

Wet Weather Team Stakeholder Group
Draft Understanding of Combined Sewer Overflow Control Strategies in
MSD's Integrated Overflow Abatement Plan
(Draft for Discussion at the April 3, 2008 Wet Weather Team Meeting)

This document aims to summarize the Wet Weather Team (WWT) stakeholder group's understanding of combined sewer overflow (CSO) control strategies, including the role of green and gray solutions, in MSD's Integrated Overflow Abatement Plan, based on the information presented by the technical team and the group's discussion at the WWT meeting on February 26, 2008.

WWT Understanding about High-Level CSO Control Strategies

The WWT stakeholder group understands that the technical team's plan for developing project alternatives for control of CSOs will be guided by the following high-level strategies.

- The goal of CSO control in MSD's Integrated Overflow Abatement Plan is compliance with the Clean Water Act and MSD's Wet Weather Consent Decree.
- CSO control options will include storage, treatment, source control (including green solutions), conveyance/transport, and sewer separation.
- The specific mix of control options for individual CSO locations will be driven by the benefit/cost analysis of how the project alternatives affect the WWT's community values and site-specific considerations.
- The technical team will use the benefit/cost tool to compare the CSO control projects and program elements that will be considered for inclusion in MSD's Integrated Overflow Abatement Plan.
- Project alternatives will be designed to be built around MSD's existing infrastructure (e.g., large diameter pipes and wastewater treatment plants) and will also look for synergistic benefits from sanitary sewer overflow elimination projects (e.g. the "Big Four" projects).
- Consistent with EPA's CSO control policy, the technical team will evaluate a wide range of levels of control, both greater and less than the "default" value of four overflows per year contained in EPA's CSO Policy.
 - The results of the benefit/cost analysis of project alternatives, which is driven by the WWT's community values, will determine the level of control recommended for any particular CSO.

WWT Understanding about the Role of Green CSO Control Solutions

The WWT stakeholder group understands that the role of green CSO control solutions in MSD's Integrated Overflow Abatement Plan includes the following components.

- Green solutions will be an integral part of CSO control in MSD's Integrated Overflow Abatement Plan.
 - In order to be successful, the green solutions will need to include:
 - Measurement and documentation of sustainable project effectiveness;
 - Partnerships between MSD and both public and private entities; and
 - Community education and participation.
 - Green solutions will include options such as green roofs, rain gardens, rain barrels, porous pavement, and bioretention, while gray solutions will include options such as storage, treatment, conveyance/transport, and sewer separation.

- Green solutions in MSD’s Integrated Overflow Abatement Plan will include both programmatic green solutions and site-specific green infrastructure projects for individual CSOs. Programmatic green solutions are solutions that reduce flow at multiple CSO sites (e.g., a rain barrel program) that are developed through partnerships with both public and private entities that MSD will initiate or join.
- Both programmatic green solutions and site-specific green infrastructure projects will be identified and analyzed on the front end of the development of CSO control options.
 - For Programmatic Green Solutions: The technical team will assess the flow reduction potential of the programmatic green solutions for each CSO basin. This reduction will be factored into the sizing of site-specific projects.
 - For Site-Specific Green Infrastructure Projects: The technical team will also assess each CSO basin to determine the potential for implementable site specific green solutions. If viable site or basin-specific green solutions exist, the technical team will estimate the flow reduction the green solutions could provide, and then develop “right-sized” gray solution(s) that provide any remaining needed flow management. Each green solution and integrated green/gray solution that the technical team develops will be compared to other gray infrastructure project alternatives using the benefit/cost tool.
- The specific green solutions will be implemented as soon as possible, to allow data to be gathered on the sustainable flow reduction benefits that occur. Prior to final design of the supporting gray solution, the actual flow reduction performance will be documented and compared against the estimated target. The final sizing of the gray solution will be based on actual documented performance of the green solutions previously implemented.
- Green infrastructure projects and the investment in green infrastructure programs will be evaluated and prioritized using the same processes and tools as gray solutions. It is expected that the outcome of this evaluation will be an optimal blend of both green and gray approaches to effective CSO management.