



CHAPTER 1

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CHAPTER 1 INTRODUCTION

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

The County Sanitation Districts of Los Angeles County (Districts) are a confederation of special districts that serve the wastewater treatment and solid waste management needs of approximately five million people in Los Angeles County. The Districts' service area covers approximately 765 square miles and encompasses 78 cities as well as unincorporated territory within the county.

The Districts were formed under authority provided by the County Sanitation District Act of 1923 (Act). The Act authorized the formation of sanitation districts based on topographic boundaries, rather than on political boundaries, in order to provide efficient wastewater management. As defined in the Act, the Districts' role is to construct, operate, and maintain facilities to collect, treat, and dispose of wastewater and industrial wastes. A 1949 amendment to the Act authorized the Districts to provide solid waste management and disposal services, including refuse transfer and resource recovery.

The Districts are composed of 25 separate districts that work cooperatively under a Joint Administration Agreement (JAA) which provides for a single administrative staff, headquartered near Whittier. Each district pays its proportionate share of joint administration costs, and each has a separate board of directors that consists of the presiding officers of the governing bodies of local jurisdictions located within that district.

Collectively, the Districts own, operate, and maintain over 1,200 miles of main trunk sewers and 11 wastewater treatment plants with a total design capacity of 625.6 million gallons per day (mgd). The Districts currently convey and treat an average of 520 mgd of wastewater. Approximately 35 percent of all treated effluent is suitable for reuse.

The Districts also operate a solid waste management system that serves the needs of a large portion of Los Angeles County. This system includes four active sanitary landfills that accept approximately 18,000 tons per day of solid waste (about half of the solid waste produced in the county), two recycle centers, a transfer station, and three gas-to-energy facilities. In addition, the Districts maintain two closed sanitary landfills and are partners in two refuse-to-energy facilities. The service area and facilities of the Districts are shown in Figure ES-1 of the Executive Summary.

SANTA CLARITA VALLEY JOINT SEWERAGE SYSTEM

Districts Nos. 26 and 32 provide sewerage services to the Santa Clarita Valley, which is located in the northwestern portion of Los Angeles County. The two districts jointly operate a regional system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The governing board for both Districts consists of three Directors: the Mayor and a City Council member of the City of Santa Clarita, and the Chair of the Los Angeles County Board of Supervisors. The SCVJSS, an interconnected network of approximately 34 miles of trunk sewers, one pumping plant, and two water reclamation plants, serves the wastewater treatment and disposal needs of the valley.

District No. 26 was formed on January 2, 1961, to serve the unincorporated areas of Saugus, Canyon Country, and Sand Canyon. The Saugus Water Reclamation Plant (SWRP) began operating in May of the following year. District No. 32 was formed on March 23, 1965, to serve Valencia, Newhall, and Castaic (areas which are west of Saugus). The Valencia Water Reclamation Plant (VWRP) came on-line two years later.

During the two decades immediately following the formation of Districts Nos. 26 and 32, the SWRP and the VWRP operated independently, treating wastewater generated within their respective boundaries and discharging treated effluent to the Santa Clara River. As the population within the Santa Clarita Valley grew, the SWRP was expanded until there was no additional land available at the site for expansion. In order to continue treating all wastewater generated within its service area, District No. 26 entered into an interim Joint Powers Agreement (JPA) with District No. 32.

Under the interim JPA, the District No. 26 Interceptor Trunk Sewer was constructed in 1981. This sewer diverted flow from District No. 26 to the VWRP, which had land available to construct facilities to treat the additional wastewater. In addition, the solids processing facilities were centralized at the VWRP. Consequently, a force main was constructed between the two plants to transport waste activated sludge (WAS) from the SWRP to the VWRP.

The SCVJSS was officially formed in July 1984 when Districts Nos. 26 and 32 entered into a final JPA. In addition to receiving benefits of larger administrative and support staffs by being signatories to the JAA, Districts Nos. 26 and 32 also benefit under the JPA in joint financing, construction, operation, and maintenance of a regional wastewater system. It was agreed that District No. 26 would continue to be primarily served by the SWRP, and any flow exceeding the capacity of the SWRP would be conveyed to the VWRP for treatment.

Districts Nos. 26 and 32 Boundaries and Spheres of Influence

Figure 1-1 shows the current boundaries and spheres of influence for Districts Nos. 26 and 32. At the time of formation, District No. 26 encompassed an area of 3.8 square miles. Through annexations, it now provides sewerage service for 20.8 square miles.

District No. 32 originally encompassed 8.3 square miles. Since its formation, District No. 32 has annexed an additional 15.5 square miles, and it now serves a total area of 23.8 square miles. With the incorporation of the City of Santa Clarita in 1987, the majority of Districts Nos. 26 and 32 lie within the city boundaries.

As defined by Section 56076 of the Cortese/Knox Local Government Reorganization Act of 1985, a sphere of influence is *the probable boundaries and service area of a local agency*. A sphere of influence of a sanitation district is generally determined by topography and drainage.

A district generally cannot annex territory beyond its sphere of influence without first amending its sphere. The current spheres of influence for Districts Nos. 26 and 32 were adopted by the Local Agency Formation Commission (LAFCO) on June 8, 1983. However, LAFCO has since approved a number of minor boundary changes to the original spheres of influence coincident with new annexations.

PAST FACILITIES PLANNING EFFORTS AND ENVIRONMENTAL DOCUMENTATION

The most recent comprehensive wastewater facilities planning effort for the Santa Clarita Valley included the preparation of the *Upper Santa Clara River Basin Facilities Plan* (1980 Plan) and the associated Environmental Impact Report (EIR) which were approved and certified in 1980. In addition, the *Addendum to the Final 1980 EIR and Facilities Plan* (Addendum) was prepared in 1987.

The 1980 Plan was intended to provide for wastewater collection, treatment, and disposal services to the Santa Clarita Valley through the year 2000. The following is a list of objectives of 1980 Plan:

- Provide adequate treatment of wastewater and sludge to meet discharge requirements.
- Provide adequate capacity to treat projected wastewater loads.
- Plan consistently with other planning agencies.
- Plan for the funding of system improvements and expansion.

In order to maintain compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements at the SWRP, effluent filters, chlorination and dechlorination facilities, and an additional primary sedimentation tank were recommended in the 1980 Plan. Other modifications that were made to SCVJSS facilities based on recommendations from the 1980 Plan included the construction of the District No. 26 Interceptor Trunk Sewer, a waste activated sludge force main, and solids processing facilities at the VWRP.

In order to provide adequate capacity to treat projected wastewater loads and comply with the State Water Resources Control Board's (SWRCB's) funding requirements, Districts Nos. 26 and 32 were required to use the population projections of the Los Angeles County 208 Plan, which was prepared by the Southern California Association of Governments (SCAG).¹ The analysis projected a combined wastewater generation rate of 12.5 mgd for Districts Nos. 26 and 32 by the year 2000.

By 1987, however, flows were approaching the system capacity of 12.5 mgd. In response, the Districts prepared the Addendum, which was based on revised flow projections consistent with actual flows and the latest population projections adopted in 1984 by the Los Angeles County Department of Regional Planning. The Addendum recommended an

increase in the system capacity from 12.5 mgd to 19.1 mgd for the year 2000. Consequently, digesters previously used at the SWRP for solids processing were converted to flow equalization basins, allowing the SWRP to treat up to 6.5 mgd. In addition, the VWRP was expanded to accommodate 12.6 mgd. Thus, the existing wastewater treatment capacity of the SCVJSS is 19.1 mgd.

NEED FOR PROJECT

The SCVJSS currently treats an average annual flow of 15.0 mgd.² Flow projections through the year 2015 were determined by applying a 101 gallons per capita per day (gpcd) residential/commercial generation rate³ to the most recent SCAG population projections. According to these flow projections, the system's current 19.1 mgd capacity will be exceeded in 1999. Since Districts Nos. 26 and 32 were created for the purpose of managing wastewater within the SCVJSS service area, a plan is needed to accommodate this projected flow.

PLANNING OBJECTIVE

The objective of the *2015 Santa Clarita Valley Joint Sewerage System Facilities Plan (2015 Plan)* is to provide for the necessary wastewater conveyance, treatment, and disposal facilities to meet the needs of the projected service area for Districts Nos. 26 and 32 through the year 2015 in a cost-effective and environmentally sound manner.

2015 PLAN ORGANIZATION

Part I of this document consists of the 2015 Plan. Chapters 2 and 3 of the 2015 Plan provide the regional and regulatory setting for facilities planning

1. SCAG is the Metropolitan Planning Organization (MPO) for the region.

2. 1996 annual mean for both the SWRP and VWRP.

3. Derived from historical wastewater flows measured during eight consecutive fiscal years from 1987-88 to 1994-95.

in the Santa Clarita Valley. The treatment plants and conveyance system that form the SCVJSS are described in Chapter 4. Chapter 5 provides a description of the existing wastewater characteristics and generation rates in the valley as well as future wastewater treatment requirements, based on population projections. Chapter 6 identifies and analyzes several project alternatives. Finally, the alternative selected as best suited for meeting the 2015 Plan objective is presented as the recommended project in Chapter 7. (The EIR for the 2015 Plan and a description of the Public Participation Program are included in Parts II and III, respectively.)