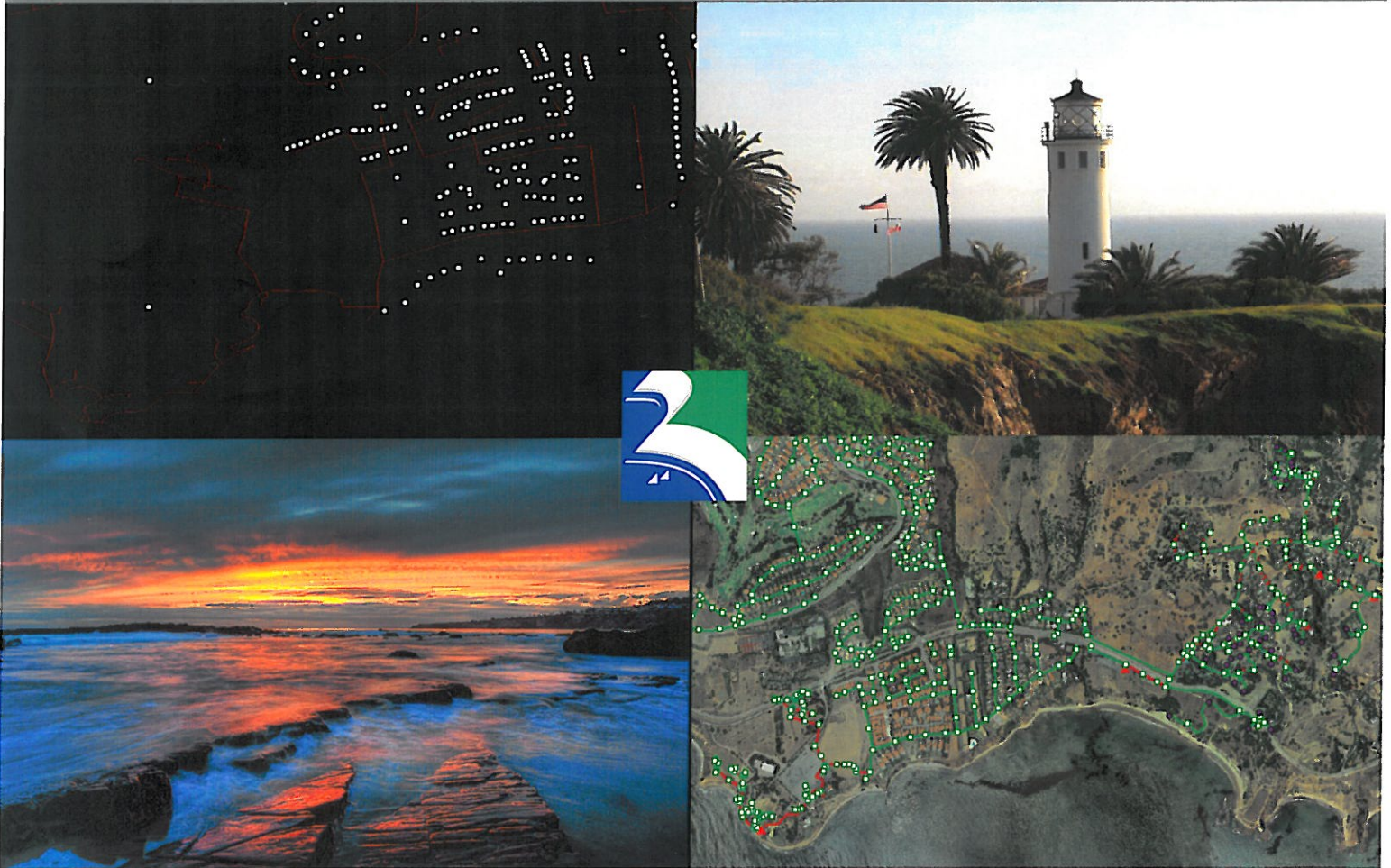


SEWER MASTER PLAN UPDATE FINAL REPORT



June 2009

PREPARED FOR

**The City of Rancho Palos Verdes
30940 Hawthorne Blvd.
Rancho Palos Verdes, Ca 90275**

PREPARED BY

**Dudek
605 Third Street
Encinitas, CA 92024**



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1.0 Introduction

1.1 Overview

The City of Rancho Palos Verdes owns the sewer collection system within the city limits.

The State Water Resources Control Board, through the 2006 Waste Discharge Requirements (WDRs) requires monitoring and reporting for sanitary sewer systems to eliminate sanitary sewer overflows (SSOs). One of the State's requirements are that owner/operators of sewer systems (one mile or longer) must develop and implement a Sewer System Management Plan (SSMP) specific to the sanitary sewer system. This update to the 2004 Sewer Master Plan will include physical changes that have been made to the system since 2004 and provide information needed to comply with the State's Waste Discharge Requirements in addition to identifying areas where improvements in the operations and maintenance of the system can be considered.

The collection system consists of privately owned laterals that extend from individual properties to the City owned collection system located in the street, right of way or easements. Private property owners with the exception of the Abalone Cove landslide area are responsible for the operations and maintenance of their individual service laterals.

Los Angeles County collects a fee from property owners in Rancho Palos Verdes for the maintenance and repair of the sewer system excluding the Abalone Cove area. Maintenance and repair activities that the Los Angeles County Department of Public Works, Consolidated Sewer Maintenance District (LACSMCD) perform, include video inspections, line cleaning, repairing structurally deficient segments of pipe, unplugging blockages and cleaning up after overflows. The City is responsible for the continuing operations of sewer collection system and to identify and correct pipeline capacity related problems found within the system.

The Abalone Cove Sewer System is currently owned, operated and maintained by the City of Rancho Palos Verdes. The city collects a fee from property owners through the Abalone Cove Sewer Fee. The City is responsible for all aspects of operating and maintaining the system. Maintenance activities for this system include line cleaning and video inspecting, lift station repair and maintenance, grinder pump and lateral line repair and maintenance. The scope of work for this study did not include an extensive evaluation of the new system. However a preliminary evaluation of the Abalone Cove Sewer System was performed. It was determined that the full operational costs associated with the system should be further evaluated.



1.2 Authorization and Scope

To improve the management of the collection system assets, Dudek was contracted to prepare a Sanitary Sewer Master Plan Update (SMPU 2009). The primary need for the update comes from the additional sewers that have been constructed and changes in the regulations governing sewer collection system that have occurred since the original 2004 Sewer Master Plan. The focus of the SMPU 2009 was to update the basis of the original master plan and to comply with the State's Waste Discharge Requirements (WDRs). Council authorized this project at their session held on August 19, 2008 (Appendix B)

The scope of work included the following items:

- Update the existing sewer GIS – adding Abalone Cover Sewer System and any new developments, making changes accordingly
- Measuring the current sewer system flow at key locations
- Update the hydraulic model from the GIS
- Recalibrate the model with current flow measurements
- Update the future land use to reflect any changes in General or Specific Plans
- Analyze the current and future capacity of the system
- Update Capacity related project descriptions and costs
- Define revised priority factors (proximity to storm drains, etc.)
- Prepare prioritized Collection System Capital Improvements Program
- Coordinate with City/County to determine the current physical condition assessments
- Recommend System Evaluation programs (CCTV, Smoke Testing and Physical Inspection) for SSMP compliance
- Revise the Sewer Master Plan to reflect new findings and to meet the requirements of the SSMP

The updated GIS and the hydraulic model represent tools that are available for improved management of the collection system asset. The analyses performed for this study also yield valuable insight into the overall physical condition and operations of the system. This report highlights the findings and makes specific recommendations related to improving and maintaining the collection system.

To further clarify, in 2006, the State and Regional Water Quality Board adopted the Waste Discharge Requirements that require the preparation of a Sewer System Management Plan (SSMP) by all owners/operators of wastewater collection systems. The City owns the wastewater collection system while the County Sewer Maintenance District (SMD) operates and maintains the collection system except for the Abalone Cove system. The SMD has prepared a general SSMP for its client cities that addresses some of the requirements of the



WDRs. The City is also responsible for preparing its own SSMP which includes elements not specifically addressed in the County's SSMP. This document addresses specific elements of the System Evaluation and Capacity Assurance Planning (SECAP) not included in the LACSMD SSMP. These elements will be included by reference in the City's SSMP being prepared by John Hunter and Associates, Inc.

The SMPU is organized by discussing the primary findings and recommendations in the Executive Summary, followed by the detailed descriptions of the collection system characteristics, capacity and system conditions, improvements required and the estimated costs for these facility improvements.

1.3 Study Area

The City of Rancho Palos Verdes City Limits served as the logical boundary of the Study Area. Certain homes located within the City of Rolling Hills Estates flow into the City of Rancho Palos Verdes. As a result these areas are included in the hydraulic model. The Rancho Palos Verdes City Limits / Study Area are shown in Figure I-1.



Figure 1-1 City of Rancho Palos Verdes Study Area

