	DISPUB	BARRICADES & TEMPORARY SIGNS WERE POSTED
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	45835	1132 ROSTREVOR CIR		MIDDLE FORK BEARGRASS CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170752	11/25/10 07:05 PM	JOHNSON	GRIFFITH	DOCUMENTED	09/02/03	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 12:15 PM	

Spot Inspections:

Discharge Amount:	7,200 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171074
Control Zone:	BARRICADES, CAUTION TAPE, AND TEMP SIGNS PLACED AT DISCHARGE
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE
Repair:	LOCATION INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 12:55 PM	DISPUB	PUBLIC NOTIFIED THROUGH TEMPORARY SIGNS TO AVOID CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	51594	1418 TREVILIAN WAY		SOUTH FORK BEARGRASS CREEK	DITCH

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170743	11/25/10 05:10 PM	MITCHELL	GRIFFITH	DOCUMENTED	09/12/06	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/25/10 08:05 PM	

Spot Inspections:

Discharge Amount:	2,200 GAL
Cause:	LACK OF SYSTEM CAOMPACITY-HEAVY RAIN
Clean Up:	DISCLN WO# 1171063
Control Zone:	CAUTION TAPE AND TEMPORARY SIGNS PLACED AROUND DISCHARGE LOCATION
Impact:	LIGHT DEBRIS OBSERVED AROUND DISCHARGE LOCATION
Repair:	LOCATION INCLUDED IN THE SANITARY SEWER DISCHARGE PLAN SUBMITTED ON DECEMBER 31, 2008

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:10 PM	DISPUB	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND CAUTION TAPE TO AVOID DIRECT CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	72571-X	4600 CHAMPIONS TRACE LN		SOUTH FORK BEARGRASS CREEK	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170726	11/25/10 06:46 PM	GRIFFITH	GRIFFITH	DOCUMENTED	11/29/01	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 05:34 AM	

Spot Inspections:

Discharge Amount:	843,051 GAL
Cause:	LACK OF SYSTEM CAPACITY-HEAVY RAIN
Clean Up:	MAGNITUDE OF STORM RESULTED IN NO DEBRIS REMAINING
Control Zone:	NONE NEEDED-MSD PROPERTY
Impact:	NO IMPACT OBSERVED-PIPE SUBMERGED
Repair:	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE ISSDP

Notifications:

11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/26/10 01:19 PM	DISPUB	PUBLIC NOTIFIED THROUGH PERMANENT SIGNS TO AVOID CONTACT WITH DISCHARGE
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	CSO019	816 N 34TH ST		OHIO RIVER	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1147676	10/09/10 03:45 AM	THOMPSON	THOMPSON	REPAIRED - ISSUE RESOLVED	10/09/10	UTILITY DAMAGED MSD ASSET	UNAUTHORIZED DISCHAGE - WATERS	10/09/10 05:00 AM	

Spot Inspections:

Discharge Amount:	238,000 GAL
Cause:	LOUISVILLE WATER COMPANY WATER MAIN BREAK
Clean Up:	NONE REQUIRED
Control Zone:	PERMANENT SIGNS POSTED AT THE CSO OUTFALL
Impact:	NONE OBSERVED
Repair:	LOUISVILLE WATER COMPANY IS REPAIRING THE WATER MAIN, OVERFLOW NO LONGER OCCURRING.

Notifications:

10/09/10 05:00 AM	DISPUB	Permanent overflow warning signs are posted at the outfall and downstream along the Ohio River. No additional public notification was made.
11/11/10 03:07 PM	DISNOT	Manual email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	CSO020	147 BUCHANAN ST		OHIO RIVER	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1158536	10/31/10 08:30 PM	THOMPSON	THOMPSON	REPAIRED - ISSUE RESOLVED	11/01/09	MECHANICAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	11/01/10 07:30 AM	

Spot Inspections:

Discharge Amount:	4,100,000 GAL
Cause:	MEHANICAL FAILURE OF THE INFLUENT GATE OPERATOR
Clean Up:	NONE REQUIRED
Control Zone:	PERMANENT SIGNS INSTALLED AT THE CSO 20 OUTFALL TO THE OHIO RIVER
Impact:	SEWAGE FLOWING OVER THE CSO 20 DAM
Repair:	MSD HAS CHAINED THE GATE OPEN AND IS IN THE PROCESS OF REMOVING AND REBUILDING THE GATE ACTUATOR

Notifications:

11/01/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/11/10 03:09 PM	DISPUB	Notification made by Overflow Advisory on MSD Website.

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	CSO050	119 N 12TH ST		OHIO RIVER	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1166021	11/15/10 07:00 PM	BRIGHT	BRIGHT	REPAIRED - ISSUE RESOLVED	11/15/10	OBSTRUCTION-NOT GREASE / ROOTS	UNAUTHORIZED DISCHAGE - WATERS	11/15/10 07:30 PM	

Spot Inspections:

Discharge Amount:	3,336 GAL
Cause:	CAUSE IS UNKNOWN. NO OVERFLOW UPON INSPECTION AND NOTHING OBSTRUCTING FLOW.
Clean Up:	NO CLEAN UP PERFORMED. PIPE DISCHARGES UNDERWATER, DIRECTLY INTO RIVER.
Control Zone:	NO CONTROL ZONE WAS SET UP. PIPE DISCHARGES UNDERWATER, DIRECTLY INTO RIVER
Impact:	NONE OBSERVED BY MSD PERSONNEL; WAS ADVISED OF OVERFLOW BY EMAIL ALERT.
Repair:	INVESTIGATION INDICATED THAT ADDITIONAL REPAIRS WERE NOT REQUIRED BY MSD

Notifications:

11/16/10 10:50 AM	DISPUB	PERMANENT WARNING SIGNS INSTALLED ALONG RIVER BANK.
11/16/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	CSO113	1215 ELLISON AVE		SOUTH FORK BEARGRASS CREEK	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1177981	12/10/10 01:21 PM	BRIGHT	BRIGHT	REPAIRED - ISSUE RESOLVED	12/10/10	OBSTRUCTION-NOT GREASE / ROOTS	UNAUTHORIZED DISCHAGE - WATERS	12/10/10 01:55 PM	MAIN

Spot Inspections:

Discharge Amount:	68 GAL
Cause:	OBSTRUCTION IN MAIN SEWER
Clean Up:	NO CLEAN UP PERFORMED- PIPE DISCHARGES DIRECTLY INTO STREAM
Control Zone:	NO CONTROL ZONE WAS SET UP. PIPE DISCHARGES DIRECTLY INTO STREAM AND THERE ARE PERMANENT SIGNS IN PLACE THROUGHOUT CHANNEL.
Impact:	SEWAGE/WATER DISCHARGING FROM OVERFLOW PIPE/FLAPGATE
Repair:	FLUSHED/VACTORED THE OBSTRUCTION/DEBRIS FROM SEWER

Notifications:

12/10/10 02:05 PM	DISPUB	PERMANENT SIGNS ALONG THIS PORTION OF CHANNEL ALREADY IN PLACE
12/10/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMH Sewer Manhole	CSO206	1700 SPRING DR		MIDDLE FORK BEARGRASS CREEK	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1153017	10/18/10 07:15 AM	BRIGHT	BRIGHT	REPAIRED - ISSUE RESOLVED	10/18/10	OBSTRUCTION-NOT GREASE / ROOTS	UNAUTHORIZED DISCHAGE - WATERS	10/18/10 08:42 AM	MAIN

Spot Inspections:

Discharge Amount:	1,000 GAL
Cause:	OBSTRUCTION IN MAIN SEWER
Clean Up:	NO CLEAN UP PERFORMED-PIPE DISCHARGING DIRECTLY INTO STREAM
Control Zone:	NO CONTROL ZONE WAS SET UP-PIPE DISCHARGES DIRECTLY INTO STREAM AND WE HAVE PERMANENT SIGNS INSTALLED ALONG THE STREAM
Impact:	DISCOLORATION OF STREAM
Repair:	WORK ORDER 1153029 - FLUSHED AND VACTORED THE OBSTRUCTION

Notifications:

10/18/10 09:49 AM	DISPUB	ADVISED ALL POSSIBLE IMPACTED PROPERTIES IN THE SURROUNDING AREA IN PERSON
10/18/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SLS Sewer Lift Station	MSD0012-PS	3246 RADIANCE RD	HIGHGATE SPRINGS	SOUTH FORK BEARGRASS CREEK	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170731	11/25/10 06:28 PM	MARKS JR	MILLS	DOCUMENTED	12/16/00	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 07:10 AM	

Spot Inspections:

Discharge Amount:	117,450 GAL
Cause:	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	PIPE DISCHARGE SUBMERGED- NO CLEANUP
Control Zone:	PERMANENT SIGNS POSTED
Impact:	NO IMPACT OBSERVED- FACILITY UNDER ELEVATED CREEK LEVEL.
Repair:	THIS LOCATION IS IN THE INTERIM SANITIARY SEWER PLAN

Notifications:

11/25/10 07:58 PM	DISPUB	msd notified public with permanent signs and with its web site
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0022411 (Cont'd)	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171636	11/30/10 04:21 AM	ELDER	SPENCER	DOCUMENTED	12/16/00	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 08:17 PM	

Spot Inspections:

Discharge Amount:	25,299 GAL
Cause:	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	PIPE DISCHARGE SUBMERGED- NO CLEANUP
Control Zone:	PERMANENT SIGNS POSTED
Impact:	NO IMPACT OBSERVED.
Repair:	THIS LOCATION IS IN THE INTERIM SANITARY SEWER DISCHARGE PLAN.

Notifications:

11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 04:21 AM	DISPUB	pipe discharge submerged- no control zone
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0098540	MSD0289	CEDAR CREEK	CEDAR CREEK	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPL Sewer Treatment Plant	MSD0289	8605 CEDAR CREEK RD		CEDAR CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1165777	11/16/10 04:30 AM	ELDER	LANGFORD	REPAIRED - ISSUE RESOLVED	11/16/10	BYPASS AT WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/16/10 05:16 AM	

Spot Inspections:

Discharge Amount:	530 GAL
Cause:	STRUCTURAL FAILURE OF THE UV INFLUENT GATE CHANNEL. CORROSION OF THE ALUMINUM GATE ALLOWED WATER TO SEEP PAST THE GATE SEALS.
Clean Up:	CLEANUP NOT POSSIBLE DUE TO DISCHARGE INTO EFFLUENT CHANNEL ALONG WITH FULLY TREATED WATER
Control Zone:	NONE WAS CREATED DUE TO WATER DISCHARGING DIRECTLY INTO FULLY TREATED EFFLUENT WATER
Impact:	PARTIALLY TREATED SEWAGE INTO FULLY TREATED EFFLUENT
Repair:	CLOSE GATE TO FULL CLOSED POSITION & PUMP BACK UNTREATED WATER TO THE SYSTEM

Notifications:

11/16/10 05:44 AM	DISPUB	Advised employees on site of the dangers of coming into contact with sewage
11/16/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/16/10 01:00 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0029114	MSD0292	HUNTING CREEK SOUTH	HARRODS CREEK	EAST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SLS Sewer Lift Station	MSD1064-PS	8619 WESTOVER DR	WESTOVER	HARRODS CREEK	DITCH

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1156201	10/25/10 05:02 PM	MARKS JR	KARCHER	REPAIRED - ISSUE RESOLVED	10/25/10	MECHANICAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	10/25/10 05:35 PM	

Spot Inspections:

Discharge Amount:	1,000 GAL
Cause:	HOME OWNER DRAINING POOL
Clean Up:	NO CLEAN UP REQUIRED ONLY CLEAR WATER
Control Zone:	TEMPORARY SIGNS POSTED
Impact:	CLEAR WATER ON GROUND
Repair:	MSD CONTRACTOR IS HAULING STATION UNTILL DISCHARGE STOPS

Notifications:

10/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
10/25/10 03:58 PM	DISPUB	msd notified public with its website and temporary signs were posted to warn public.

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0043087	MSD0293	TIMBERLAKE	HARRODS CREEK	EAST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMN Sewer Main	103508-V	7009 BREAKWATER PL		HARRODS CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1172189	11/24/10 09:36 AM	MARKS JR	BROOKS	REPAIRED - ISSUE RESOLVED	11/30/10	STRUCTURAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 04:30 PM	

Spot Inspections:

Discharge Amount:	52,200 GAL
Cause:	STRUCTURIAL FAILURE OF FORCEMAIN
Clean Up:	MSD PERSONELL CLEANED AND SANITIZED THE AREA
Control Zone:	TEMPORARY SIGNS HAVE BEEN POSTED
Impact:	DEBRIS AND SEWAGE ON GROUND OBSERVED
Repair:	MSD CONTRACTOR WILL MAKE REPAIRS

Notifications:

11/30/10 04:44 PM	DISPUB	msd used its website and temporary signs to warn public
11/30/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0042226	MSD0403	CHENOWETH RUN	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMN Sewer Main	80351B-AG	14310 LAKE FOREST DR		CHENOWETH RUN	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1149533	10/12/10 11:50 AM	SINGLETON	WRIGHT	REPAIRED - ISSUE RESOLVED	10/12/10	STRUCTURAL FAILURE	UNAUTHORIZED DISCHAGE - WATERS	10/12/10 12:30 PM	

Spot Inspections:

Discharge Amount:	200 GAL
Cause:	FORCE MAIN BREAK
Clean Up:	NO DEBRIS OBSERVED
Control Zone:	TEMPORARY SIGNS PLACED
Impact:	SEWAGE IN THE LAKE
Repair:	CONTRACTOR REPAIRED FORCE MAIN

Notifications:

10/12/10 11:50 AM	DISPUB	TEMPORARY SIGNS HAVE BEEN PLACED
10/12/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
10/12/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Total Facilities Printed: 28
Total Work Orders Printed: 36

Appendix B-2 - Discharge Work Orders – BYPASS

MSD
Metropolitan Sewer District

IMSAST0004
Overflow Report
Initiated Oct 01, 2010 12:00 AM thru Dec 31, 2010 11:59 PM

Report Selections: Excluding PPI, CSO, Prob Code: BYPAS, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0029459	MSD0263	CHENOWETH HILLS	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPL Sewer Treatment Plant	MSD0263	4305 ST RENE CT		CHENOWETH RUN	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170737	11/25/10 08:45 PM	MARKS JR	BRAZEL	DOCUMENTED	09/27/02	BYPASS AT WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/25/10 11:40 PM	

Spot Inspections:

Discharge Amount:	77,800 GAL
Cause:	RAIN EVENT CAUSED BYPASS LACK OF SYSTEM CAPACITY
Clean Up:	NO CLEANUP REQUIRED SUBMERGED DISCHARGE PIPE
Control Zone:	TEMPORARY SIGNS POSTED
Impact:	NO IMPACT OBSERVED SUBMERGED DISCHARGE
Repair:	RAIN SUBSIDED

Notifications:

11/25/10 09:42 PM	DISPUB	public notified by temporary signs and msd web sites
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Prob Code: BYPAS, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0098540	MSD0289	CEDAR CREEK	CEDAR CREEK	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPL Sewer Treatment Plant	MSD0289	8605 CEDAR CREEK RD		CEDAR CREEK	GROUND

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISDW: DRY WEATHER DISCHARGE	1165777	11/16/10 04:30 AM	ELDER	LANGFORD	REPAIRED - ISSUE RESOLVED	11/16/10	BYPASS AT WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/16/10 05:16 AM	

Spot Inspections:

Discharge Amount:	530 GAL
Cause:	STRUCTURAL FAILURE OF THE UV INFLUENT GATE CHANNEL. CORROSION OF THE ALUMINUM GATE ALLOWED WATER TO SEEP PAST THE GATE SEALS.
Clean Up:	CLEANUP NOT POSSIBLE DUE TO DISCHARGE INTO EFFLUENT CHANNEL ALONG WITH FULLY TREATED WATER
Control Zone:	NONE WAS CREATED DUE TO WATER DISCHARGING DIRECTLY INTO FULLY TREATED EFFLUENT WATER
Impact:	PARTIALLY TREATED SEWAGE INTO FULLY TREATED EFFLUENT
Repair:	CLOSE GATE TO FULL CLOSED POSITION & PUMP BACK UNTREATED WATER TO THE SYSTEM

Notifications:

11/16/10 05:44 AM	DISPUB	Advised employees on site of the dangers of coming into contact with sewage
11/16/10 01:00 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/16/10 01:00 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Total Facilities Printed: 2
Total Work Orders Printed: 2

Appendix B-3 - Discharge Work Orders – BLENDING

MSD
Metropolitan Sewer District

IMSAST0004
Overflow Report
Initiated Oct 01, 2010 12:00 AM thru Dec 31, 2010 11:59 PM

Report Selections: Excluding PPI, CSO, Prob Code: BLEND, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPL Sewer Treatment Plant	MSD0255	10725 OLD TAYLORSVILLE RD		CHENOWETH RUN	STREAM

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1170698	11/25/10 01:07 PM	ELDER	CLARK	DOCUMENTED	01/14/07	BLENDING AT JTOWN WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/26/10 07:38 AM	

Spot Inspections:

Peak Plant Flow when Blending:	16,689,000 GPD
Total Plant Flow when Blending:	16,658,000 GAL
Discharge Amount:	2,838,171 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	CLEANUP NOT POSSIBLE DUE TO ELEVATED CREEK LEVEL
Control Zone:	NO CONTROL ZONE WAS SET UP - PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM
Impact:	NO IMPACT OBSERVED - FACILITY DISCHARGE UNDER ELEVATED CREEK LEVEL
Repair:	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION

Notifications:

11/25/10 01:57 PM	DISPUB	Notification by http://www.msdlouky.org/projectwin/ Also,PERMANENT SIGNS POSTED IN AREA
11/25/10 01:00 PM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/25/10 01:00 PM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Report Selections: Excluding PPI, CSO, Prob Code: BLEND, Result: WUS, Act Code: DISDW, DISREV

KPDES #	Facility ID	Water Quality Treatement Center	Receiving Stream of Treatment Center	Region
KY0025194 (Cont'd)	MSD0255	JEFFERSONTOWN	CHENOWETH RUN	CENT

Activity Code / Description	WO #	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
DISREV: RAIN EVENT DISCHARGE	1171634	11/30/10 03:29 AM	ELDER	SPENCER	DOCUMENTED	01/14/07	BLENDING AT JTOWN WQTC	UNAUTHORIZED DISCHAGE - WATERS	11/30/10 11:45 PM	

Spot Inspections:

Peal Plant Flow when Blending:	13,127,000 GPD
Total Plant Flow when Blending:	9,436,000 GAL
Discharge Amount:	1,067,355 GAL
Cause:	LACK OF CAPACITY DUE TO RAIN EVENT IN AREA
Clean Up:	CLEANUP NOT POSSIBLE DUE TO ELEVATED CREEK LEVEL
Control Zone:	NO CONTROL ZONE WAS SET UP - PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM
Impact:	NO IMPACT OBSERVED - FACILITY DISCHARGE UNDER ELEVATED CREEK LEVEL
Repair:	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION

Notifications:

11/30/10 06:03 AM	DISPUB	Notification by http://www.msdlouky.org/projectwin/ Also,PERMANENT SIGNS POSTED IN AREA
11/30/10 01:01 AM	DISNOT	Email notification of unauthorized discharge sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov
11/30/10 01:01 AM	DISSNO	Supplemental Email notification of unauthorized discharge has been sent to ireland.sean@epa.gov, eppc.ert@ky.gov and LisaA.Jeffries@ky.gov

Total Facilities Printed: 1
Total Work Orders Printed: 2

Appendix C – Annual Average Overflow Volume

CSO Model Simulation Summary

Model Simulation	AAOV (MG/YR)	Number of OF (# OF/YR)	Rainfall	Model	Boundary Condition	RTC Rules	MFWTP Repsentation	Notes:
January 2009 Existing	**3,298**	**2,348**	2001	InfoWorks ver.9.5	Modeled inflow from SSS models (Existing condition) using 2001 data	RTC Phase I & II rules developed by BPR CSO	Modeled with max. flow of 325 MGD	CSO108 modification includes the CDS unit
October 2008 Existing	**4,092**	**2,314**	2001	InfoWorks ver.8.0	Modeled inflow from SSS models (Existing condition) using 2001 data	RTC Phase I rules developed by BPR CSO	Modeled with max. flow of 325 MGD	
June 2008 Existing	3,581	2,289	2001	InfoWorks ver.8.0	Modeled inflow from SSS models (including Big4) using 2001 data	RTC Phase I rules developed by BPR CSO	Modeled with max. flow of 325 MGD	
***June 2008 AAOV**	**2,838**	**2,236**	2001	InfoWorks ver.8.0	Modeled inflow from SSS models (including Big4) using 2001 data	RTC Phase I & II Rules developed by BPR CSO	RTC Rules controll flow to the plant. Peak 350MD and Sustainable at 325 MGD	
May 2008 AAOV	3,055	2,231	2001	InfoWorks ver.8.0	Modeled inflow from SSS models (including Big4) using 2001 data	RTC Phase I & II Rules developed by BPR CSO	RTC Rules controll flow to the plant. Peak 350MD and Sustainable at 325 MGD	
****2007 XP-SWMM**	2,970	2,445	Synthetic	XP-SWMM ver 10	Inflow generated using Runoff in CSO model	Simplified Rule at Sneads Branch	Modeled with Max. Capacity of 350MGD	
2003 XP-SWMM	3,478	2,304	Synthetic	XP-SWMM ver 8	Inflow generated using Runoff in CSO model	Simplified Rule at Sneads Branch	Modeled with Max. Capacity of 350MGD	
Synthetic W/ RTC	2,555	2,183	Synthetic	InfoWorks ver.8.0	Modeled finlow from SSS models except on ORFM.	Preliminary RTC Phase I & II Rules provided by BPR CSO	Preliminary RTC Rules allowed peak flow rate greater than 350MD to the plant	
Synthetic W/O RTC	3,649	2,174	Synthetic	InfoWorks ver.8.0	Modeled finlow from SSS models except on ORFM.	Simplifed Rules at MFWTP & Wheeler Basin	Modeled with max. flow of 325 MGD	

* June2008 AAOV is recommended for LTCP. The June 2008 simulation incorporate the headloss coefficient adjustments at CSOs 015,016,019,022,104,105,117,146,149,179,191, & 210
** 2007 XP-SWMM data was used to develop and size the prelimilnary LTCP alternatives.

Pinte Date:11/1/2010

Louisville MSD
Existing Condition AAOV

CSO	CSO NAME	RECEIVING STREAM	Drainage Area (Acres)	October 2008 IWCS (ver8.0)		January 2009 IWCS (ver 9.5)		Change in AAOV (MG/YR) Jan-Oct
				AAOV (MG/YR)	OF Incidents (# OF/YR)	AAOV (MG/YR)	OF Incidents (# OF/YR)	
015	SOUTHWESTERN PS	OR	7,496.7	1177.03	56	845.75	66	-331.28
016	MILES PARK BYPASS	OR		82.38	37	29.94	30	-52.44
018	NIGHTINGALE PS	SF BGC		49.00	16	44.93	16	-4.07
019	34th STREET PS	OR	1,094.0	297.92	60	305.40	60	7.48
020	BUCHANAN PS	OR	86.6	6.46	14	6.60	12	0.14
022	FOURTH ST PS	OR	100.9	0.95	4	0.96	4	0.00
023	ORI @ 4th ST PS	OR		85.96	26	76.78	28	-9.18
026	CRD 6th & BROADWAY	OR	**Eliminated**					
027	CRD 7th & BROADWAY	OR	10.1	0.00	0	0.00	0	0.00
028	CRD 6th & YORK	OR	6.1	0.00	0	0.00	0	0.00
029	CRD 8th & YORK	OR	34.8	5.66	33	5.66	33	0.00
030	CRD 9th & YORK "A"	OR	**Eliminated**					
031	CRD 6th & BRECKINRIDGE	OR	3.7	0.00	0	0.00	0	0.00
032	CRD 4th & BRECKINRIDGE	OR	**Eliminated**					
033	CRD ON YORK E OF 4th	OR	**Eliminated**					
034	CRD 4th & YORK	OR	5.1	0.00	0	0.00	0	0.00
035	CRD 2nd & BROADWAY NO 1	OR	14.3	0.23	11	0.23	11	0.00
036	CRD 3rd & BROADWAY	OR	23.1	0.03	4	0.03	4	0.00
038	CRD 5th & BROADWAY	OR	9.5	0.00	0	0.00	0	0.00
049	PRESTON ST	OR	**Eliminated**					
050	12th STREET	OR	36.3	43.75	42	39.77	41	-3.98
051	11th STREET	OR	6.3	4.95	27	3.90	28	-1.05
052	10th STREET	OR	8.7	9.81	33	8.66	30	-1.15
053	8th STREET	OR	34.1	4.61	23	4.54	23	-0.07
054	7th STREET	OR	7.1	0.11	32	0.11	23	0.00
055	6th STREET	OR	18.0	21.10	34	19.17	31	-1.93
056	5th STREET	OR	22.0	2.91	18	2.81	18	-0.10
057	FIRST STREET OVFL WEIR	OR		0.00	0	0.00	0	0.00
058	PRESTON ST OVFL WEIR	OR	105.4	121.51	51	124.16	51	2.65
062	LOGAN COMPANY	OR		0.00	0	0.00	0	0.00
065	LAMPTON STREET	SF BGC	**Eliminated**					
080	PAYNE STREET	MF BGC	**Eliminated**					
081	LETTERLE	SF BGC	**Eliminated**					
082	BGI AT BGC	SF BGC		1.16	24	1.13	24	-0.03
083	BRENT ST & BROADWAY CONNEC	SF BGC	38.1	0.00	0	0.00	0	0.00
084	BRENT ST @ BGC	SF BGC	125.1	17.96	34	17.94	34	-0.02
086	PAYNE AT SPRING	MF BGC	6.1	0.00	0	0.00	0	0.00
087	BLUEHORSE	SF BGC	**Eliminated**					
088	MELLWOOD AVE INT	SF BGC	18.8	0.58	6	0.58	6	0.00
091	SCHILLER AVE OVFL	SF BGC	15.0	1.62	34	1.62	34	0.00
092	ST CATHERINE @ BGC	SF BGC	7.7	0.00	0	0.00	0	0.00
093	SPRING STREET	SF BGC	20.8	1.81	37	1.81	37	0.00
097	CANTONMENT SIPHON NO 2	SF BGC		16.19	44	16.07	45	-0.12
104	SW PKWY SEWER @ BROADWAY	OR	62.0	0.20	5	0.20	5	0.00
105	WESTERN OUTFALL @ BROADWA	OR	1,881.2	21.43	19	21.46	19	0.03
106	ROYAL - NEFF	SF BGC	11.8	0.34	17	0.34	17	0.00
108	REG N0 1 - NEWBURG	SF BGC	485.2	31.83	13	36.07	27	4.24

PRINT DATE: 11/1/2010

Louisville MSD
Existing Condition AAOV

CSO	CSO NAME	RECEIVING STREAM	Drainage Area (Acres)	October 2008 IWCS (ver8.0)		January 2009 IWCS (ver 9.5)		Change in AAOV (MG/YR) Jan-Oct
				AAOV (MG/YR)	OF Incidents (# OF/YR)	AAOV (MG/YR)	OF Incidents (# OF/YR)	
109	REG NO 2 - DEER PARK	SF BGC	95.4	0.27	3	0.27	3	0.00
110	REG NO 3 - GOSS AVE	SF BGC	73.0	30.49	44	30.39	43	-0.10
111	EMERSON STREET SEWER	SF BGC	99.4	0.00	0	0.00	0	0.00
113	ELLISON AVENUE SEWER	SF BGC	67.6	7.74	37	7.74	37	0.00
117	REG NO 11 - DRY RUN	SF BGC	74.2	94.99	41	94.13	41	-0.86
118	REG NO 15 - E BRDWY	SF BGC	354.1	100.49	39	100.17	39	-0.32
119	BRENT STREET SEWER	SF BGC	7.6	12.59	40	12.51	40	-0.08
120	PHOENIX HILL SEWER	SF BGC	16.5	9.24	51	9.24	51	0.00
121	REG NO 18 - GREEN ST	SF BGC	107.2	11.26	28	11.23	28	-0.03
123	REG NO 20 - RUTH-SULGRV	MF BGC	**Eliminated**					
125	REG NO 24 - GRINSTEAD DR	MF BGC	391.0	48.58	55	48.63	54	0.05
126	REG NO 26 - RAYMOND AVE	MF BGC	35.3	0.55	13	0.55	13	0.00
127	ETLEY AVENUE	MF BGC	192.3	4.63	21	4.63	21	0.00
130	WEBSTER STREET	SF BGC	28.4	0.86	10	0.85	10	-0.01
131	EG NO 33 - MELWD & FRANKFOR	SF BGC	50.3	0.06	3	0.06	3	0.00
132	REG NO 35 - BROWNSBORO	MudF BGC	674.0	149.39	56	149.36	56	-0.03
137	CALVARY CEMETARY	SF BGC	26.7	3.94	37	3.93	37	-0.01
140	LOCUST STREET	MF BGC	75.5	17.01	54	17.01	54	0.00
141	BAXTER AVE @ BGC	SF BGC	7.7	5.07	27	5.06	27	-0.01
143	KENTUCKY ST BLOW-OFF	SF BGC	**Eliminated**					
144	VANCE ST REGULATOR	MF BGC	16.4	0.00	0	0.00	0	0.00
145	POINT PUMP STATION	SF BGC	**Eliminated**					
146	SNEADS BRANCH DIVERSION	SF BGC	112.6	50.45	46	52.57	58	2.12
147	SWAN STREET DIVERSION	SF BGC	**Eliminated**					
148	EASTERN PKWY DIVERSION	SF BGC	24.9	1.27	26	1.27	26	0.00
149	DRY RUN DIVERSION	SF BGC	226.5	56.93	38	56.78	37	-0.15
150	8th ST @ COMMON PLACE	OR	1.8	8.50	35	7.95	32	-0.55
151	REG NO 5 - CASTLEWOOD	SF BGC	219.7	85.00	56	86.01	57	1.01
152	REG NO 7 - SOUTHEASTERN	SF BGC	260.6	76.43	52	76.34	52	-0.09
153	COOPER STREET	SF BGC	41.7	15.67	56	15.66	56	-0.01
154	MELLWOOD @ SCHOEFFEL	MudF BGC	31.0	1.96	16	1.96	16	0.00
155	ROWAN ST @ 12th ST	OR	11.9	2.06	39	2.05	39	-0.01
156	6th & WASHINGTON SAN DIV	OR	**Eliminated**					
160	SEWER IN ALLEY SAN DIV	OR	2.0	0.28	28	1.24	76	0.96
161	MARKET ST SAN DIV	OR	2.5	0.01	1	0.001	1	-0.01
162	BEALS BRANCH HW REG	MF BGC	**Eliminated**					
166	BEALS BRANCH SAN DIV	MF BGC	696.6	10.09	19	10.13	19	0.04
167	BROWNSBORO LAT NO 2	MudF BGC	11.0	1.00	12	0.95	12	-0.05
172	ADAMS STREET	OR	13.7	1.28	31	1.28	31	0.00
178	CRD 9th & YORK "B"	OR	58.0	1.44	16	1.44	16	0.00
179	KENTUCKY ST SEWER OVFL	SF BGC	456.2	0.00	0	0.00	0	0.00
181	CRD 2nd & BROADWAY NO 2	OR	22.6	0.27	11	0.01	3	-0.26
189	NORTHWESTERN SAN DIV	OR	1,148.7	184.41	38	175.86	37	-8.55
190	SEVENTEENTH ST SAN DIV	OR	145.4	36.19	49	36.19	49	0.00
191	ALGONQUIN PKWY SAN DIV	OR	339.7	51.08	30	40.26	21	-10.82
192	CRD S 6th & GARLAND	OR	9.0	0.00	0	0.00	0	0.00

PRINT DATE: 11/1/2010

Louisville MSD
Existing Condition AAOV

CSO	CSO NAME	RECEIVING STREAM	Drainage Area (Acres)	October 2008 IWCS (ver8.0)		January 2009 IWCS (ver 9.5)		Change in AAOV (MG/YR) Jan-Oct
				AAOV (MG/YR)	OF Incidents (# OF/YR)	AAOV (MG/YR)	OF Incidents (# OF/YR)	
193	CRD S 6th & KENTUCKY	OR	22.7	0.04	5	0.04	5	0.00
194	CRD S OAK W OF 4th	OR	**Eliminated**					
195	CRD S 4th & OAK	OR	7.3	2.19	55	2.19	55	0.00
196	CRD S 3rd & OAK	OR	2.2	0.24	19	0.13	11	-0.11
197	CRD S 3rd S OF OAK	OR	4.5	4.17	53	3.02	47	-1.15
198	CRD S 3rd & ORMSBY	OR	4.4	0.00	5	0.00	2	0.00
199	CRD S 3rd N OF MAGNOLIA	OR	8.6	0.46	45	0.46	45	0.00
200	CRD S 3rd & MAGNOLIA	OR	10.3	4.91	65	4.91	65	0.00
201	CRD S 5th & KENTUCKY	OR	8.3	0.00	0	0.00	0	0.00
202	CRD S ORMSBY W OF 3rd	OR	5.3	0.09	13	0.09	13	0.00
203	CRD S 4th & ORMSBY	OR	14.2	0.00	0	0.00	0	0.00
204	CRD S FIFTH & BRECKINRIDGE	OR	**Eliminated**					
206	CHEROKEE PARK @ SPRING DR	MF BGC	464.6	8.64	39	19.91	52	11.27
207	2nd & JEFFERSON	OR	2.3	0.05	2	0.04	1	-0.02
208	12th & JEFFERSON	OR	11.2	0.33	11	0.33	11	0.00
209	CHEROKEE PK @ PARK BD RD	MF BGC	**Eliminated**					
210	45th STREET-GREENWOOD	OR	166.7	503.73	52	197.29	51	-306.44
211	MAIN DIVERSION STRUCTURE	OR	3,554.9	465.55	29	377.61	29	-87.94
SBR	**CSOs 142,174,180,182,183,184,185,186,187,188,205**			12.15	9	12.14	9	-0.01
			Total	**4,092**	**2,314**	**3,298**	**2,348**	
			Total AAOV Difference (MG/YR)	**613.82**		**-793.02**		
			Total AAOV Difference (Percentage)	**15%**		**-19%**		

Details of Individual SBR CSOs							
SBR	**CSOs 142,174,180,182,183,184,185,186,187,188,205**						
142	SBR LOGAN ST @ ST CATHERINE	SF BGC	157.5	0.00	0	0.00	0
174	SBR GOSS & BOYLE	SF BGC	6.8	37.31	57	37.30	57
180	SBR ORMSBY AVE RELIEF	SF BGC	221.6	0.27	11	0.27	11
182	SBR SHELBY & BURNETT	SF BGC	3.6	44.75	44	44.76	44
183	SBR ALEXANDER & KESWICK	SF BGC	104.8	0.00	0	0.00	0
184	SBR FETTER & ALEXANDER	SF BGC	108.2	0.43	13	0.43	13
185	SBR SHELBY & KESWICK	SF BGC	4.7	0.55	7	0.55	7
186	SBR LOGAN & OAK	SF BGC	7.2	0.00	0	0.00	0
187	SBR SHELBY & CAMP	SF BGC	13.1	0.00	0	0.00	0
188	SBR SHELBY & CLAY	SF BGC	11.5	0.03	8	0.03	8
205	SBR MORGAN STREET RELIEF	SF BGC	9.5	0.00	0	0.00	0

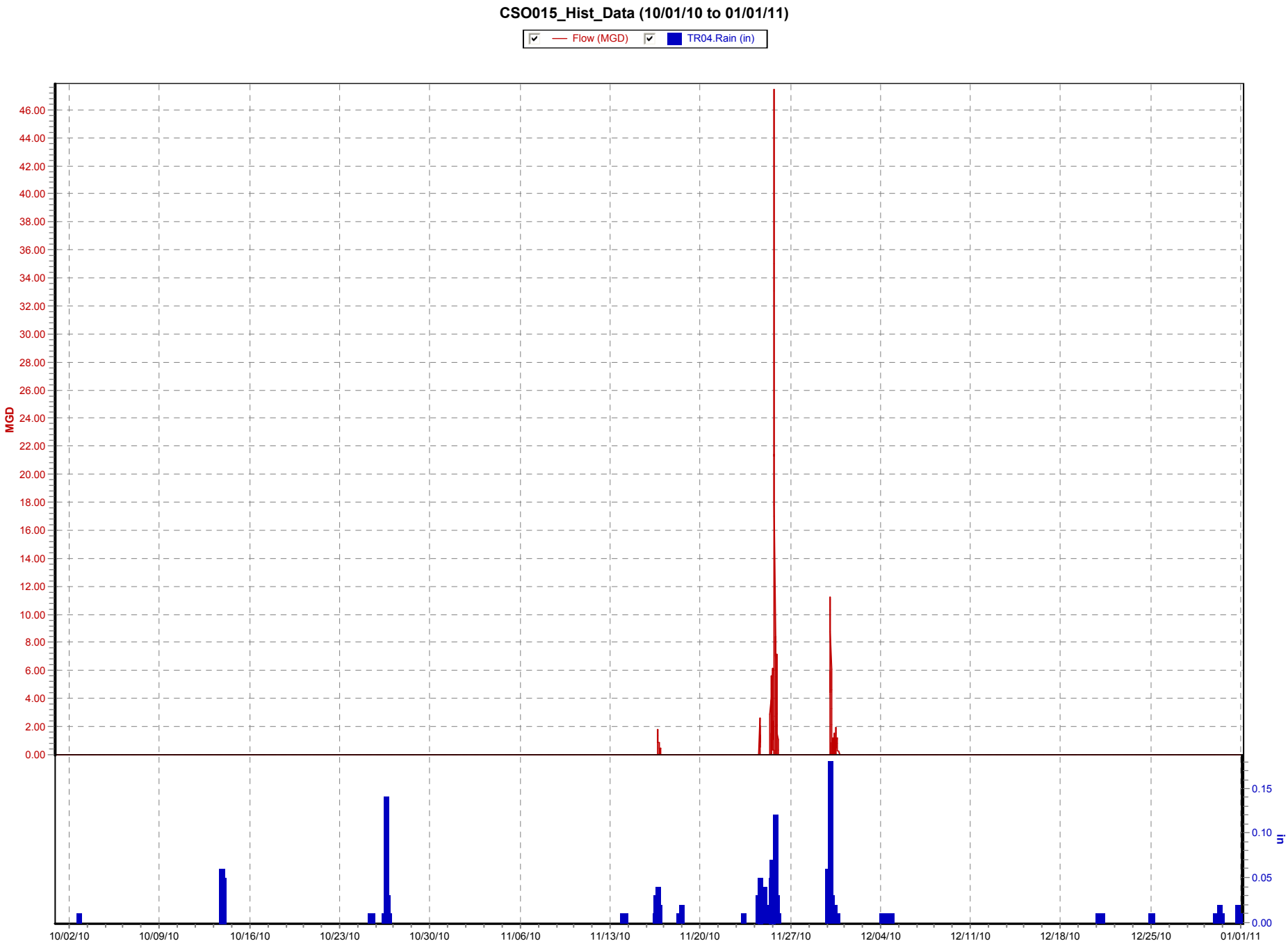
PRINT DATE: 11/1/2010

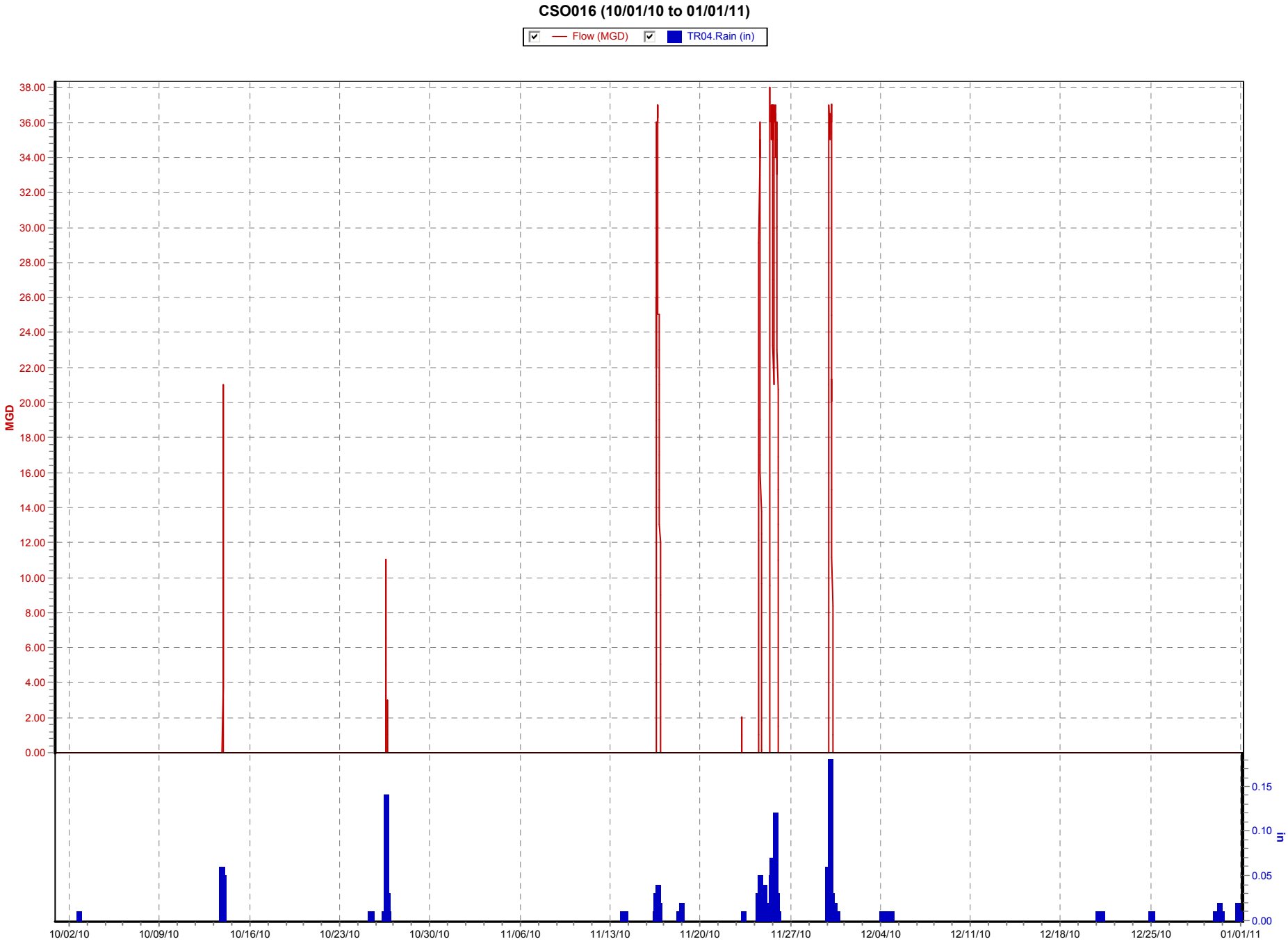
Appendix D – CSO Flow Monitoring Data

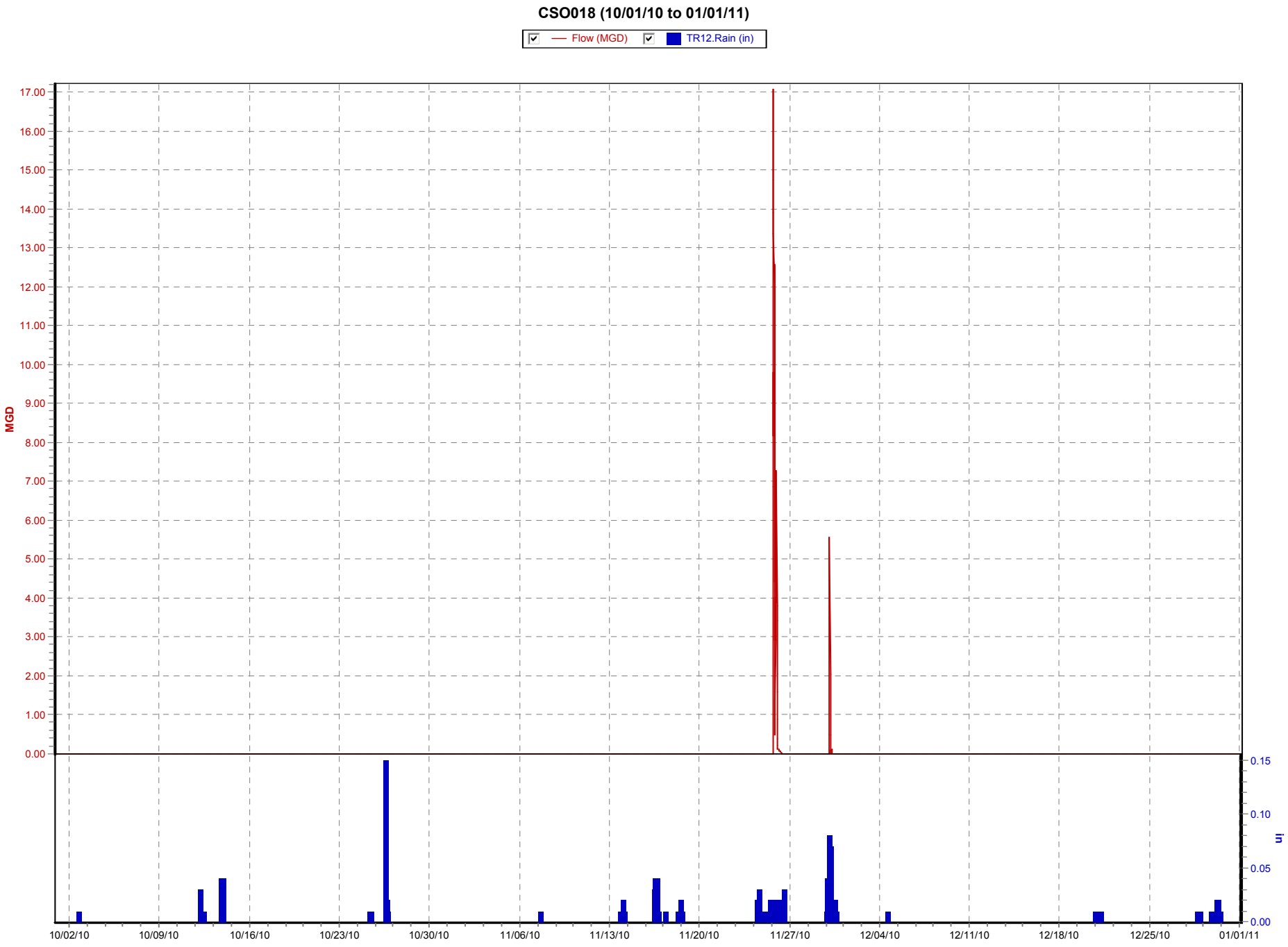
Data Exceptions for 10/1/2010 – 12/31/2011

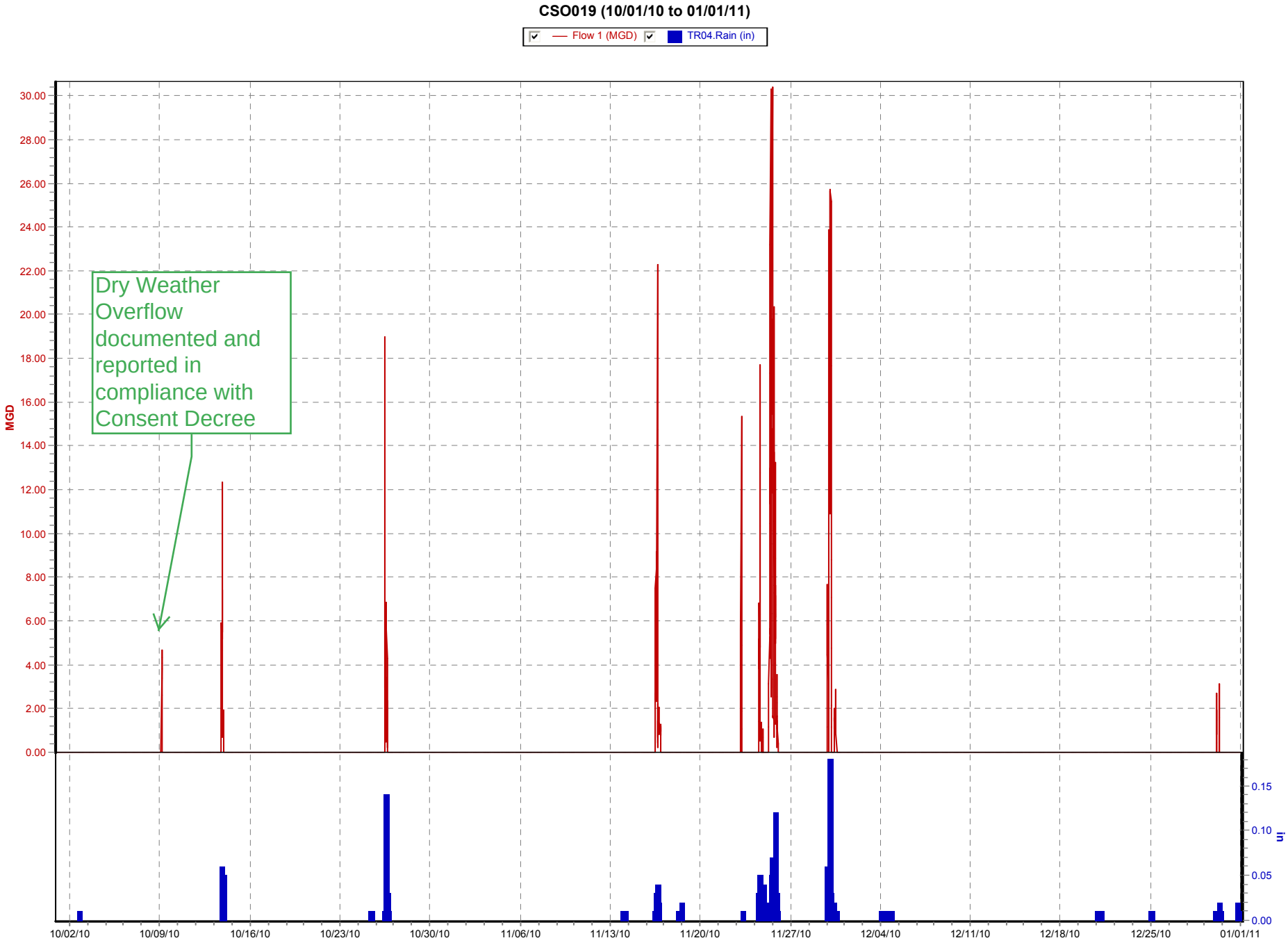
Note 1 - On November 23rd, December 11th and December 15th, there was flow at several CSOs with no rain gauge data being present. MSD analyzed radar rainfall data and found rainfall records in the combined sewer area on those days preceding the overflow events. MSD believes that these overflow events were caused by wet weather.

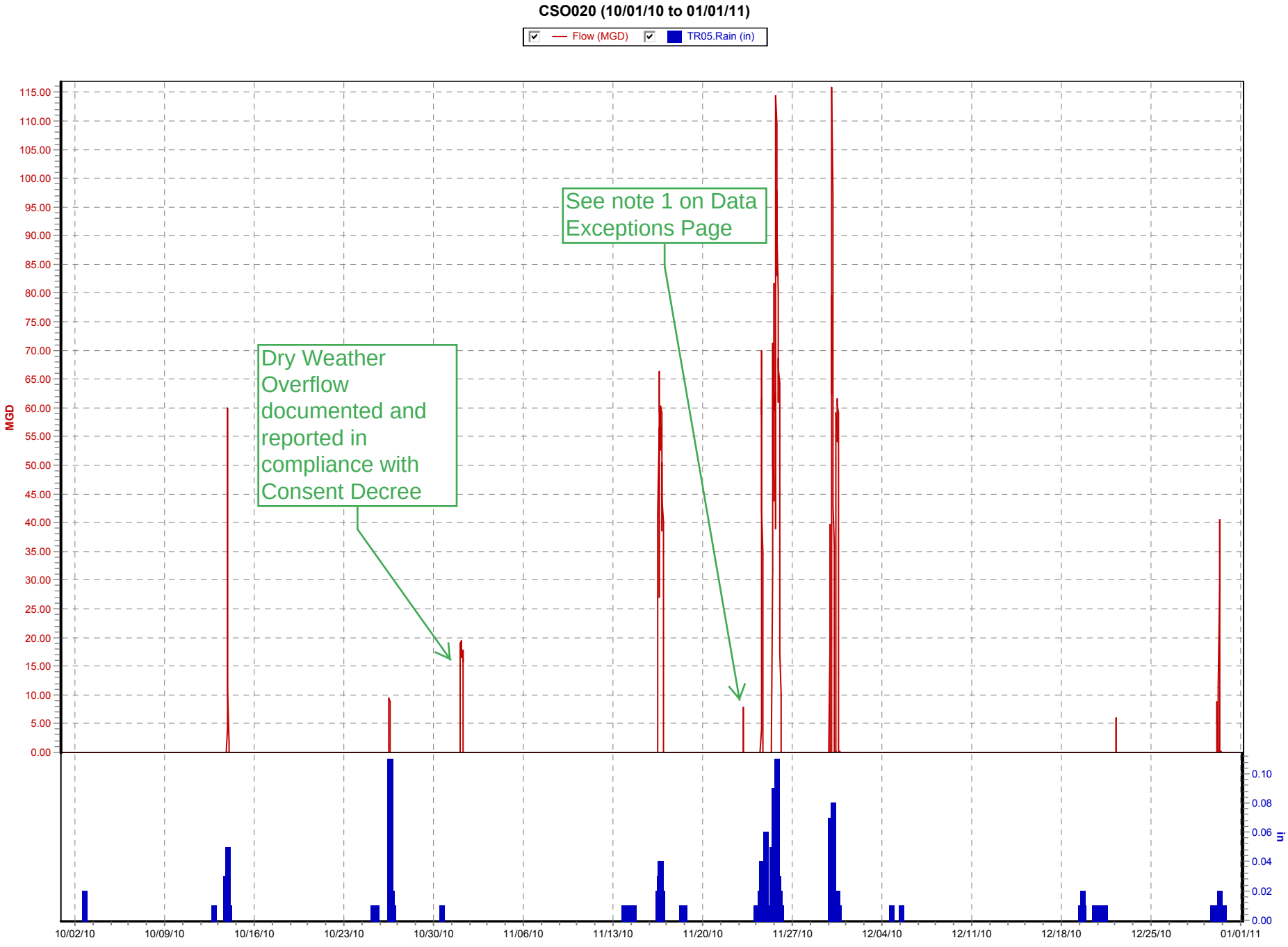
Missing Data for 10/1/2010 – 12/31/2010
CSO050 – Experienced minor data gaps between 12/14/2010 and 12/20/2010 due to a new
battery installation
CSO108 – Flow meter was uninstalled on 12/02/2010
CSO118 – Flow meter battery was down from 11/24/2010 – 11/29/2010
CSO121 – Flow meter battery was down from 11/24/2010 – 11/29/2010
CSO172 – Meter was uninstalled in August, 2010.
CSO182 – The flow meter battery was down from 10/19/2010 – 11/3/2010. A problem was recognized with the flow meter on 11/28/2010. A new flow meter was installed on 12/13/2010.


CSO015_Hist_Data (10/01/10 to 01/01/11)
Flow (MGD)
TR04.Rain (in)
MGD
in
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
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO016 (10/01/10 to 01/01/11)
Flow (MGD)
TR04.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
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO018 (10/01/10 to 01/01/11)
Flow (MGD)
TR12.Rain (in)
MGD
in
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO019 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR04.Rain (in)
Dry Weather Overflow documented and reported in compliance with Consent Decree
MGD
in
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO020 (10/01/10 to 01/01/11)
Flow (MGD)
TR05.Rain (in)
See note 1 on Data Exceptions Page
Dry Weather Overflow documented and reported in compliance with Consent Decree
MGD
in
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
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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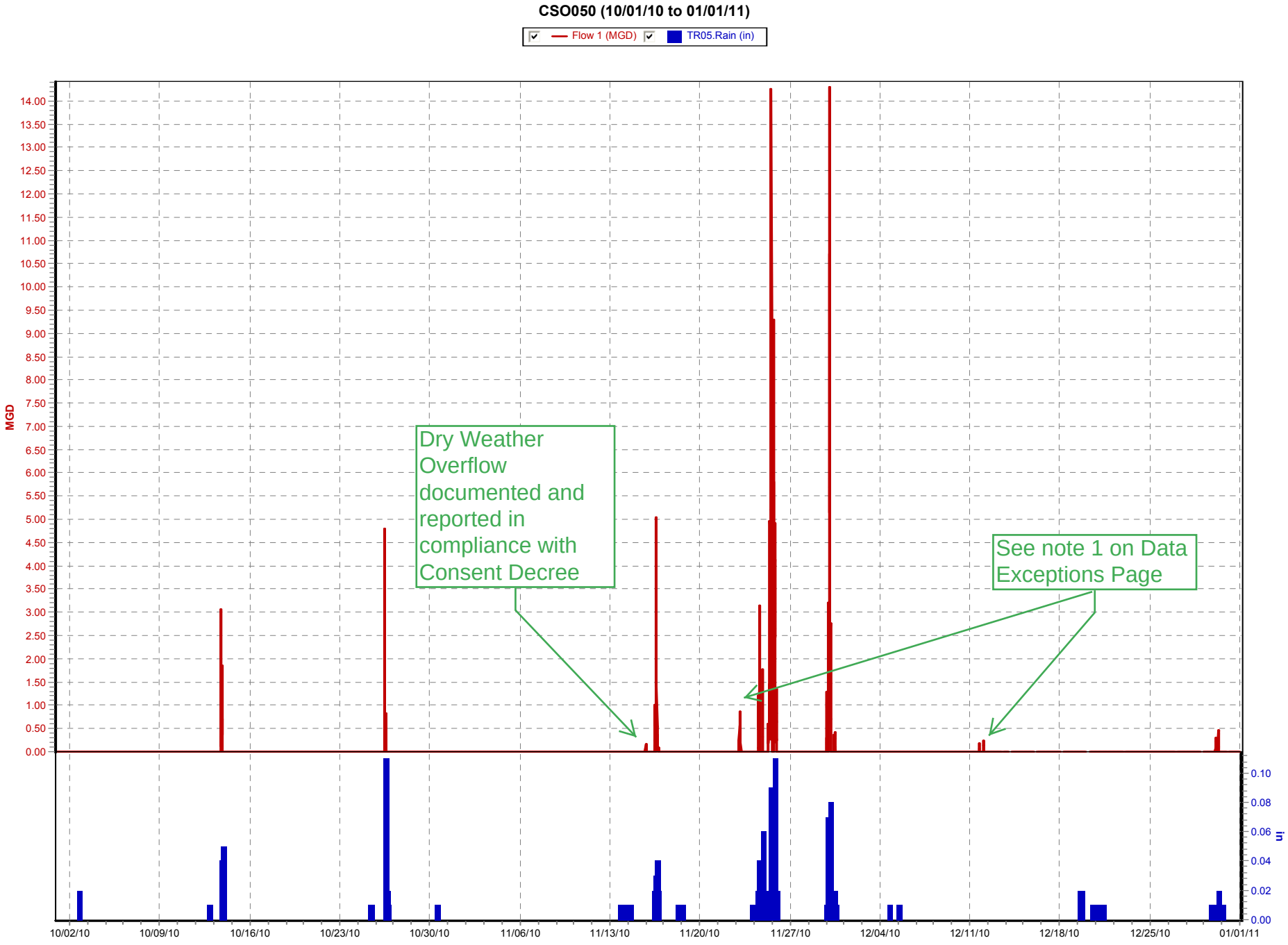
12/11/10
12/18/10
12/25/10
01/01/11


CSO050 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
Dry Weather Overflow documented and reported in compliance with Consent Decree
See note 1 on Data Exceptions Page
14.00
13.50
13.00
12.50
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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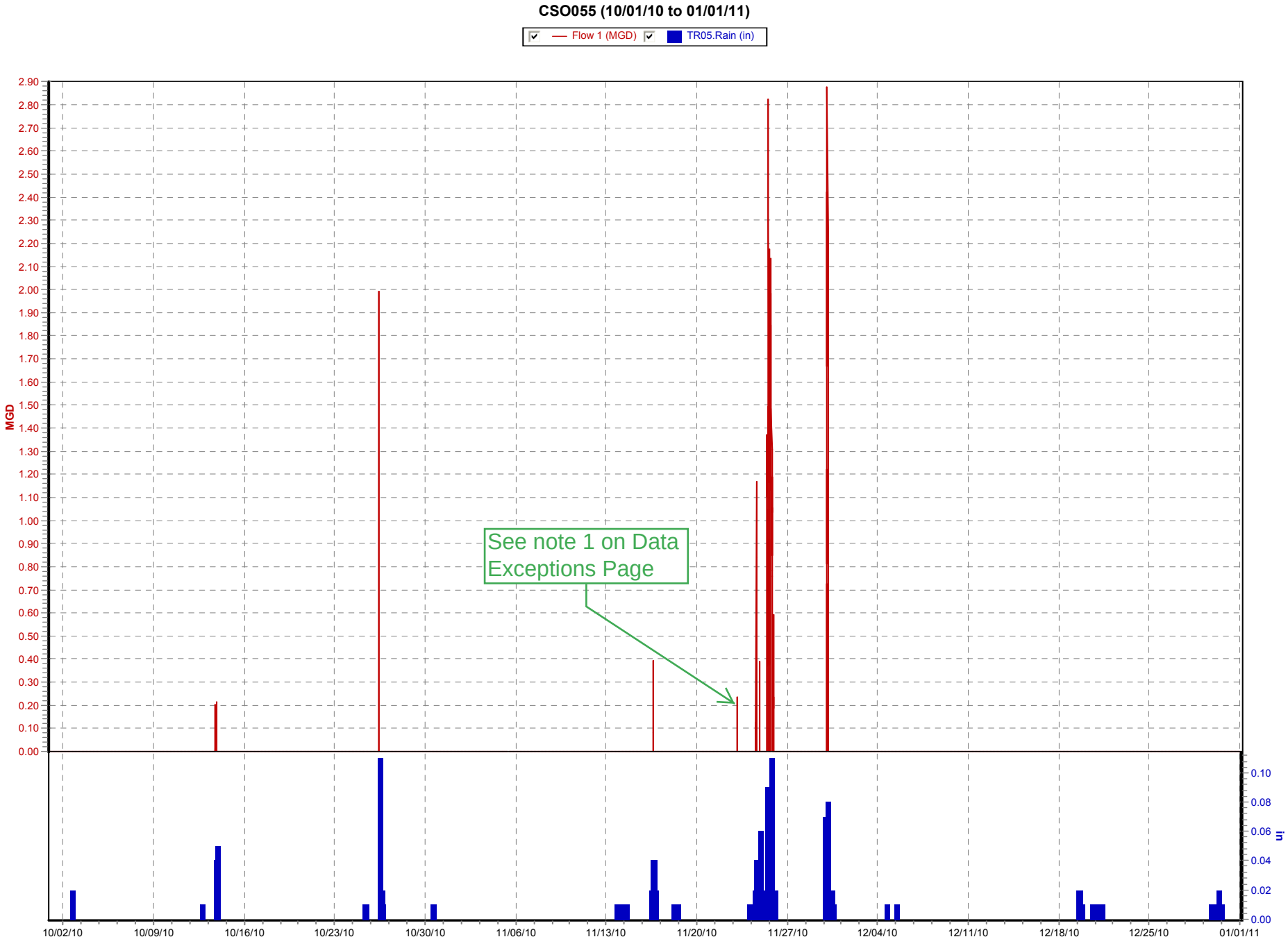
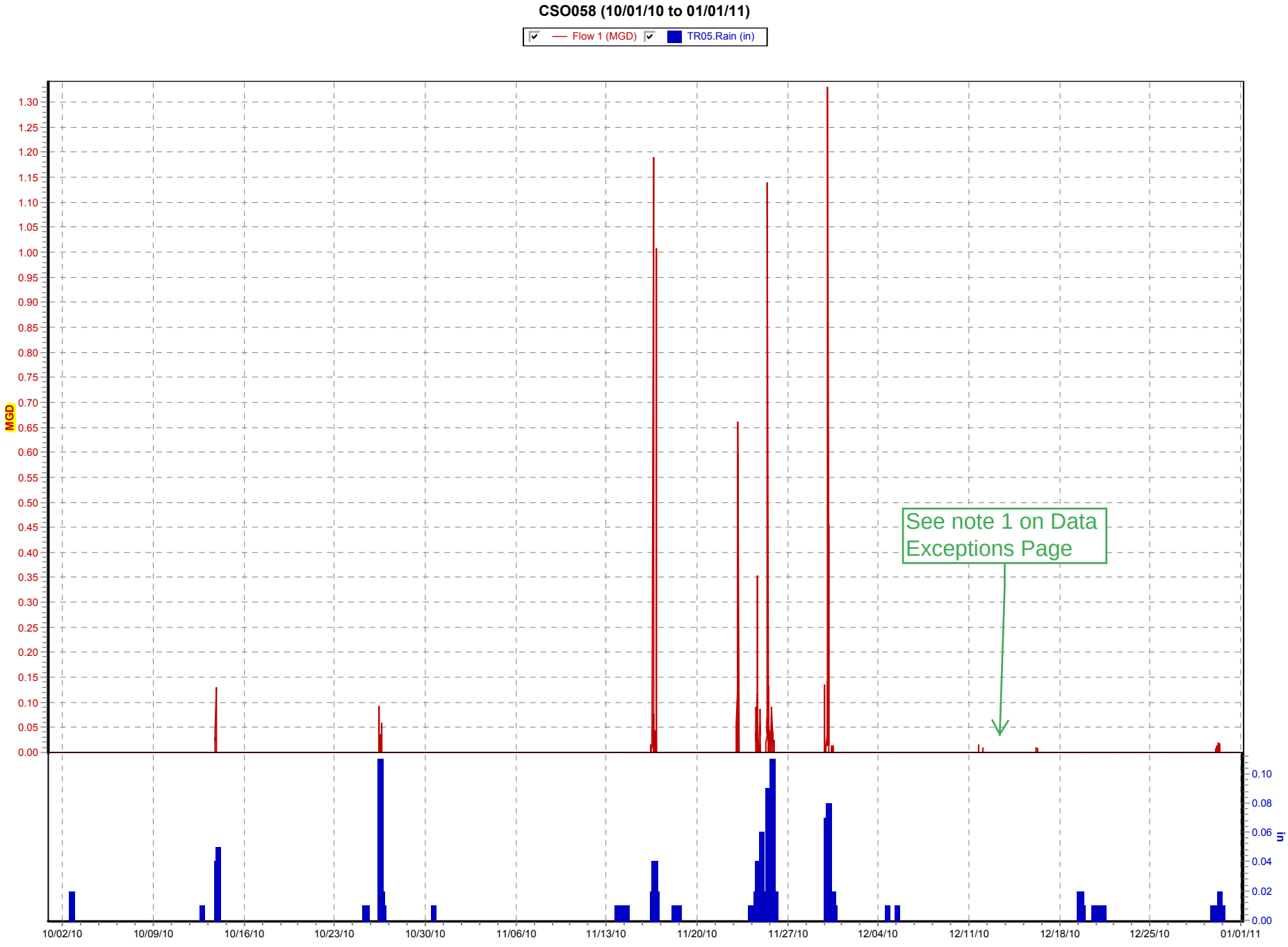
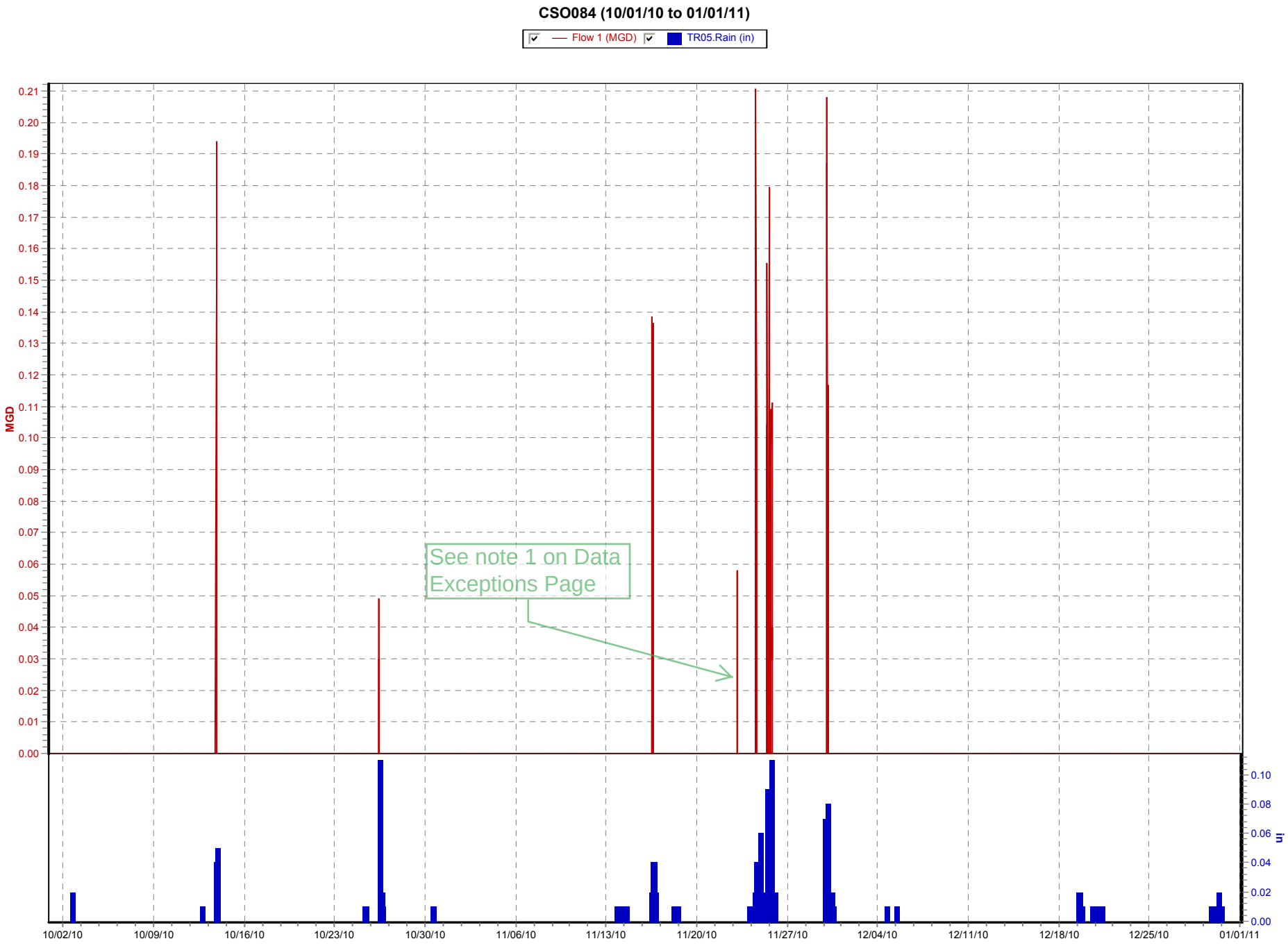
12/11/10
12/18/10
12/25/10
01/01/11


CSO055 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO058 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO084 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
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
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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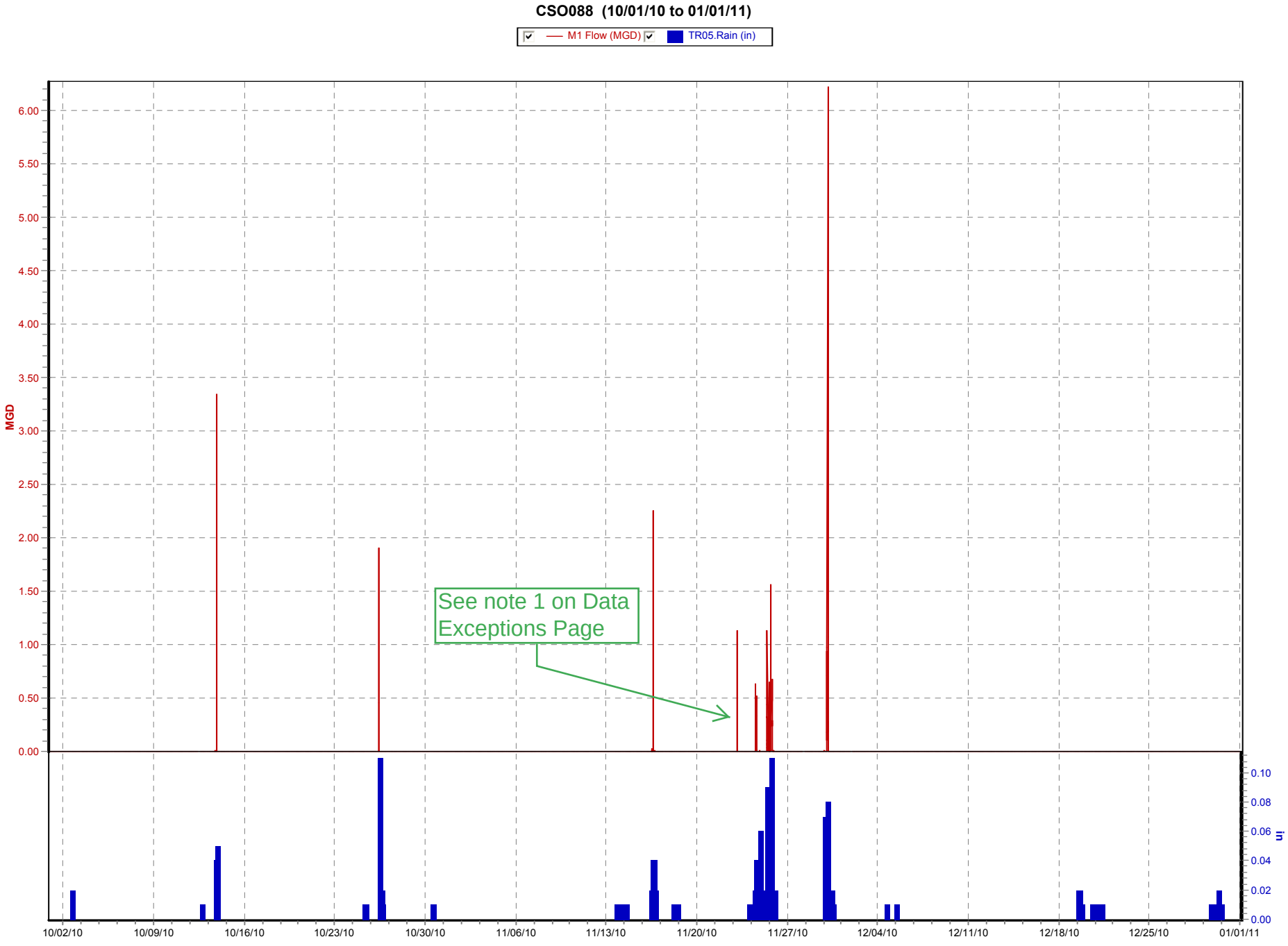
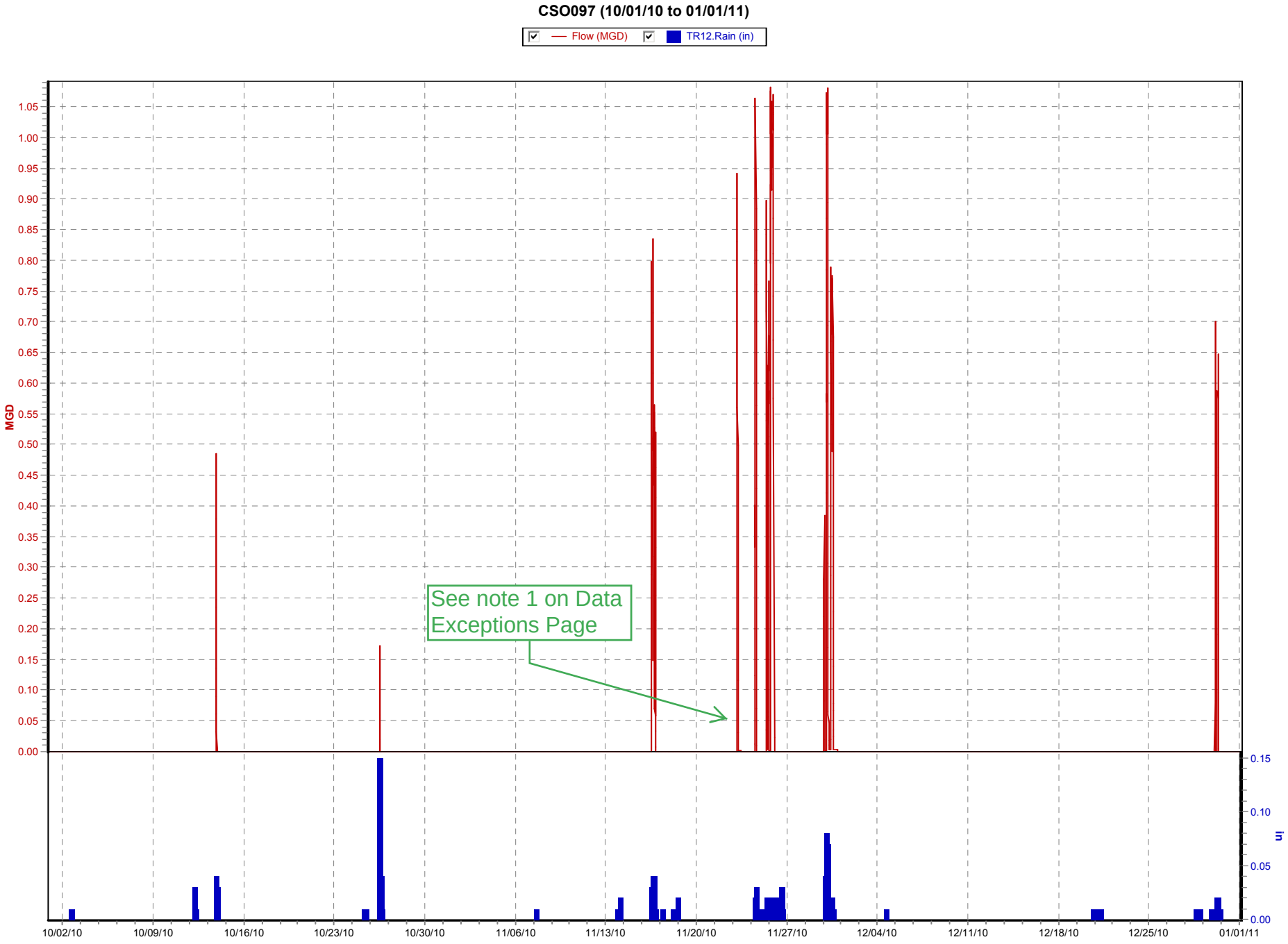
12/11/10
12/18/10
12/25/10
01/01/11


CSO088 (10/01/10 to 01/01/11)
M1 Flow (MGD)
TR05.Rain (in)
MGD
in
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.10
0.08
0.06
0.04
0.02
0.00
See note 1 on Data Exceptions Page
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO097 (10/01/10 to 01/01/11)
Flow (MGD)
TR12.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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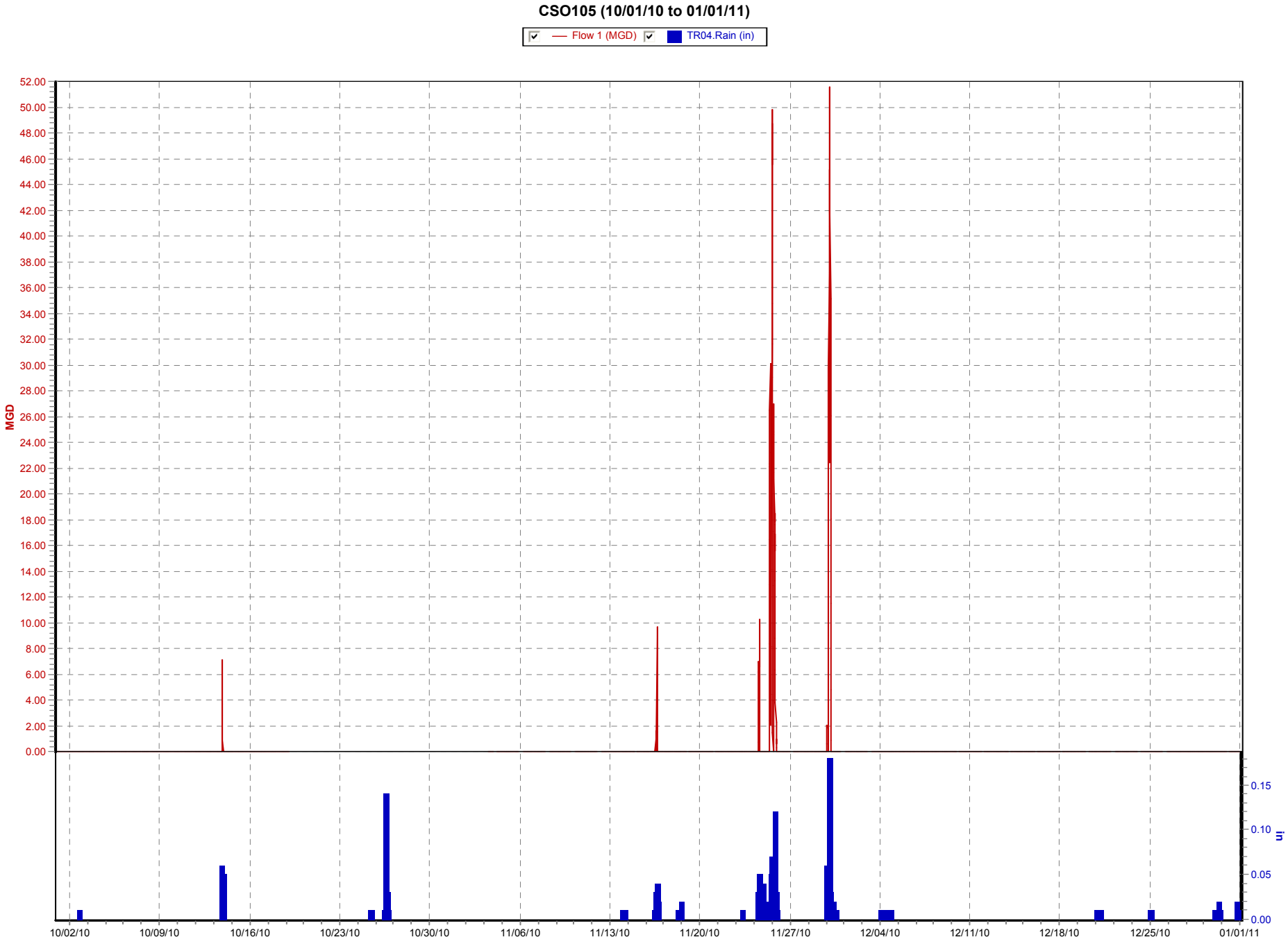
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO105 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR04.Rain (in)
MGD
in
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
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
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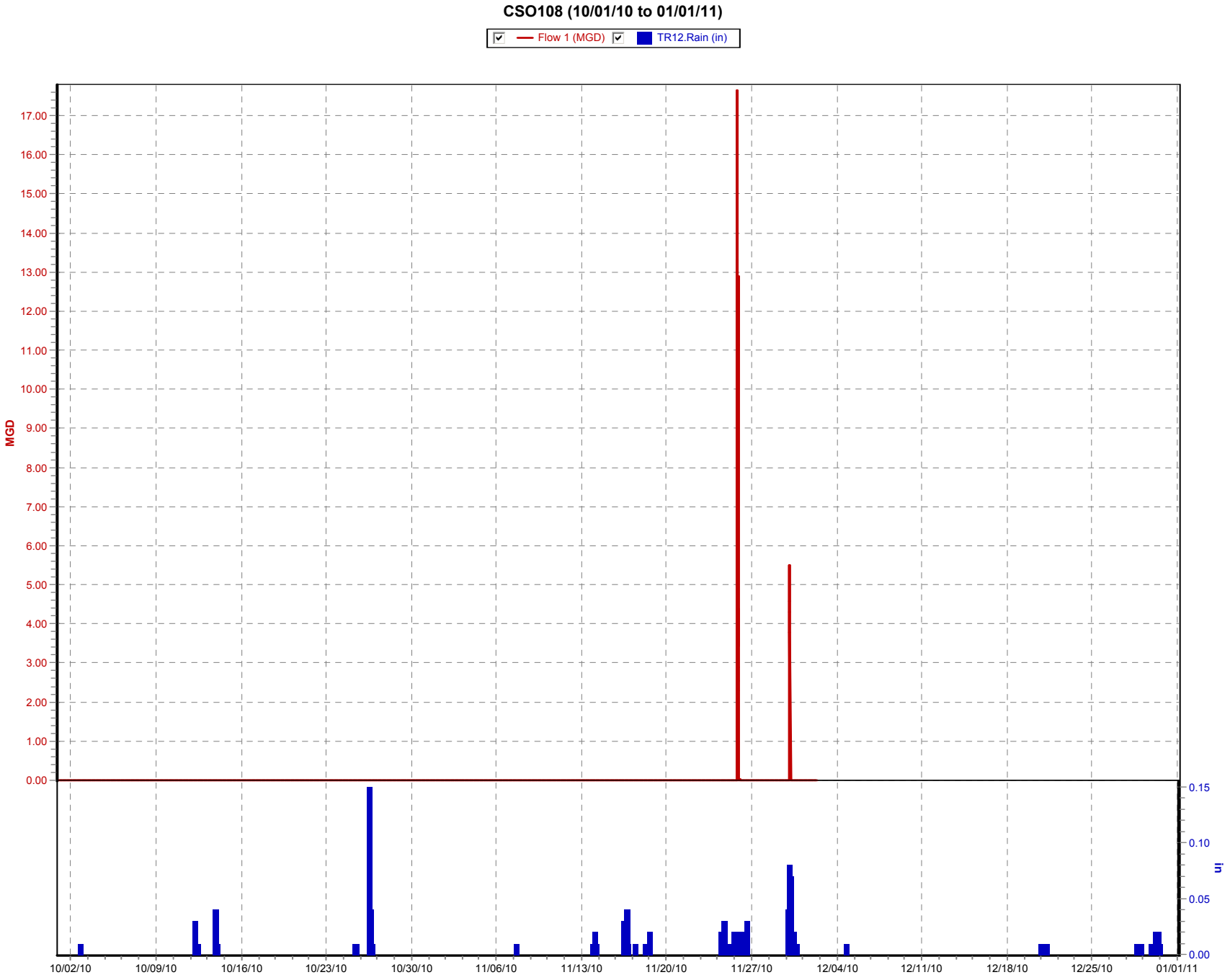
12/11/10
12/18/10
12/25/10
01/01/11


CSO108 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.15
0.10
0.05
0.00
in
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
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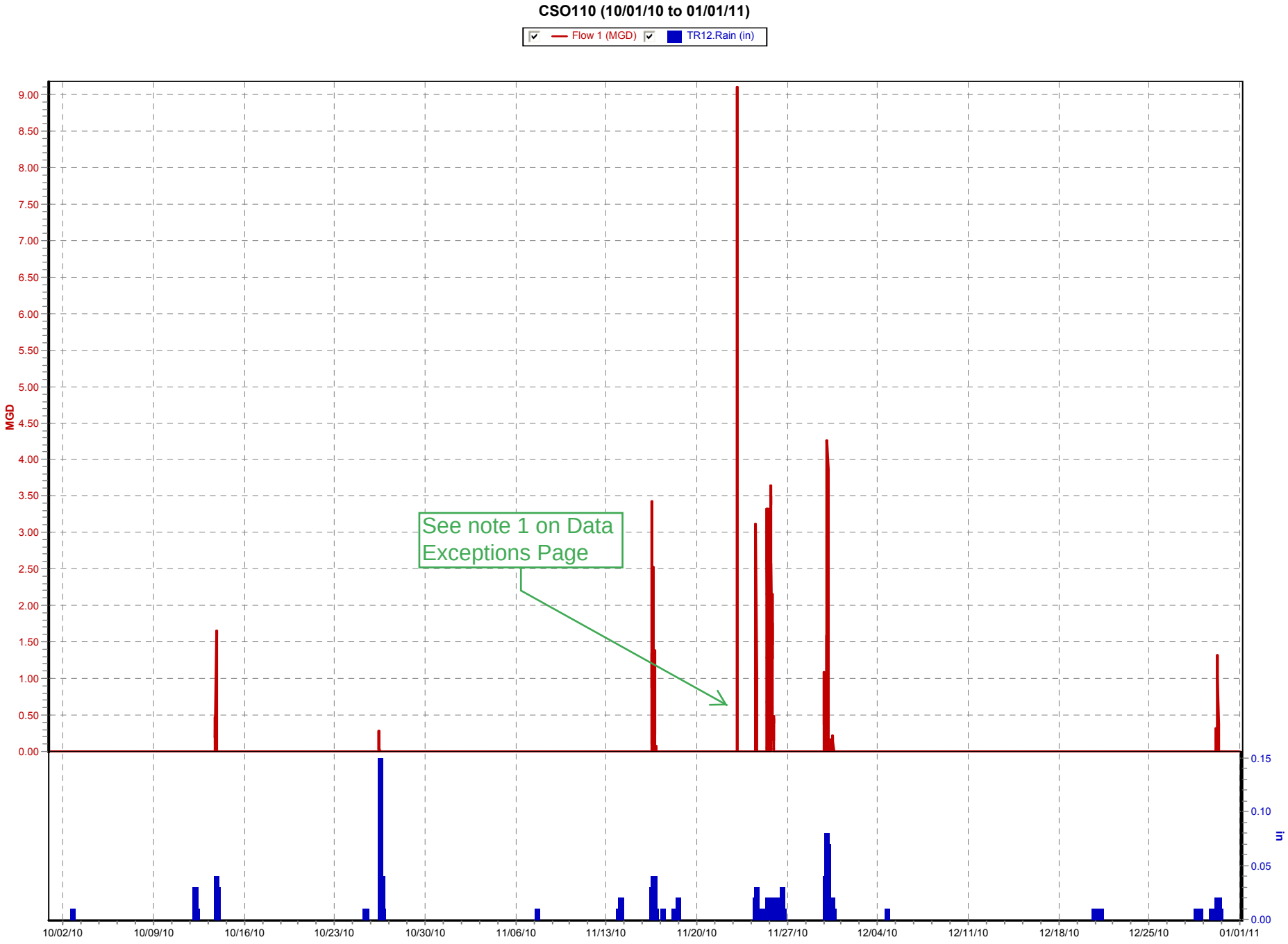
12/11/10
12/18/10
12/25/10
01/01/11


CSO110 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
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
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
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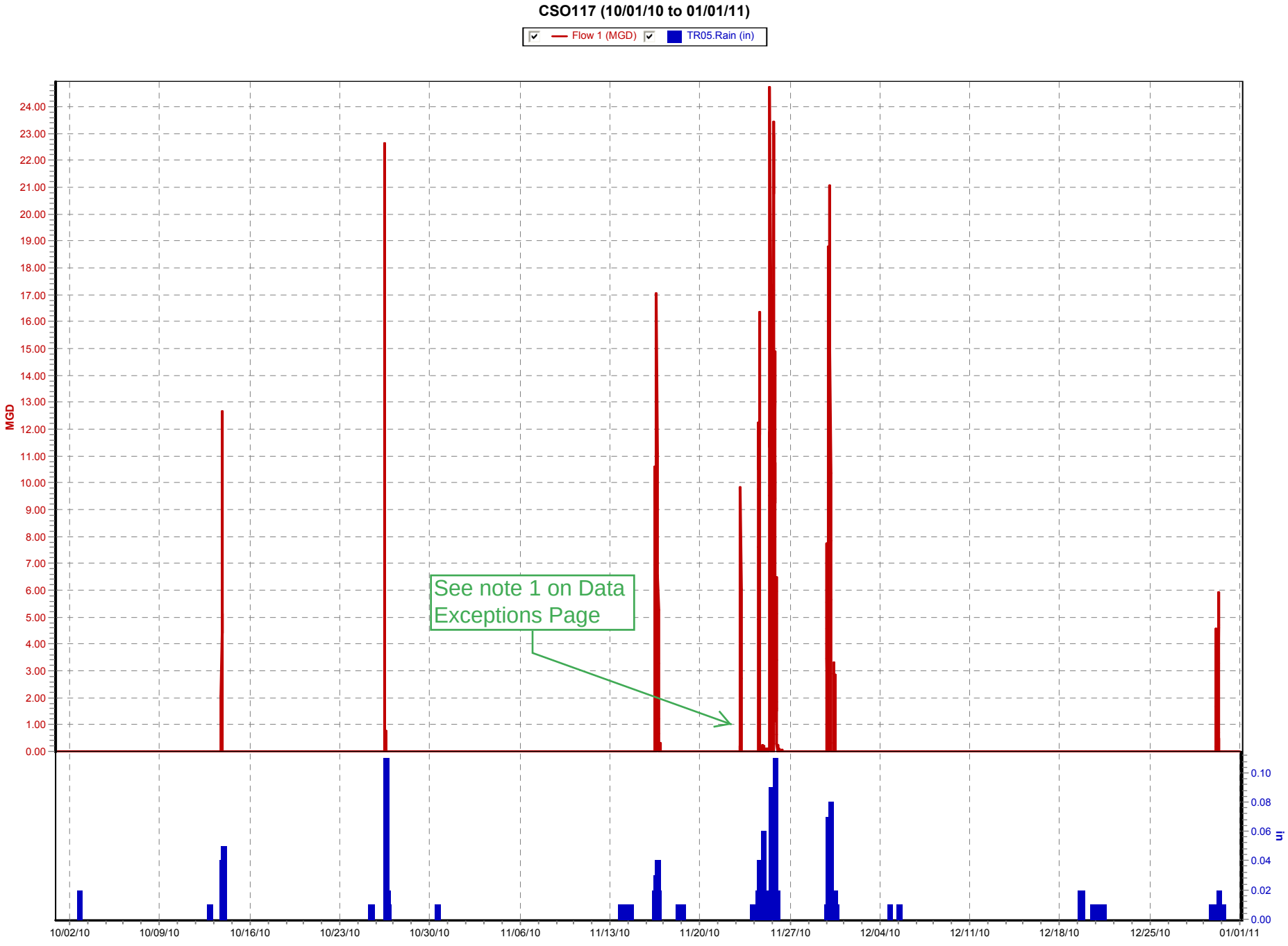
12/11/10
12/18/10
12/25/10
01/01/11


CSO117 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
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
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
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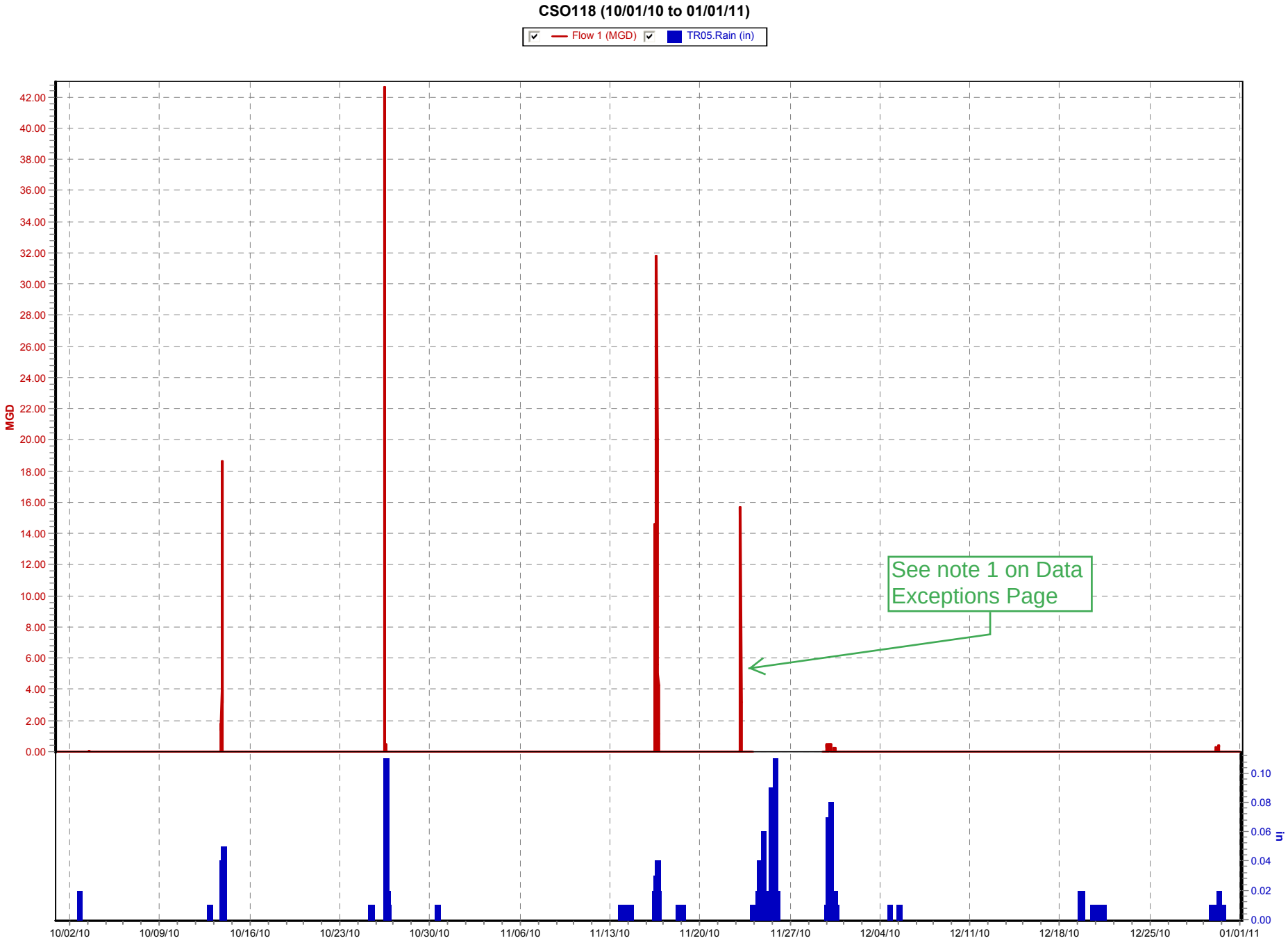
12/11/10
12/18/10
12/25/10
01/01/11


CSO118 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
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
See note 1 on Data Exceptions Page
0.10
0.08
0.06
0.04
0.02
0.00
in
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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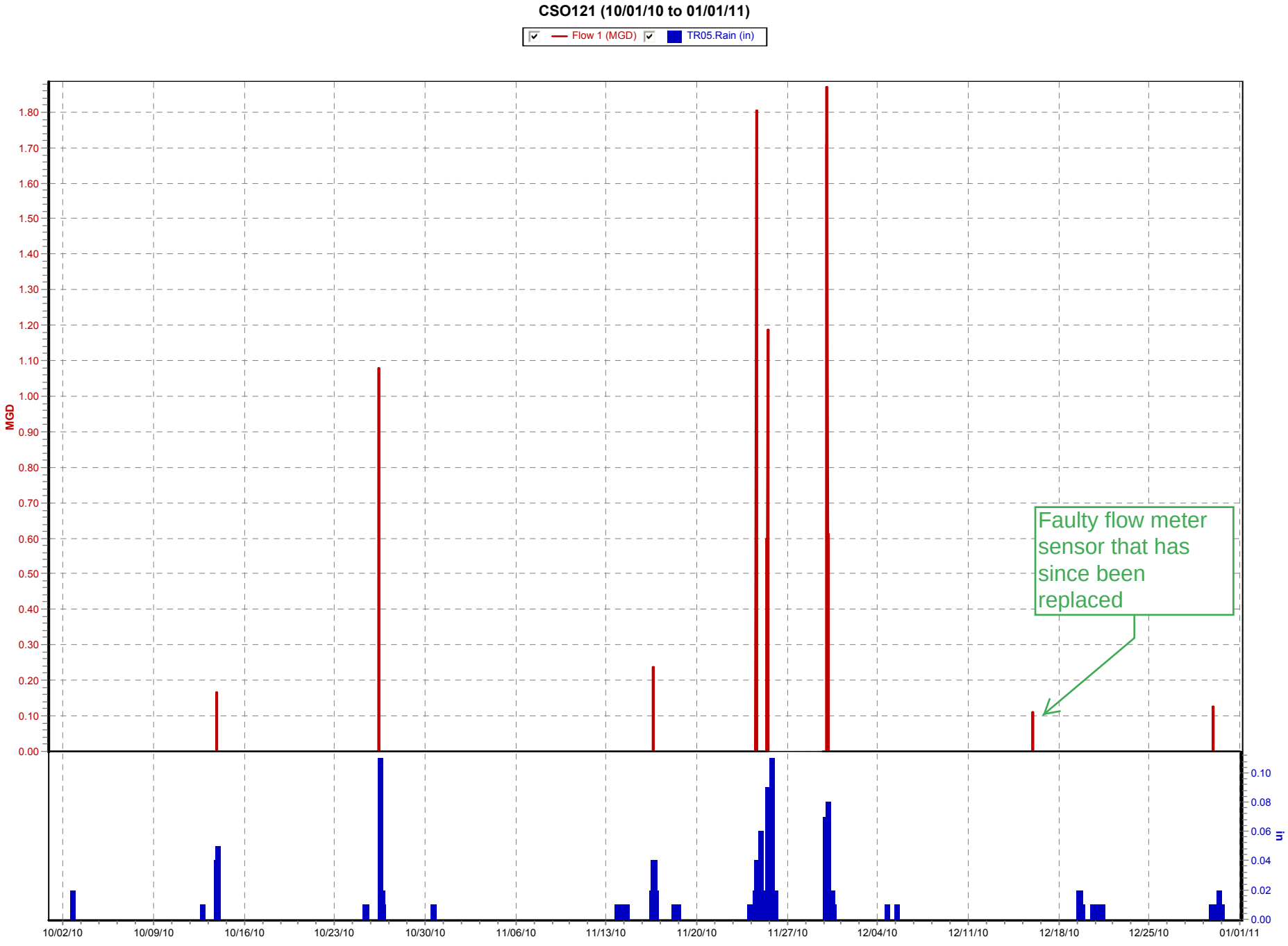
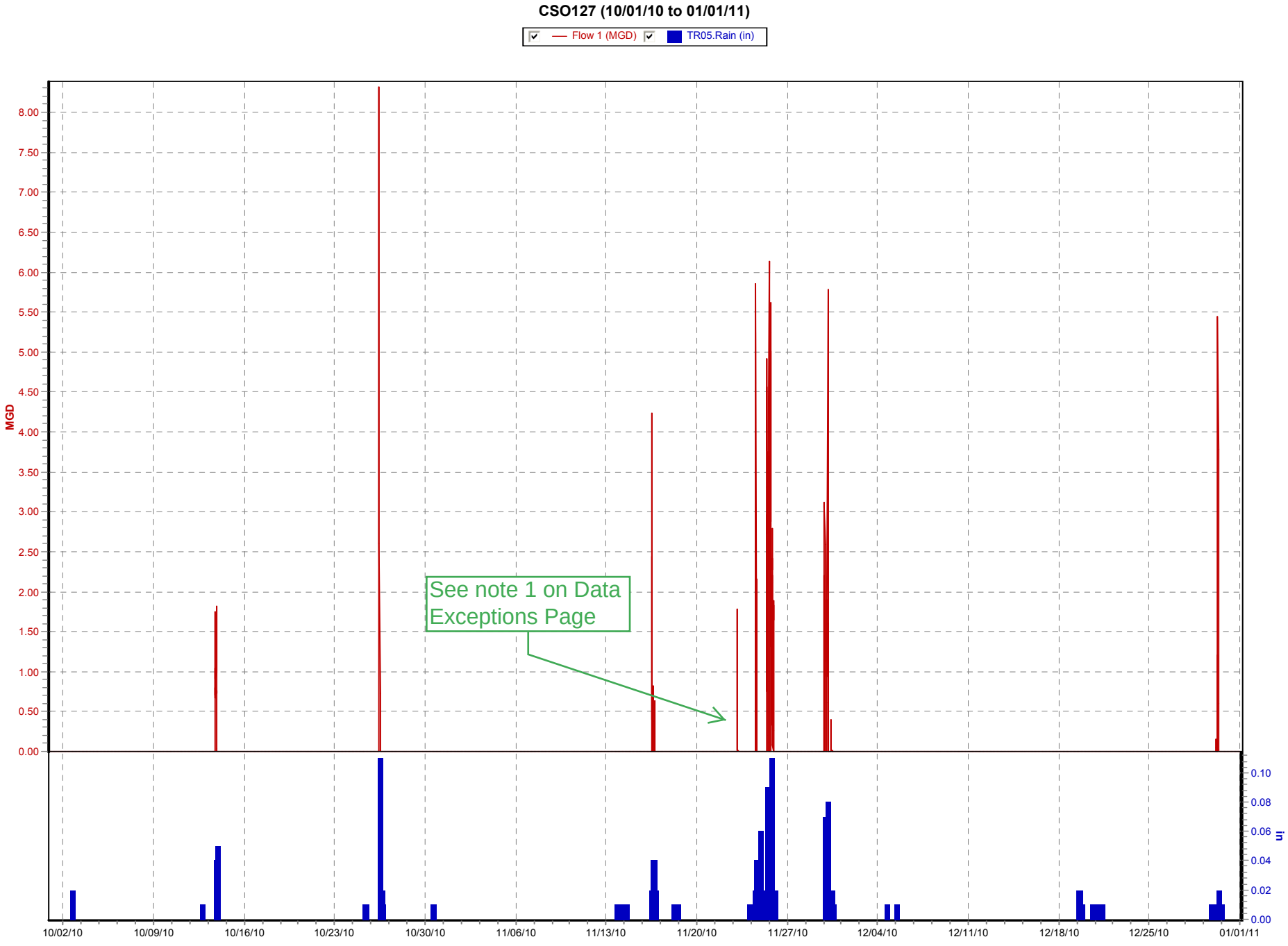
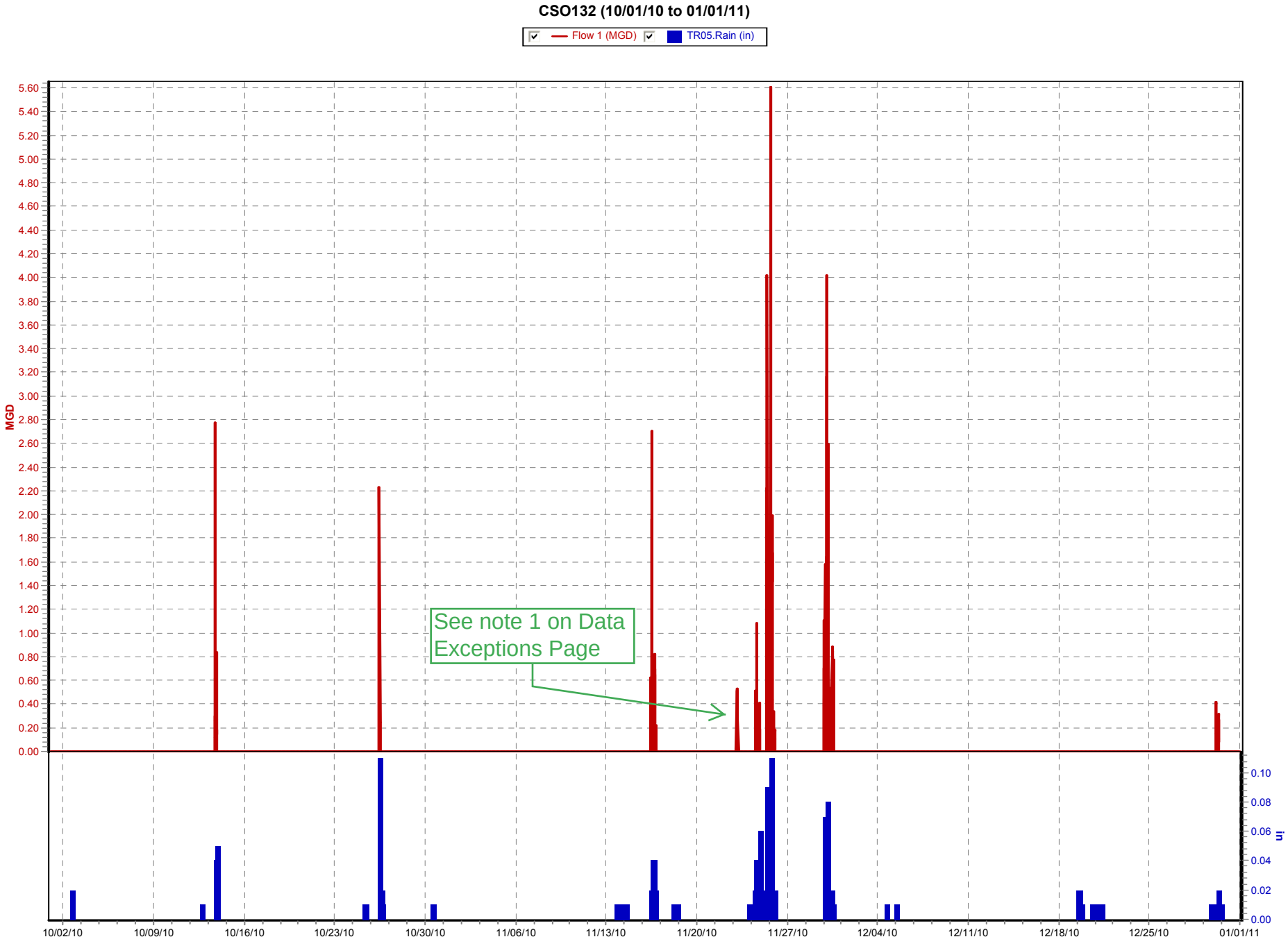
12/11/10
12/18/10
12/25/10
01/01/11


CSO121 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11
Faulty flow meter sensor that has since been replaced


CSO127 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
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
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11
See note 1 on Data Exceptions Page


CSO132 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
5.60
5.40
5.20
5.00
4.80
4.60
4.40
4.20
4.00
3.80
3.60
3.40
3.20
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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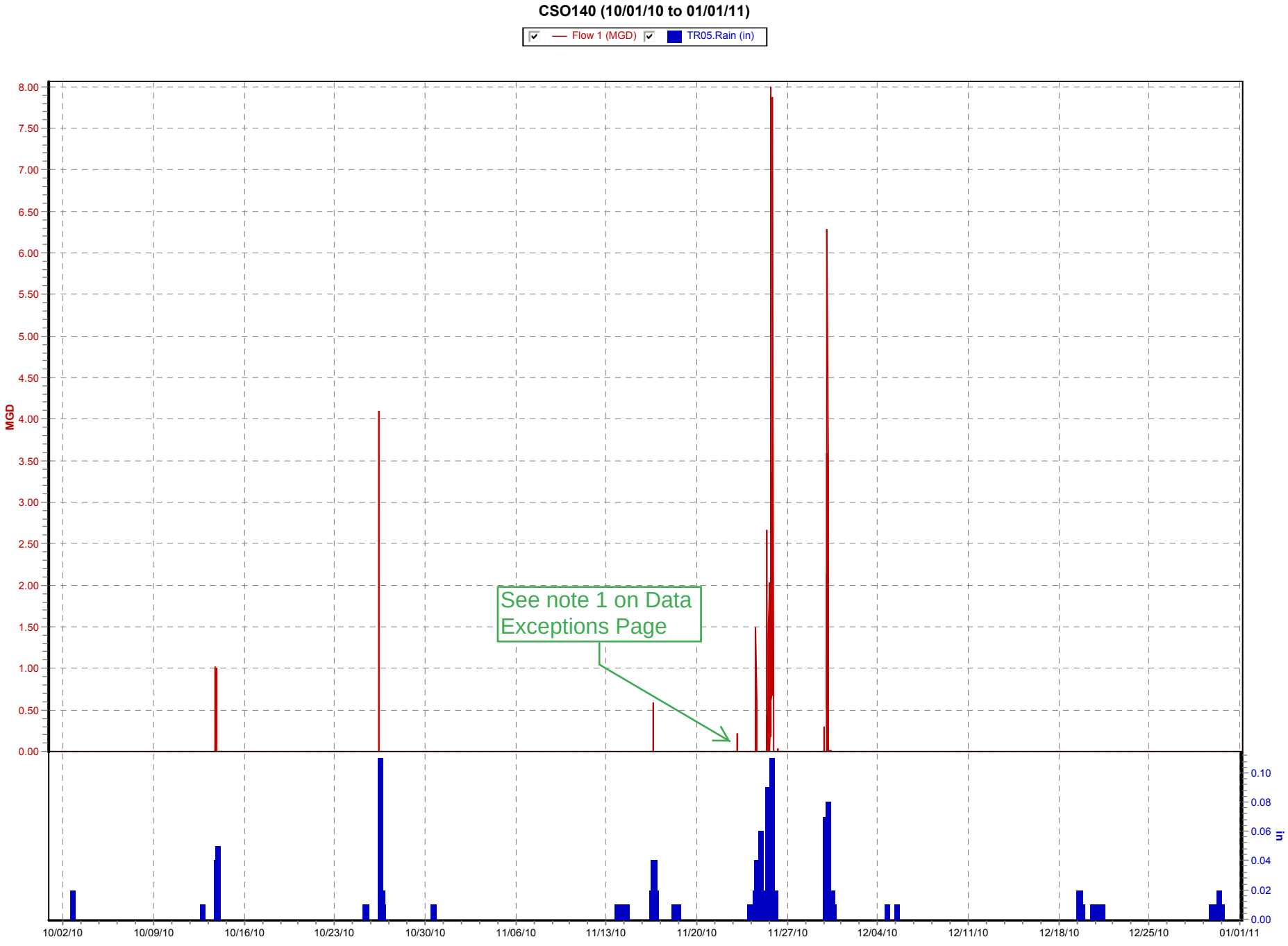
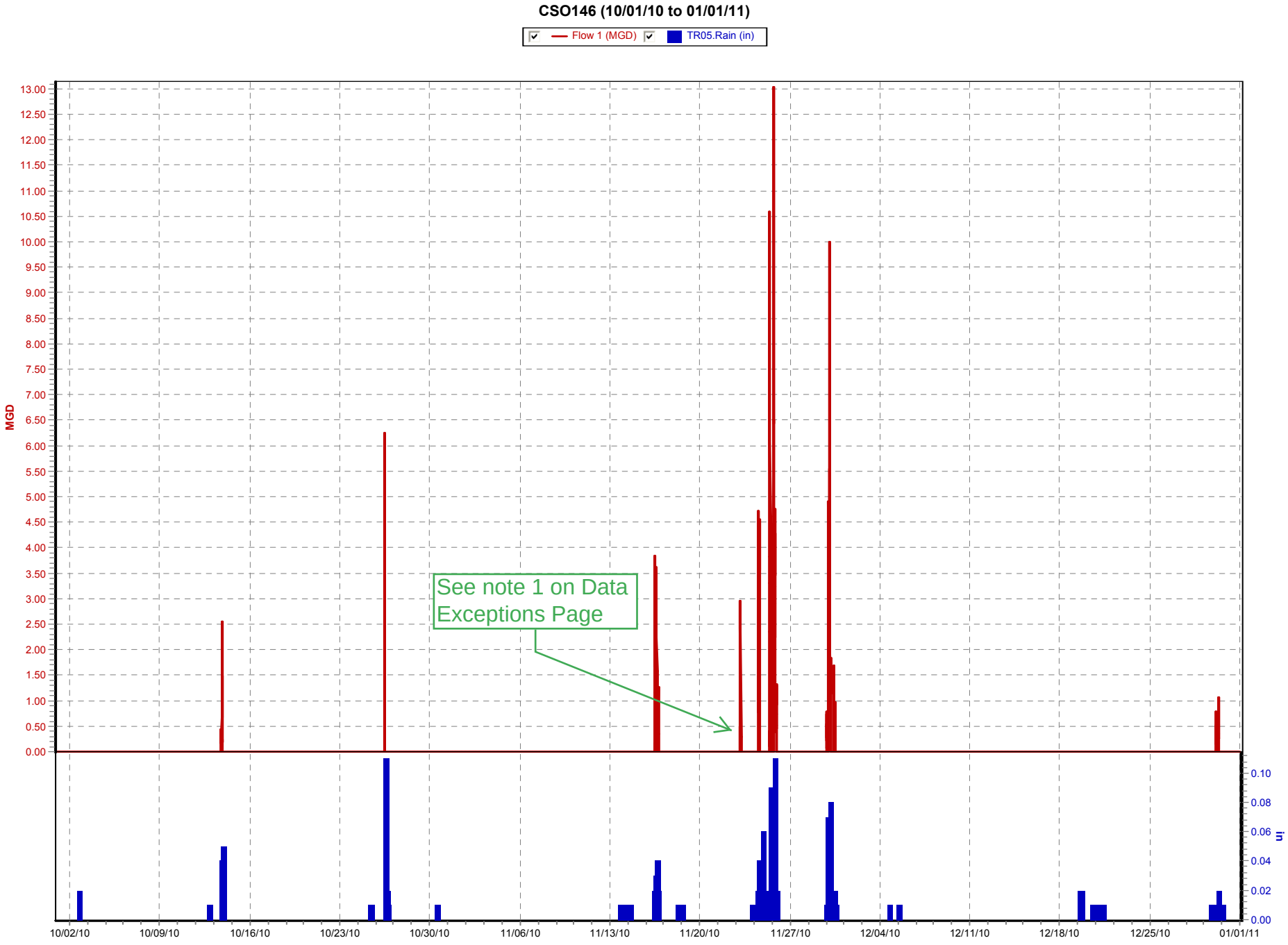
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO140 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
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
0.10
0.08
0.06
0.04
0.02
0.00
See note 1 on Data Exceptions Page
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO146 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
13.00
12.50
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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11/20/10
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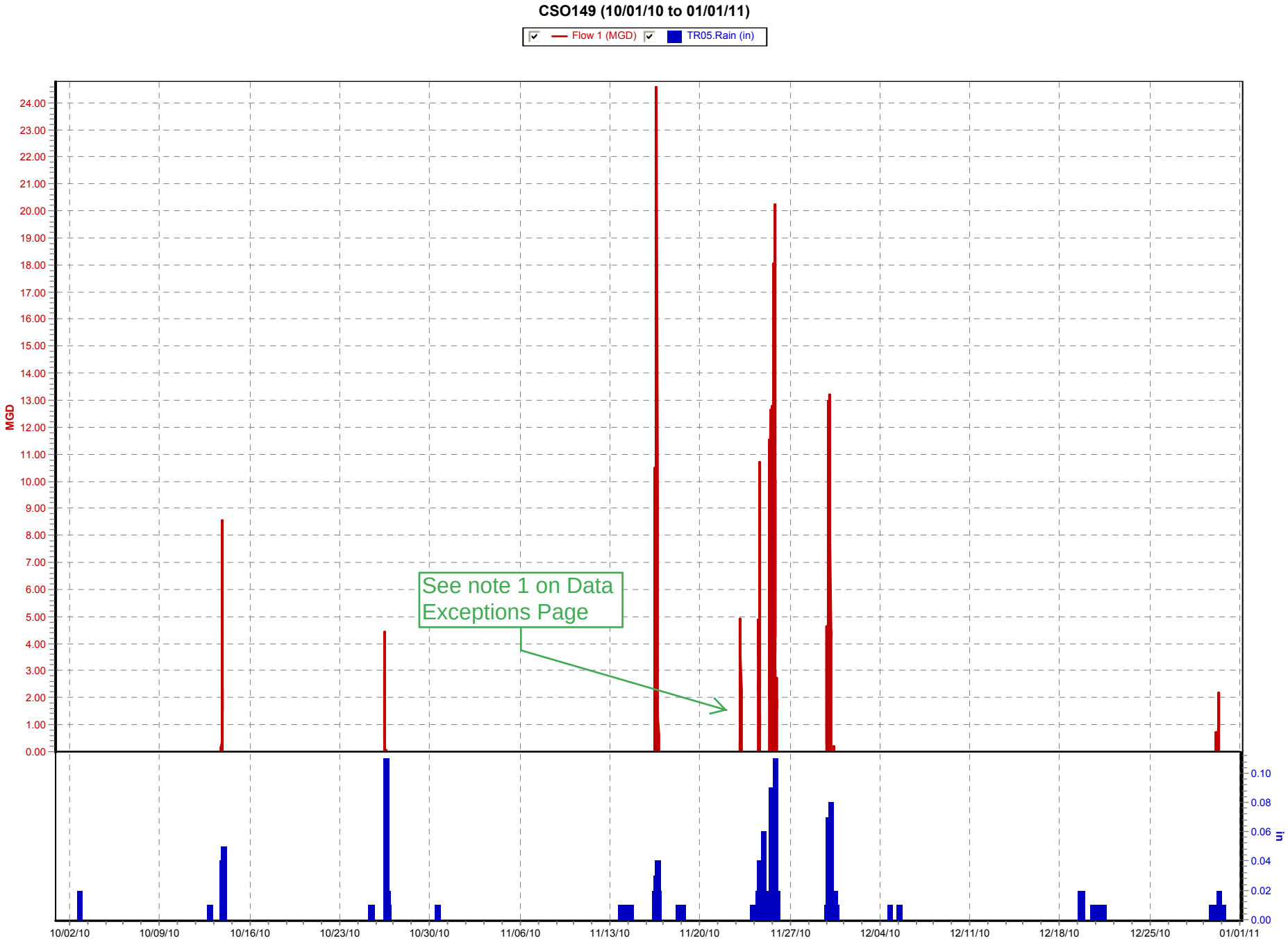
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO149 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
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
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
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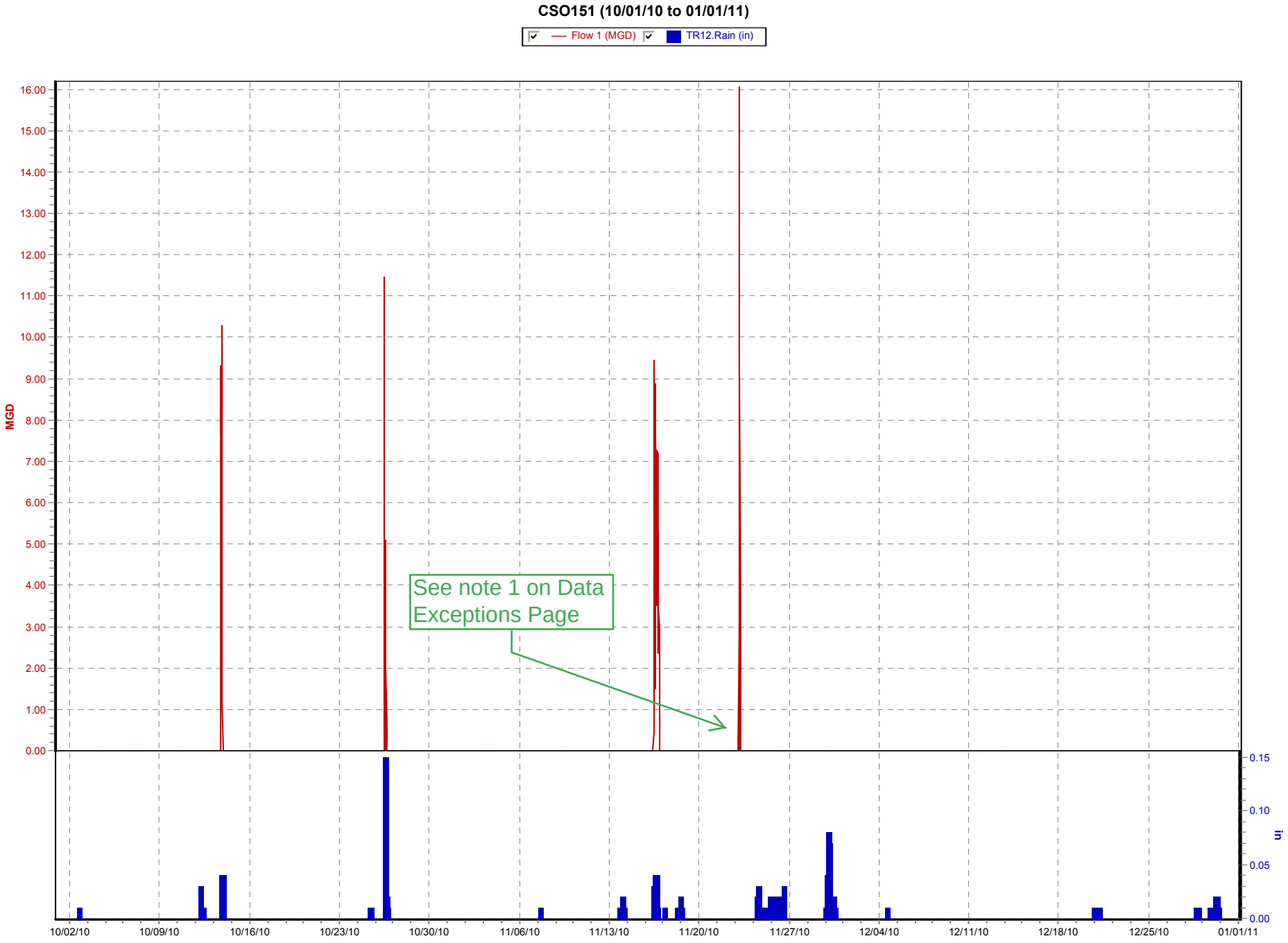
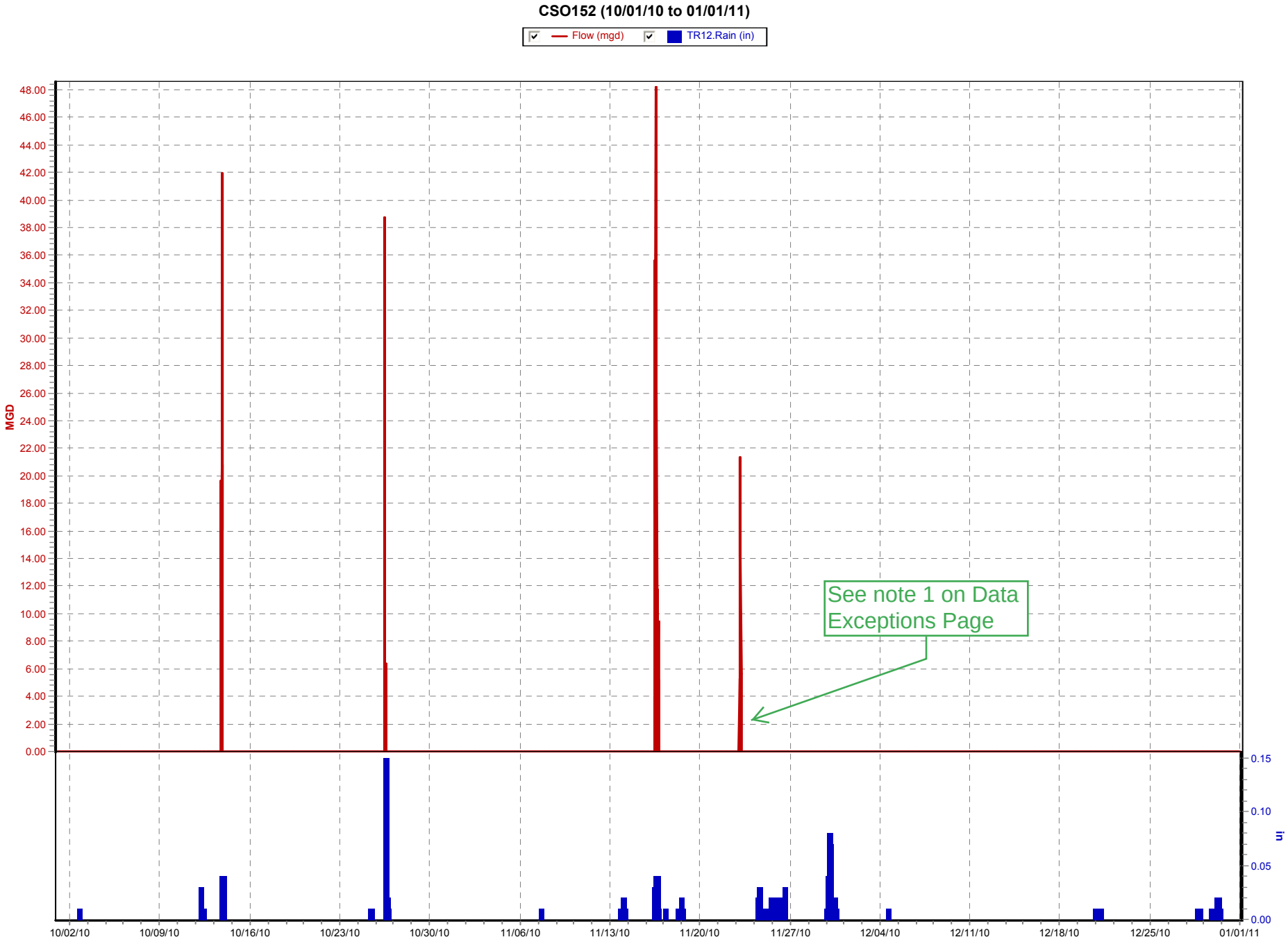
12/11/10
12/18/10
12/25/10
01/01/11


CSO151 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
in
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.15
0.10
0.05
0.00
See note 1 on Data Exceptions Page
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO152 (10/01/10 to 01/01/11)
Flow (mgd)
TR12.Rain (in)
MGD
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
See note 1 on Data Exceptions Page
0.15
0.10
0.05
0.00
in
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
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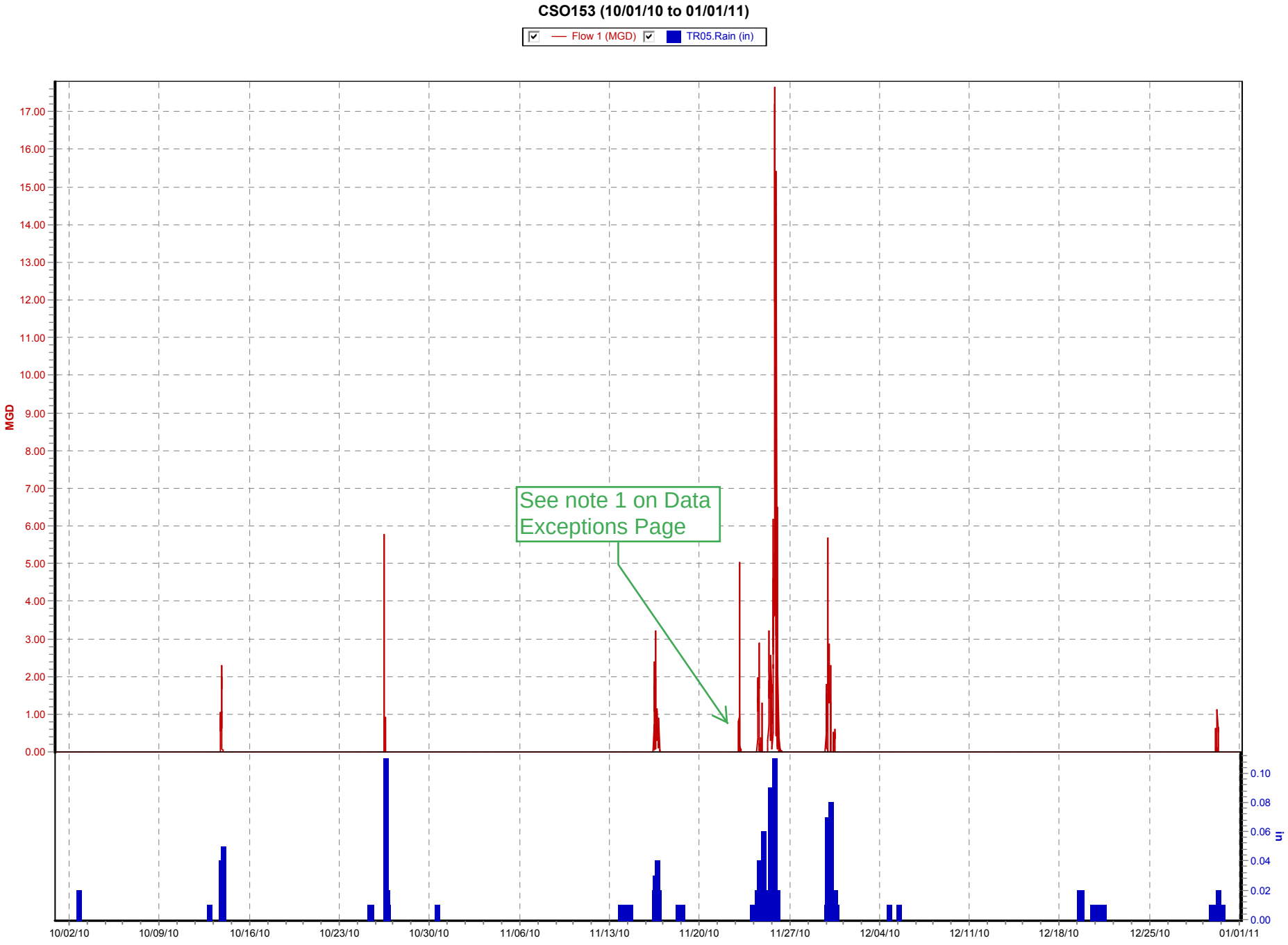
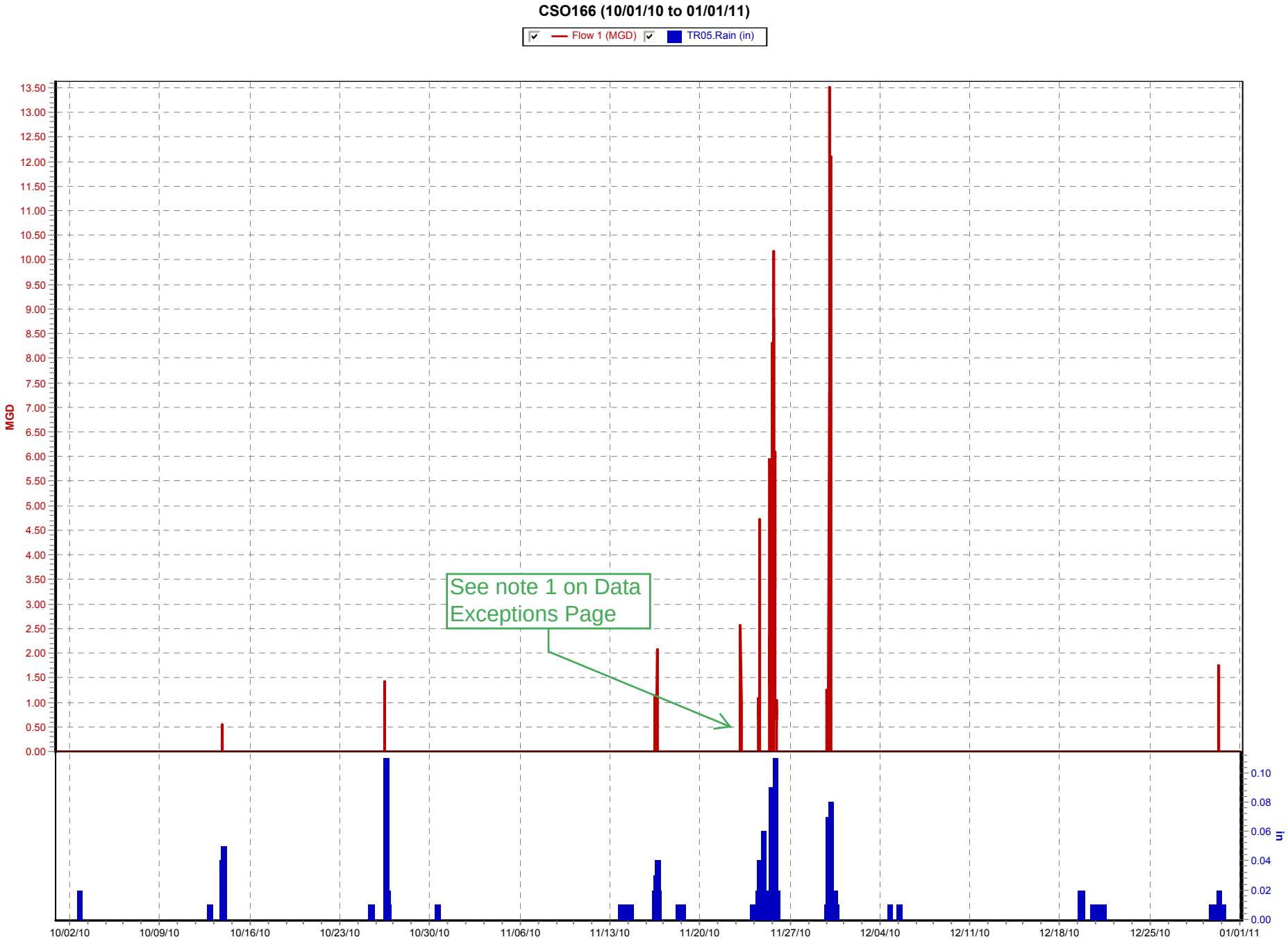
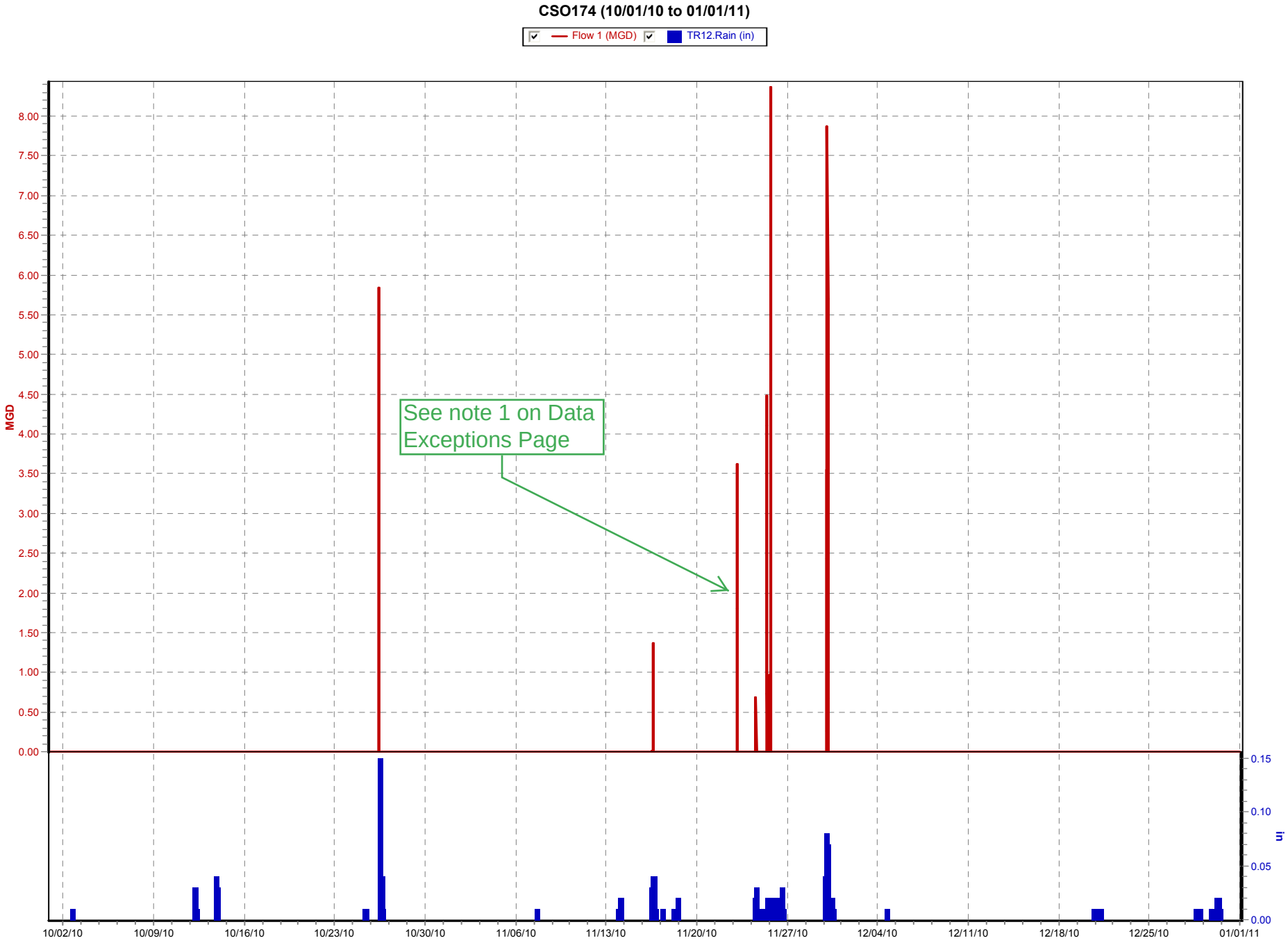
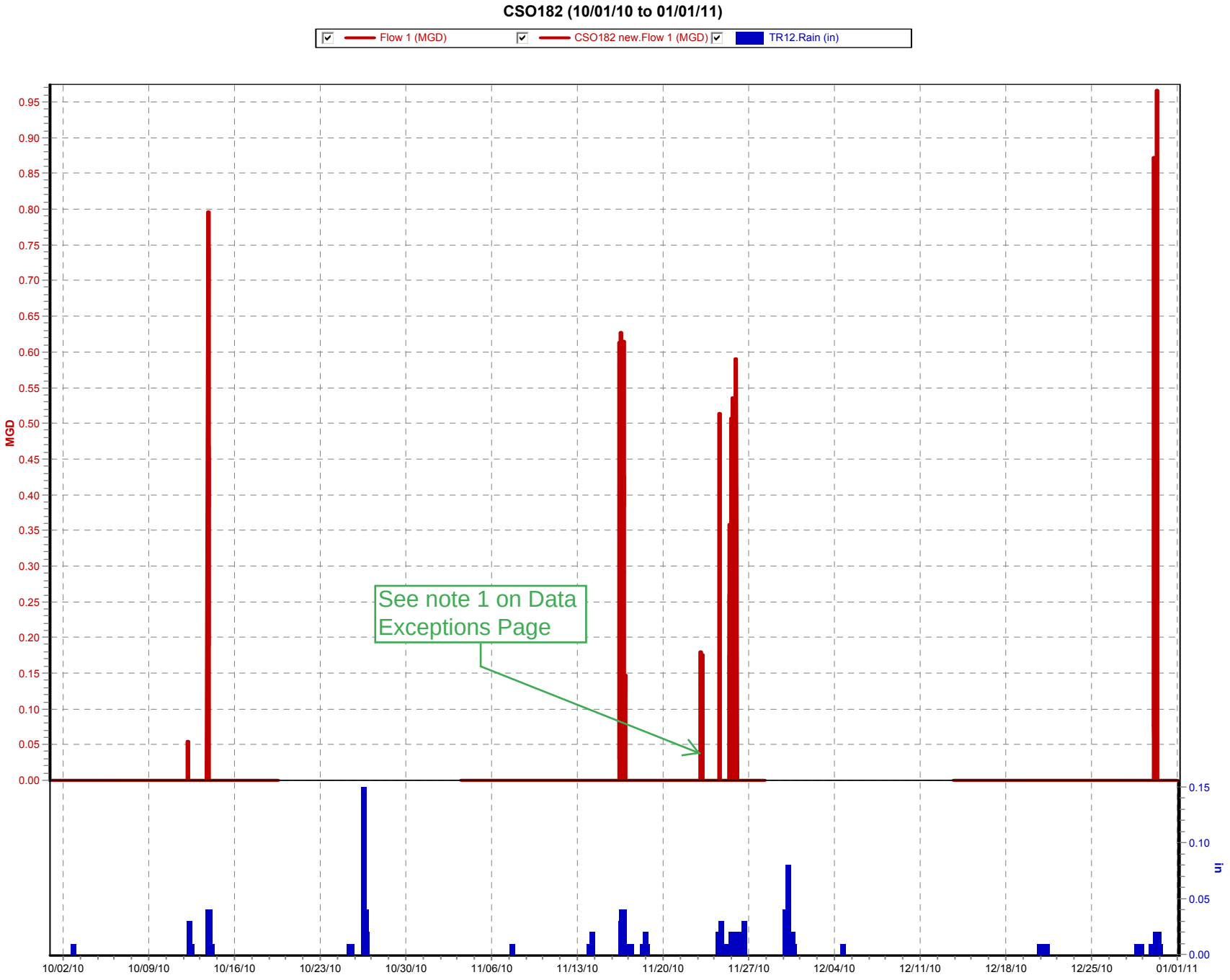
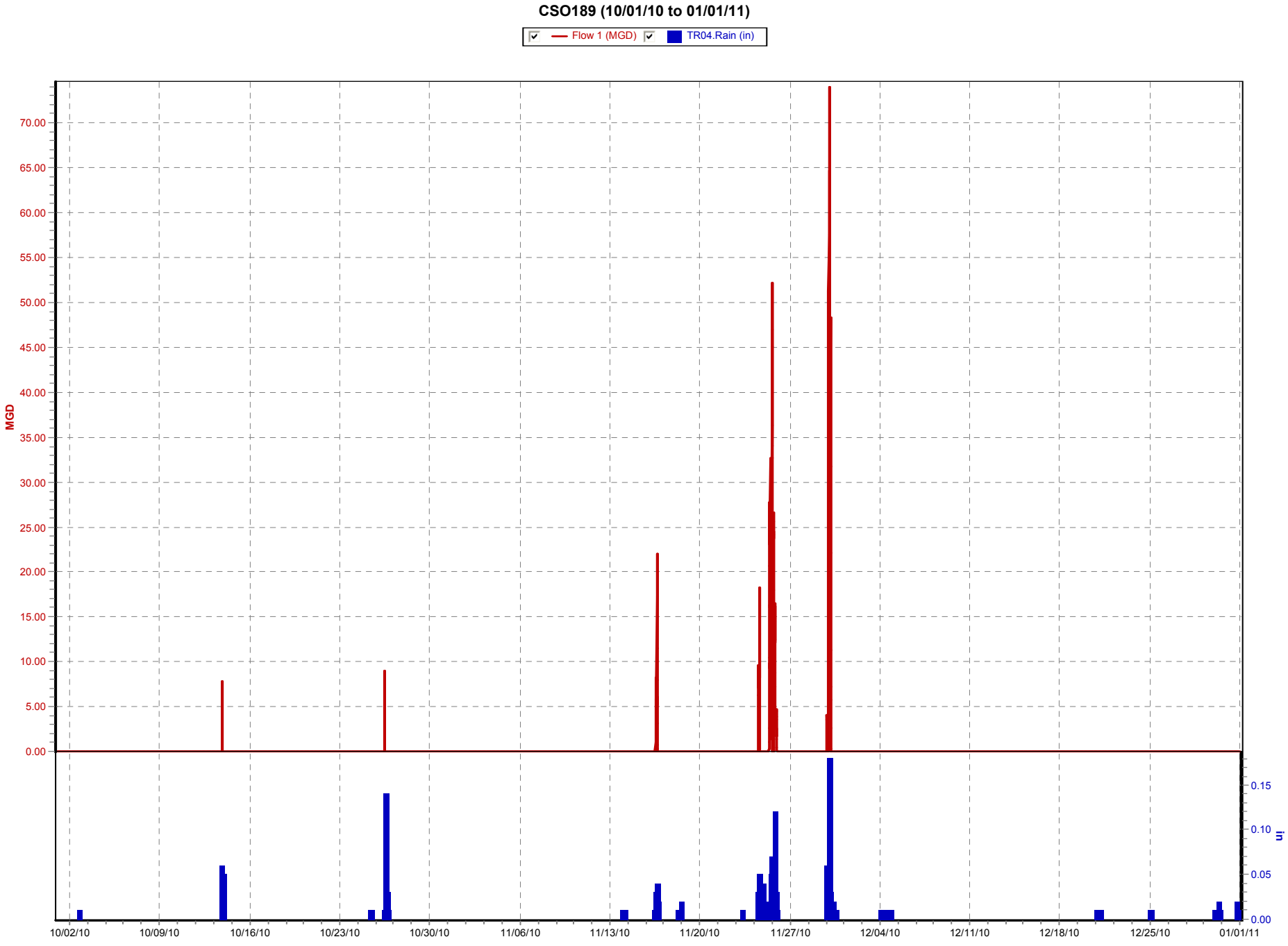
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11

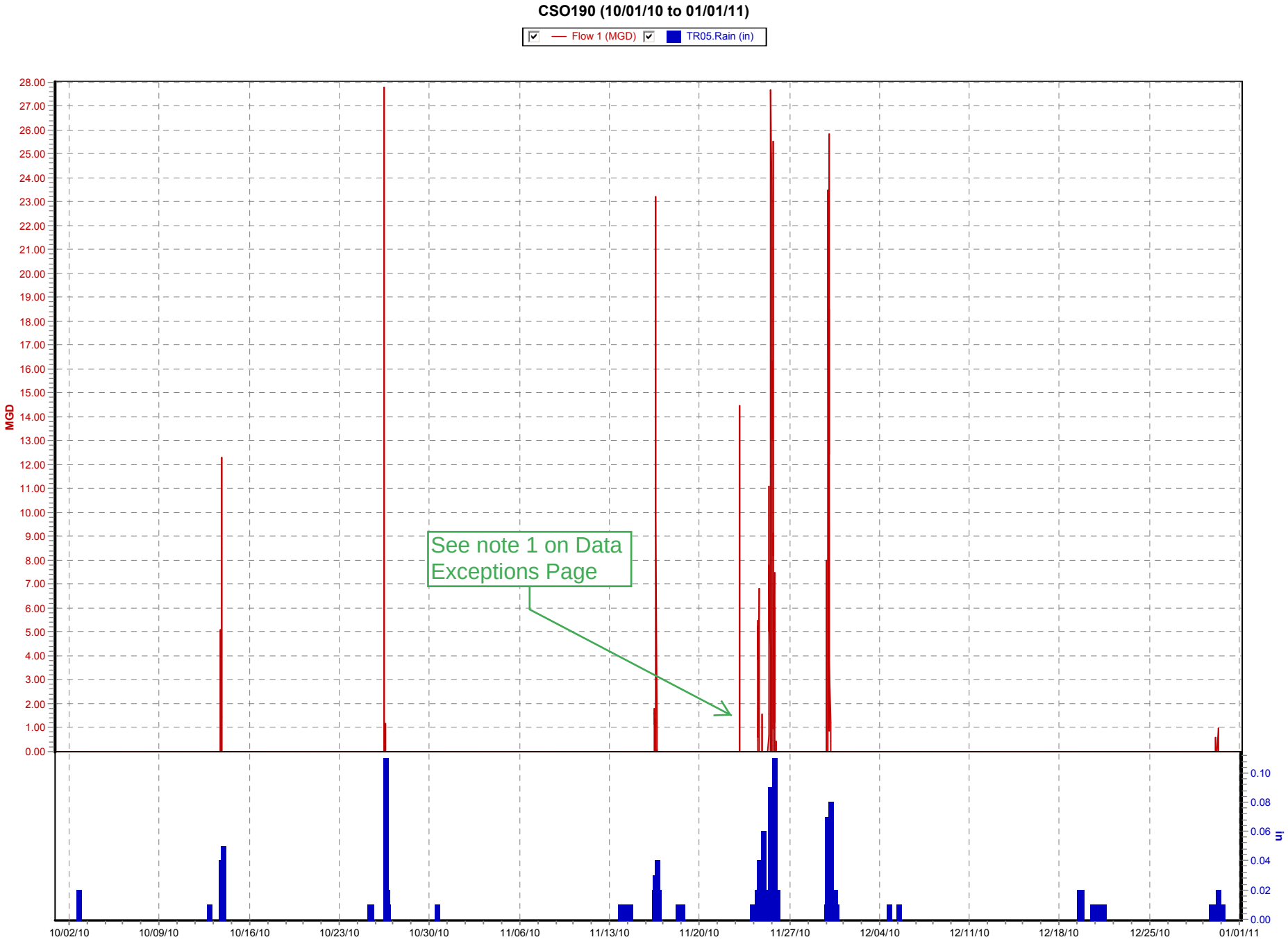

CSO153 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11

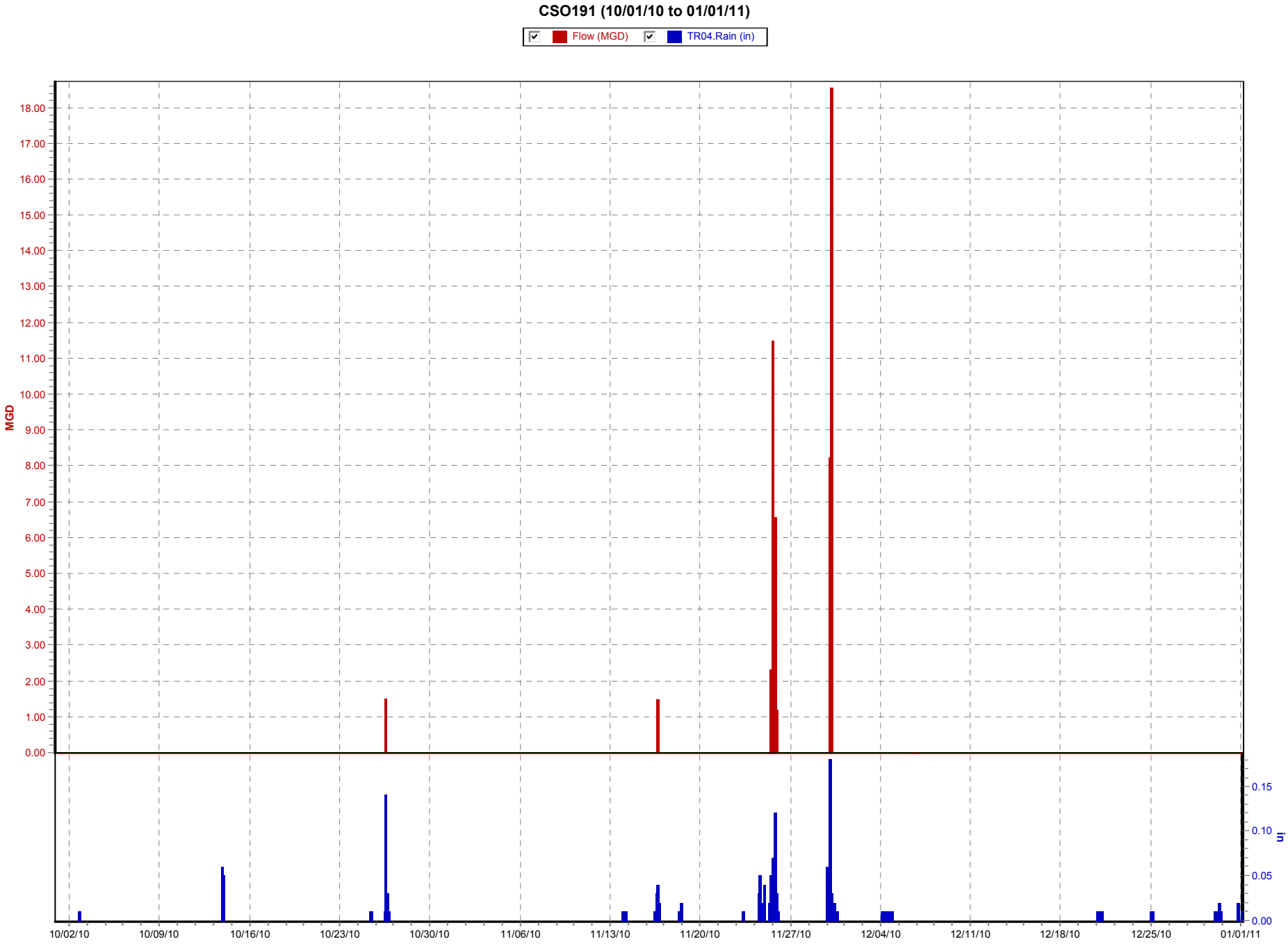

CSO166 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
13.50
13.00
12.50
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11

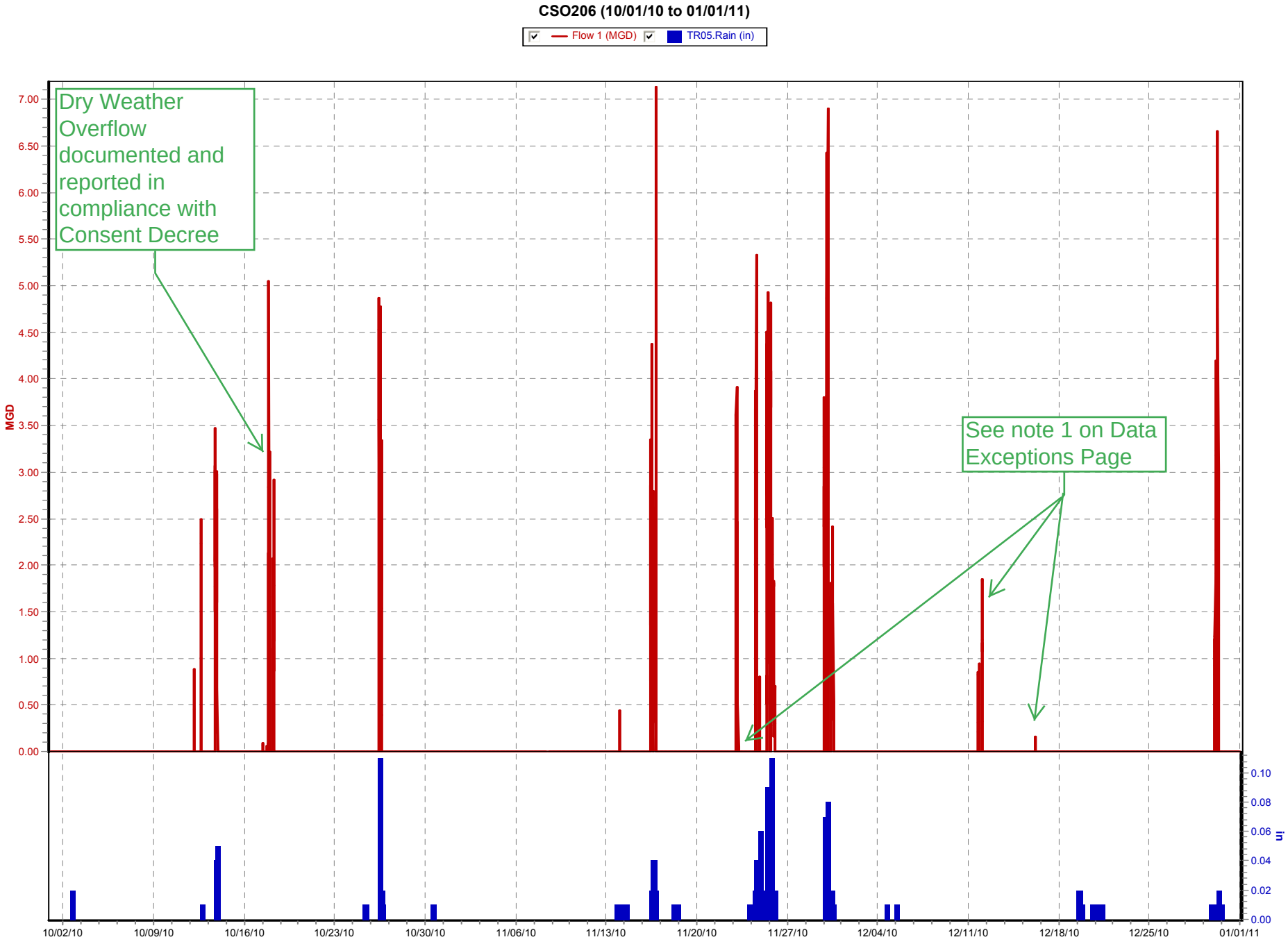

CSO174 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR12.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11

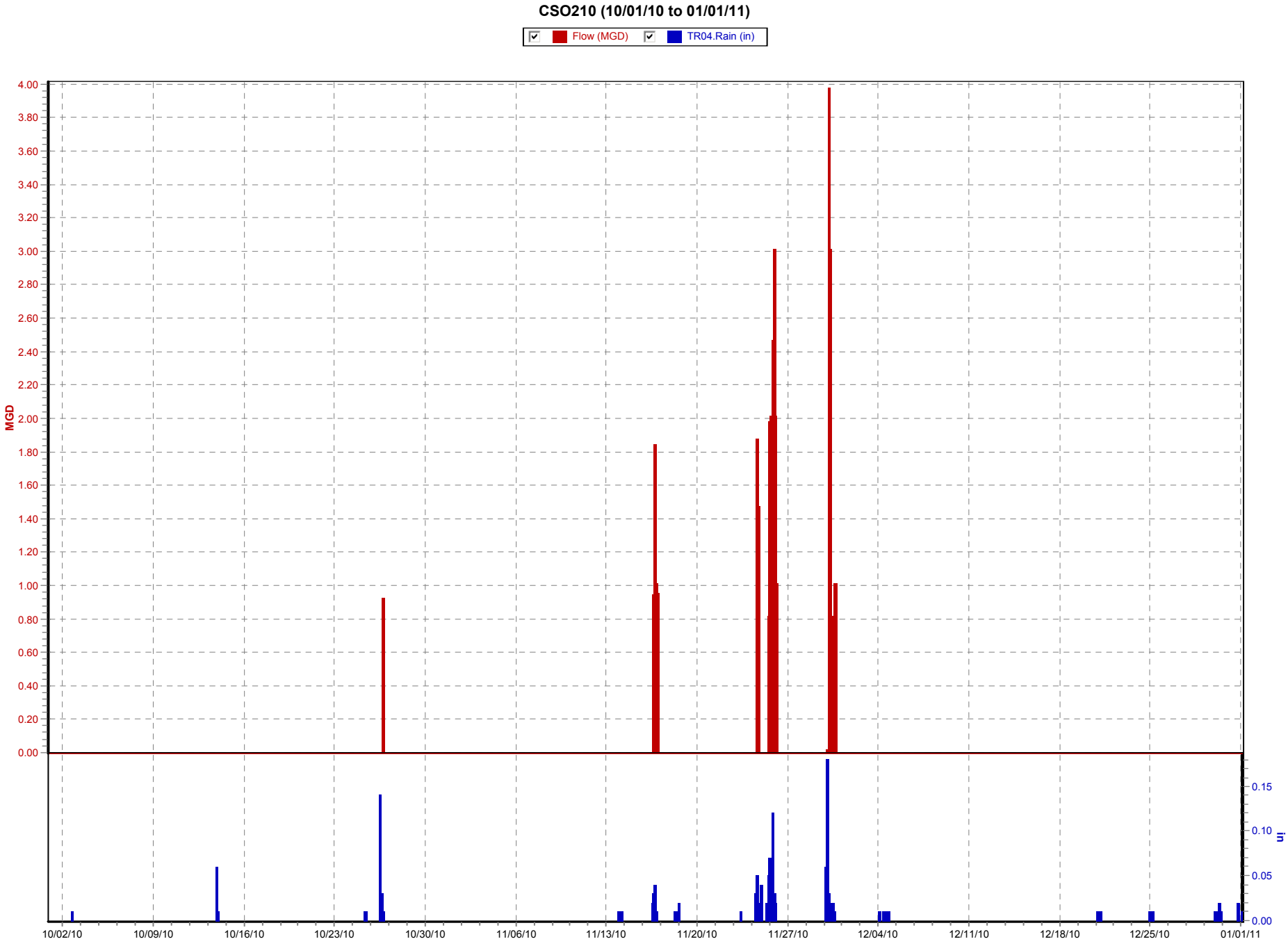

CSO182 (10/01/10 to 01/01/11)
Flow 1 (MGD)
CSO182 new.Flow 1 (MGD)
TR12.Rain (in)
MGD
in
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.15
0.10
0.05
0.00
See note 1 on Data Exceptions Page
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11

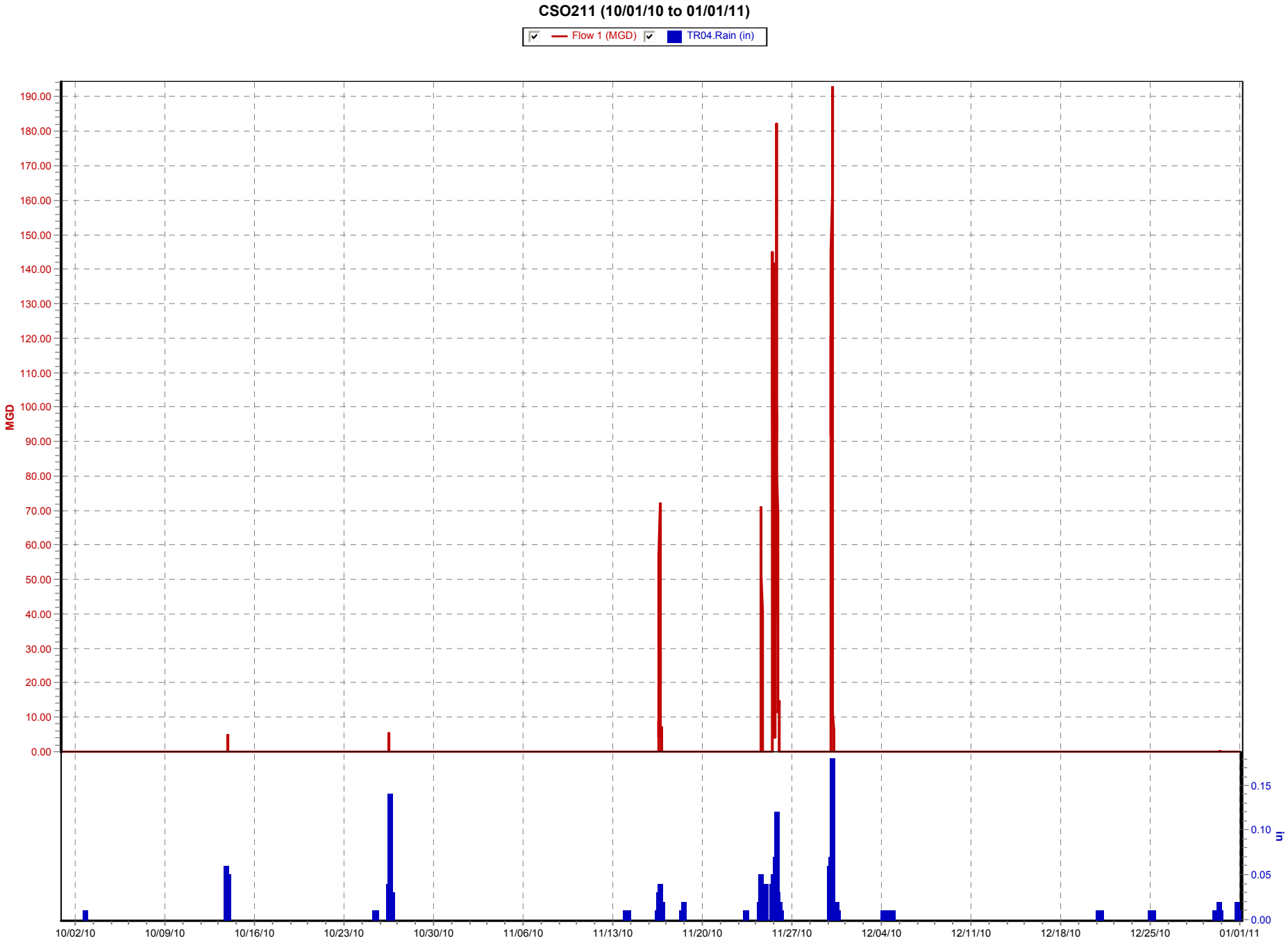

CSO189 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR04.Rain (in)
MGD
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
in
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO190 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
MGD
in
See note 1 on Data Exceptions Page
28.00
27.00
26.00
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.10
0.08
0.06
0.04
0.02
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO191 (10/01/10 to 01/01/11)
Flow (MGD)
TR04.Rain (in)
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
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO206 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR05.Rain (in)
Dry Weather Overflow documented and reported in compliance with Consent Decree
See note 1 on Data Exceptions Page
MGD
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.10
0.08
0.06
0.04
0.02
0.00
in
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO210 (10/01/10 to 01/01/11)
Flow (MGD)
TR04.Rain (in)
MGD
in
4.00
3.80
3.60
3.40
3.20
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11


CSO211 (10/01/10 to 01/01/11)
Flow 1 (MGD)
TR04.Rain (in)
MGD
in
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
0.15
0.10
0.05
0.00
10/02/10
10/09/10
10/16/10
10/23/10
10/30/10
11/06/10
11/13/10
11/20/10
11/27/10
12/04/10
12/11/10
12/18/10
12/25/10
01/01/11

Appendix E – Acronyms

Appendix E - 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
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

Appendix E - Acronyms for Project WIN Quarterly Report

MEB	Main Equipment Building
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

Appendix E - Acronyms for Project WIN Quarterly Report

WW	Wet Weather
WWT	Wet Weather Team

Appendix F – RTC Report

Louisville/Jefferson County
Metropolitan Sewer District

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

Period	
From :	10/1/10
To :	12/31/10

Event Number	Wet Weather Event			Rainfall			Wet Weather Storage Volume (MG)							High River Levels
	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	
2010-074	10/13/10 17:45	10/14/10 4:45	11:00	0.449	0.610	TR05	7.85	2.80	0.65	3.75	3.55	0.00	18.60	No
2010-076	10/26/10 9:35	10/26/10 22:50	13:15	0.754	1.050	TR14	7.70	4.15	0.90	3.70	3.30	0.00	19.75	No
2010-078	11/16/10 8:55	11/17/10 13:55	29:00	0.717	0.970	TR14	14.05	5.65	2.50	0.00	0.00	0.00	22.20	No
2010-080	11/24/10 9:05	11/28/10 9:20	96:15	2.771	3.190	TR04	26.85	16.25	9.85	7.45	7.35	0.55	68.30	No
2010-081	11/29/10 18:40	12/1/10 19:15	48:35	1.589	1.830	TR04	19.20	12.45	4.50	6.75	5.45	0.45	48.80	No
2010-090	12/29/10 22:10	12/30/10 17:45	19:35	0.520	0.590	TR12	6.25	8.50	0.25	3.75	4.05	0.00	22.80	No
Total							**81.90**	**49.80**	**18.65**	**25.40**	**23.70**	**1.00**	**200.45**	

*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

Appendix G – Phosphorus Data

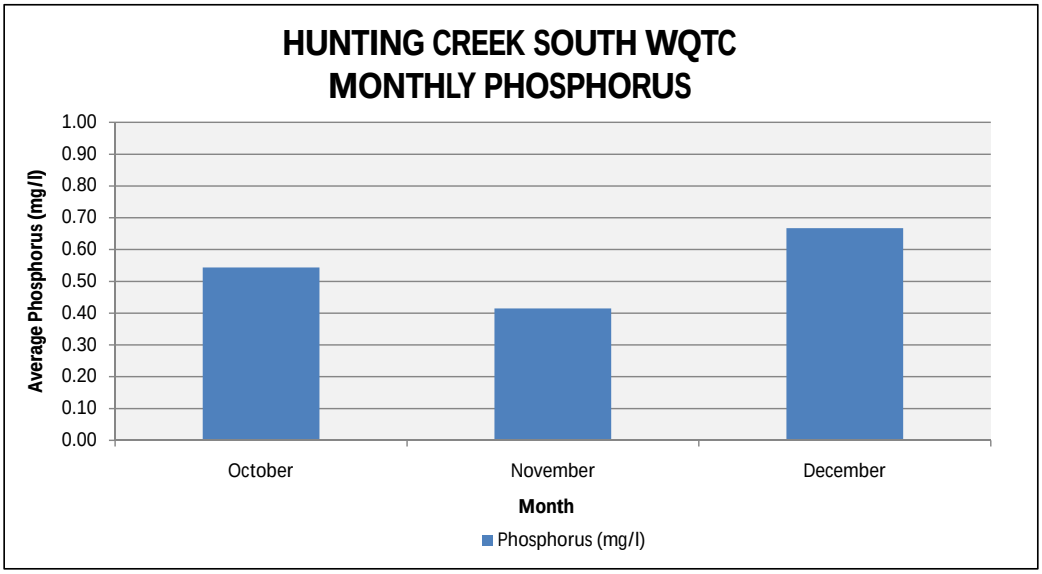
Hunting Creek South Wastewater Treatment Plant KY0029114
Quarterly Effluent Total Phosphorus Results

Hunting Creek South Phosphorus Readings

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
10/3/2010	EPA 200.7	Total Phosphorous via ICP	0.988	mg/l	MSD
10/6/2010	EPA 200.7	Total Phosphorous via ICP	0.359	mg/l	MSD
10/10/2010	EPA 200.7	Total Phosphorous via ICP	0.997	mg/l	MSD
10/17/2010	EPA 200.7	Total Phosphorous via ICP	0.172	mg/l	MSD
10/26/2010	EPA 200.7	Total Phosphorous via ICP	0.201	mg/l	MSD
		Monthly Average	**0.54**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
11/1/2010	EPA 200.7	Total Phosphorous via ICP	0.324	mg/l	MSD
11/8/2010	EPA 200.7	Total Phosphorous via ICP	0.402	mg/l	MSD
11/15/2010	EPA 200.7	Total Phosphorous via ICP	0.508	mg/l	MSD
11/22/2010	EPA 200.7	Total Phosphorous via ICP	0.424	mg/l	MSD
		Monthly Average	**0.41**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
12/1/2010	EPA 200.7	Total Phosphorous via ICP	0.715	mg/l	MSD
12/8/2010	EPA 200.7	Total Phosphorous via ICP	0.572	mg/l	MSD
12/19/2010	EPA 200.7	Total Phosphorous via ICP	1.230	mg/l	MSD
12/21/2010	EPA 200.7	Total Phosphorous via ICP	1.580	mg/l	MSD
12/27/2010	EPA 200.7	Total Phosphorous via ICP	0.203	mg/l	MSD
12/28/2010	EPA 200.7	Total Phosphorous via ICP	0.462	mg/l	MSD
12/29/2010	EPA 200.7	Total Phosphorous via ICP	0.393	mg/l	MSD
12/30/2010	EPA 200.7	Total Phosphorous via ICP	0.184	mg/l	MSD
		Monthly Average	**0.67**	mg/l	



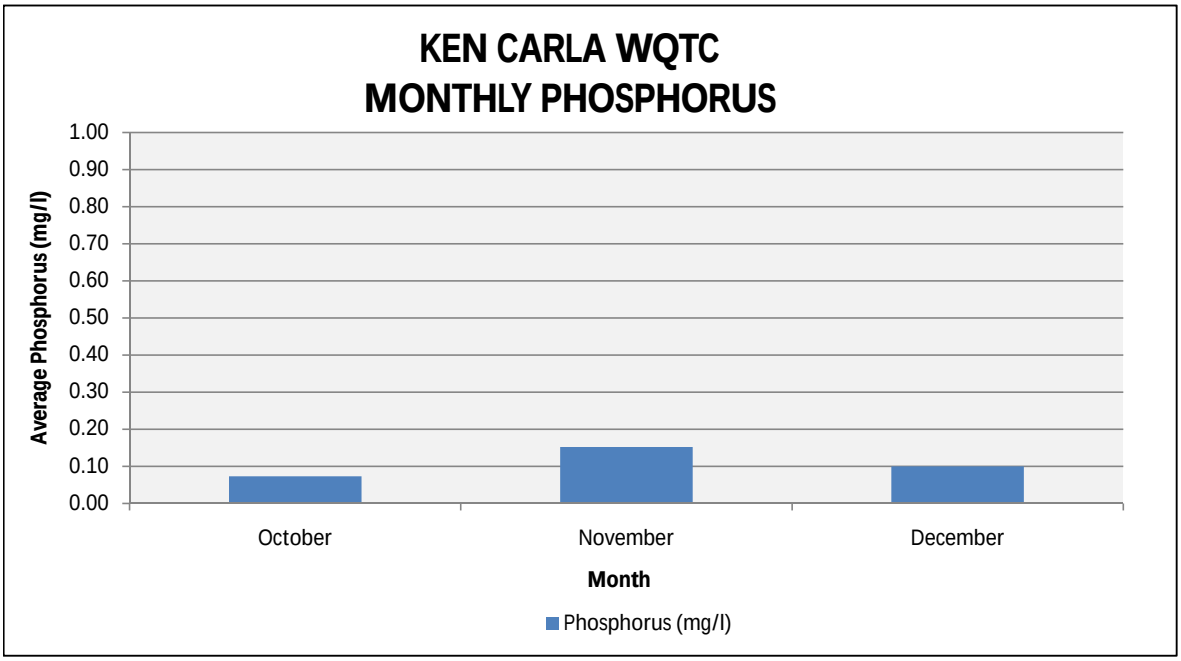
Ken Carla Wastewater Treatment Plant KY0022497
Quarterly Effluent Total Phosphorus Results

Ken Carla Phosphorus Readings

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
10/4/2010	EPA 200.7	Total Phosphorous via ICP	0.073	mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
		Monthly Average	**0.07**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
11/3/2010	EPA 200.7	Total Phosphorous via ICP	0.152	mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
		Monthly Average	**0.15**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
12/8/2010	EPA 200.7	Total Phosphorous via ICP	0.100	mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
	EPA 200.7	Total Phosphorous via ICP		mg/l	MSD
		Monthly Average	**0.10**	mg/l	



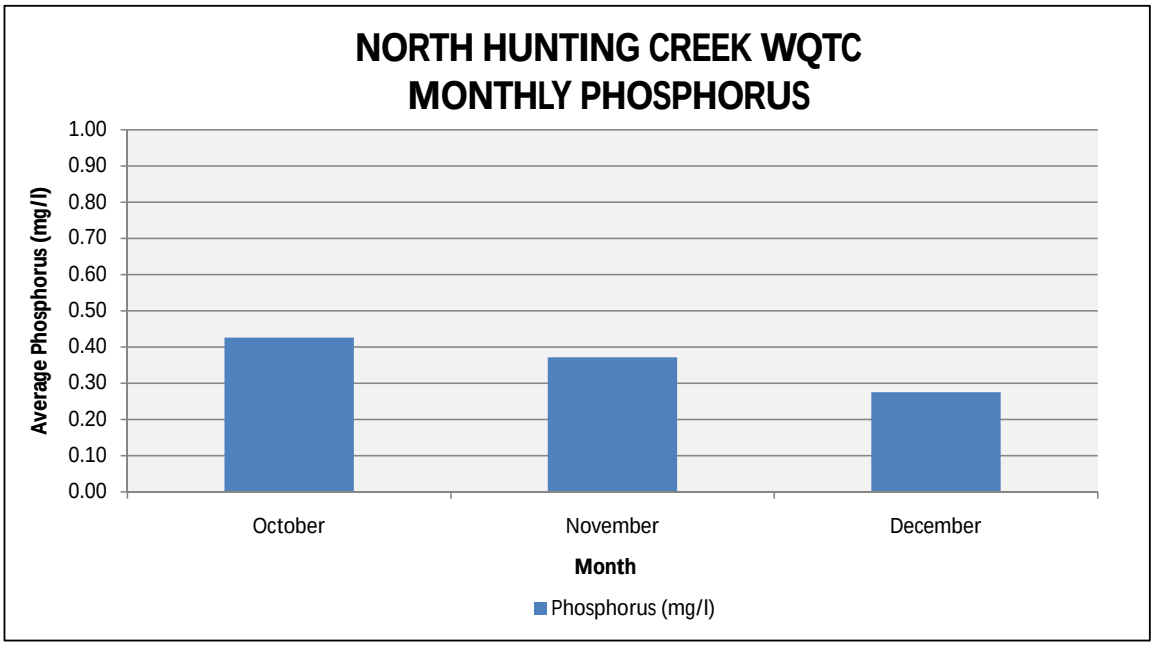
North Hunting Creek Wastewater Treatment Plant KY0029106
Quarterly Effluent Total Phosphorus Results

North Hunting Creek Phosphorus Readings

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
10/3/2010	EPA 200.7	Total Phosphorous via ICP	0.675	mg/l	MSD
10/10/2010	EPA 200.7	Total Phosphorous via ICP	0.229	mg/l	MSD
10/17/2010	EPA 200.7	Total Phosphorous via ICP	0.497	mg/l	MSD
10/26/2010	EPA 200.7	Total Phosphorous via ICP	0.303	mg/l	MSD
		Monthly Average	**0.43**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
11/1/2010	EPA 200.7	Total Phosphorous via ICP	0.249	mg/l	MSD
11/8/2010	EPA 200.7	Total Phosphorous via ICP	0.501	mg/l	MSD
11/15/2010	EPA 200.7	Total Phosphorous via ICP	0.5	mg/l	MSD
11/22/2010	EPA 200.7	Total Phosphorous via ICP	0.237	mg/l	MSD
		Monthly Average	**0.37**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
12/1/2010	EPA 200.7	Total Phosphorous via ICP	0.258	mg/l	MSD
12/8/2010	EPA 200.7	Total Phosphorous via ICP	0.308	mg/l	MSD
12/19/2010	EPA 200.7	Total Phosphorous via ICP	0.342	mg/l	MSD
12/21/2010	EPA 200.7	Total Phosphorous via ICP	0.257	mg/l	MSD
12/27/2010	EPA 200.7	Total Phosphorous via ICP	0.275	mg/l	MSD
		Monthly Average	**0.29**	mg/l	



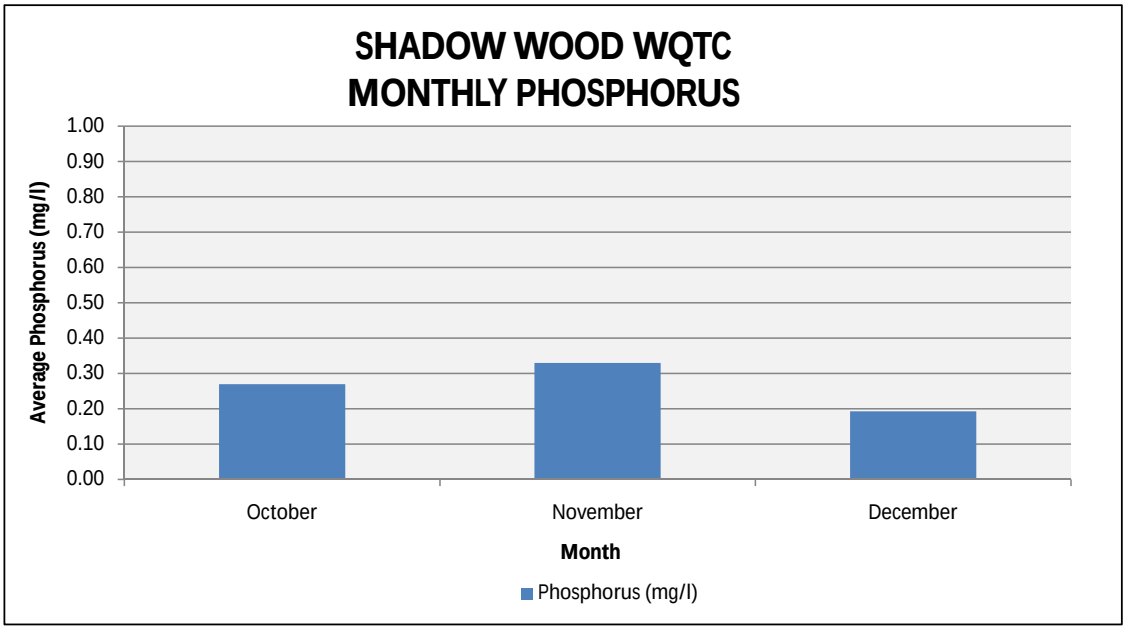
Shadow Wood Wastewater Treatment Plant KY0031810
Quarterly Effluent Total Phosphorus Results

Shadow Wood Phosphorus Readings

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
10/3/2010	EPA 200.7	Total Phosphorous via ICP	0.254	mg/l	MSD
10/10/2010	EPA 200.7	Total Phosphorous via ICP	0.312	mg/l	MSD
10/17/2010	EPA 200.7	Total Phosphorous via ICP	0.155	mg/l	MSD
10/26/2010	EPA 200.7	Total Phosphorous via ICP	0.356	mg/l	MSD
		Monthly Average	**0.27**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
11/1/2010	EPA 200.7	Total Phosphorous via ICP	0.278	mg/l	MSD
11/8/2010	EPA 200.7	Total Phosphorous via ICP	0.458	mg/l	MSD
11/15/2010	EPA 200.7	Total Phosphorous via ICP	0.203	mg/l	MSD
11/22/2010	EPA 200.7	Total Phosphorous via ICP	0.378	mg/l	MSD
		Monthly Average	**0.33**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
12/1/2010	EPA 200.7	Total Phosphorous via ICP	0.151	mg/l	MSD
12/8/2010	EPA 200.7	Total Phosphorous via ICP	0.232	mg/l	MSD
12/15/2010	EPA 200.7	Total Phosphorous via ICP	0.353	mg/l	MSD
12/21/2010	EPA 200.7	Total Phosphorous via ICP	0.105	mg/l	MSD
12/27/2010	EPA 200.7	Total Phosphorous via ICP	0.123	mg/l	MSD
		Monthly Average	**0.19**	mg/l	



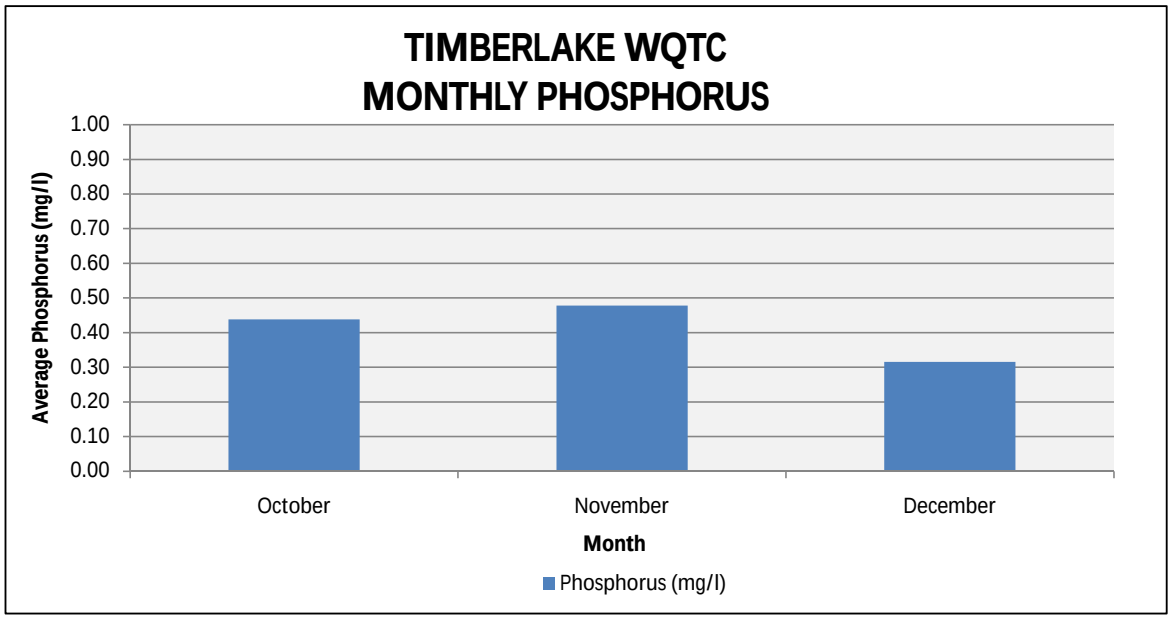
Timberlake Wastewater Treatment Plant KY0043087
Quarterly Effluent Total Phosphorus Results

Timberlake WQTC Phosphorus Readings

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
10/3/2010	EPA 200.7	Total Phosphorous via ICP	0.599	mg/l	MSD
10/10/2010	EPA 200.7	Total Phosphorous via ICP	0.432	mg/l	MSD
10/17/2010	EPA 200.7	Total Phosphorous via ICP	0.36	mg/l	MSD
10/26/2010	EPA 200.7	Total Phosphorous via ICP	0.362	mg/l	MSD
		Monthly Average	**0.44**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
11/1/2010	EPA 200.7	Total Phosphorous via ICP	0.328	mg/l	MSD
11/8/2010	EPA 200.7	Total Phosphorous via ICP	0.328	mg/l	MSD
11/15/2010	EPA 200.7	Total Phosphorous via ICP	0.549	mg/l	MSD
11/22/2010	EPA 200.7	Total Phosphorous via ICP	0.708	mg/l	MSD
		Monthly Average	**0.48**	mg/l	

SAMPLE DATE	TEST METHOD	PARAMETER	RESULT	UNIT	LABORATORY
12/1/2010	EPA 200.7	Total Phosphorous via ICP	0.383	mg/l	MSD
12/8/2010	EPA 200.7	Total Phosphorous via ICP	0.244	mg/l	MSD
12/15/2010	EPA 200.7	Total Phosphorous via ICP	0.34	mg/l	MSD
12/21/2010	EPA 200.7	Total Phosphorous via ICP	0.307	mg/l	MSD
12/27/2010	EPA 200.7	Total Phosphorous via ICP	0.305	mg/l	MSD
		Monthly Average	**0.32**	mg/l	



Appendix H – CSO 108 Report

MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

December 21, 2010

Joyce Bender
Nature Preserves and Natural Areas Branch Manager
Kentucky State Nature Preserve Commission
801 Schenkel Lane
Frankfort, KY 40601

Subject: CSO 108 Semi-Annual Report #5

Dear Ms. Bender:

As required in Paragraph #10 of the document titled "Memorandum of Understanding by and between the Kentucky State Nature Preserve Commission and the Louisville and Jefferson County Metropolitan Sewer District", MSD submits to you the MOU Semi-Annual Report #5. This report summarizes activities at the CSO 108 CDS Site during the reporting period of July 1, 2010 to December 31, 2010.

Should you have any questions or comments, please feel free to contact me via email at potempa@msdlouky.org or phone at (502) 540-6112.

Happy Holidays!

Sincerely,

Julie L. Potempa
Project WIN Project Manager

JLP:jlp

cc: J. Loechle A. Akridge J. Muller File

INTRODUCTION

The Louisville and Jefferson County Metropolitan Sewer District (MSD) has entered into a Memorandum of Understanding (MOU) with the Kentucky State Nature Preserve Commission (Commission). The MOU was signed by MSD on July 30, 2008, and by the Commission on September 17, 2008. This MOU is effective for the period starting September 1, 2008, and ending on September 1, 2018.

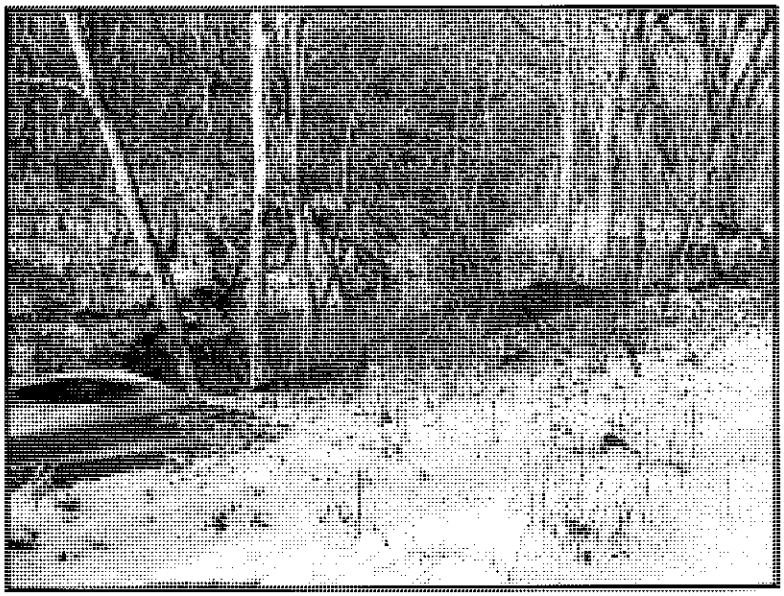
This is the fifth Semi-Annual Report submitted in accordance with Paragraph 10 of the MOU. This report covers the time period of July 1, 2010 through December 31, 2010.

This Semi-Annual Report will address only those requirements considered ongoing. The initial Semi-Annual Report, MOU Semi-Annual Report #1, was comprehensive and included a response to each requirement addressed within the MOU. Please refer to the initial Semi-Annual Report should you need additional information not found within this document.

Work and activities undertaken by MSD and relating to the MOU are outlined in the paragraphs below:

Paragraph #8 of the MOU:

During construction, MSD shall implement an Erosion Control Plan. Following completion of construction and installation of the pavers in the access road, MSD shall implement a Site Remediation Plan, sowing the disturbed areas with wild rye grass. Following construction of the Real Time Control Phase 2 project, MSD will replace the 7-inch dbh sycamore that will be destroyed by the pipe installation with four (4) of the largest container tree stock available (no less than 1.75 inches) at the time of restoration, using a mix of similar sized white, shumard, and chinquapin oak trees at the point designated on the map in Exhibit A. MSD shall monitor and maintain the tree for the first two (2) years to ensure establishment and shall replace any of the tree trees that do not survive the two years.



Picture 1: River Oats Area
(dated 12/14/2010)

- MSD Response: The construction area was seeded with River Oats (Chasmanthium latiforium) in spring of 2009. Please refer to MOU Semi-Annual Report #4 (January 1, 2010 to June 30, 2010) for additional information.

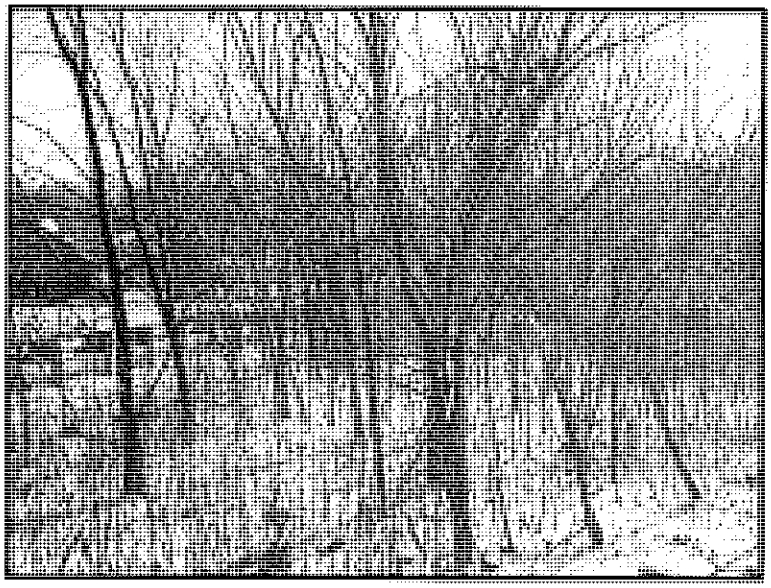
  MSD ordered three 1 gallon White Oaks in the fall of 2008, with the intent to plant these trees in the spring of 2009, to coincide with seeding of the disturbed site. Unfortunately all three of the White Oaks died during the winter. In an effort to replace the White Oaks that died, nine trees were planted and mulched within the restoration site during November of 2009. The plantings consisted of three White Oaks (Quercus alba), three Shingle Oaks (Quercus imbricaria) and three Chinqapin Oaks (Quercus muehlenbergii).

All trees were in 15-gallon pots. MSD monitored the trees during the year following the initial planting. Though the site has rebounded well after the construction period, a couple of the trees may not have survived the harsh drought conditions in late summer and early fall. The plantings will be evaluated again in spring to determine which trees, if any, did not survive through the winter months. MSD is committed to maintaining the plantings during the remaining 12 months of the monitoring period.

Paragraph #10 of the MOU:

MSD shall be diligent of this ten year period in more timely supplying the Commission with semi-annual reports on the efficacy of the CDS unit, water quality monitoring data, and any other such pertinent information. Said reports shall be provided to the Commission by June 30 and December 31 of each year.

- MSD Response: This document is the fifth semi-annual report to the Commission since the completion of the Project.



Picture 2: Foliage Adjacent to CDS Unit
(dated 12/14/2010)

The CSO 108 CDS Unit is inspected weekly and cleaned on an as-needed basis. Between the dates of July 1, 2010 and December 21, 2010, MSD cleaned the CDS Unit one time and that was on November 11, 2010. At that time approximately 0.25 cubic yards of debris was hauled from the site during the solids and floatables cleaning. Louisville experienced drought-like conditions during the late summer and fall months of 2010, and as a result, very little debris collected within the CDS Unit.

The Crystal Report showing the work performed at the CSO 108 CDS Unit is shown in Attachment A. The report is generated from work orders initiated whenever the CDS Unit needs to be cleaned. Cleaning consists of either washing debris off of the bar racks or hauling the solids and floatables from the site. Both operations result in removing debris that would otherwise overflow into Beargrass Creek. The Quantity column within the report show the cubic yards of debris removed during each cleaning activity.

Paragraph #11 of the MOU:

If (1) MSD does not comply strictly with their terms of this MOU, (2) the CDS unit does not provide solids and floatable materials removal of at least 85% of the annual average overflow for CSO 108, or (3) all debris from the CDS unit is not removed from the Beargrass Creek State Nature Preserve immediately after the CDS unit is cleaned, MSD shall, within six (6) months after the receipt of written notice of removal from the Commission, remove the CDS unit from the Preserve and restore the service area by planting native herbaceous and woody plant species chosen by the Commission as suitable for the site's remediation. The CDS unit shall not operate past the expiration date of this Agreement, unless both parties enter into a subsequent Agreement which permits the Project to remain on Preserve property. In the event a subsequent Agreement is not reached, MSD shall have a reasonable period of time to remove the CDS unit from the Preserve.

- MSD Response:

  (1) No Action Required

  (2) The Continuous Deflective Separation (CDS) system was placed along the Trevillian Way Twin Trunk Sewer to capture solids and floatables from a 485 acre drainage area. The unit uses a vortex action created by the hydraulic energy of incoming flow to separate solids and floatable from the flow. The treated flow is then discharged through the outlet pipe to Beargrass Creek. To insure that the CDS Unit functions properly and removes 85% of the solids and floatables that pass through the system, MSD inspects the facility weekly.

  (3) The CSO 108 CDS Unit is inspected weekly and cleaned on an as-needed basis. The Crystal Report showing the work performed at the CSO 108 CDS Unit is shown in Attachment A and described in detail in **Paragraph #10** above.

ATTACHMENT "A": CSO 108 CDS Unit Debris Removal

ACTCO	UNITID	FAILCODE	WONO	QTY	COMMENTS	COMPDTTM
Debris	CSO 108	Debris	1164320	0.25	Work Order to vactor out CDS Unit while weather still warm. Removed only minimal debris from CDS Unit. Estimated 0.25 CY of debris	11/11/10 10:30:00 am
			Total	**0.25**	**Cubic Yards**	

Appendix I – Public Outreach

DON'T LEAF IT!

Catch basins carry stormwater away from our homes and streets when it rains. Covered or clogged catch basin drains, grates, and ditch lines contribute to street and yard flooding.

Please take time to rake away leaves and other debris from catch basin grates. Just a few minutes of your time could prevent street flooding in your neighborhood during heavy rains.

BE
PART OF THE
SOLUTION,
NOT PART OF THE
PROBLEM!

MSD
Metropolitan Sewer District

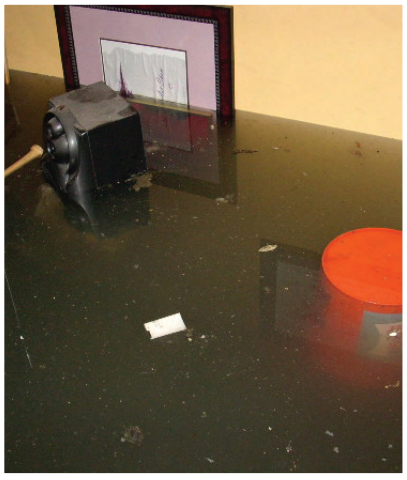
PROJECT WIN
Waterway Improvements Now

For additional information visit us at www.msdlouky.org or call us at 502-587-0603

PUT YOUR DRAIN ON A DIET!

NO FATS, OILS OR GREASE...

BE PART OF THE SOLUTION, NOT PART OF THE PROBLEM!



Fats, oils and grease poured down the drain will congeal and clog sewer pipes. Sewers that are clogged can cause a back-up in **YOUR** basement. *SO BE PART OF THE SOLUTION AND* ***CAN THE GREASE!***

MSD
Metropolitan Sewer District

PROJECT WIN
Waterway Improvements Now

For additional information visit us at www.msdlouky.org or call us at 502-587-0603

RESOLVE TO DO YOUR PART FOR CLEAN WATERWAYS

NEW YEAR'S Resolutions 2011

Area streams and rivers are among Louisville's greatest resources – supporting fish, wildlife and recreational activities. Your support can improve and protect these resources today and for coming generations.

Louisville needs the support of all area citizens if we're to meet the goal of clean waterways.

HOW CAN EACH OF US HELP IN THE COMING YEAR? RESOLVE TO:

CONSERVE WATER AND PREVENT THE OVERLOADING OF SEWERS

Use the dishwasher and washing machine only when they are full and refrain from using them during heavy rains or immediately thereafter.

DISPOSE OF FATS, COOKING OILS AND GREASE INTO THE TRASH

Refrain from pouring these byproducts down the sink to prevent them from building up in sewers.

THINK OF THE FISH AND WILDLIFE

Think of the fish and wildlife before putting anything down the sink, toilet, and or catch basins, such as: paint, medicines, trash, oil, or pesticides. Dispose of these items properly.

PREVENT LOCALIZED FLOODING

Take time to rake away leaves and remove yard waste from storm drains and catch basin grates to prevent street flooding due to clogged inlets - but only when it is safe to do so.

PICK UP AT LEAST FOUR PIECES OF LITTER EACH DAY

Keep our community beautiful and prevent trash from washing off into our streams and rivers.

SPREAD THE WORD

Talk to neighbors, friends, and family about the value of our streams and rivers. Share with them this New Year's Resolution to Be Part of the **SOLUTION**, Not Part of the **Problem!**

MSD Metropolitan Sewer District

www.MSDLOUKY.org/PROJECTWIN

PROJECT WIN Waterway Improvements Now

To minimize sewer overflows, do not use your washing machine or dishwasher while it's raining.

During rain events, sewers can reach capacity. Additional water from appliances can cause **YOUR** basement to back-up and manholes to overflow.

Be Part of the **Solution**, Not Part of the **Problem!**

MSD Metropolitan Sewer District

www.**MSDLOUKY**.org/**PROJECTWIN**

PROJECT WIN Waterway Improvements Now