WATERSHED MANAGEMENT DIVISION

SANTA MONICA BAY WATERSHEDS

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Section Background

The Santa Monica Bay Watershed Section was created to develop and implement multipurpose projects to meet the Division's watershed management objectives including flood hazard mitigation, water quality improvements, water conservation, and aesthetic enhancements of County of Los Angeles' facilities.

This Section consists of two units. The South Santa Monica Bay includes the urban watersheds south of Topanga down through the Palos Verdes peninsula, including the Ballona Creek Watershed. The cities include: Los Angeles, Culver City, Beverly Hills, Inglewood, El Segundo, Manhattan Beach, Hermosa Beach, Redondo Beach, Torrance, and Rancho Palos Verdes. The urban watershed consists of two main regions: Ballona Creek and the south bay cities including Marina del Rey.

The North Santa Monica Bay consists of the Malibu Creek, Topanga Creek, and other rural subwatersheds. The North Santa Monica Bay Unit actively leads regional efforts relative to TMDLs implementation, including the organization of the North Santa Monica Bay Task Force kick-off, which is charged with the development and implementation of the Regional Watershed Implementation Plan described later in the North Santa Monica Bay projects section.

The North Santa Monica Bay unit also actively participates in many of the watershed-related groups, such as the Santa Monica Bay Restoration Commission, Onsite Wastewater Treatment System Task Force, the Malibu Creek Watershed Advisory Council, Malibu Creek Lagoon Working Group, Local Coastal Plan Technical Advisory Committee, Executive Ad Hoc Santa Monica Bay TMDL Committee, and the Topanga Creek Watershed Committee.

Mission

South Santa Monica Bay

To generate new ideas and projects to improve the quality of life in the Santa Monica Bay Watershed by providing responsive, efficient, and high quality public service. This will be done through watershed management incorporating flood protection, water conservation, water quality improvements, and other beneficial watershed improvements.

North Santa Monica Bay

To generate innovative ideas and regional solutions to improve the quality of life in the North Santa Monica Bay Watershed by leading collaborative efforts and combining resources with local agencies to provide responsive, efficient, and high quality public service through watershed management techniques of incorporating flood protection, water conservation, water quality improvements, and other beneficial watershed improvements.

Accomplishments

South Santa Monica Bay

The South Santa Monica Bay Unit worked on a variety of watershed improvement projects made possible through partnerships and grant funding. The following is a list of projects that are in various stages of planning study, concept development, or project implementation.

Propositions 12 and 13 Grant Projects that were awarded:

- Ballona Creek and Manhattan Beach Low Flow Diversions Projects
- Ballona Litter Monitoring Project
- Ballona Creek Watershed Management Plan
- Methodology for Prioritizing Structural Best Management Practices Study

General Projects and Studies:

- Ballona Creek Wetlands Walkway Project
- Marina del Rey/Ballona Creek Trash & Debris Study
- Lower Ballona Creek Restoration Study
- South Santa Monica Bay Dry-Weather Bacteria TMDL program
- South Santa Monica Bay TMDL Low-Flow Diversion Program.
- Santa Monica Bay Restoration Commission $3 million Water Quality Improvement Grant
- Marina del Rey Bacteria TMDL Implementation Program
- The Santa Monica Bay Restoration Joint Powers Authority
- Ballona Creek Earth Day 2003 and 2004

The Unit worked closely with stakeholders including: elected officials, Federal, State, and local agencies, environmental groups, and local businesses and residents to enhance the quality of life in the Malibu Creek, Topanga Creek, Ballona Creek, other Rural and Urban watersheds.

North Santa Monica Bay

The North Santa Monica Bay Unit worked on a variety of watershed improvement projects made possible through partnerships and grant funding. The following is a list of projects that are in various stages of planning study, concept development, or project implementation within the North Santa Monica Bay watersheds:

Grant projects that were awarded:

- National Oceanographic and Atmospheric Administration (NOAA) Grant
- North Santa Monica Bay Water Quality Improvement Grant

General Projects and Studies:

- Malibu Creek Watershed Management Area Plan (aka Plan Blue)
- Las Virgenes Creek Restoration Study
- North Santa Monica Bay White Paper

- North Santa Monica Bay Regional Watersheds Implementation Plan
- Santa Monica Bay Beaches Dry-Weather Bacteria TMDL Implementation Projects
- Santa Monica Bay Beaches Wet-Weather Bacteria TMDL Implementation Plan
- Malibu Creek Bacteria TMDL Implementation Plan
- Malibu Creek Earth Day 2003 and 2004

The Unit worked closely with elected officials, Federal, State, and local agencies, environmental groups, and local businesses and residents to enhance the quality of life in the Malibu Creek, Topanga Creek, and other rural watersheds.

Projects in the South Santa Monica Bay Watersheds

Marina del Rey Back Basins and Mother's Beach Bacteria TMDL

County of Los Angeles was named as the lead agency for the Marina del Rey Back Basins and Mother's Beach Bacteria TMDL. Public Works, with the County of Los Angeles Department of Beaches and Harbors, is taking the lead in coordinating compliance efforts. The TMDL became effective on March 22, 2004. A Jurisdictional Group was formed with City of Los Angeles, Culver City, CalTrans, and other stakeholders to comply with each TMDL requirement. Three main deliverables were required within 120 days from the TMDL effective date: a coordinated monitoring plan, small drain study, and a discharge report. All three items were submitted to the LARWQCB. The jurisdictional group hired a consultant to prepare the dry-and wet-weather implementation plans. The draft is due to the LARWQCB by March 30, 2005, and the final by July 30, 2005. The jurisdictional group intends to pursue an integrated approach.

Watershed Area Plans

Ballona Creek Watershed Management Plan:

Public Works partnered with the Santa Monica Bay Restoration Commission, the City of Los Angeles, and Ballona Creek Renaissance to develop a Ballona Creek Watershed Management Plan. The plan is funded by State Proposition 13 - Costa-Machado Water Act Grant. The objectives are to conduct a comprehensive assessment of the watershed's water quality conditions and to identify potential water quality and multiuse projects for future funding opportunities. Public Works will strategically select and prioritize cost-effective Best Management Practices (BMPs) for achieving a set of water quality improvement/ habitat restoration goals. A long-term, community-based watershed monitoring plan, identifying existing and future funding sources for plan implementation will be developed. The final Management Plan will be released in September 2004.

South Santa Monica Bay Beaches Bacteria TMDL

Dry Weather Bacteria TMDL

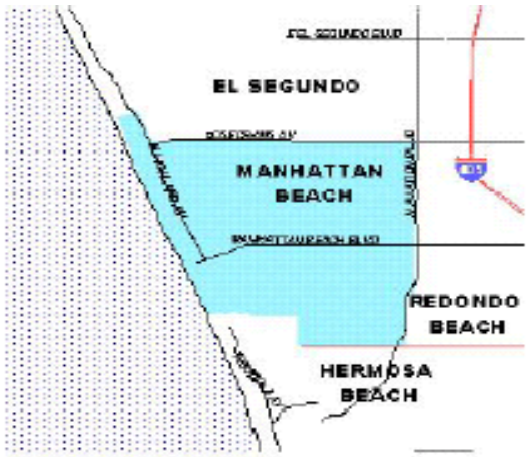
The South Santa Monica Bay Beaches Dry-Weather Bacteria TMDL became effective on July 15, 2003. The TMDL requires there be zero bacteriological exceedances during summer dry weather and less than three exceedances during winter dry weather by July 15, 2006. Public Works plans on diverting to the sewer system all County-owned storm drains originally identified in the TMDL as problematic, as well as those drains producing significant dry-weather runoff into the bay. A regular flow monitoring program was initiated for the drains outletting into the South Santa Monica Bay.

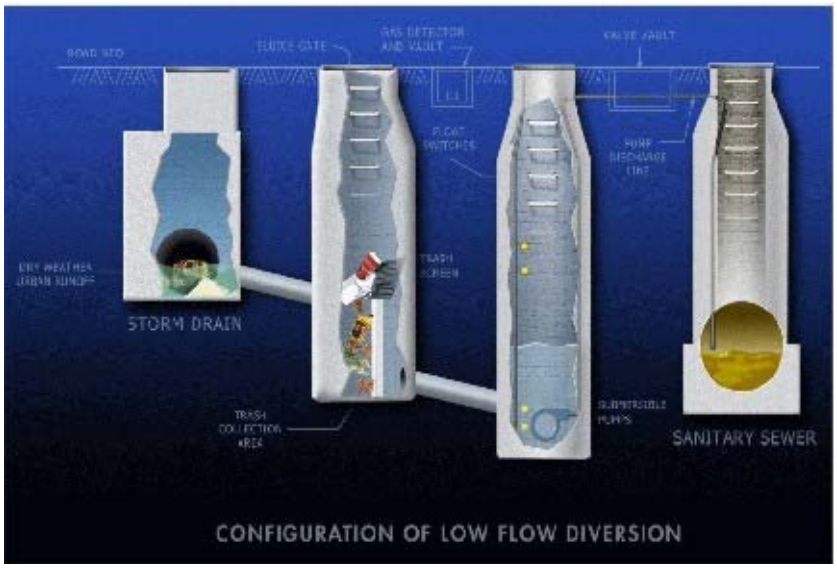
This program will ensure compliance with waste load allocations and ensure attainment of the beneficial uses.

Program Development Division currently has eleven low-flow diversion projects in the design phase. Construction of three low-flow diversions are scheduled for August 2004 and the other eight low-flow diversions are scheduled for August 2005.

Manhattan Beach Low-flow Diversion Project

The design, engineering, and construction of a dry-weather diversion at the Manhattan Beach Pump Plant to connect it to the Los Angeles County Sanitation system for treatment was completed in March 2004. The primary function of the diversion system is to divert dry-weather low -low laden with high bacteria. The system can also serve as secondary contaminant to capture trash and other pollutants. Water quality monitoring will occur for one year.



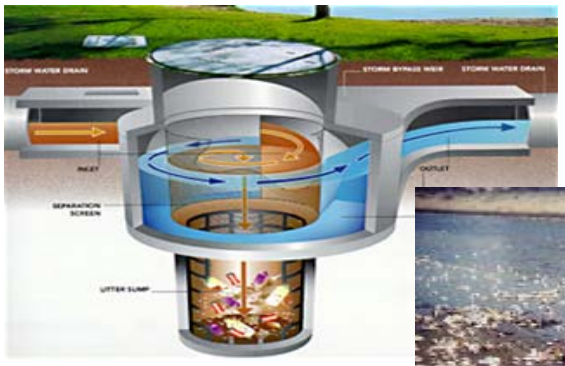


Wet Weather Bacteria TMDL

In South Santa Monica Bay, the County of Los Angeles and the Cities are actively participating in Jurisdictional Groups 2, 3, 5, 6, 7, and 8 set up by the LARWQCB. The Jurisdictional Groups are developing Implementation Plans to comply with the Wet-Weather Bacteria TMDL. Final Implementation Plans are due to the LARWQCB by July 15, 2005.

The City of Los Angeles is lead for groups 2, 3, and 8, Redondo Beach is lead for Groups 5 and 6, and Rancho Palos Verdes is lead for Group 7. Public Works actively participates in the groups providing technical assistance, reviewing work products, providing watershed expertise and record information, and selecting a consultant to prepare the Wet-Weather Implementation Plan.

Ballona Creek Litter Monitoring Project



Public Works plans to reduce trash entering Ballona Creek by 50 percent by installing catch basin trash reduction devices and Continuous Deflective Separator (CDS) units throughout the unincorporated County area of Baldwin Hills.

Reducing trash in Ballona Creek and the Santa Monica Bay will improve water quality and ensure attainment of beneficial uses for these water bodies. As more trash reduction BMPs are constructed, improved water quality will benefit everyone.

Projects in the North Santa Monica Bay Watersheds

Las Virgenes Creek Restoration Study and Project

Las Virgenes Creek begins in Ventura County on State-owned land where the creek is natural. Below the Ventura County line, the creek runs through mostly urban area in the City of Calabasas and Unincorporated County areas. At the Ventura-Los Angeles County line, the creek is primarily channelized with a concrete channel downstream to Agoura Road in the City of Calabasas. From Agoura Road to Lost Hills Road, the channel runs through urbanized areas as a natural creek. From Lost Hills Road to its confluence with Malibu Creek, Las Virgenes Creek is natural and runs through State-owned land.

The Unit managed the consultant contract for the Las Virgenes Restoration and Feasibility Study in 2002-03. The study recommended three alternatives for restoration from the Ventura-Los Angeles County line to approximately two miles downstream at Lost Hills Road. The three alternatives considered a more naturalized environment, while continuing to provide flood protection. The first alternative suggests complete restoration, which is defined as removal of all the concrete along the creek corridor. The two other alternatives consider more feasible options to complete restoration with improved water quality benefits, enhanced aesthetics, an improved wildlife corridor, and enhancement of vegetation and wildlife habitat. The study was completed in November 2003.

Out of the feasibility study, a PCR will follow. The PCR will recommend a project based on the preferred and most feasible alternative. The PCR will further study water quality aspects to include current and future TMDLs and the current plans for the Regional Watersheds Implementation Plan.

Regional Watersheds Implementation Plan

In 2002, Los Angeles County Supervisorial District 3 (SD-3) saw a need for regional solutions for meeting water quality regulatory requirements. SD-3 requested Public Works to prepare an informational White Paper for the area known as the North Santa Monica Bay Watershed.

Out of the White Paper came recommendations to establish the North Santa Monica Bay Watershed Task to develop the North Santa Monica Bay Regional Watersheds Implementation Plan (RWIP). The RWIP will identify and implement projects and funding mechanisms to comply regionally with water quality regulations, namely the MS4 NPDES Permit, TMDLs, and Assembly Bill 885. This is the first time the entire North Santa Monica Bay Watershed will work together towards water quality regulatory compliance in a regionally consistent and collaborative manner.

The Unit worked closely with SD-3, the cities of the watersheds, and the County of Ventura to establish an Executive Committee. The Unit also worked with interested stakeholders, including public agencies, regulators, environmental groups, homeowners, and special interest groups to participate in the RWIP preparation through subcommittees. For more details, please visit the website http://www.ladpw.org/NSMB.

North Santa Monica Water Quality Improvement Grant

The LACFCD with the City of Malibu and CalTrans have been granted funding under the Proposition 13 Non-Point Source Program for the North Santa Monica Bay Water Quality Improvement Project.

The objective of the North Santa Monica Bay Water Quality Improvement Project is to help meet bacteriological standards set forth in the Santa Monica Bay Wet-Weather Bacteria TMDL while also addressing future TMDLs, improve water quality at natural creeks and public beaches in North Santa Monica Bay, and limit the impact of non-point source discharges to the creeks and in turn the bay. The proposed project areas also encompass Areas of Special Biological Significance, from Latigo Canyon to the Los Angeles County border.

North Santa Monica Bay Watersheds are unique in that they contain both rural and urbanized areas. There are also a more limited number of municipal storm drains and a much larger number of private sanitary disposal systems proportionally in the North Santa Monica Bay Watersheds than in the rest of Santa Monica Bay. These are some of the reasons why North Santa Monica Bay Watersheds are largely impacted by non-point sources.

This grant funding of $954,000 will allow for the development of a Technical Advisory Committee, the creation of project prioritization criteria, and the implementation of at least one structural BMP protect to improve water quality, including monitoring of BMP efficiency and maintenance. All of this information will be extremely valuable in complying with the bacteria TMDLs and improving storm water quality.

Santa Monica Bay Dry-Weather Bacteria TMDL Implementation Plan

On July 15, 2003, the Santa Monica Bay Beaches Wet- and Dry-Weather Bacteria TMDLs regulations became effective. The Dry-Weather TMDL requires that by July 15, 2006, there be no exceedance of bacteriological standards at Santa Monica Bay beaches during summer dry weather.

In order to comply with this regulation, Public Works is committed to developing innovative treatment solutions in North Santa Monica Bay. Field investigations were conducted throughout the 2003 dry-weather season to identify potential pollutant sources.

Project concepts are being developed to research treatment of multiple pollutants for both summer and winter dry-weather flows, especially where the option of low-flow diversions to sewer lines are not available. We propose to develop BMPs to address not only bacteria but also other water quality impairments in North Santa Monica Bay like organics.

Once these concepts have been approved, they will be programmed for design and construction to meet the TMDL compliance deadline and improve water quality.

Santa Monica Bay Wet-Weather Bacteria TMDL Implementation Plan

In December 2002, the Regional Board approved the Wet-Weather Bacteria TMDL for Santa Monica Bay beaches. The TMDL regulations designate the County of Los Angeles as a responsible agency along with others that drain to the Santa Monica Bay. In the TMDL, Santa Monica Bay is divided into seven jurisdictional groups, which encompass each of the 27 coastal subwatersheds draining into Santa Monica Bay. Each of the seven jurisdictional groups has a designated lead agency (based on land area), plus a number of responsible agencies, which drain to that group of subwatersheds, as well.

In North Santa Monica Bay, County of Los Angeles has been designated lead responsible agency for Jurisdictional Group 1. The TMDL requires each of Santa Monica Bay's seven jurisdictional groups to submit an implementation plan within 20 months of the July 15, 2003 start date. Jurisdictional Groups 1 and 4 have embraced an "integrated, iterative, and adaptive" implementation approach for meeting the TMDL requirements. As part of this integrated approach, we propose to address not only bacteria, but also other water quality impairments in North Santa Monica Bay like metals, organics, and sediment. A TMDL implementation plan development is being coordinated between the County of Los Angeles, the City of Malibu, and CalTrans.

Malibu Creek and Lagoon Basins Bacteria TMDL Implementation Plan

On January 29, 2004, the LARWQCB issued a draft Malibu Creek and Lagoon Basins Bacteria TMDL. The draft TMDL requires that responsible agencies, including the County of Los Angeles, develop and submit an implementation plan. This implementation plan would outline how compliance with the TMDL would be cooperatively achieved within the implementation schedule. The implementation plan is required to be submitted to the LARWQCB one year after the TMDL effective date. The Malibu Creek Watershed Management Committee (WMC) consisting of many of the responsible agencies named in the TMDL has been meeting regularly under the requirements of the MS4 NPDES Permit. The Malibu Creek WMC has now agreed to expand their scope to address TMDL regulations and requested for the County of Los Angeles to chair this committee and lead the efforts to develop a collaborative implementation plan.

Lessons Learned

South Santa Monica Bay

The Unit has aggressively pursued grants to fund several proposed projects and studies that provide watershed enhancements. An example of lessons learned occurred when the City of Los Angeles and Public Works applied for the same grant to divert dry-weather low-flow to the nearby sewer system from the same storm drains. This duplicated effort resulted from a lack of communication with the City. In order to minimize or eliminate the possibility of overlapping efforts, the Unit will increase coordination efforts with all levels of government, as well wtih the local community groups. This has been a valuable lesson learned that can assist in better serving the watershed in the future.

North Santa Monica Bay

The North Santa Monica Bay Watersheds are unique when compared to the highly urbanized watersheds in South Santa Monica Bay. Traditional engineering solutions such as low-flow diversions and infiltration may not work as well in a highly rural area with private onsite wastewater treatment systems. Therefore, due to the unique challenges in the North Santa Monica Bay Watersheds, it would be more cost effective and efficient to address these issues as a region. This way staff can concentrate on developing tailor-made solutions specific to meeting the various challenges in the watersheds.

The Unit also actively led regional efforts relative to TMDLs implementation and actively participated in many of the watershed-related groups, such as the Santa Monica Bay Restoration Commission Onsite Wastewater Treatment System Task Force, the Malibu Creek Watershed Advisory Council, Malibu Creek Lagoon Working Group, Local Coastal Plan Technical Advisory Committee, Executive Ad-Hoc Santa Monica Bay TMDL Committee. In working with these groups, the Unit has been able to leverage against work that has already been completed in the region.

Future

South Santa Monica Bay

The Unit will continue to proactively address water quality regulations for the watershed. This includes taking the leadership role in organizing the responsible agencies and stakeholders to address future TMDLs where the County of Los Angeles is the lead agency. In addition to the existing responsibilities, the future role of the watershed managers would include project management duties beyond concept development in a collaborative effort with the stakeholders. The extended responsibility will ensure a seamless transition from the conceptual phase to the project delivery phase.

North Santa Monica Bay

Our long-term goal is to optimize the balance of available human and natural resources to provide flood protection, improve the quality of stormwater runoff, preserve existing open space for recreation and habitat, increase and enhance groundwater supply, and decrease the need for portable water supply by finding reuse options. We will develop, manage, and implement multipurpose projects that incorporate new technologies and methodologies for achieving the stakeholder's goals of maximizing the beneficial uses.

Currently, several watershed organizations meet regularly, but their efforts are not coordinated among all the watersheds or stakeholders in the North Santa Monica Bay. There is an underlying need among municipalities and stakeholders to collaborate in order to achieve regulatory compliance and watershed restoration with a regional and watershed based approach. Coordination among several entities is critical to minimize duplication of efforts and maximize the benefits obtained.

Good water quality is a critical component of a healthy watershed. Therefore, the Unit envisions the RWIP will set the stage for NPDES, TMDLs, and Assembly Bill 885 compliance and serve as a model for water quality compliance throughout the Los Angeles County. The RWIP will enable regulated agencies to comply with water quality regulation in the most responsible and cost-effective manner. The RWIP is to have a holistic view of regional water resources management while addressing multiple pollutants with implementation flexibility, through both non-structural and structural BMPs, as well as, multiuse projects.