

1. INTRODUCTION

This document presents the Watershed Urban Runoff Management Program (Watershed URMP) which describes the activities and requirements that the Copermittees within the Carlsbad Hydrologic Unit No. 904 (Carlsbad Watershed) are or will implement to ensure compliance with the Waste Discharge Requirements of the Regional Water Quality Control Board's Municipal Permit (Municipal Permit) NPDES No. CA S0108758, commonly referred to as the "Municipal Storm Water Permit." More importantly, this document describes the collaborative plans and efforts to reduce the impacts of urban activity on receiving water quality within the Carlsbad Watershed to the maximum extent practicable (MEP).

The Carlsbad WURMP includes material that describes the Carlsbad Copermittees' intended approach to meeting their watershed-related Municipal Permit obligations as specified under Sections J, K and L of the Municipal Permit. This material is submitted pursuant to the Municipal Permit, and is subject to Section R.2 of the Municipal Permit concerning enforceability. This document also includes material describing the Carlsbad Copermittee's plans to go beyond the requirements of the Municipal Permit. This additional material is provided for information only and is not submitted pursuant to the Municipal Permit. These two kinds of material are interwoven.

This Carlsbad Watershed URMP has been developed and authored by all eight of the Copermittees whose jurisdictions are within the Carlsbad Watershed including the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach and Vista and the County of San Diego. The Watershed URMP is based upon the Model Watershed URMP documents prepared by the various Copermittee/Project Clean Water working groups to ensure regional consistency, but has been tailored specifically to the Carlsbad Watershed. Each Copermittee prepared a specific component of the Watershed URMP and provided it to the others for review and comment. This has been accomplished through regular communications, meetings, and coordination among the jurisdictions. Following their Jurisdictional URMP submittals, Watershed Copermittees began meeting in March 2002, to begin this next step in Municipal Permit compliance, which is to address urban runoff in the shared watershed. These monthly meetings immediately established a cohesive and productive working relationship among the Copermittees in the watershed and are anticipated to serve the watershed throughout the life of Municipal Permit.

The Watershed URMP is divided into three sections: Introduction and Watershed Description; Assessment of Water Quality and Identification of Problems; and Plan of Action. Within these sections are ten chapters that describe the program. Following is a briefly summary of the contents of each chapter of the document.

Introduction and Watershed Description

Chapter 1.0 – This chapter provides a brief introduction to the Watershed URMP, the plan organization, regulatory background, the goals and objectives of the Watershed URMP, and regulatory requirements of the Municipal Permit.

Chapter 2.0 – This chapter provides a brief description of the Carlsbad Hydrologic Unit or Watershed including the topographical and drainage features, the cities encompassed by the watershed, the various water bodies throughout, and the types of ongoing or

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designated land uses within this watershed. The required watershed MS4 map and high priority land use inventories for each jurisdiction are also presented in this chapter.

Assessment of water Quality and Identification of Problems

Chapters 3.0 and 4.0 – These chapters discuss the key components of this watershed plan, which is the assessment of existing water quality data within the watershed, the identification, and prioritization of specific constituents to target for improvement.

Plan of Action

Chapter 5.0 – This chapter describes the short and long-term activities to be conducted by the Carlsbad Watershed Copermittees to comply with the Municipal Permit and facilitate efforts for improving water quality as identified in the preceding chapters.

Chapter 6.0 – This chapter describes the existing framework and methods used in making land use planning decisions within the individual jurisdictions. This chapter also discusses the dependence of successful Watershed URMP efforts on collaborative inter-jurisdictional land use planning and potential mechanisms for this coordinated approach.

Chapters 7.0 and 8.0 – These chapters describe the educational and public outreach efforts that are ongoing and required to ensure that all stakeholders are informed and encouraged to integrate their activities into a watershed approach for improving water quality.

Chapter 9.0 – This chapter summarizes the objectives of the Carlsbad Watershed URMP and defines how the achievement of these goals will be measured over the life of the Municipal Permit.

Chapter 10.0 – This chapter provides a summary and conclusions of the Watershed URMP.

It is the Carlsbad Watershed Copermittees' intent that this Watershed URMP be a "living document" which is periodically updated as the program evolves and additional needs are identified to:

- 1) ensure compliance with Municipal Permit;
- 2) address specific and targeted water quality issues within the Carlsbad Watershed;
- 3) improve collaboration among the Carlsbad Watershed Copermittees with respect to land use planning issues;
- 4) facilitate public involvement and ensure a consistent educational message; and,
- 5) assist the Copermittees' staffs in understanding and implementing the Watershed URMP.

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1.a. Background

The Federal Clean Water Act was amended in 1987 to address storm water (urban runoff). Many municipalities throughout the United States were directed to obtain National Pollutant Discharge Elimination System (NPDES) permits for discharges of urban runoff from their Municipal Separate Storm Sewer Systems (MS4s). In July 1990, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB) issued a municipal storm water permit, Order 90-42, to the City of San Diego as the Principal Permittee, the County of San Diego, and 18 cities within the County as Copermittees. The requirements of Order No. 90-42 were written in very broad terms. It did not require watershed-based programs but did require some regional cooperation and consistency among the Copermittees. Originally, Order 90-42 had an effective term of five years; however, the expiration date was extended another five years, pending the issuance of a new permit by the SDRWQCB.

On February 21, 2001, the SDRWQCB issued a new permit, Order 2001-01, to the County as Principal Permittee, the San Diego Unified Port District and 18 local cities within the County as Copermittees. This permit is a more comprehensive regional NPDES permit which includes permit compliance and urban runoff management both on jurisdictional and watershed bases.

The Municipal Permit was issued to the following jurisdictions:

City of Carlsbad	City of Imperial Beach	City of San Marcos
City of Chula Vista	City of La Mesa	City of Santee
City of Coronado	City of Lemon Grove	City of Solana Beach
City of Del Mar	City of National City	City of Vista
City of El Cajon	City of Oceanside	County of San Diego
City of Encinitas	City of Poway	Unified Port District
City of Escondido	City of San Diego	

The Municipal Permit assigns the ultimate responsibility for the pollutants and runoff generated as a result of urbanization to the Copermittees, since they own and operate the storm water conveyance systems through which the pollutants and increased flows are conveyed and ultimately discharged to receiving waters. Based on this responsibility, Municipal Permit requires the Copermittees to do the following:

- Establish and maintain adequate legal authority to control pollutant discharges into and from its municipal separate storm sewer systems;
- Develop and implement a Jurisdictional Urban Runoff Management Program, which will reduce discharges of pollutants and runoff flow during each major phase of urban development (i.e., planning, construction, and use or operation phases) within its jurisdiction;
- Collaborate with other Copermittees within its watershed(s) to develop and implement a Watershed Urban Runoff Management Program, which will identify and address the highest priority water quality issues/pollutants in their respective watershed(s);
- Collaborate with all other Copermittees to address common issues, promote consistency, and plan and coordinate urban runoff activities;

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- Develop and implement a Receiving Waters Monitoring Program, which shall focus on the collection of monitoring data to be used for the achievement of water quality policies and the protection of beneficial uses; and,
- Submit various reports describing the measures it is undertaking to meet the requirements of the Permit.

On February 21, 2002, the Copermittees were required to implement their Jurisdictional Urban Runoff Management Plans (Jurisdictional URMPs) for their individual jurisdictions. The Copermittees have authority over the three stages of development (planning, construction, and operation) within their respective jurisdictions and therefore have responsibility for water quality impacts resulting from their land use decisions.

However, since urban runoff generated within cities and the county does not recognize jurisdictional boundaries, but rather travels through many jurisdictions while flowing toward receiving waters, the Copermittees must also comply with these requirements on a watershed basis, collaborating with the other cities within the common watershed. Regional cooperation on a watershed basis can help to ensure that local government tools are deployed more effectively to address the most important issues affecting water quality in each watershed. Thus, the Municipal Permit requires the Copermittees located within each of the nine regional watersheds to develop and implement Watershed URMPs. The specific watershed requirements for the Watershed URMPs are described in Section J of the Municipal Permit.

1.b. Watershed URMP Purpose and Goals

In broad terms, the overall purpose of the Carlsbad Watershed URMP is to ensure compliance with the requirements of the Municipal Permit, and more importantly to address the water quality issues and any ongoing degradation within the Carlsbad Watershed. Fundamental to both establishing specific Watershed URMP objectives and measuring achievement, is the understanding that long-term solutions to water quality problems will be more effective if the issues are correctly and comprehensively identified and characterized. Based upon the proper identification and targeted characterization, true “watershed-approach” solutions can then in fact be applied. Consistent with the intent of the Municipal Permit, the use of a “watershed approach” considers the complex dynamics of the entire watershed as opposed to focusing on activities within specific jurisdictions. It must be recognized that this approach will be attempted and implemented where existing and potential new frameworks and structures permit this transition. However, jurisdictional constraints and variations in codes, regulations, and practices which are not related to water quality, but rather to political autonomy must also be recognized.

This section provides an overview of the goals of the Carlsbad Watershed URMP for which more specifics are discussed in the corresponding chapters of this document (Chapters 5.0 through 8.0). Chapter 9.0 of this document directly relates to these goals and objectives, as it identifies the mechanisms for assessing the effectiveness of attaining these watershed goals and objectives, and the time frames associated with the long-term strategy.

The goal of the Carlsbad Watershed URMP is to:

Positively Impact the Water Quality in the Receiving Waters of the Carlsbad Watershed

This goal will be pursued through the implementation of the following specific objectives:

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Objective #1: Develop and expand methods to assess and improve water quality in the Carlsbad Watershed (Hydrologic Unit).

Objective #2: Integrate watershed principles into land use planning among jurisdictions within the watershed.

Objective #3: Increase and enhance public understanding of watershed issues and pollution prevention through a watershed-based educational program.

Objective #4: Increase opportunities for public and stakeholder involvement within the watershed.

1.c. Regulatory Requirements

Section J of Municipal Permit identifies those Copermittees within each of the nine regional watersheds, as well as a Lead Copermittee for each watershed. The following Copermittees comprise the Carlsbad Watershed Copermittees (Figure 1-1):

- City of Carlsbad;
- City of Encinitas;
- City of Escondido;
- City of Oceanside;
- City of San Marcos;
- City of Solana Beach;
- City of Vista; and
- County of San Diego.

Section J also designates the default Lead Copermittee in the Watershed to be the City of Encinitas, who has agreed to fill this role for the Carlsbad Watershed.

In accordance with Section J of the Municipal Permit, these listed Copermittees must participate in the development and implementation of a Watershed URMP. This requires collaboration with all Copermittees within the common watersheds to identify and address the highest priority water quality issues/pollutants in that watershed. The requirements include:

- Mapping the watershed and identifying all receiving waters, all impaired receiving waters, land uses, highways, jurisdictional boundaries, and inventoried commercial, industrial, construction, municipal sites, and residential areas;
- Assessing the water quality of all receiving waters in the watershed based on existing data, and eventually performing watershed-based water quality monitoring;
- Identifying and prioritizing major water quality problems in the watershed caused or contributed to by discharges from MS4s, including potential sources of the problems;
- Developing and implementing a schedule of activities needed to address the highest priority water quality problems;
- Identifying which Copermittee(s) is (are) responsible for implementing each recommended watershed activity;

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- Developing and implementing a mechanism for public participation in watershed activities;
- Developing and implementing a watershed-based education program;
- Developing a mechanism to facilitate collaborative watershed-based land use planning with other Copermittees in the watershed; and
- Developing a long-term strategy for assessing the effectiveness of the Watershed URMP.
- Following the development and first year of implementation of the Watershed URMP, the Municipal Permit requires the submittal of a Watershed URMP Annual Report which documents the Copermittees' watershed activities during the preceding year. At a minimum the annual report must include:
 - A comprehensive description of all watershed activities conducted by the Copermittees for permit compliance;
 - Public participation mechanisms utilized during implementation;
 - Watershed-based land use planning mechanism description;
 - Effectiveness assessment of the Watershed URMP;
 - A summary of watershed related data not already included in the annual monitoring report; and
 - Identification of water quality improvements or degradation.