
SSO 700 Integrated Watershed Action Plan Progress Report No. 2 February 2015

PREPARED FOR: Metropolitan Sewer District of Greater Cincinnati
PREPARED BY: Frank Duran
DATE: March 16, 2015
PROJECT NUMBER: MSDGC: 11140010
CH2M HILL: 498759

Purpose: The purpose of this report is to document the progress of the SSO 700 Integrated Watershed Action Plan (IWAP) from the **January 31, 2015** through **February 27, 2015**. For each task, a summary of work performed during the reporting period and the work planned for the upcoming reporting period are presented. A discussion of the project schedule and outstanding project issues is also presented.

Overview: This second reporting period for the SSO 700 IWAP captures the approval of the study area boundary; the analyses of the water quality model, collection system model, and pertinent watershed data; the development of technical memoranda to summarize these analyses; and execution of the first Steering Committee Meeting. The project is on or ahead of schedule for all critical path tasks; however, a couple of non-critical tasks have lagged behind slightly. At this time, there are two issues that have some potential to negatively affect project schedule or progress: (1) scheduling of meetings with political jurisdictions, and (2) agreement on the method of calibration for the collection system model.

Section 1 - Work Progress

This section summarizes project progress by CH2M HILL during the reporting period and identifies work planned for the upcoming reporting period by task as listed in the Contract scope of work. A log of project deliverables is attached at the end of this progress report.

Task 1.0: Project Administration

1.1 Project Management

Work completed during the reporting period:

- Development of the Project Management Plan.
- Submission of January 2015 progress report.

Work planned for the upcoming reporting period:

- Completion and submission of the Project Management Plan to MSDGC.
- Submission of February 2015 progress report.

1.2 Project Meetings

Work completed during the reporting period:

- Steering Committee meeting was held on February 11th.

- Submission of the draft meeting summary for the Steering Committee meeting for review by County/MSDGC.
- February progress meeting was held on February 19th.
- Submission of the final meeting summary for February project progress meeting.
- Plans for meetings with political jurisdictions were developed.

Work planned for the upcoming reporting period:

- Submission of the final meeting summary for the Steering Committee meeting for distribution to members of the Steering Committee by Hamilton County.
- March progress meeting will be held on March 19th.
- Meetings with political jurisdictions will be held.

1.3 Quality Assurance and Quality Control

Work completed during the reporting period:

- The QA/QC plan was developed.

Work planned for the upcoming reporting period:

- Completion and submission of the QA/QC plan with the Project Management Plan.

1.4 Risk Management

Work completed during the reporting period:

- The Risk Management Plan was developed and submitted to MSDGC and the County at the February progress meeting.

Work planned for the upcoming reporting period:

- Completion and submission of the Risk Management Plan with the Project Management Plan.

1.5 Schedule

Work completed during the reporting period:

- Progress schedule was developed and submitted with the January progress report.

Work planned for the upcoming reporting period:

- Development of monthly progress schedule.

Task 2.0: Watershed and Source Characterization

2.1 Watershed Selection and Delineation

Work completed during the reporting period:

- Study boundary was presented at the February 19th progress meeting.
- Study boundary review comments were received from MSDGC and Hamilton County.

Work planned for the upcoming reporting period:

- Address review comments on study area boundary in Task 2.4 deliverable, *Inventory and Gap Analysis Technical Memorandum*.

2.2 Data Collection

Work completed during the reporting period:

- Miscellaneous data collection tasks were performed to collect remaining outstanding data and data identified at the February 11th Steering Committee Meeting.
- Met with representatives of the Hamilton County Storm Water District on February 23, 2015, to receive background data.

Work planned for the upcoming reporting period:

- No further work is anticipated on this task other than perhaps some remaining miscellaneous data collection efforts. Task is essentially complete.

2.3 Site Visits

Work completed during the reporting period:

- Preparation for two site visits:
 - Site Visit to SSO 700 Storage and Treatment Facility
 - March 26th general site visit to locations of interest within study area.

Work planned for the upcoming reporting period:

- Implementation of two site visits.

2.4 Inventory and Gap Analysis

Work completed during the reporting period:

- Submittal of draft technical memorandum outline to MSDGC and Hamilton County on February 11th.
- Review, analysis, and summary of available data.
- Development of draft technical memorandum.

Work planned for the upcoming reporting period:

- Submittal of preliminary draft technical memorandum to MSDGC and Hamilton County.

2.5 Water Quality Data Collection Program – Optional Task

This task has not yet been authorized.

2.6 Watershed Water Quality Models Update & Development

Work completed during the reporting period:

- Submittal of draft technical memorandum outline to MSDGC and Hamilton County on February 11th.
- Review of available watershed and surface water quality models.
- Review of available water quality data.
- Development of preliminary draft technical memorandum.

Work planned for the upcoming reporting period:

- Submittal of preliminary draft technical memorandum to MSDGC and Hamilton County.
- Review of preliminary draft technical memorandum with MSDGC and Hamilton County at special water quality meeting on March 19th.
- Receive authorization to develop level of effort and detailed scope of services for the development of water quality model(s) to support the IWAP.

2.7 Hydraulic Model Update & Development

Work completed during the reporting period:

- Submittal of draft technical memorandum outline to MSDGC and Hamilton County on February 11th.
- Review of available flow data and corresponding rainfall data to identify appropriate model validation periods.
- Development and submittal of *Model Validation Period Selection Technical Memorandum*, an informational technical memo intended to request approval of the data selected for validation of the existing model. Memo was submitted to MSDGC on February 27th.
- Determination that no storm sewer model exists for the SSO 700 IWAP study area. Recommendations regarding the filling of this model gap will be outlined in the Task 2.6.1 deliverable.

Work planned for the upcoming reporting period:

- Meet with representatives of MSDGC and Hamilton County on March 9th to discuss current status of this task.
- Receipt of approval from MSDGC and Hamilton County to proceed with model validation using the recommended model validation periods.
- Begin work on model validation.
- Participate with MSDGC and Hamilton County in a comprehensive discussion of model calibration methods available for implementation in watersheds that do not meet MSDGC model calibration standards.

Task 3.0: Identify Pollution Sources & Use Tools to Evaluate Collection System Response & Waterway Response

This task shall be funded and authorized through a task order modification.

Task 4.0: Summary Report

This task shall be funded and authorized through a task order modification.

Section 2 - Schedule

Attached to this progress report are three schedules representing the progress of the IWAP. The first schedule presents only the progress of the critical path tasks. The second schedule presents a high level overview of all the project tasks. The third schedule presents the latest project schedule by each detailed task with the progress of the work by task shown versus the baseline schedule.

The critical path tasks are currently on schedule; however, the schedule for a few non-critical path tasks have been adjusted in response to the scheduling of the meetings with political jurisdictions. The first meeting with a political jurisdiction has been scheduled for March 18th. Subsequent meetings are expected to follow and are now estimated to be completed by April 27th. The political jurisdiction meetings are a predecessor to the completion of the Task 2.4 deliverable, *Data Inventory and Gap Analysis Technical Memorandum*, which is now estimated to be completed on April 27th. Other than data to be collected from the political jurisdictions, the remaining portions of this deliverable are anticipated to be completed by the end of March. This adjustment does not affect the critical path, which remains

focused on the water quality data collection program and development of the updated water quality model.

Section 3 – Project Issues

Two project issues have been identified that have the potential to impede project progress and negatively impact project schedule:

1. Scheduling of meetings with political jurisdictions
2. Agreement on the calibration method for the collection system model

Scheduling of the meetings with political jurisdictions has begun and must be persistently pursued to achieve project goals. Discussions amongst the project team, MSDGC, and Hamilton County on the model calibration method have begun. A final decision has been postponed pending the outcome of the model validation. However, agreement on an approach will need to be made quickly once validation results are reported to maintain the project schedule.

No other project issues have been identified at this time.



**MSDGC-Hamilton County
SSO 700 IWAP
Project Nos. 11140010 , 498759**



Project Deliverable Log as of 3/18/2015

TASK NO.	TASK NAME	DELIVERABLE TYPE	DELIVERABLE NAME	ORIGINAL SUBMITTED DATE	STATUS	FINAL VERSION DATE	COMMENT
Task 1 - Project Administration							
1.1	Project Management	Schedule	Baseline Schedule	1/15/2015	Final	2/2/2015	
1.1	Project Management	Progress Report and Schedule	Progress Report No. 1, January 2015	2/5/2015	Final	2/5/2015	Format of progress report accepted by MSDGC.
1.1	Project Management	Progress Report and Schedule	Progress Report No. 2, February 2015	3/18/2015	Final	3/18/2015	
1.1	Project Management	Plan	Project Management Plan, including Quality Control Document and Risk Register	3/5/2015	Awaiting Comments by 3/19		To be updated only as warranted after first draft is approved.
1.2	Project Meetings	Meeting Summary	Chartering Meeting Summary 12/17/2014	1/6/2015	Final	1/6/2015	
1.2	Project Meetings	Meeting Summary	Steering Committee Meeting Summary 2/11/2015	2/16/2015	Final	2/16/2015	To be distributed to Steering Committee Members by Karen Ball or Dave Meyer.
1.2	Project Meetings	Charter	Project Charter	2/19/2015	Awaiting Comments by 3/19		Charter to be discussed at 3/19 progress meeting.
1.2	Project Meetings	Meeting Summary	Progress Meeting Summary 2/19/2015	2/24/2015	Final	2/24/2015	
1.3	Quality Assurance and Quality Control	Plan	Quality Control Document (included as part of PMP)	3/5/2015	Awaiting Comments by 3/19		
1.4	Risk Management	Plan	Risk Management Plan (Risk Register), (included as part of PMP)	draft 2/19/2015	Awaiting Comments by 3/19		Risk register to be discussed at 3/19 progress meeting.
Task 2 - Watershed and Source Characterization							
2.1	Watershed Selection and Delineation	Shapefile	SSO700_IWAP_StudyAreaBoundary.shp	1/30/2015	Final	1/30/2015	
2.1	Watershed Selection and Delineation	Shapefile	EBMC_Sewershed.shp	1/30/2015	Final	1/30/2015	
2.1	Watershed Selection and Delineation	Shapefile	EBMC_Watershed.shp	1/30/2015	Final	1/30/2015	May be further refined based on additional storm data received.
2.1	Watershed Selection and Delineation	Technical Memorandum	SSO 700 Integrated Watershed Action Plan Study Area Boundary Development	1/30/2015	Final	1/30/2015	Unofficial submittal; to be included with Data Inventory TM; comments received to be included with Data Inventory TM
2.2	Data Collection	Technical Memorandum	SSO 700 Watershed Data Request	8/26/2014	Updated as required	Latest version 12/12/2014	
2.3	Site Visits	Technical Memorandum	Watershed Site Conditions				
2.4	Inventory and Gap Analysis	Technical Memorandum Draft Outline	Inventory and Gap Analysis Draft Outline	2/10/2015	Comments Received	NA	Comments will be addressed in draft Tech Memo
2.4	Inventory and Gap Analysis	Technical Memorandum	Inventory and Gap Analysis	draft 3/9/2015	Awaiting Comments by 3/19		
2.5	<i>Water Quality Data Collection Program (OPTIONAL TASK)</i>	<i>Task Scope</i>	<i>Detailed scope of work to be submitted after completion of Task 2.4</i>				
2.6.1	Existing Watershed Water Quality Models Assessment	Technical Memorandum Draft Outline	Watershed Water Quality Models Gap Analysis and Update Assessment Draft Outline	2/10/2015	Comments Received	NA	Comments will be addressed in draft Tech Memo
2.6.1	Existing Watershed Water Quality Models Assessment	Technical Memorandum	Watershed Water Quality Models Gap Analysis and Update Assessment	draft 3/12/2015	Awaiting Comments by 3/19		
2.6.2	Watershed Water Quality Models Development	Task Scope and Level of Effort	Detailed scope of work and estimated level of effort				
2.7.1	Existing Hydraulic Model Assessment	Technical Memorandum Draft Outline	Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment Draft Outline	2/10/2015	Comments Received	NA	Comments will be addressed in draft Tech Memo
2.7.1	Existing Hydraulic Model Assessment	Technical Memorandum	Hydraulic Model Validation Period Selection	2/27/2015	Final	2/27/2015	Comments will be addressed in Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment TM. Approval to proceed with model validation received on 3/9/2015.
2.7.1	Existing Hydraulic Model Assessment	Technical Memorandum	Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment				
2.7.2	Hydraulic Model Development	Task Scope and Level of Effort	Detailed scope of work and estimated level of effort				
2.7.3	<i>Flow Monitoring Data Collection Program (OPTIONAL TASK)</i>	<i>Task Scope and Level of Effort</i>	<i>Detailed scope of work and level of effort - if required</i>				

Activity ID	Activity Name	2015				2016				2017				2018			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
498759 SSO 700 Watershed Integrated Watershed Action Plan		[Summary bar spanning all quarters]															
498759.1 Project Administration		[Summary bar spanning all quarters]															
498759.1.1 Project Management		[Actual work bar in Q1 2015]															
498759.1.2 Project Meetings		[Summary bar spanning all quarters]															
498759.1.2.0 Kickoff Meeting		[Actual work bar in Q1 2015]															
498759.1.2.1 Monthly Status Meetings		[Remaining work bars in Q1-Q4 2015]															
498759.1.2.2 Jurisdictional Meetings		[Remaining work bars in Q1-Q2 2015]															
498759.1.2.3 Stakeholder Steering Committee Meeting		[Actual work bar in Q1 2015]															
498759.1.2.4 Regulatory Meetings		[Remaining work bars in Q1-Q4 2015]															
498759.1.3 QA/QC		[Actual work bar in Q1 2015]															
498759.1.4 Risk Management		[Actual work bar in Q1 2015]															
498759.2 Watershed and Source Characterization		[Summary bar spanning all quarters]															
498759.2.1 Watershed Selection and Delineation		[Actual work bar in Q1 2015]															
498759.2.2 Data Collection		[Actual work bar in Q1 2015]															
498759.2.3 Site Visits		[Actual work bar in Q1 2015]															
498759.2.4 Inventory and Gap Analysis		[Actual work bar in Q1 2015]															
498759.2.5 Water Quality Data Collection Program		[Actual work bar in Q1 2015]															
498759.2.6 Watershed Water Quality Model Development		[Actual work bar in Q1 2015]															
498759.2.7 Watershed Hydraulic Model Development		[Actual work bar in Q1 2015]															
498759.3 Identify Pollution Sources and Evaluate System Resonse		[Actual work bar in Q4 2015]															
498759.4 Summary Report		[Actual work bar in Q4 2015]															
498759.5 Prepare Draft Integrated Watershed Action Plan		[Summary bar spanning all quarters]															
A4560	Cost Estimating	[Actual work bar in Q1 2016]															
A4550	Potential Projects Identification and Selection	[Actual work bar in Q1 2016]															
A4570	Final Project Suite Selection	[Actual work bar in Q2 2016]															
A4580	Finalize Plan and Seek BOCC Approval	[Actual work bar in Q3 2016]															
A5410	Submittal to Regulators	[Actual work bar in Q4 2016]															
498759.6 Regulatory Review and Approval		[Summary bar spanning all quarters]															

Activity ID	Activity Name	Physical % Complete	Remaining Duration	Start	Finish	Predecessors	Total Float	2015												2016			
								Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
498759	SSO 700 Watershed Integrated Watershed Action Plan		1215	09-Dec-14 A	26-Jun-18		0																
498759.1	Project Administration		363	09-Dec-14 A	01-Mar-16		847																
498759.1.1	Project Management		23	18-Dec-14 A	27-Mar-15		1187																
A1000	Develop and Submit Project Management Plan	100%	0	18-Dec-14 A	05-Mar-15 A	A1030, A1060, A1100																	
A1010	MSDGC/County Review of PMP	0%	12	05-Mar-15	16-Mar-15	A1000																	
A1020	Finish and Submit PMP	0%	11	17-Mar-15	27-Mar-15	A1010, A1050, A1080																	
498759.1.2	Project Meetings		350	09-Dec-14 A	01-Mar-16		847																
498759.1.2.0	Kickoff Meeting		0	09-Dec-14 A	05-Jan-15 A																		
A1100	Kickoff Meeting	100%	0	09-Dec-14 A	09-Dec-14 A																		
A1110	Prepare and Submit Meeting Summary	100%	0	18-Dec-14 A	24-Dec-14 A	A1100																	
A1120	MSDGC/County Review Meeting Summary	100%	0	25-Dec-14 A	31-Dec-14 A	A1110																	
A1130	Finish and Submit Meeting Summary	100%	0	01-Jan-15 A	05-Jan-15 A	A1120																	
498759.1.2.1	Monthly Status Meetings		334	19-Feb-15 A	15-Feb-16		862																
498759.1.2.1.2	Feb 2015		0	19-Feb-15 A	06-Mar-15 A																		
A4070	Meeting	100%	0	19-Feb-15 A	19-Feb-15 A																		
A4080	Prepare and Submit Meeting Summary	100%	0	20-Feb-15 A	24-Feb-15 A	A4070																	
A4090	MSDGC/County Review Meeting Summary	100%	0	24-Feb-15 A	06-Mar-15 A	A4080																	
A4100	Finish and Submit Meeting Summary	100%	0	06-Mar-15 A	06-Mar-15 A	A4090																	
498759.1.2.1.3	Mar 2015		20	19-Mar-15	07-Apr-15		1176																
A4110	Meeting	0%	1	19-Mar-15*	19-Mar-15		1176																
A4120	Prepare and Submit Meeting Summary	0%	7	20-Mar-15	26-Mar-15	A4110																	
A4130	MSDGC/County Review Meeting Summary	0%	7	27-Mar-15	02-Apr-15	A4120																	
A4140	Finish and Submit Meeting Summary	0%	5	03-Apr-15	07-Apr-15	A4130																	
498759.1.2.1.4	Apr 2015		20	22-Apr-15	11-May-15		1142																
A4150	Meeting - Date TBD	0%	1	22-Apr-15*	22-Apr-15		1142																
A4160	Prepare and Submit Meeting Summary	0%	7	23-Apr-15	29-Apr-15	A4150																	
A4170	MSDGC/County Review Meeting Summary	0%	7	30-Apr-15	06-May-15	A4160																	
A4180	Finish and Submit Meeting Summary	0%	5	07-May-15	11-May-15	A4170																	
498759.1.2.1.5	May 2015		20	27-May-15	15-Jun-15		1107																
A4190	Meeting - Date TBD	0%	1	27-May-15*	27-May-15		1107																
A4200	Prepare and Submit Meeting Summary	0%	7	28-May-15	03-Jun-15	A4190																	
A4210	MSDGC/County Review Meeting Summary	0%	7	04-Jun-15	10-Jun-15	A4200																	
A4220	Finish and Submit Meeting Summary	0%	5	11-Jun-15	15-Jun-15	A4210																	
498759.1.2.1.6	June 2015		20	24-Jun-15	13-Jul-15		1079																
A4230	Meeting - Date TBD	0%	1	24-Jun-15*	24-Jun-15		1079																
A4240	Prepare and Submit Meeting Summary	0%	7	25-Jun-15	01-Jul-15	A4230																	
A4250	MSDGC/County Review Meeting Summary	0%	7	02-Jul-15	08-Jul-15	A4240																	
A4260	Finish and Submit Meeting Summary	0%	5	09-Jul-15	13-Jul-15	A4250																	
498759.1.2.1.7	July 2015		20	22-Jul-15	10-Aug-15		1051																
A4270	Meeting - Date TBD	0%	1	22-Jul-15*	22-Jul-15		1051																
A4280	Prepare and Submit Meeting Summary	0%	7	23-Jul-15	29-Jul-15	A4270																	
A4290	MSDGC/County Review Meeting Summary	0%	7	30-Jul-15	05-Aug-15	A4280																	
A4300	Finish and Submit Meeting Summary	0%	5	06-Aug-15	10-Aug-15	A4290																	
498759.1.2.1.8	Aug 2015		20	26-Aug-15	14-Sep-15		1016																
A4310	Meeting - Date TBD	0%	1	26-Aug-15*	26-Aug-15		1016																
A4320	Prepare and Submit Meeting Summary	0%	7	27-Aug-15	02-Sep-15	A4310																	
A4330	MSDGC/County Review Meeting Summary	0%	7	03-Sep-15	09-Sep-15	A4320																	
A4340	Finish and Submit Meeting Summary	0%	5	10-Sep-15	14-Sep-15	A4330																	
498759.1.2.1.9	Sep 2015		20	23-Sep-15	12-Oct-15		988																
A4350	Meeting - Date TBD	0%	1	23-Sep-15*	23-Sep-15		988																
A4360	Prepare and Submit Meeting Summary	0%	7	24-Sep-15	30-Sep-15	A4350																	
A4370	MSDGC/County Review Meeting Summary	0%	7	01-Oct-15	07-Oct-15	A4360																	
A4380	Finish and Submit Meeting Summary	0%	5	08-Oct-15	12-Oct-15	A4370																	
498759.1.2.1.10	Oct 2015		20	28-Oct-15	16-Nov-15		953																
A4390	Meeting - Date TBD	0%	1	28-Oct-15*	28-Oct-15		953																
A4400	Prepare and Submit Meeting Summary	0%	7	29-Oct-15	04-Nov-15	A4390																	
A4410	MSDGC/County Review Meeting Summary	0%	7	05-Nov-15	11-Nov-15	A4400																	
A4420	Finish and Submit Meeting Summary	0%	5	12-Nov-15	16-Nov-15	A4410																	

█ Actual Work
 █ Critical Remaining Work
 Summary
█ Remaining Work
 ◆ Milestone
 Primary Baseline

