

US EPA ARCHIVE DOCUMENT

Final Wet Weather Improvement Program

This Final Wet Weather Improvement Program ("Final WWIP"), is being submitted to fulfill consent decree requirements pertaining to submission of the CSO Long Term Control Plan Update ("LTCPU") and the Capacity Assurance Program Plan ("CAPP"). As used in this Final WWIP, "Defendants" means, collectively, the Board of County Commissioners of Hamilton County, Ohio and the City of Cincinnati, Ohio, and "Regulators" means, collectively, the U.S. EPA, Ohio EPA, and the Ohio River Valley Water Sanitation Commission.

In June 2006, Defendants submitted a Wet Weather Improvement Program plan ("2006 WWIP") to the Regulators. Defendants intended for the WWIP to fulfill the CAPP and LTCPU requirements of the Interim Partial Consent Decree on Sanitary Sewer Overflows ("SSO Decree") and the Consent Decree on Combined Sewer Overflows, Wastewater Treatment Plants and Implementation of Capacity Assurance Program Plan for Sanitary Sewer Overflows ("CSO Decree") (both Decrees entered in June 2004). On September 16, 2008, Defendants proposed significant changes to the 2006 WWIP, in a document entitled 2008 Revised Wet Weather Improvement Program Detailed Conceptual Outline Report ("2008 Revised WWIP"). On November 25, 2008, the Regulators issued a letter to Defendants declining to approve the 2006 WWIP and 2008 Revised WWIP. On March 25, 2009, Defendants proposed additional changes to the 2006 WWIP and 2008 Revised WWIP in a letter to the Regulators with detailed attachments ("2009 Revised WWIP"). The Regulators have thereafter obtained comments from the Sierra Club and have contacted Defendants in order that a final WWIP be submitted that is consistent with the Regulators' November 25, 2008 letter. This Final WWIP (including its attachments) is proposed as the final WWIP, which Defendants believe will address the Regulators' comments and inquiries. This Final WWIP is based upon and supported by the monitoring, modeling, analytical, and public participation efforts that Defendants performed in accordance with the SSO and CSO Decrees, the information developed and submitted to the Regulators in the 2006 WWIP, 2008 Revised WWIP, and 2009 Revised WWIP, and other reports, studies, and information provided to the Regulators and Sierra Club after the entry of the SSO and CSO Decrees. This Final WWIP is proposed on the condition that the CSO and SSO Decrees are modified to conform to this Final WWIP regarding

certain project and schedule related issues.

A. WWIP Phase 1

1. Schedule of Work: Defendants shall implement the projects or project bundles ("projects") listed as Phase 1 in accordance with the schedule set forth in **Attachment 1A**, which schedule shall achieve substantial completion of construction of all Phase 1 projects by no later than December 31, 2018, except in accordance with Paragraph A.2 below ("Phase 1 End Date") and according to the performance and design criteria set forth in **Attachment 1B** (and **Attachment 5** for EHRT facilities) and the project milestones set forth in **Attachment 1A**. Phase 1 includes about \$1.145 billion (all dollar (\$) values in this Final WWIP and its attachments are in 2006 dollars unless otherwise noted) in work, including projects and allowances (including green infrastructure). Estimated costs are identified in **Attachment 1B**.

2. LMCPR: Phase 1 includes a Lower Mill Creek Partial Remedy ("Original LMCPR") which specifically consists of a short deep tunnel and an Enhanced High Rate Treatment without ballasted flocculation ("EHRT") facility, described in **Attachment 1C**, which is presently estimated to cost approximately \$244 million.

a. LMC Study/Revised Original LMCPR: Phase 1 will include a 3 year study/detailed design period to examine green measures and other measures to refine the Original LMCPR approach and cost estimates. Defendants may submit to the Regulators proposed changes to, or improvements on, the Original LMCPR remedy as a result of this study, provided the proposed revised remedy ("Revised Original LMCPR") provides equal or greater control of CSO annual volume as the Original LMCPR and is completed by the Phase 1 End Date. Defendants shall submit to the Regulators a LMCPR Study Report and any proposal for a Revised Original LMCPR by December 31, 2012.

b. EHRT Alternatives Analysis: Subject to the terms of this Paragraph A.2.b, Defendants shall, no later than June 30, 2014, submit to Ohio EPA an EHRT alternatives analysis ("EAA") of the Original LMCPR EHRT or the Revised Original LMCPR EHRT which (i) describes the cost, benefits in pollutant removal, technology utilized, design and performance criteria of the facility for which Defendants intend seek a Permit to Install ("PTI"), (ii) describes a range of alternatives for the EHRT portion of the facility and (iii) compares the EHRT in the Original LMCPR (or any EHRT in a Revised Original LMCPR) with alternative enhanced high rate treatment technologies for clarification by cost, benefits in pollutant removal, and cost-effectiveness. However, the Defendants' obligation to submit an EAA shall exist only if Defendants seek a PTI for an EHRT in the Original LMCPR or an EHRT in the Revised Original LMCPR. Further, while the EAA will be considered a part of Defendants' PTI application for a specific EHRT, the EAA (in and of itself) shall not cause or give rise to the issuance of any type of action or determination by the Director of Ohio EPA, except a proposed action, final action or determination on the submitted PTI application.

c. LMCPR Schedule Extensions: It is presently expected that the Original LMCPR will cost approximately \$244 million. If Defendants demonstrate that the projected costs of the Original LMCPR or Revised Original LMCPR will exceed \$300 million, then Defendants have the right to extend the schedule for completing the Original LMCPR or Revised Original LMCPR by up to 2 years. If Defendants demonstrate that the projected costs will exceed \$350 million, Defendants may also submit to the Regulators a proposed schedule extension beyond 2 years if the Defendants can demonstrate that the additional time is necessary and that the schedule for completion is as expeditious as practicable. Any extension allowed under this Paragraph A.2.c would not serve to extend any other aspect of Phase 1, and would not serve to extend the deadline for submission of the Phase 2 schedule described below, but see Paragraph B.4 below.

d. Substitute LMCPR: If by June 30, 2015, Defendants submit a timely and complete application for a PTI for the installation and operation of the Original LMCPR EHRT (or the

Original LMCPR as a whole, including the EHRT)(or an approved Revised Original LMCPR EHRT, or an approved Revised Original LMCPR as a whole, including an EHRT) and if, by December 31, 2015, a PTI is not granted by Ohio EPA, or is approved with conditions requiring ballasted flocculation technology (when no ballasted flocculation technology was proposed in the PTI application) or conditions that are inconsistent with the Design and Performance Criteria that are listed on **Attachment 5** (when no conditions inconsistent with those Design and Performance Criteria were proposed in the PTI application), then:

- (i) Defendants are not obligated to commence (or substantially complete) construction of the Original LMCPR (or the Revised Original LMCPR), and,
- (ii) Defendants shall submit to the Regulators for their review and approval a proposed, substitute LMCPR ("Substitute LMCPR"), which shall provide equal or greater control of CSO volumes on an annual basis as the Original LMCPR, unless the costs of the Substitute LMCPR, when added to the costs expended by Defendants on implementing the Original LMCPR (or the Revised Original LMCPR), exceed the greater of (a) \$244 million or, (b) the costs of implementing the Original LMCPR as determined at the time that Defendants submitted their application for a PTI. If the costs exceed the greater of those two amounts, then Defendants shall submit to the Regulators for their review and approval a proposed Substitute LMCPR which shall both provide the greatest control of CSO annual volume practicable, and cost no less than \$244 million and no more than the greater of the two amounts set forth above in the preceding sentence in items (a) and (b).

The Defendants' submission to the Regulators of a proposed Substitute LMCPR shall also include a schedule for implementing the Substitute LMCPR that shall be

as expeditious as practicable and may extend beyond the Phase 1 End Date. For the balance of this Final WWIP, the term "LMCPR" shall mean either the "Original LMCPR", the "Revised Original LMCPR", or the "Substitute LMCPR" as determined under this Paragraph A.2.

3. SSO 700: Phase 1 will also include a 3 year study to identify the SSO 700 Final Remedial Plan ("SSO 700 Remedial Plan"). This study will augment work Defendants have already performed for the SSO 700 Remedial Plan required by Section VI.C.3 of the SSO Consent Decree, and will also consider information arising from the evaluation of the effectiveness of the SSO 700 Interim Remedial Measures, the LMC Study being conducted pursuant to Paragraph 2.a., examinations of the potential use of green measures, RDI/I work upstream of SSO 700, and other factors. Defendants shall submit to the Regulators the SSO 700 Remedial Plan by December 31, 2012 (rather than December 31, 2009 as currently required by the SSO Consent Decree), which shall contain all of the information required in SSO Decree Section VI.C.3, except that the schedule for design and construction of the proposed remedial measures shall be submitted to the Regulators in accordance with, and shall be subject to, the Phase 2 schedule requirements specified in Paragraph B.1, below. The SSO 700 remedial measure (project # 10141180) set forth on **Attachment 2** is conditioned on, and may be changed as a result of, the Defendants' submittal of the SSO 700 Remedial Plan and the Regulators' approval of the SSO 700 Remedial Plan.

4. Werk & Westbourne Pilot EHRT Project: The Werk and Westbourne Pilot EHRT project (Project #10130740), is a pilot EHRT which will be constructed according to the design and performance criteria on **Attachment 5** to evaluate EHRT technology, and shall not require the EAA identified in Paragraph A.2.b, above.

B. WWIP Phase 2

1. Schedule of Work: By June 30, 2017, Defendants shall submit to the Regulators a proposed Phase 2 schedule for additional WWIP projects to be constructed

consistent with the priority order established in **Attachment 2**, and according to the design and performance criteria set forth on **Attachment 2** (and **Attachment 5** for EHRT facilities).

The Phase 2 schedule shall be as expeditious as practicable, based on the considerations set forth in Exhibit 4, Section II. F of the CSO Consent Decree (June 9, 2004) (including the Residential Indicator analysis through the method set forth below) (in Paragraph B.3), and other relevant factors, including but not limited to (a) the impact that the cost and length of schedule of Phase 2 will have on Defendants' financing in the tax exempt market, (b) local and national experience with the time, cost, economics and practicality of CSO/SSO program implementation, and (c) availability of "stimulus" money applicable to WWIP projects.

a. If Defendants fail to submit a Phase 2 schedule by August 31, 2017, in addition to applicable stipulated penalties, the Regulators may impose on Defendants a schedule for all or a part of Phase 2 that is as expeditious as practicable, which schedule is not subject to dispute resolution. Upon receipt of the Regulator schedule, Defendants shall implement the Regulator schedule until they have submitted a proposed Phase 2 schedule (which Regulators shall promptly review) in accordance with the requirements of this Paragraph B, and they have either (1) obtained the Regulators' approval of Defendants' proposed schedule, (2) Defendants' Phase 2 schedule has been determined in accordance with dispute resolution as set forth below in Paragraph C.4, or (3) the Regulators agree to adjust the Regulator schedule pending the approval process of the Defendants' Phase 2 schedule.

b. The proposed Phase 2 schedule required under Paragraph B.1 above shall include all remaining WWIP projects unless Defendants choose to submit to the Regulators a proposed Phase 2 schedule for only a subpart of the remaining WWIP projects ("Phase 2A"), with the remainder of the WWIP projects to be scheduled as part of an additional subpart ("Phase 2B") to be scheduled at a later specified date. If Defendants choose to submit a schedule for only a subpart of the remaining WWIP projects, then the Phase 2A and 2B schedules shall both be as expeditious as practicable, based on the considerations and factors described in Paragraph B.1 above. Defendants may request schedules for additional subparts beyond Phase 2B only if they can demonstrate that the additional schedule is necessary to

avoid severe financial hardship and that the schedule for completion of remedial measures in that subpart is as expeditious as practicable based on the considerations and factors described in Paragraph B.1 above.

c. If Defendants submit to the Regulators a proposed schedule for Phase 2 for only a subpart of the remaining WWIP projects, the schedule for Phase 2A shall include (i) planning and design work for a subset of Phase 2B projects in priority order to ensure that WWIP project work does not stop between Phase 2A and Phase 2B for lack of planned and designed projects; and, (ii) a schedule for completing a geotechnical investigation for the remaining Lower Mill Creek remedial project bundle as set forth in **Attachment 2** (Lower Mill Creek Final Remedy or "LMCFR") (provided, however, that such investigation shall not be required if a revised LMCFR has been approved such that some or all of such investigation is not needed).

2. Outer Boundary Cap: In no event shall Defendants be required to propose a schedule for any Phase 2 WWIP projects or work or implement, including continuation of, an approved schedule for Phase 2 WWIP projects or work where the cost of the projects or work for the specific schedule at issue would cause or contribute to the Residential Indicator ("RI") for the proposed or approved Phase 2 schedule at issue exceeding a cap of 2.8% (see Paragraph B.3 below on the RI analysis). This cap is solely an outer boundary, not-to-exceed, percentage established to assist in obtaining financing by providing some financial certainty, and shall not create an inference or suggestion as to what constitutes "as expeditious as practicable" as that term is used in Paragraph B.1 above. If this cap is exceeded, its effect (to extend the schedule(s) for implementing the WWIP) shall not relieve Defendants of the requirement ultimately to implement all WWIP measures under a schedule that is as expeditious as practicable.

3. RI Analysis: Defendants will perform RI analysis in accordance with U.S. EPA's Combined Sewer Overflows Guidance for Financial Capability Assessment and Schedule Development (March 1997) ("Guidance") (in the absence of an agreement by the

Defendants and Regulators to use an alternative method) using (1) the projected costs of the remaining WWIP projects for one analysis; and (2) the projected costs of the projects specified in Defendants' proposed Phase 2 schedule at issue if Defendants are only proposing a schedule for a subpart of the remaining WWIP projects for the second analysis. Defendants (i) shall use the information inputs set forth in **Attachment 3**; and (ii) may include projected future costs for "Asset Management" and for "Allowances," provided that Defendants demonstrate that those costs are likely to be incurred and that, for Allowances, the amount does not exceed an annual average of expenditures spent during the course of implementing the Phase 1 schedule, and, for Asset Management, the amount does not exceed \$51 million per year. Defendants may request that different cost figures be used for the MSD Sustainable Infrastructure (Green) Program of Allowances, and/or for Asset Management, for purposes of calculating the RI, provided that Defendants reasonably demonstrate the necessity of greater spending. The Regulators' decision to accept or reject Defendants' request for use of a different cost figure for Asset Management is not subject to dispute resolution.

4. **Phase 2 Schedule Modification:** If, between the date that Defendants submit a proposed Phase 2 schedule to the Regulators and the date that Defendants complete construction of the LMCPR, the costs of the LMCPR increase substantially beyond the costs used in calculating the RI in support of the proposed Phase 2 schedule such that there is a substantial effect on the Phase 2 schedule, Defendants may submit to the Regulators a proposal to modify the Phase 2 schedule to account for the cost increases, as long as the proposed modified schedule remains as expeditious as practicable.

5. **LMCFR:** No later than two years before any first Milestone Date that Defendants are required to meet for the LMCFR (as that project bundle is set forth in **Attachment 2**), Defendants may submit to the Regulators a proposal for a different project or projects for the LMCFR, provided the proposed remedy provides equal or greater control of CSO annual volumes as, and can be completed in a comparable timeframe to, the LMCFR set forth in **Attachment 2**. For purposes of scheduling, the LMCFR shall remain at the end

of the **Attachment 2** priority list.

6. **Supplemental Remedial Measures Plan**: Defendants will be required to obtain a PTI from Ohio EPA for each specific EHRT facility included in **Attachment 2**. If (a) the Regulators provide notice to Defendants of the facts and circumstances of a controlling decision or rule indicating that Defendants will not be able to obtain a PTI for a specific EHRT facility, or (b) Defendants have determined, on an informed, reasonable basis, that Defendants will not be able to obtain a PTI for a specific EHRT facility, then as expeditiously as practicable, but in no event later than three months before the applicable date for Commencement of Construction of that specific EHRT facility, Defendants shall submit to the Regulators for their review and approval a proposed Supplemental Remedial Measures Plan ("SRM Plan").

Each SRM Plan shall specify remedial measures and a schedule that is as expeditious as practicable to ensure that the CSOs that were to have been addressed by the specific EHRT facility will comply with the requirements of the Clean Water Act, U.S. EPA's CSO Policy, Chapter 6111 of the Ohio Revised Code and the rules promulgated thereunder, the Compact (as defined in the CSO Decree) and the pollution control standards promulgated thereunder, and Defendants' Current Permits (as defined in the CSO Decree). To the extent that Defendants' proposed SRM Plan for a specific EHRT facility does not use EHRT technologies for clarification, Defendants shall explain why they chose their proposed alternative rather than an alternative utilizing ballasted flocculation technologies. In any event, Defendants shall also explain why they believe that their proposed SRM Plan will ensure compliance with all applicable laws, including why they believe Defendants will likely be able to obtain any PTI(s) that will be required under Ohio law in order to implement their proposed SRM Plan.

C. **Concepts Applicable to All Phases of the WWIP**

1. **Bond Covenants**: The Regulators and Defendants do not presently expect or

anticipate that implementation of the WWIP will cause Defendants to violate their existing bond covenants. However, because of the expected significance of a violation of bond covenants, if facts or circumstances arise that suggest that implementation of the WWIP may result in Defendants violating their bond covenants, Defendants may submit to Regulators a request for a modification of the WWIP as necessary to avoid violating their bond covenants.

2. Adaptive Plan Alterations: Defendants may submit to the Regulators proposed significant changes to specific projects, to groups of projects, to watershed approaches, priorities, and other matters through the concepts of "adaptive management." Defendants should propose such requests for Adaptive Management review no more frequently than every 5 years. In Phase 1, the Parties anticipate Major/Adaptive Management review in about 2013 and also as part of the Phase 2 scheduling. This provision does not prohibit requests for non-major alterations to projects or project bundles. The Regulators retain discretion to approve in conformance with the terms of the Consent Decree and this Final WWIP appropriate changes requested by Defendants to Performance and Design Criteria. The Regulators' decisions to approve or disapprove any modifications under this Section are not subject to dispute resolution.

3. Green Projects: Defendants may identify proposed revisions to WWIP projects by adding or substituting "green infrastructure" for "grey infrastructure" where it is justified by business case evaluation in Defendants' sole discretion. At the end of the LMC Study Period (Paragraph A.3), Defendants may submit to Regulators such proposed modifications for review. At the time of submission of any Phase 2 schedule (Paragraph B.1), Defendants may submit to the Regulators such proposed modifications. Defendants will make reasonable best efforts to request any such green modifications or substitutions in one of these submissions, although requests may be made at other times as appropriate. The Regulators' decisions to approve or disapprove any WWIP modifications under this Section are not subject to dispute resolution.

4. Submittals and Dispute Resolution.

a. The submittals required or permitted under this WWIP shall be subject to review and approval by the Regulators in accordance with Section XXX of the CSO Decree. The Regulators may approve the submittal or decline to approve it and provide written comments. Within 60 days of receiving the Regulators' written comments (or within such other timeframe as may be agreed to by the Parties), Defendants shall either: (i) alter the submittal consistent with the Regulators' written comments, and submit the revised submittal to the Regulators for final approval; or (ii) except as provided in Paragraphs B.3, C.2, C.3, or otherwise in Section XXI of the CSO Consent Decree, submit the matter for dispute resolution under Section XXI of the CSO Decree. Upon receipt of the Regulators' final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution (as permissible), Defendants shall implement the submittal in accordance with its terms.

b. Except as provided in Paragraphs B.3, C.2, C.3, or otherwise in Section XXI of the CSO Consent Decree, any dispute that arises with respect to the meaning, application, implementation, interpretation, amendment or modification of this WWIP, or with respect to Defendants' compliance herewith (including the adequacy of the Defendants' performance of the remedial measures and adequacy of the submittals required by this WWIP) or any delay hereunder, the resolution of which is not expressly provided for in this WWIP, shall be subject to dispute resolution pursuant to Section XXI of the CSO Consent Decree.

5. Asset Management. The term "asset management" generally refers to a comprehensive and structured approach to the long-term management of assets as tools for the efficient and effective delivery of services; for purposes of this WWIP, the term "Asset Management" means those same capital expenditures by MSD that are not formally considered WWIP projects or Allowance expenditures. Asset Management budgets are submitted as part of the annual capital budget which is then subject to public review and evaluation prior to approval by the Board of County Commissioners. Annually, in one of the quarterly reports, Defendants shall provide an accounting and listing of the work for which

Asset Management capital funds have been spent during the preceding year as well as MSD's 3-year estimate of future Asset Management expenditures.

6. Allowances. In addition to the Long Term Control Plan and the Capacity Assurance Program Plan projects, the WWIP includes eight subject matter programs, referred to as "Allowances." The Allowance programs exist to address, reduce and/or eliminate overflows and improve water quality consistent with federal and state law. Allowance program activities complement the LTCP and CAPP projects. However, unlike fixed location, discrete projects, Allowances instead arise due to newly discovered circumstances (e.g., WIB, Sewer/Manhole Relining, RDI/I, Urgent Capacity), opportunities to directly improve water quality (e.g., HSTS), District-wide, regional, or large-scale circumstances (e.g., RDI/I, Green), or information/analysis needs (e.g., RDI/I, WWIP studies). Because Allowances are typically not planned or designed years in advance, their budgets will vary from year to year. The Phase 1 Allowance budget for this WWIP represents a reduction relative to the budgets and needs identified in MSD's 2006 and 2008 submissions to the Regulators. Projected Allowance expenditures for 2009 and 2010, with breakdowns by Allowance Program, including specific defined projects where they have been determined, are listed on **Attachment 4**. A budget for Allowances, including each of the eight programs, will be prepared as part of the MSD annual capital budget which is then submitted to the Board of County Commissioners, becomes subject to public review and evaluation, and then requires approval by the Board of County Commissioners. Annually, in one of the quarterly reports, Defendants shall provide an accounting and listing of the work for which Allowance monies have been spent during the preceding year as well as MSD's 3-year estimate of future expenditures. Listed below are names and descriptions of the Allowance programs.

a. Water-in-Basement Program (WIB):

The WIB program operates clean-up, claims, and prevention activities, customer education and communication, property acquisition, and other activities related to the administration and management of this program.

b. Sewer Relining (Trenchless Technology) Program:

This program conducts internal lining of sewers and external lining of aerial sewers as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limited itself to, spiral wound pipe, pipe bursting, directional drilling, carbon filament wrapping, and jack and boring. These projects are identified through investigations of the sewer lines and are prioritized based on a standardized condition assessment procedure.

c. Manhole Rehabilitation (Trenchless Technology) Program:

The manhole rehabilitation program provides a cost effective method of rehabilitating structurally deteriorated manholes. Like the Sewer Lining Trenchless Technology Program, manhole rehabilitation projects are identified through investigations and are prioritized based on a standardized condition assessment procedure.

d. Rainfall Derived Infiltration and Inflow (RDI/I) Program:

This program assists in the elimination of Sanitary Sewer Overflows. Projects for RDI/I are identified through investigations which may use intrusive methods. Remedial projects are funded through this program or either or both of the Sewer Relining and Manhole Rehabilitation Allowance Programs, depending on the choice of construction methods.

e. Home Sewage Treatment System (HSTS) Elimination Program:

This program conducts the design, property acquisition and construction of new sanitary sewers to connect properties in built up areas of the MSD service area to eliminate home sewage treatment systems (HSTS). These projects improve the water quality of WWIP watersheds by replacing failing or inadequate home systems. These projects are

identified and prioritized based on the public health risk. HSTS construction projects will undergo public review and evaluation as part of proposed legislation and approval by the Board of County Commissioners.

f. Urgent Capacity Response Program:

This program funds measures that restore sewer capacity in existing CSO communities by identifying urgent WWIP construction work that is needed to address urgent CSO community capacity needs, WIB issues, or unpermitted flows. These measures are either not identified as WWIP projects or would be moved up from existing WWIP schedules. All construction projects will undergo public review and evaluation as part of proposed legislation and approval by the Board of County Commissioners.

g. WWIP Progress Studies and Recreation Management:

This allowance funds ongoing evaluation of the progress of the WWIP and various measures to address wet weather issues in CSO areas. Evaluations involve systematic review of the wet weather effect within watersheds, the sensitivity of various remedial projects on the system hydraulic grade lines etc. Findings of these studies will provide clear and strategic direction to the watershed planning group. This allowance also funds recreation management notice, reporting and information needs.

h. MSD Sustainable Infrastructure (Green) Program:

This program will use Low Impact Development Best Management Practices (LID BMP), storm water offloading through stream separation, and promotion of sustainable best practices to remove storm water from sewers in both CSO and SSO areas. Program activities will initially include LID Demonstration Projects (to evaluate technologies and reduce storm water impacts to CSOs), Pilot Projects (to evaluate multiple methods in a set of multiple projects), Regional BMP Projects (larger sewershed projects expected to capture over 10 million gallons) and Large Scale Projects (long-term projects in major CSO sewersheds).

These projects will be evaluated and, in some cases, prioritized on volumetric reduction of storm water from the system, and unit cost per gallon of water removed from the system. MSD intends to conduct this process in accordance with "asset-centric" prioritization principles which MSD will be publishing soon and will be open for public review and evaluation. The larger, more expensive green projects will focus on projects capable of removing a minimum of 10 million gallons of storm water from the combined sewer system, at equal or lower cost than comparable "grey" infrastructure projects.

List of Attachments

- Attachment 1A:** Phase 1 project list and schedule
- Attachment 1B:** Phase 1 project list with detailed information
- Attachment 1C:** Original LM CPR description
- Attachment 2:** Phase 2 project list with detailed information (no schedule)
- Attachment 3:** Information inputs for RI analysis
- Attachment 4:** Allowance information
- Attachment 5:** EHRT Performance and Design Criteria information