



700 West Liberty Street | Louisville, KY 40203-1911
Phone: 502.587.0603 | Fax: 502.540.6106 | louisvillemsd.org

April 29, 2019

Michael Kroeger, Director, Division of
Enforcement
Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

EPA - Enforcement and Compliance
Assurance Division
Attn: Mary Jo Bragan
61 Forsyth Street SW, 9T25
Atlanta, GA 30303

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

Subject: Capital Project Construction Certification
Amended Consent Decree Project No.: S_FF_FF_NB02_S_13_C
MSD Budget ID: NA
DOJ Case No. 90-5-1-1-08254

Attention Director and Chiefs:

The following project was completed in accordance with the Consent Decree as entered in United States District Court, Western Division of Kentucky, Louisville Division.

Eden Care Pump Station SSO Investigation was completed on December 31, 2012.

I certify under penalty of law that this document and all attached were prepared under my 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 any questions or need additional information, please contact me via phone at (502) 540-6136.

Sincerely,

Angela L. Akridge
MSD Chief Engineer

cc: James A. Parrott
Paula Purifoy
File



700 West Liberty Street | Louisville, KY 40203-1911
Phone: 502.540.6000 | LouisvilleMSD.org

Eden Care Pump Station SSO Investigation Project Clarification

IOAP Project No. S_FF_FF_NB02_S_13_C

The intent of this memo is to provide background for the Eden Care Pump Station SSO Investigation IOAP Project (S_FF_FF_NB02_S_13_C) to support the accompanying project certification letter as well as reconcile potential confusion associated with past submittals. No overflows have occurred at the Eden Care Pump Station location to date during the IOAP monitoring period, fulfilling the intent of the investigation project scope.

2009 IOAP Project Description

The original Eden Care Pump Station SSO project involved monitoring the SSO (MSD1105-PS) during rain events for a period of three years to verify that no overflows occurred. Per the 2009 fact sheet description:

Monitor the Eden Care PS during rain events for the next three years according to SORP protocols. The only overflow of record for this location occurred on March 18, 2006 and is suspected to have been caused by a blockage.

2012 IOAP Modification (Approved 2014)

In the 2012 IOAP modification, both the fact sheet and executive summary of projects reflected the project as 'eliminated'. Per the 2012 fact sheet project description:

The overflow at Eden Care PS had only been documented to overflow once. The overflow location was monitored for three years and no additional overflows were witnessed. As such, no further action for overflow mitigation will be undertaken.

Two letters were also submitted to EPA prior to the final submittal of the 2012 IOAP modification in 2014. The first, on August 17, 2012, provided notice proposing that the project be eliminated. The second, on October 4, 2012, described the investigation project as a "placeholder" to ensure that follow-up actions were taken if monitoring indicated that mitigation was necessary and clarified that the projects would be certified when complete.

2019 Certification Clarification

Because the project was completed as stated in the original fact sheet, MSD is clarifying that the project has been complete, with certification effective December 31, 2012. The Eden Care Pump Station has been monitored since 2006, no overflows have occurred, and no additional mitigation efforts are necessary.

Technical Justification

When this SSO was reviewed during the IOAP development, MSD believed that it was likely caused by a blockage, as noted on the 2009 fact sheet. However, because the project was reported as 'capacity related', an investigation project was developed for the IOAP in order to monitor the Eden Care Pump Station for three years according to Sewer Overflow Response Protocol (SORP) methodologies. Interviews and investigation of the 2006 event supported that the cause was a suspected blockage, not pump station capacity.

Although this location has been maintained as a documented overflow on SSO routes since 2006, no overflows have occurred to date during wet weather or dry weather. This exceeds the three-year post-construction compliance monitoring (PCCM) requirement as well as the three-year requirement listed on the fact sheet. Zero

overflows during the required 6-year monitoring period as well as from 2012 to present (totaling 13 years) provide further support that the initial overflow was due to a blockage and is not a recurring problem. Based on these findings, the project was completed as described on the 2009 fact sheet.

As noted above, the intent of this documentation is to support the certification of the Eden Care PS Investigation Project as well as reconcile potential confusion that may have been caused by past submittals. As part of a comprehensive compliance library review, contradictory documentation of project "elimination" versus project "completion" were identified as potential sources of confusion relative to this project as summarized in the submittal timeline below.

Below is a summary list of each item submitted, relative to this project:

- June 19, 2009 IOAP – An investigation project was developed for the IOAP with the fact sheet general description being to 'monitor the SSO for three years'
- August 17, 2012 – A modification letter was sent to the EPA providing 'advance notice' that MSD would be **eliminating** this project, with the justification that no project was necessary because the SSO had not overflowed in six years. No action was requested in these letters.
- October 4, 2012 – A letter was sent to the EPA containing clarification for this project as well as the Leland Road SSO Investigation. In this letter, MSD clarified that rather than eliminating these projects, MSD would **certify** the projects as complete by the end of the monitoring period with no further action required because the actions listed in the fact sheet were performed.
- 2012 IOAP Modification (May 2014) – Table ES.2 lists the project as **eliminated** with a description that "Only one overflow had been documented at this location. MSD cleaned the sewers in the vicinity and has not documented an overflow in over 3 years. No further action is deemed necessary." The fact sheet also describes the project as eliminated.

Because an overflow mitigation project is not ultimately necessary for the Eden Care Pump Station, either approach for project elimination or certification could be effective. However, since MSD performed monitoring and investigation work as described in the 2009 IOAP fact sheet, it is appropriate to clarify that this project was completed with a certification letter submittal for IOAP documentation purposes.

For your reference, a copy of the August 2012 project elimination letter along with project fact sheets and maps from the 2009 IOAP is included in Attachment A. The October 2012 project clarification letter is provided in Attachment B. The 2012 IOAP Modification (May 2014) SSDP summary Table ES.2 and project fact sheet have been provided in Attachment C.

Eden Care Pump Station SSO Investigation Project Clarification

Attachment A

August 2012 Project Elimination Letter

2009 IOAP Project Fact Sheet and Map

Eden Care Pump Station SSO Investigation Project Clarification

Attachment A

August 2012 Project Elimination Letter

2009 IOAP Project Fact Sheet and Map



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

August 17, 2012

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

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

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

Subject: Eden Care PS SSO Investigation
Project Elimination
IOAP Project No. S_FF_FF_NB02_S_13_C
DOJ Case No. 90-5-1-1-08254

Attention Chiefs and Directors:

MSD is providing advanced notification of a proposed minor project modification to eliminate the Eden Care PS Sanitary Sewer Overflow (SSO) Investigation project (IOAP Project No. S_FF_FF_NB02_S_13_C). This modification is part of an overall adaptive management review of the approved 2009 IOAP that will be documented in the proposed 2012 IOAP Modification to be formally submitted in 2013. No action is requested at this time.

2009 IOAP Project Description

The Eden Care PS SSO Investigation project included monitoring the location during rain events for three years following Sewer Overflow Response Protocols.

Proposed Project Modification

MSD has been monitoring the Eden Care PS (MSD1105-PS) over the past three years during wet weather and determined that overflows do not occur at this location. As a result, under the Sewer Overflow Response Protocol (SORP), MSD is no longer required to monitor the location and no remedial project is necessary.

These modifications are part of an overall adaptive management review of the approved 2009 IOAP. Additional sewer system monitoring, hydraulic modeling recalibration and enhancements to the physical representation of the sewer system resulted in a redistribution of the flow in individual sewer lines, thus



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affecting project approach and sizing in some cases. Each proposed change will be justified in detail through minor modification letters. Detailed benefits, costs and program implementation refinements to the overflow abatement program will be documented in proposed 2012 IOAP Modification to be submitted in 2013. No action is requested at this time.

Technical Justification

The inline storage solution alternative originally developed for the 2008 IOAP (IOAP Project No. S_FF_FF_NB02_S_13_C), which has a required completion date of December 31, 2021, consisted of upsizing 90 LF of 8-inch diameter pipe to 48-inches. This solution is not necessary based on monitoring according to SORP protocols at Eden Care PS. The only historical overflow documented at Eden Care Pump Station (MSD1105-PS) related to system capacity was 200 gallons on March 18, 2006. This overflow was caused by a blockage and no overflows have been recorded since that date six years ago.

Table 1 – Recorded overflows at Eden Care PS

ID	Overflow Date	Cause	Volume (gal)
MSD1105-PS	3/18/2006	Capacity	200

Given these results, MSD proposes to eliminate the Eden Care Pump Station project. For your reference, the original project fact sheet and map from the IOAP are enclosed in Attachment A.

I certify under penalty of law that this document and all attachments were prepared under my 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 any questions or need additional information, please contact me or Ms. Angela Akridge, Project WIN Program Manager at (502) 540-6000.

Sincerely,



W. Brian Bingham
Regulatory Services Director

Cc: G. Heitzman P. Purifoy
Attachment

MSD

Metropolitan Sewer District

ATTACHMENT A



SSO SSDP Project Fact Sheet



SSO Project Number: S_FF_FF_NB02_S_13_C

Project Name: Eden Care PS SSO Investigation

Modeled Area: Floyds Fork

Branch or SSO ID: NB02

Project Type: Monitor

Receiving Stream: Floyds Fork

Project Description: Monitor the Eden Care PS during rain events for the next three years according to SORP protocols .

Reason for Overflow: Pump station capacity / suspected blockage

Design Assumptions: The only overflow record for this location occurred on March 18, 2006 and is suspected to have been caused by a blockage.

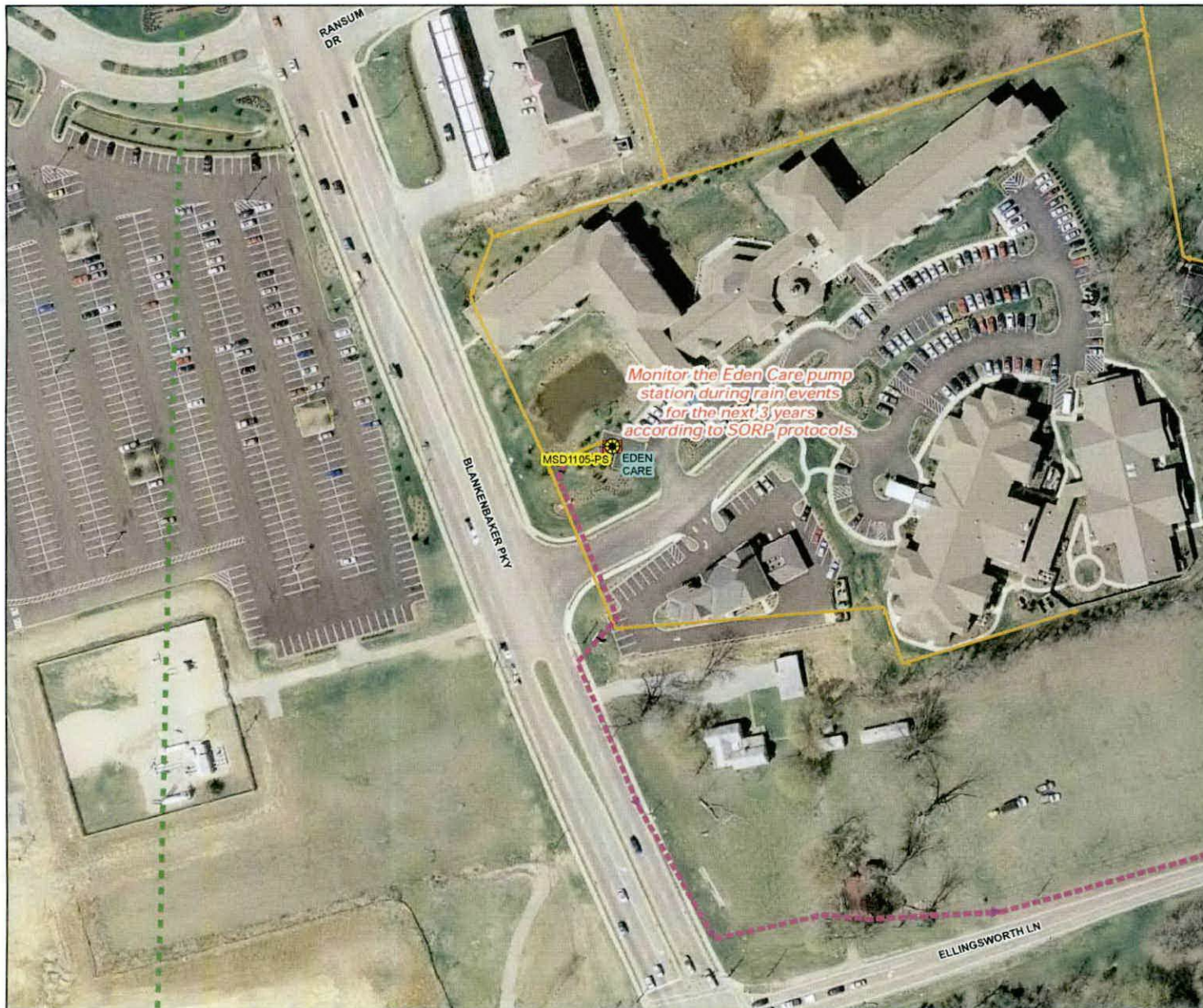
Project Constraints: None

Estimated Capital Cost (2008 dollars): This work will be performed under the SORP/CMOM programs

Weighted Benefit/Cost Ratio (Present Worth): --

Overflow Points Addressed:

SSO	SSO Name	Service Area	Overflow Type	Discharge To	Average Overflow / Incident (gallons)
MSD1105-PS	Eden Care	Floyds Fork	Lift Station	Ground	200



Integrated Overflow Abatement Plan
Vol. 3 - Sanitary Sewer Discharge Plan
 Floyds Fork Sewershed
 Solution ID # S_FF_FF_NB02_S_13_C
 Eden Care PS SSO Investigation

Preliminary - For Budget Development Only
Legend

- Documented SSO
- Suspected SSO
- Haul Operation
- Proposed Pump Station Solution
- Pump Station
- WWTP
- Proposed Pipe Solution
- Force Main
- Collector < 12"
- Interceptor >= 12"
- Combined Sewer Pipe
- Proposed Off-line Storage
- Road
- Streams
- Floodway
- Small WWTP Service Area
- Large WWTP Service Area
- CSO Area
- Metro Parks

General representation of overflow abatement solutions are for preliminary planning purposes. Alignments and locations may be altered during design.

1 inch = 100 feet
 Scalable when printed on 11" X 17" paper

Some boundaries are uniquely symbolized within the map.

Map Revision
 May 07, 2009

Aerial Date: 2006

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MSD

Metropolitan Sewer District

ATTACHMENT B

**Project Eliminated
or Combined with Another**

No Attachment B

Eden Care Pump Station SSO Investigation Project Clarification

Attachment B

October 2012 Project Clarification Letter



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

October 4, 2012

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

Jeffrey A. Cummins, Acting Director
Division of Enforcement
Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

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

Subject: 2012 Integrated Overflow Abatement Plan (IOAP) Modification
DOJ Case No. 90-5-1-1-08254
Clarification of September 20, 2012, submittal

Attention Director and Chiefs:

As part of the adaptive management approach outlined in the approved 2009 Integrated Overflow Abatement Plan (IOAP), the Louisville and Jefferson County Metropolitan Sewer District (MSD) previously submitted information documenting proposed modifications to the approved plan. This submittal included letters requesting review and approval of minor modifications to the plan and also informational letters providing advance notification of proposed changes that will be address in a proposed 2012 IOAP Modification. The purpose of this letter is to clarify the status of two of the project letters provided "for information" that have more immediate impact on MSD's Amended Consent Decree compliance activities.

The Eden Care Pump Station SSO Investigation and the Leland Road SSO Investigation are projects developed in response to SSOs documented one time, at one location each. At the time of the IOAP submittal MSD believed both of these documented SSOs had been eliminated as a result of sewer cleaning. In accordance with the approved SORP, however, MSD is required to monitor documented SSOs for a period of three years with no further SSO events before the SSO can be considered eliminated. The projects related to these two locations were "placeholders" to ensure follow-up actions were taken if the SSOs were found to not be eliminated as a result of the project monitoring.

Both these projects have a completion date of December 31, 2012, in the approved IOAP. Since no SSOs have occurred at either location during the project monitoring period, MSD will certify these projects as complete at the end of the monitoring period, and no further action will be required. The "information



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Clarification of 2012 IOAP Modifications

October 4, 2012

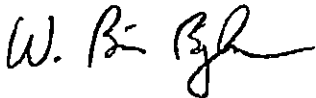
Page 2 of 2

only" letters referred to the projects as being eliminated, when in fact the projects will be considered complete with no further action required.

I certify under penalty of law that this document and all attachments were prepared under my 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 Ms. Angela Akridge, Project WIN Program Manager, or myself at (502) 540-6000.

Sincerely,

A handwritten signature in black ink, appearing to read "W. B. Bingham".

W. Brian Bingham
Regulatory Services Director

cc: G. Heitzman P. Purifoy,

Eden Care Pump Station SSO Investigation Project Clarification

Attachment C

2012 IOAP Modification (May 2014) Table ES.2 and Project Fact Sheet

Table ES.2 2012 SSDP Final Project Suite

ACD Project Number	Project Name	Receiving Stream	Overflows Controlled	2009 Level of Control Depth (in)	2009 Level of Control Storm	2009 Size (MG)	2009 Cost	2012 Level of Control Depth (in)	2012 Level of Control Storm	2012 Revised Size (MG)	2012 Revised Cost (in 2008 dollars)	2009 Completion Date	Proposed Completion Date	Explanation for Proposed Revisions or Comments
CEDAR CREEK AREA														
S_CC_CC_20158_M_09A_C	Milewood In-line Storage	CEDAR CREEK	28998, 28984, 63004, 63093, 70158	1.82	2-Year, 3-Hour	N/A	\$2,317,000	1.82	2-Year, 3-Hour	N/A	\$2,317,000	12/31/2023	12/31/2023	
S_FF_FF_81316_M_03_C_A	Fairmount Road Pump Station Off-Line Storage	BIG RUN	Fairmount Road PS (81316 & 97362)	N/A	N/A (New Project)	N/A	N/A	1.82	2-Year, 3-Hour	3.4 MG	\$13,439,000	N/A	12/31/2015	Project needed to accommodate flows from eliminated Jeffersontowns WQTC and acknowledge capacity at Cedar Creek WQTC.
S_CC_CC_67997_M_01_C	Little Cedar Creek Interceptor Improvements	LITTLE CEDAR CREEK	67997, 67999, 86423, 86424, 89195, 89196, 89197	1.82	2-Year, 3-Hour	Pipe Upgrades	\$1,875,000	1.82	2-Year, 3-Hour	N/A	\$1,875,000	12/31/2024	12/31/2024	
S_CC_CC_MSD1025_S_03_B	Bardonia Rd. PS Improvements	BIG RUN	88545	2.25	5-Year, 3-Hour	N/A	\$281,000	2.25	5-Year, 3-Hour	N/A	\$281,000	12/31/2021	12/31/2021	
S_CC_CC_MSD1080_S_01_C	Running Fox PS Elimination	LITTLE CEDAR CREEK	MSD1080-LS	1.82	2-Year, 3-Hour	N/A	\$86,000	1.82	2-Year, 3-Hour	N/A	\$77,000	12/31/2010	12/31/2010	Project Completed
HITE CREEK AREA														
S_HC_HC_MSD1082_S_09A_C	Meadow Stream Pump Station & Force Main Upgrade	FLOYDS FORK, SOUTH FORK HARRIS CREEK	Meadow Stream PS (91087, MSD1082-PS)	1.82	2-Year, 3-Hour	0.3	\$974,000	2.60	10-Year, 3-Hour	3.89 MSD PS & New 18" Force Main	\$974,000	12/31/2016	12/31/2012	Project changed from a small storage basin to a pump station upgrade and new force main due to the capacity needs of Crestwood. The City paid the additional costs beyond MSD's overflow control commitment. Project Completed - Monitoring Ongoing
S_HC_HC_MSD1086_M_07_C_A	Floydburg Rd. SSES, Rehabilitation and Pump Station Upgrade	FLOYDS FORK	Floydburg Road (MSD1086-PS, 90776, 108956, 108957, 108958)	1.82	2-Year, 3-Hour	N/A	\$37,000	1.82	2-Year, 3-Hour	N/A	\$57,000	12/31/2010	12/31/2010	Project Completed - Monitoring Ongoing
S_HC_HC_MSD1085_S_03_A	Kavanaugh Rd. PS Improvements	HITE CREEK	Kavanaugh Rd (MSD1085-PS)	2.60	10-Year, 3-Hour	N/A	\$1,110,000	2.60	10-Year, 3-Hour	N/A	\$1,110,000	12/31/2024	12/31/2024	
FLOYDS FORK AREA														
S_FF_FF_NB01_S_01_C_A	Woodland Hills PS Diversion	POPE LICK	33063, 65531	1.82	2-Year, 3-Hour	N/A	\$20,000	1.82	2-Year, 3-Hour	N/A	\$20,000	12/31/2011	12/31/2011	Project Completed - Monitoring Ongoing
S_FF_FF_NB02_S_13_C	Eden Cove PS SSO Investigation	FLOYDS FORK	Eden Cove PS (MSD1105-PS)	N/A	N/A (Monitor)	N/A	N/A	N/A	N/A	N/A	\$0	N/A	Eliminated	Only one overflow had been documented at this location. MSD cleaned the sewers in the vicinity and has not documented an overflow in over 3 years. No further action is deemed necessary.
S_FF_FF_NB03_M_01_C_A	Ashburnton PS Improvements & Diversion	FLOYDS FORK	Old Copper Coast PS (MSD0165-PS), Ashburnton PS (MSD0166-PS)	1.82	2-Year, 3-Hour	N/A	\$118,000	1.82	2-Year, 3-Hour	N/A	\$118,000	12/31/2021	12/31/2021	Project Completed
JEFFERSONTOWNS AREA														
S_JT_JT_NB01_M_01_C_A	Jeffersontowns WQTC Elimination	CHENOWETH RUN	28396, 28391, 28392, 28395, 28351, 31733, Jeffersontowns WQTC (28173 & 64505 & MSD0255 & 88028-81)	1.82	2-Year, 3-Hour	N/A	\$23,737,000	1.82	2-Year, 3-Hour	N/A	\$23,737,000	12/31/2015	12/31/2015	
S_JT_JT_NB01A_M_03_C	Chenoweth Hills WQTC Elimination & PS Improvements	CHENOWETH RUN	Chenoweth Run PS (MSD0196-PS & 86052 & 64096), Chagawa PS (92061), Chenoweth Hills WQTC PS (MSD0265A-PS), Chenoweth Hills WQTC (MSD0263)	1.82	2-Year, 3-Hour	N/A	\$3,140,000	1.82	2-Year, 3-Hour	N/A	\$3,140,000	12/31/2015	12/31/2015	
S_JT_JT_NB02_M_01_C	Dell Rd & Charlene Project Flow Interceptor	BEATTY BROOK	Charlene Flow (28250, 28249, 28048, 28336, 104289), Dell Rd (28413, 28414, 28415, 28416, 28417)	1.82	2-Year, 3-Hour	Pipe Upgrades	\$917,000	1.82	2-Year, 3-Hour	N/A	\$917,000	12/31/2022	12/31/2022	
S_JT_JT_NB03_M_01_C	Relatree & Marlen Ct PS Eliminations and Pipe Upgrades (2 Phases)	BEATTY BROOK	28710, 28711, Marlen Court PS (28729), Relatree PS (MSD0149-PS)	1.82	2-Year, 3-Hour	N/A	\$1,005,000	1.82	2-Year, 3-Hour	N/A	\$1,005,000	12/31/2021	12/31/2021	
S_JT_JT_NB04_M_01_A	Monticello PS Elimination	PERN CREEK	Monticello Place PS (MSD0131-PS & 27909)	2.60	10-Year, 3-Hour	N/A	\$207,000	2.60	10-Year, 3-Hour	N/A	\$207,000	12/31/2022	12/31/2022	

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Table ES.2 2012 SSDP Final Project Suite

ACD Project Number	Project Name	Receiving Stream	Overflows Controlled	2009 Level of Control Depth (in)	2009 Level of Control Storm	2009 Size (MG)	2009 Cost	2012 Level of Control Depth (in)	2012 Level of Control Storm	2012 Revised Size (MG)	2012 Revised Cost (in 2009 dollars)	2009 Completion Date	Proposed Completion Date	Explanation for Proposed Revisions or Comments
DREAM AREA														
S_OR_MF_NB01_M_01_B	Midwood PS and Foremain Improvements, System Improvements & PS Elimination (2 Phases)	MUDDY FORK BEARGRASS CREEK	20752, 41374, 41416, Mockingbird Valley PS (MSD0007-PS), Watson PS (MSD0010-PS), Midwood Avenue PS (24472 & MSD0023-PS), Canoe Lane PS (24152-W & MSD0024-PS)	2.25	3-Year, 3-Hour	N/A	\$3,055,000	2.25	3-Year, 3-Hour	N/A	\$3,055,000	12/31/2012, 12/31/2024	12/31/2012, 12/31/2024	Phase 1 Project Completed - Monitoring Ongoing
S_OR_MF_NB02_S_13_C	Leland Road SBO Investigation	CHERRYWOOD CREEK	96020	N/A	N/A	N/A	N/A	N/A (Rehab & Monitoring)	N/A (Rehab & Monitoring)	N/A	\$0	N/A	Eliminated	Only one overflow had been documented at this location. MSD cleaned the sewers in the vicinity and has not documented an overflow in over 3 years. No further action is deemed necessary.
S_OR_MF_NB03_S_07_C	Dorington Ct. PS II Investigation & Rehabilitation	GOOSE CREEK	Dorington Court PS (MSD0095-PS)	1.82	2-Year, 3-Hour	N/A	\$265,000	1.82	2-Year, 3-Hour	N/A	\$265,000	12/31/2012	12/31/2012	Project Completed - Monitoring Ongoing
S_OR_MF_NB04_M_03_B_B	Prospect WQTC Elimination, Harrods Creek PS, and OMPPS System Improvements (3 Phases)	LITTLE GOOSE CREEK	40870, 40871, 40872, 89646, Barbours Lane PS (42040, 55633, 45635, MSD0192-PS), West Goose Creek PS (22430 & MSD0123-PS), Phoenix Hill PS (MSD1044-PS), Glenview Hills PS (MSD0183-PS), New Market PS (MSD1193-PS), Deep Creek PS (MSD1063-PS), Hunting Creek South WQTC (MSD0292)	2.25	5-Year, 3-Hour	N/A	\$31,368,000	2.25	5-Year, 3-Hour	N/A	\$31,368,000	12/31/2015, 12/31/2016	12/31/2015, 12/31/2016	
MILL CREEK AREA														
S_MC_WC_NB01_M_01_A	Shively Interceptor	LYNNVIEW DITCH	04491, 04542, Pioneer PS (R1114-W), Fern Lea PS (MSD0047-PS), Gary's Lane PS (MSD0050-PS)	2.60	10-Year, 3-Hour	Pipe Upgrades	\$10,419,000	2.6	10-Year, 3-Hour	N/A	\$10,419,000	12/31/2014	12/31/2014	Project Completed - Monitoring Ongoing
S_MC_WC_NB02_S_03_C	East Rockford PS Reduction	MILL CREEK	East Rockford PS (04099-W)	1.82	2-Year, 3-Hour	N/A	\$1,044,000	1.82	2-Year, 3-Hour	N/A	\$1,044,000	12/31/2021	12/31/2021	Project Completed
SMALL WQTC AREA														
S_FF_BT_NB01_S_09A_C_A	Lanes La. PS In-line Storage	GOOSE CREEK	Lanes Lane PS (MSD0100-L5)	1.82	2-Year, 3-Hour	N/A	\$183,000	1.82	2-Year, 3-Hour	N/A	\$183,000	12/31/2021	12/31/2021	
S_HC_HN_NB01_S_03_C_A	Riding Ridge PS Improvements	HARRODS CREEK	Riding Ridge PS (MSD1060-L5)	1.82	2-Year, 3-Hour	N/A	\$27,000	1.82	2-Year, 3-Hour	N/A	\$27,000	12/31/2014	12/31/2014	
S_HC_HN_NB02_S_09A_C_B	Gunpowder PS In-line Storage	HARRODS CREEK	Gunpowder PS (MSD1055-L5)	1.82	2-Year, 3-Hour	N/A	\$176,000	1.82	2-Year, 3-Hour	N/A	\$176,000	12/31/2021	12/31/2021	
S_HC_HN_NB03_S_09A_A_A	Fox Harbor In-line Storage	HARRODS CREEK	Fox Harbor #1 and #2 PS (62769)	2.60	10-Year, 3-Hour	N/A	\$328,000	2.60	10-Year, 3-Hour	N/A	\$328,000	12/31/2021	12/31/2021	
S_HC_HN_NB01_S_03_C_A	Fairway View PS Improvements	HARRODS CREEK	Fairway View PS (MSD1065-PS)	1.82	2-Year, 3-Hour	N/A	\$87,000	1.82	2-Year, 3-Hour	N/A	\$167,000	12/31/2014	12/31/2014	
S_FF_LF_NB01_S_13_C_A	Lake Forest PS SBO Investigation	CHENOWETH RUN	Lake Forest PS (MSD1169-L5)	N/A	N/A	N/A	N/A	N/A (Monitoring)	N/A (Monitoring)	N/A	\$77,000	12/31/2012	12/31/2012	Monitoring Ongoing
S_FF_CH_NB01_S_09A_C_A	St. Rose Rd. PS In-line Storage	CHENOWETH RUN	04187	1.82	2-Year, 3-Hour	N/A	\$30,000	1.82	2-Year, 3-Hour	N/A	\$30,000	12/31/2021	12/31/2021	
LOS AREA														
S_OR_MF_42007_S_07_C	Scane PS II Investigation	PADDY RUN	Scane Avenue PS (MSD0042-PS)	1.82	2-Year, 3-Hour	N/A	\$265,000	1.82	2-Year, 3-Hour	N/A	\$265,000	12/31/2011	12/31/2011	Project Completed - Monitoring Ongoing
S_SF_MF_30917_M_09_A	Camp Taylor System Improvements (Four Phases)	MUDDY FORK BEARGRASS CREEK	08717, 13931, 13943, 36763, 44096, 44397, 66340, 104223, 104231	2.60	10-Year, 3-Hour	Pipe Upgrades	\$28,279,000	2.60	10-Year, 3-Hour	Pipe Upgrades	\$28,279,000	Dec 31, 2012, 2013, 2017 & 2024	Multiple (Same as 2009)	Project approach is similar to 2009, but the project area targeted for inspection and rehabilitation is larger.
S_MC_MF_55665_S_07_C	Hardwood PS II Investigation & Rehabilitation	MANSLECK BRANCH	Hardwood PS (55665)	1.82	2-Year, 3-Hour	N/A	\$173,000	1.82	2-Year, 3-Hour	N/A	\$173,000	12/31/2011	12/31/2011	Project Completed - Monitoring Ongoing

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ACT Project Number	Project Name	2009 Level of Control Depth (in)	2009 Level of Control Storm (in)	2009 Size (MG)	2009 Cost (M\$)	2012 Level of Control Depth (in)	2012 Level of Control Storm (in)	2012 Revised Cost (in 2006 dollars)	2009 Completion Date	Proposed Completion Date	Explanation for Proposed Revisions or Comments
HIGHWAY SPURNS PS	Highway Spurns and Interceptor	NORTH FORK BEAUBASS CREEK 1847, 1848, 1855, 1856, AND WOODCROD 4824, 4828, 4872, 4873, MS00012-PS						\$21,216,000	11/27/2012		This project includes improvements to the Hulse Pond Sewer System and Interceptor consists of 10,000 LF of 72-inch sewer that connects to Southwestern discharging into the Highway Sprung Pump Station. The sewer is less than 100 years old.
SOUTHEASTERN DIVISION STRUCTURE & INTERCEPTOR	Southwestern Diversion Structure and Interceptor	SOUTH FORK BEAUBASS CREEK 10828, 10827, 10820, 10817, 10880, 10881, 49547						\$12,644,000	5/12/2012		This project includes improvements to the Southwest Diversion Structure for improved flow due to the Hulse Lane Interceptor and other Final SSDF projects. The project consists of a new parallel finalization Interceptor and two flow control junction boxes, and modifications to the existing Southwestern Diversion Structure (including removing control weirs and reprogramming Real Time Control gates). Project Completed - Monitoring Ongoing
NORTHERN DITCH DIVISION INTERCEPTOR	Northern Ditch Division Interceptor	NORTHERN DITCH MS200271 (Evolution)						\$20,207,000	7/31/2011		This project includes construction of a new Northern Ditch Division Interceptor which will allow flow from upstream projects to reach the North R. Catchment via the new flow control system. Project Completed - Monitoring Ongoing
SINCEWOOD POND REEFER SEWER	Making First Refeer Sewer	MIDDLE POND BEAUBASS CREEK AND UPPER SINCEWOOD POND 21181, 25012, 63310						\$1,600,000	12/25/2009		This project includes conveying flow from some of the new Sincewood Village wastewater treatment plant to accommodate upstream SSDF projects. The project includes installing 2,800 LF of 24 inch pipe sewer.
BECKWOOD VILLAGE SANITARY SEWER REPLACEMENT	Beckwood Village Sanitary Sewer Replacement	UPPER SINCEWOOD POND 21061, 21089, 21101, 21133, 21156						\$11,800,000	4/27/2011		This project includes replacing or rehabilitating the entire local systems, including 22,700 LF of sewer pipe and 400 manureways service connections. The project will be completed in two phases, East and West. Project Completed
BEEKER R GUTTER WATER QUALITY TREATMENT CENTER	Beek R. Gutber Water QCTC	CHOD RIVER, BLACK POINT CREEK, ALVEY LITTLE MINOOKA BRANCH, MILL CREEK Sewer Worker SSOS 4.50						\$102,700,000	11/27/2012		Full length test treatment capacity not yet available for flows to be seen by 2012 due to extensive wet weather in 2011. Test current flows and overflow situations can be accommodated with current treatment capacity. Project Completed - Monitoring Ongoing

Project Name Eden Care PS SSO Investigation

Project Number S_FF_FF_NB02_S_13_C

Modeled Area Floyds Fork

Branch or SSO ID NB02

Project Type Inline Storage

Receiving Stream Floyds Fork

Project Description The overflow at Eden Care PS had only been documented to overflow once. The overflow location was monitored for three years and no additional overflows were witnessed. As such, no further action for overflow mitigation will be undertaken.

Reason for Overflow Pump station capacity

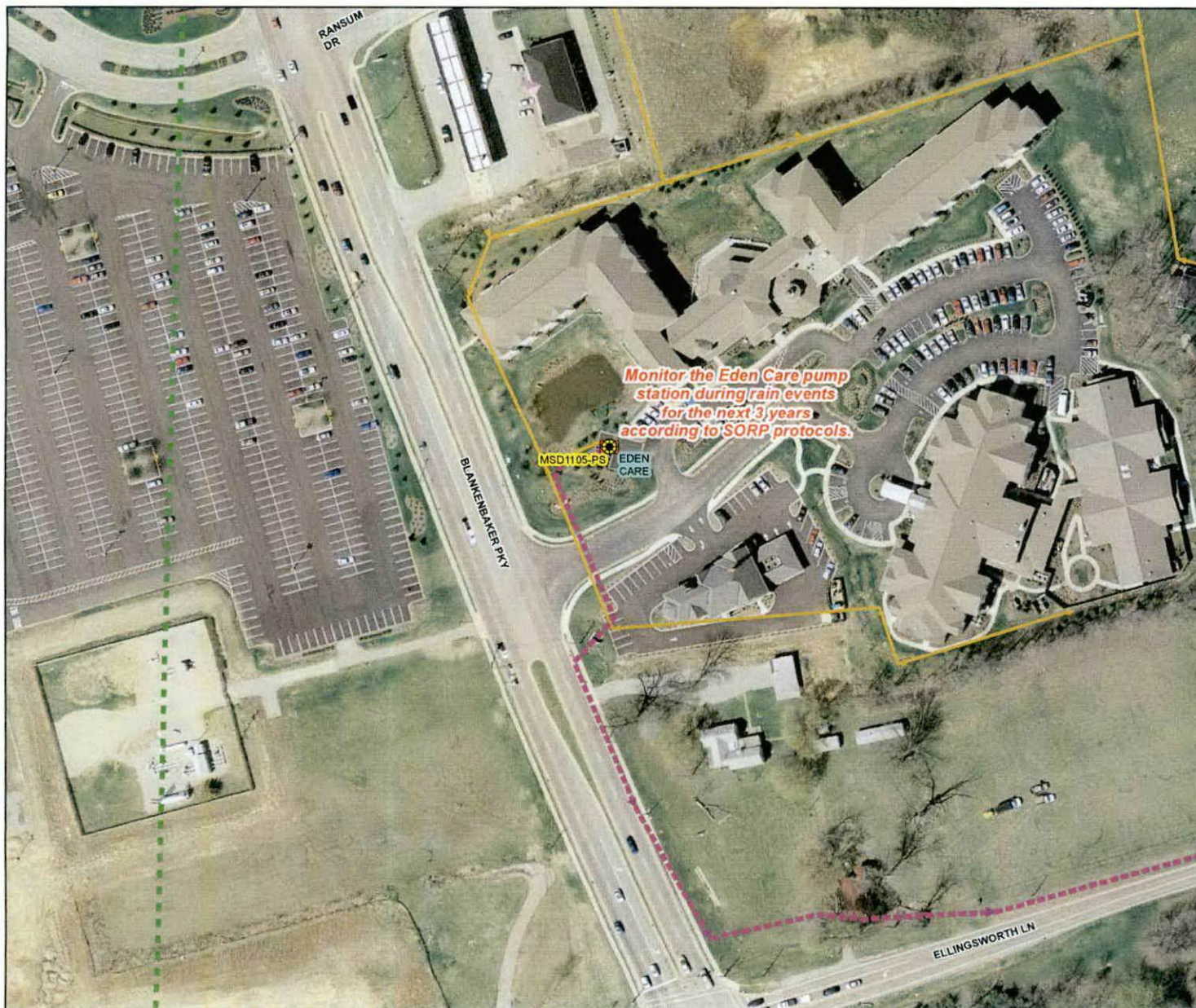
Design Parameters Project Eliminated.

Project Constraints Project Eliminated

Estimated Capital Cost Project Eliminated

Weighted Benefit/Cost Ratio Project Eliminated

Asset ID	SSO Start Date	Volume (Gal)
MSD1105-PS	3/18/2006	200



Integrated Overflow Abatement Plan **Vol. 3 - Sanitary Sewer Discharge Plan**

Floyds Fork Sewershed
 Solution ID # S_FF_FF_NB02_S_13_C
 Eden Care PS SSO Investigation

Preliminary - For Budget Development Only **Legend**

- Documented SSO
- ▲ Suspected SSO
- Haul Operation
- Proposed Pump Station Solution
- Pump Station
- WWTP
- Proposed Pipe Solution
- Force Main
- Collector < 12"
- Interceptor ≥ 12"
- Combined Sewer Pipe
- Proposed Off-line Storage
- Road
- Streams
- Floodway
- Small WWTP Service Area
- Large WWTP Service Area
- CSO Area
- Metro Parks

General representation of overflow abatement solutions are for preliminary planning purposes. Alignments and locations may be altered during design.

1 inch = 100 feet
 Scalable when printed on 11" X 17" paper



Some boundaries are uniquely symbolized within the map.

Map Revision
 May 07, 2009

Aerial Date: 2006



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