
SSO 700 Integrated Watershed Action Plan Progress Report No. 4 April 2015

PREPARED FOR: Metropolitan Sewer District of Greater Cincinnati
PREPARED BY: Frank Duran
DATE: May 8, 2015
PROJECT NUMBER: MSDGC: 11140010
CH2M: 498759

Purpose: The purpose of this report is to document the progress of the SSO 700 Integrated Watershed Action Plan (IWAP) from the **March 28, 2015** through **April 24, 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 fourth reporting period for the SSO 700 IWAP captures the execution of additional political jurisdiction meetings; the submission of the final Project Management Plan, QA/QC plan, and Risk Management Plan; the submittal of draft detailed scopes of work and levels of effort for the Water Quality Data Collection task and the Water Quality Model Development task; and the submittal of the draft *Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment Technical Memorandum*. 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, three issues have the potential to negatively affect project schedule or progress: (1) scheduling of meetings with political jurisdictions, (2) agreement on the method of calibration for the collection system model, and (3) determination of funding mechanism for Water Quality Data Collection Program and remaining IWAP Phase 1 tasks.

Section 1 - Work Progress

This section summarizes project progress by CH2M 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:

- Finalization of the Project Management Plan with responses to MSDGC and County review comments.
- Submission of the final Project Management Plan to MSDGC.
- Submission of March 2015 progress report.

Work planned for the upcoming reporting period:

- Submission of April 2015 progress report.

1.2 Project Meetings

Work completed during the reporting period:

- Political jurisdiction meeting was held with City of Sharonville on April 8th.
- Submission of final meeting summary for political jurisdiction meeting with City of Sharonville.
- Political jurisdiction meeting was held with City of Woodlawn on April 15th.

Work planned for the upcoming reporting period:

- Submission of final meeting summary for political jurisdiction meeting with Village of Woodlawn.
- April progress meeting will be held on April 27th.
- Submission of final meeting summary for April project progress meeting.
- Additional meetings with political jurisdictions will be held.

1.3 Quality Assurance and Quality Control

Work completed during the reporting period:

- Finalization of QA/QC plan with the Project Management Plan with responses to MSDGC and County review comments.
- Submission of the final QA/QC plan with the Project Management Plan to MSDGC.

Work planned for the upcoming reporting period:

- Update of the QA/QC plan as project conditions warrant.

1.4 Risk Management

Work completed during the reporting period:

- Finalization of the Risk Management Plan with the Project Management Plan with responses to MSDGC and County review comments.
- Submission of final Risk Management Plan with the Project Management Plan to MSDGC.

Work planned for the upcoming reporting period:

- Update of the Risk Management Plan as project conditions warrant.

1.5 Schedule

Work completed during the reporting period:

- Progress schedule was developed and submitted with the March 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

Task Complete.

2.2 Data Collection

Task is complete other than perhaps some remaining miscellaneous data collection efforts.

2.3 Site Visits

Work completed during the reporting period:

- Development of draft *Watershed Site Conditions Technical Memorandum*.

Work planned for the upcoming reporting period:

- Completion and submission of draft *Watershed Site Conditions Technical Memorandum* for review by MSDGC and County.

2.4 Inventory and Gap Analysis

Work completed during the reporting period:

- Progression of revisions to draft *Inventory and Gap Analysis Technical Memorandum* per comments received.

Work planned for the upcoming reporting period:

- Completion and submission of final *Inventory and Gap Analysis Technical Memorandum* once final data is received from political jurisdictions per the political jurisdiction meetings.

2.5 Water Quality Data Collection Program

Work completed during the reporting period:

- Held meeting on April 14th with MSDGC laboratory and sampling staff to determine potential support that these groups could provide for the IWAP Water Quality Data Collection Program.
- Development and submittal on April 17th of draft detailed scope of work and level of effort for Water Quality Data Collection Program to support the development of water quality model(s).

Work planned for the upcoming reporting period:

- Submission of final meeting summary for April 14th meeting with MSDGC laboratory and sampling staff.
- Presentation of draft detailed scope of work and level of effort for Water Quality Data Collection Program to support the development of water quality model(s) on April 27th.
- Receive authorization from County and MSDGC to proceed with the initial tasks of the Water Quality Data Collection Program
- Develop Quality Assurance Project Plan (QAPP), Sampling Plan, and Health and Safety Plan for the Water Quality Data Collection Program
- Perform initial dry and/or wet weather sampling event

2.6 Watershed Water Quality Models Update & Development

Work completed during the reporting period:

- Development and submittal on April 17th of draft detailed scope of work and level of effort for the Water Quality Model Development task to support the IWAP.

Work planned for the upcoming reporting period:

- Submission of final *Watershed Water Quality Models Gap Analysis and Update Assessment Technical Memorandum* upon receipt of comments from MSDGC and Hamilton County.

- Presentation of draft detailed scope of work and level of effort for Water Quality Model Development task on April 27th.
- Receive authorization from County and MSDGC to proceed with the Water Quality Model Development task.

2.7 Hydraulic Model Update & Development

Work completed during the reporting period:

- Completion and submittal on April 20th of the draft of the *Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment Technical Memorandum*.

Work planned for the upcoming reporting period:

- Submission of final *Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment Technical Memorandum* upon receipt of comments from MSDGC and County.
- Receive authorization to prepare detailed scope of work and level of effort to recalibrate the collection system hydraulic model.
- Development and submittal of draft detailed scope of work and level of effort for the collection system hydraulic model recalibration task to support the IWAP.
- Achieve agreement among the project team members on the method of model calibration for this project.

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. Political jurisdiction meetings are estimated to be completed by the end of May. 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 at this same time. 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

Three project issues 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
3. Determination of funding mechanism for Water Quality Data Collection Program and remaining IWAP Phase 1 tasks

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 and review of the *Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment Technical Memorandum*. However, agreement on an approach will need to be made quickly once validation results are reported to maintain the project schedule. Finally, due to the urgency to begin the Water Quality Data Collection Program in May, a final determination of the funding mechanism for the sampling program, as well as the remaining IWAP Phase 1 tasks must be determined by MSDGC and the County quickly to maintain 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 5/8/2015

| TASK NO. | TASK NAME | DELIVERABLE TYPE | DELIVERABLE NAME | ORIGINAL SUBMITTED DATE | STATUS | FINAL VERSION DATE | COMMENT | |
|---|---------------------------------------|------------------|------------------------------------|---|----------------|---|---------------------------|---|
| Task 1 - Project Administration | | | | | | | | |
| 1.1 | Project Management | Major Submittal | Schedule | Baseline Schedule | 1/15/2015 | Final | 2/2/2015 | |
| 1.1 | Project Management | Informational | 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 | Informational | Progress Report and Schedule | Progress Report No. 2, February 2015 | 3/18/2015 | Final | 3/18/2015 | |
| 1.1 | Project Management | Informational | Progress Report and Schedule | Progress Report No. 3, March 2015 | 4/8/2015 | Final | 4/8/2015 | |
| 1.1 | Project Management | Major Submittal | Plan | Project Management Plan, including Quality Control Document and Risk Register | 3/5/2015 | Final | 4/3/2015 | To be updated only as warranted after first draft is approved. |
| 1.2 | Project Meetings | Informational | Meeting Summary | Chartering Meeting Summary 12/17/2014 | 1/6/2015 | Final | 1/6/2015 | |
| 1.2 | Project Meetings | Informational | 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 | Minor Submittal | Charter | Project Charter | 2/19/2015 | Final | 4/3/2015 | |
| 1.2 | Project Meetings | Informational | Meeting Summary | Progress Meeting Summary 2/19/2015 | 2/24/2015 | Final | 2/24/2015 | |
| 1.2 | Project Meetings | Informational | Meeting Summary | Progress Meeting Summary 3/19/2015 | 3/30/2015 | Final | 3/30/2015 | |
| 1.2 | Project Meetings | Informational | Meeting Summary | Progress Meeting Summary 4/27/2015 | 5/6/2015 | Final | 5/6/2015 | |
| 1.2 | Jurisdictional Meetings | Informational | Meeting Summary | City of Reading Meeting Summary 3/18/2015 | 4/2/2015 | Final | 4/2/2015 | |
| 1.2 | Jurisdictional Meetings | Informational | Meeting Summary | City of Sharonville Meeting Summary 4/8/2015 | 4/21/2015 | Final | 4/21/2015 | |
| 1.2 | Jurisdictional Meetings | Informational | Meeting Summary | Village of Woodlawn Meeting Summary 4/15/2015 | 4/30/2015 | Final | 4/30/2015 | |
| 1.3 | Quality Assurance and Quality Control | Major Submittal | Plan | Quality Control Document (included as part of PMP) | 3/5/2015 | Final | 4/3/2015 | |
| 1.4 | Risk Management | Major Submittal | Plan | Risk Management Plan (Risk Register), (included as part of PMP) | 3/5/2015 | Final | 4/3/2015 | Risk register discussed at 3/19 progress meeting. |
| Task 2 - Watershed and Source Characterization | | | | | | | | |
| 2.1 | Watershed Selection and Delineation | Major Submittal | Shapefile | SSO700_IWAP_StudyAreaBoundary.shp | 1/30/2015 | Final | 1/30/2015 | |
| 2.1 | Watershed Selection and Delineation | Major Submittal | Shapefile | EBMC_Sewershed.shp | 1/30/2015 | Final | 1/30/2015 | |
| 2.1 | Watershed Selection and Delineation | Major Submittal | 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 | Informational | 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 | Major Submittal | Technical Memorandum | SSO 700 Watershed Data Request | 8/26/2014 | Update as required | Latest version 12/12/2014 | |
| 2.3 | Site Visits | | Technical Memorandum | Watershed Site Conditions | | | | |
| 2.4 | Inventory and Gap Analysis | Informational | 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 | Major Submittal | Technical Memorandum | Inventory and Gap Analysis | draft 3/9/2015 | Updating per comments received; awaiting completion of jurisdictional meetings. | | |
| 2.5 | Water Quality Data Collection Program | Major Submittal | Technical Memorandum | Water Quality Data Collection Program Detailed SOW/LOE | 4/17/2015 | Final Draft | | Received authorization on 4/27/15 to begin initial documentation required for the Water Quality Sampling Program based on this TM |
| 2.5 | Water Quality Data Collection Program | Informational | Meeting Summary | MSDGC Lab and Sampling Group Meeting Summary 4/14/2015 | 4/30/2015 | Final | 4/30/2015 | |
| 2.5 | Water Quality Data Collection Program | Major Submittal | Plan | Quality Assurance Project Plan (QAPP) | | | | |
| 2.5 | Water Quality Data Collection Program | Major Submittal | Plan | Sampling Plan | | | | |
| 2.5 | Water Quality Data Collection Program | Major Submittal | Plan | Health and Safety Plan | | | | |



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



Project Deliverable Log as of 5/8/2015

| TASK NO. | TASK NAME | DELIVERABLE TYPE | DELIVERABLE NAME | ORIGINAL SUBMITTED DATE | STATUS | FINAL VERSION DATE | COMMENT |
|----------|---|------------------|------------------------------------|---|-----------------|---------------------------|--|
| 2.6.1 | Existing Watershed Water Quality Models Assessment | Informational | 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 | Major Submittal | Technical Memorandum | Watershed Water Quality Models Gap Analysis and Update Assessment | draft 3/12/2015 | Awaiting Comments by 4/10 | |
| 2.6.1 | Existing Watershed Water Quality Models Assessment | Informational | Meeting Summary | Meeting Summary for Water Quality Framework Meeting 3/19/2015 | 3/30/2015 | Final | 4/6/2015 |
| 2.6.1 | Existing Watershed Water Quality Models Assessment | Informational | Meeting Summary | Meeting Summary for Water Quality Sampling Program and Model Development Meeting 4/27/2015 | 5/6/2015 | Final | 5/6/2015 |
| 2.6.2 | Watershed Water Quality Models Development | Major Submittal | Technical Memorandum | Water Quality Model Development Detailed SOW/LOE | 4/17/2015 | Final Draft | |
| 2.7.1 | Existing Hydraulic Model Assessment | Informational | Meeting Summary | Meeting Summary for Model Validation and Calibration Meeting 1/13/2015 | 1/20/2015 | Final | 1/20/2015 |
| 2.7.1 | Existing Hydraulic Model Assessment | Informational | 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 | Minor Submittal | 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 | Informational | Meeting Summary | Meeting Summary for Model Calibration Meeting 3/9/2015 | 3/16/2015 | Final | 3/16/2015 |
| 2.7.1 | Existing Hydraulic Model Assessment | Major Submittal | Technical Memorandum | Watershed Collection System Hydraulic Models Gap Analysis and Update Assessment | 4/20/2015 | Final Draft | |
| 2.7.2 | Hydraulic Model Development | | Task Scope and Level of Effort | Detailed scope of work and estimated level of effort | | | |
| 2.7.3 | Flow Monitoring Data Collection Program (OPTIONAL TASK) | | Task Scope and Level of Effort | Detailed scope of work and level of effort - if required | | | |

| Activity ID | Activity Name | Remaining Duration | Str | 2015 | | | | 2016 | | | | 2017 | | | | 2018 | | | |
|-------------------|---|--------------------|-----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | | | | Q4 | Q1 | Q2 | Q3 |
| 498759 | SSO 700 Watershed Integrated Watershed Action Plan | 1160 | 18A | | | | | | | | | | | | | | | | |
| 498759.2 | Watershed and Source Characterization | 220 | 1 | | | | | | | | | | | | | | | | |
| 498759.2.5 | Water Quality Data Collection Program | 175 | 1 | | | | | | | | | | | | | | | | |
| A2110 | MSDGC/County Authorize WQ data Collection Program | 10 | 1 | | | | | | | | | | | | | | | | |
| A2120 | Obtain WQ Data | 165 | 2 | | | | | | | | | | | | | | | | |
| 498759.2.6 | Watershed Water Quality Model Development | 140 | 1 | | | | | | | | | | | | | | | | |
| A2180 | Develop Updated WQ Model | 140 | 1 | | | | | | | | | | | | | | | | |
| 498759.3 | Identify Pollution Sources and Evaluate System Resonse | 60 | 0 | | | | | | | | | | | | | | | | |
| A3000 | Identify Pollution Sources and Evaluate System Response | 60 | 03 | | | | | | | | | | | | | | | | |
| 498759.5 | Prepare Draft Integrated Watershed Action Plan | 515 | 0 | | | | | | | | | | | | | | | | |
| A4550 | Potential Projects Identification and Selection | 300 | 0 | | | | | | | | | | | | | | | | |
| A4570 | Final Project Suite Selection | 120 | 2 | | | | | | | | | | | | | | | | |
| A4580 | Finalize Plan and Seek BOCC Approval | 90 | 2 | | | | | | | | | | | | | | | | |
| A5410 | Submittal to Regulators | 5 | 2 | | | | | | | | | | | | | | | | |
| 498759.6 | Regulatory Review and Approval | 365 | 3 | | | | | | | | | | | | | | | | |
| A5420 | Regulatory Review and Approval | 365 | 3 | | | | | | | | | | | | | | | | |

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

| 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 | | 1163 | 09-Dec-14 A | 29-Jun-18 | | 0 | | | | | | | | | | | | | | | | |
| 498759.1 | Project Administration | | 301 | 09-Dec-14 A | 01-Mar-16 | | 850 | | | | | | | | | | | | | | | | |
| 498759.1.1 | Project Management | | 0 | 18-Dec-14 A | 03-Apr-15 A | | | | | | | | | | | | | | | | | | |
| 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 | 100% | 0 | 05-Mar-15 A | 16-Mar-15 A | A1000 | | | | | | | | | | | | | | | | | |
| A1020 | Finish and Submit PMP | 100% | 0 | 17-Mar-15 A | 03-Apr-15 A | A1010, A1050, A1080 | | | | | | | | | | | | | | | | | |
| 498759.1.2 | Project Meetings | | 301 | 09-Dec-14 A | 01-Mar-16 | | 850 | | | | | | | | | | | | | | | | |
| 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 | | 286 | 19-Feb-15 A | 15-Feb-16 | | 865 | | | | | | | | | | | | | | | | |
| 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 | | 0 | 19-Mar-15 A | 07-Apr-15 A | | | | | | | | | | | | | | | | | | |
| A4110 | Meeting | 100% | 0 | 19-Mar-15 A | 19-Mar-15 A | | | | | | | | | | | | | | | | | | |
| A4120 | Prepare and Submit Meeting Summary | 100% | 0 | 20-Mar-15 A | 26-Mar-15 A | A4110 | | | | | | | | | | | | | | | | | |
| A4130 | MSDGC/County Review Meeting Summary | 100% | 0 | 27-Mar-15 A | 02-Apr-15 A | A4120 | | | | | | | | | | | | | | | | | |
| A4140 | Finish and Submit Meeting Summary | 100% | 0 | 03-Apr-15 A | 07-Apr-15 A | A4130 | | | | | | | | | | | | | | | | | |
| 498759.1.2.1.4 | Apr 2015 | | 12 | 27-Apr-15 A | 17-May-15 | | 1139 | | | | | | | | | | | | | | | | |
| A4150 | Meeting | 100% | 0 | 27-Apr-15 A | 27-Apr-15 A | | | | | | | | | | | | | | | | | | |
| A4160 | Prepare and Submit Meeting Summary | 100% | 0 | 28-Apr-15 A | 06-May-15 A | A4150 | | | | | | | | | | | | | | | | | |
| A4170 | MSDGC/County Review Meeting Summary | 0% | 7 | 06-May-15 | 12-May-15 | A4160 | 1139 | | | | | | | | | | | | | | | | |
| A4180 | Finish and Submit Meeting Summary | 0% | 5 | 13-May-15 | 17-May-15 | A4170 | 1139 | | | | | | | | | | | | | | | | |
| 498759.1.2.1.5 | May 2015 | | 20 | 27-May-15 | 15-Jun-15 | | 1110 | | | | | | | | | | | | | | | | |
| A4190 | Meeting - Date TBD | 0% | 1 | 27-May-15* | 27-May-15 | | 1110 | | | | | | | | | | | | | | | | |
| A4200 | Prepare and Submit Meeting Summary | 0% | 7 | 28-May-15 | 03-Jun-15 | A4190 | 1110 | | | | | | | | | | | | | | | | |
| A4210 | MSDGC/County Review Meeting Summary | 0% | 7 | 04-Jun-15 | 10-Jun-15 | A4200 | 1110 | | | | | | | | | | | | | | | | |
| A4220 | Finish and Submit Meeting Summary | 0% | 5 | 11-Jun-15 | 15-Jun-15 | A4210 | 1110 | | | | | | | | | | | | | | | | |
| 498759.1.2.1.6 | June 2015 | | 20 | 24-Jun-15 | 13-Jul-15 | | 1082 | | | | | | | | | | | | | | | | |
| A4230 | Meeting - Date TBD | 0% | 1 | 24-Jun-15* | 24-Jun-15 | | 1082 | | | | | | | | | | | | | | | | |
| A4240 | Prepare and Submit Meeting Summary | 0% | 7 | 25-Jun-15 | 01-Jul-15 | A4230 | 1082 | | | | | | | | | | | | | | | | |
| A4250 | MSDGC/County Review Meeting Summary | 0% | 7 | 02-Jul-15 | 08-Jul-15 | A4240 | 1082 | | | | | | | | | | | | | | | | |
| A4260 | Finish and Submit Meeting Summary | 0% | 5 | 09-Jul-15 | 13-Jul-15 | A4250 | 1082 | | | | | | | | | | | | | | | | |
| 498759.1.2.1.7 | July 2015 | | 20 | 22-Jul-15 | 10-Aug-15 | | 1054 | | | | | | | | | | | | | | | | |
| A4270 | Meeting - Date TBD | 0% | 1 | 22-Jul-15* | 22-Jul-15 | | 1054 | | | | | | | | | | | | | | | | |
| A4280 | Prepare and Submit Meeting Summary | 0% | 7 | 23-Jul-15 | 29-Jul-15 | A4270 | 1054 | | | | | | | | | | | | | | | | |
| A4290 | MSDGC/County Review Meeting Summary | 0% | 7 | 30-Jul-15 | 05-Aug-15 | A4280 | 1054 | | | | | | | | | | | | | | | | |
| A4300 | Finish and Submit Meeting Summary | 0% | 5 | 06-Aug-15 | 10-Aug-15 | A4290 | 1054 | | | | | | | | | | | | | | | | |
| 498759.1.2.1.8 | Aug 2015 | | 20 | 26-Aug-15 | 14-Sep-15 | | 1019 | | | | | | | | | | | | | | | | |
| A4310 | Meeting - Date TBD | 0% | 1 | 26-Aug-15* | 26-Aug-15 | | 1019 | | | | | | | | | | | | | | | | |
| A4320 | Prepare and Submit Meeting Summary | 0% | 7 | 27-Aug-15 | 02-Sep-15 | A4310 | 1019 | | | | | | | | | | | | | | | | |
| A4330 | MSDGC/County Review Meeting Summary | 0% | 7 | 03-Sep-15 | 09-Sep-15 | A4320 | 1019 | | | | | | | | | | | | | | | | |
| A4340 | Finish and Submit Meeting Summary | 0% | 5 | 10-Sep-15 | 14-Sep-15 | A4330 | 1019 | | | | | | | | | | | | | | | | |
| 498759.1.2.1.9 | Sep 2015 | | 20 | 23-Sep-15 | 12-Oct-15 | | 991 | | | | | | | | | | | | | | | | |
| A4350 | Meeting - Date TBD | 0% | 1 | 23-Sep-15* | 23-Sep-15 | | 991 | | | | | | | | | | | | | | | | |
| A4360 | Prepare and Submit Meeting Summary | 0% | 7 | 24-Sep-15 | 30-Sep-15 | A4350 | 991 | | | | | | | | | | | | | | | | |
| A4370 | MSDGC/County Review Meeting Summary | 0% | 7 | 01-Oct-15 | 07-Oct-15 | A4360 | 991 | | | | | | | | | | | | | | | | |
| A4380 | Finish and Submit Meeting Summary | 0% | 5 | 08-Oct-15 | 12-Oct-15 | A4370 | 991 | | | | | | | | | | | | | | | | |
| 498759.1.2.1.10 | Oct 2015 | | 20 | 28-Oct-15 | 16-Nov-15 | | 956 | | | | | | | | | | | | | | | | |
| A4390 | Meeting - Date TBD | 0% | 1 | 28-Oct-15* | 28-Oct-15 | | 956 | | | | | | | | | | | | | | | | |
| A4400 | Prepare and Submit Meeting Summary | 0% | 7 | 29-Oct-15 | 04-Nov-15 | A4390 | 956 | | | | | | | | | | | | | | | | |
| A4410 | MSDGC/County Review Meeting Summary | 0% | 7 | 05-Nov-15 | 11-Nov-15 | A4400 | 956 | | | | | | | | | | | | | | | | |
| A4420 | Finish and Submit Meeting Summary | 0% | 5 | 12-Nov-15 | 16-Nov-15 | A4410 | 956 | | | | | | | | | | | | | | | | |

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

TASK filter: All Activities
WBS-Phase1 Focused

| 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 | Mar | Apr | |
| 498759.1.4 Risk Management | | | | | | | | 0 18-Dec-14 A 03-Apr-15 A | | | | | | | | | | | | | | | | | | |
| A1060 | Develop and Submit Risk Management Plan | 100% | 0 | 18-Dec-14 A | 05-Mar-15 A | A1100 | | [Gantt bar: Nov-Dec 2015] | | | | | | | | | | | | | | | | | | |
| A1070 | MSDGC/County Review of RMP | 100% | 0 | 05-Mar-15 A | 26-Mar-15 A | A1060 | | [Gantt bar: Mar 2015] | | | | | | | | | | | | | | | | | | |
| A1080 | Finish and Submit RMP | 100% | 0 | 26-Mar-15 A | 03-Apr-15 A | A1070 | | [Gantt bar: Mar-Apr 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2 Watershed and Source Characterization | | | | | | | | 223 09-Dec-14 A 02-Dec-15 | | | | | | | | | | | | | | | | | | |
| 498759.2.1 Watershed Selection and Delineation | | | | | | | | 0 12-Jan-15 A 09-Mar-15 A | | | | | | | | | | | | | | | | | | |
| A2000 | Develop and Submit GIS File of Study Area Boundary | 100% | 0 | 12-Jan-15 A | 30-Jan-15 A | A2040 | | [Gantt bar: Jan 2015] | | | | | | | | | | | | | | | | | | |
| A2010 | MSDGC/County Review of Study Area Boundary | 100% | 0 | 30-Jan-15 A | 24-Feb-15 A | A2000 | | [Gantt bar: Jan-Feb 2015] | | | | | | | | | | | | | | | | | | |
| A2020 | Finish and Submit Study Area Boundary | 100% | 0 | 24-Feb-15 A | 09-Mar-15 A | A2010 | | [Gantt bar: Feb-Mar 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.2 Data Collection | | | | | | | | 0 09-Dec-14 A 27-Feb-15 A | | | | | | | | | | | | | | | | | | |
| A2030 | Develop and Submit Data Request Memo | 100% | 0 | 09-Dec-14 A | 12-Dec-14 A | | | [Gantt bar: Dec 2014] | | | | | | | | | | | | | | | | | | |
| A2040 | Receive Requested Data from MSDGC | 100% | 0 | 13-Dec-14 A | 26-Jan-15 A | A2030 | | [Gantt bar: Dec 2014 - Jan 2015] | | | | | | | | | | | | | | | | | | |
| A2050 | Develop SP Library of Received Data | 100% | 0 | 27-Jan-15 A | 27-Feb-15 A | A2040 | | [Gantt bar: Jan 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.3 Site Visits | | | | | | | | 37 11-Mar-15 A 30-May-15 | | | | | | | | | | | | | | | | | | |
| A2060 | Visit Watershed Area and Submit Technical Memo | 90% | 20 | 11-Mar-15 A | 13-May-15 | | 46 | [Gantt bar: Mar-May 2015] | | | | | | | | | | | | | | | | | | |
| A5310 | MSDGC/County Review of Watershed Conditions TM | 0% | 10 | 14-May-15 | 23-May-15 | A2060 | 46 | [Gantt bar: May 2015] | | | | | | | | | | | | | | | | | | |
| A5320 | Finish and Submit Watershed Conditions TM | 0% | 7 | 24-May-15 | 30-May-15 | A5310 | 46 | [Gantt bar: May 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.4 Inventory and Gap Analysis | | | | | | | | 22 18-Feb-15 A 13-Jun-15 | | | | | | | | | | | | | | | | | | |
| A2070 | Develop and Submit Data Inventory TM | 90% | 5 | 18-Feb-15 A | 27-May-15 | A2000, A2040, A4950 | 32 | [Gantt bar: Feb-May 2015] | | | | | | | | | | | | | | | | | | |
| A2080 | MSDGC/County Review of Data Inventory TM | 90% | 10 | 09-Mar-15 A | 06-Jun-15 | A2070 | 32 | [Gantt bar: Mar-Jun 2015] | | | | | | | | | | | | | | | | | | |
| A2090 | Finish and Submit Data Inventory TM | 0% | 7 | 07-Jun-15 | 13-Jun-15 | A2080 | 32 | [Gantt bar: Jun 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.5 Water Quality Data Collection Program | | | | | | | | 175 20-Mar-15 A 18-Oct-15 | | | | | | | | | | | | | | | | | | |
| A2100 | Develop and Submit WQ Data Collection Program Scope and LOE | 100% | 0 | 20-Mar-15 A | 17-Apr-15 A | A2130 | | [Gantt bar: Mar-Apr 2015] | | | | | | | | | | | | | | | | | | |
| A2110 | MSDGC/County Authorize WQ data Collection Program | 50% | 10 | 18-Apr-15 A | 06-May-15 | A2100 | -10 | [Gantt bar: Apr-May 2015] | | | | | | | | | | | | | | | | | | |
| A2120 | Obtain WQ Data | 10% | 165 | 27-Apr-15 A | 18-Oct-15 | A2110 | 0 | [Gantt bar: Apr-Oct 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.6 Watershed Water Quality Model Development | | | | | | | | 223 23-Jan-15 A 02-Dec-15 | | | | | | | | | | | | | | | | | | |
| A2125 | Receive Water Quality Data from MSDGC | 100% | 0 | 23-Jan-15 A | 06-Feb-15 A | | | [Gantt bar: Jan 2015] | | | | | | | | | | | | | | | | | | |
| A2130 | Develop and Submit Draft WQ Model Assessment TM | 100% | 0 | 07-Feb-15 A | 12-Mar-15 A | A2125, A2040 | | [Gantt bar: Jan-Feb 2015] | | | | | | | | | | | | | | | | | | |
| A2135 | Develop and Submit Final Draft WQ Model Assessment TM | 100% | 0 | 12-Mar-15 A | 12-Mar-15 A | A2130, A4590 | | [Gantt bar: Mar 2015] | | | | | | | | | | | | | | | | | | |
| A2160 | Submit WQ Model Update Plan and LOE | 100% | 0 | 20-Mar-15 A | 17-Apr-15 A | A2130 | | [Gantt bar: Mar-Apr 2015] | | | | | | | | | | | | | | | | | | |
| A2140 | MSDGC/County Review of WQ Model Assessment TM | 95% | 15 | 24-Apr-15 A | 08-May-15 | A2130, A2135 | 61 | [Gantt bar: Apr-May 2015] | | | | | | | | | | | | | | | | | | |
| A2150 | Finish and Submit WQ Model Assessment TM | 0% | 7 | 09-May-15 | 15-May-15 | A2140 | 61 | [Gantt bar: May 2015] | | | | | | | | | | | | | | | | | | |
| A2170 | MSDGC/County Approve WQ Model Plan | 0% | 22 | 24-Apr-15 | 15-May-15 | A2160 | 61 | [Gantt bar: Apr-May 2015] | | | | | | | | | | | | | | | | | | |
| A2180 | Develop Updated WQ Model | 0% | 140 | 16-Jul-15 | 02-Dec-15 | A2170, A2120, A2240, | 0 | [Gantt bar: Jul-Dec 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.7 Watershed Hydraulic Model Development | | | | | | | | 177 27-Jan-15 A 17-Oct-15 | | | | | | | | | | | | | | | | | | |
| 498759.2.7.1 Watershed Hydraulic Model Assessment | | | | | | | | 177 27-Jan-15 A 17-Oct-15 | | | | | | | | | | | | | | | | | | |
| 498759.2.7.1.1 Watershed Hydraulic Model Assessment | | | | | | | | 177 27-Jan-15 A 17-Oct-15 | | | | | | | | | | | | | | | | | | |
| A2195 | Develop and Submit Final Draft Hydraulic Model Assessment TM | 100% | 0 | 20-Apr-15 A | 20-Apr-15 A | A2190 | | [Gantt bar: Apr 2015] | | | | | | | | | | | | | | | | | | |
| A2190 | Develop and Submit Draft Hydraulic Model Assessment TM | 100% | 0 | 27-Jan-15 A | 20-Apr-15 A | A2040 | | [Gantt bar: Jan-Apr 2015] | | | | | | | | | | | | | | | | | | |
| A2200 | MSDGC/County Review of Hydraulic Model Assessment TM | 50% | 20 | 24-Apr-15 A | 13-May-15 | A2190, A2195 | 11 | [Gantt bar: Apr-May 2015] | | | | | | | | | | | | | | | | | | |
| A2220 | Submit Hydraulic Model Update Plan and LOE | 0% | 21 | 28-Apr-15 | 18-May-15 | A4150 | 3 | [Gantt bar: Apr-May 2015] | | | | | | | | | | | | | | | | | | |
| A2210 | Finish and Submit Hydraulic Model Assessment TM | 0% | 7 | 14-May-15 | 20-May-15 | A2200 | 11 | [Gantt bar: May 2015] | | | | | | | | | | | | | | | | | | |
| A2230 | MSDGC/County Approve Hydraulic Model Plan | 0% | 10 | 19-May-15 | 28-May-15 | A2220 | 3 | [Gantt bar: May 2015] | | | | | | | | | | | | | | | | | | |
| A2240 | Develop Updated Hydraulic Model | 0% | 140 | 31-May-15 | 17-Oct-15 | A2230, A2260, A2270, | 1 | [Gantt bar: May-Oct 2015] | | | | | | | | | | | | | | | | | | |
| 498759.2.7.3 Flow Monitoring Program | | | | | | | | 127 24-Apr-15 28-Aug-15 | | | | | | | | | | | | | | | | | | |
| A2250 | Submit Flow Monitoring Program Scope and LOE | 0% | 30 | 24-Apr-15 | 23-May-15 | A2220 | 1 | [Gantt bar: Apr-May 2015] | | | | | | | | | | | | | | | | | | |
| A2260 | MSDGC/County Authorize Flow Monitoring Program | 0% | 7 | 24-May-15 | 30-May-15 | A2250 | 1 | [Gantt bar: May 2015] | | | | | | | | | | | | | | | | | | |
| A2270 | Obtain Flow Monitoring Data | 0% | 90 | 31-May-15 | 28-Aug-15 | A2260 | 21 | [Gantt bar: May-Aug 2015] | | | | | | | | | | | | | | | | | | |
| 498759.3 Identify Pollution Sources and Evaluate System Resonse | | | | | | | | 60 03-Dec-15 31-Jan-16 | | | | | | | | | | | | | | | | | | |
| A3000 | Identify Pollution Sources and Evaluate System Response | 0% | 60 | 03-Dec-15 | 31-Jan-16 | A2240, A2180 | 0 | [Gantt bar: Dec 2015 - Jan 2016] | | | | | | | | | | | | | | | | | | |
| 498759.4 Summary Report | | | | | | | | 47 17-Jan-16 03-Mar-16 | | | | | | | | | | | | | | | | | | |
| A4000 | Develop and Submit Draft Summary Report | 0% | 30 | 17-Jan-16 | 15-Feb-16 | A3000 | 848 | [Gantt bar: Jan-Feb 2016] | | | | | | | | | | | | | | | | | | |
| A4010 | MSDGC/County Review of Summary Report | 0% | 10 | 16-Feb-16 | 25-Feb-16 | A4000 | 848 | [Gantt bar: Feb 2016] | | | | | | | | | | | | | | | | | | |
| A4020 | Finish and Submit Final Summary Report | 0% | 7 | 26-Feb-16 | 03-Mar-16 | A4010 | 848 | [Gantt bar: Feb-Mar 2016] | | | | | | | | | | | | | | | | | | |
| 498759.5 Prepare Draft Integrated Watershed Action Plan | | | | | | | | 515 01-Feb-16 29-Jun-17 | | | | | | | | | | | | | | | | | | |
| A4560 | Cost Estimating | 0% | 270 | 01-Feb-16 | 27-Oct-16 | A3000 | 30 | [Gantt bar: Feb-Oct 2016] | | | | | | | | | | | | | | | | | | |

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

TASK filter: All Activities
WBS-Phase1 Focused

