

Supplement to the Helix Water District 2005 Urban Water Management Plan

Wastewater Collection Systems Within Helix Water District

The Helix Water District is solely a retail water supplier and does not collect, treat, or discharge wastewater within its service area. There are nine distinct agencies providing wastewater collection service within the District's service area. These agencies exist in the form of municipalities, sanitation districts, water districts providing wastewater service, a sewer maintenance district, and the County of San Diego serving unincorporated areas. In addition, the boundaries of these various wastewater agencies are not coincident with the boundaries of the District. These agencies are listed below and the attached figure illustrates their location and extent.

- Padre Dam Municipal Water District
- Lemon Grove Sanitation District
- Spring Valley Sanitation District
- Winter Gardens Sewer Maintenance District
- Lakeside Sanitation District
- City of El Cajon
- City of La Mesa
- Otay Water District
- County of San Diego (unincorporated areas)

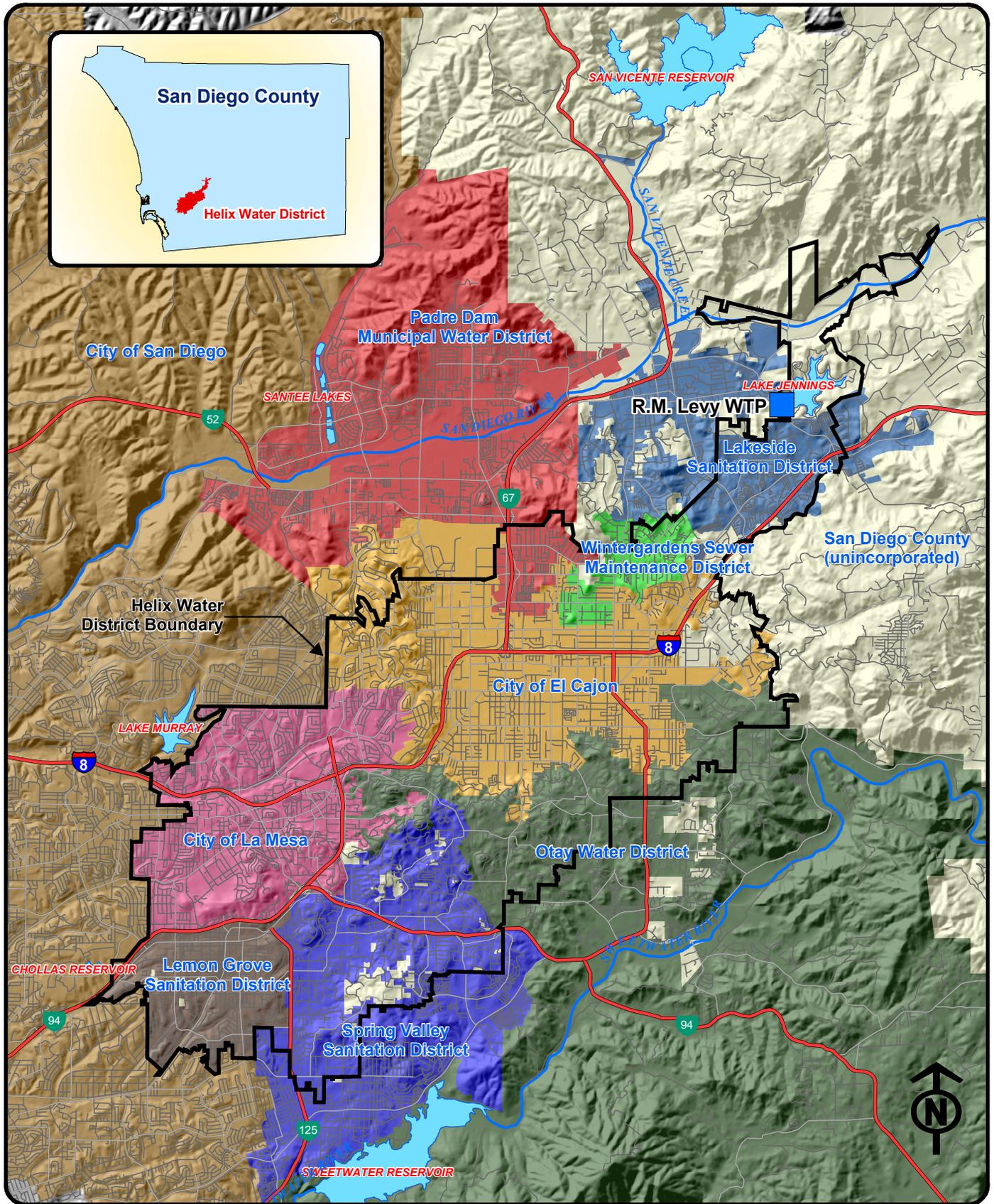
All wastewater collected by collection systems within the above agencies is ultimately conveyed the City of San Diego's Metropolitan Wastewater Department's (Metro) trunk sewer system which delivers the wastewater to the City's Point Loma Wastewater Treatment Plant (WWTP). Wastewater entering the Point Loma WWTP undergoes advanced primary treatment and is ultimately discharged to the Pacific Ocean through an ocean outfall. Portions of the District's service area that are sparsely developed are known to be served by septic systems and as a result, wastewater generated within those areas never enters the Metro system.

As illustrated on the attached figure, the District's service area is not coincident with all of the boundaries of the various wastewater agencies listed above. As shown, the City of La Mesa and Lemon Grove Sanitation District service areas are fully contained within the District and the City of El Cajon is almost fully contained within the District. Current average daily wastewater flows within these three agencies are 5 million gallons per day (MGD), 2 MGD, and 8 MGD, respectively. These three agencies comprise a majority of the wastewater flow generated and collected within the District's boundaries. In terms of water consumption, these three agencies comprise approximately 65 percent of the District's total water usage and by extension, it may be assumed that wastewater generation within these three agencies comprises a similar percentage of total wastewater flow within the District.

The remaining six wastewater agencies are bisected by District boundaries that are not delineated on the basis of wastewater drainage basins. As a result, it is not possible to quantify the volume of wastewater collected by these agencies explicitly within the District's service area.

It is noted that the District completed a water reclamation feasibility study in 1992, the results of which indicated that wastewater re-use within the District's service area through a dual distribution system is not feasible due to small and widely dispersed reclaimed water markets. In that study, the proposed source of wastewater was the Santee Water Recycling Facility (WRF) which is owned and operated by Padre Dam Municipal Water District. Influent wastewater to that facility is obtained by diverting flows away from Padre Dam's trunk sewer system before it continues on to the Metro system. Such wastewater diversions are derived primarily, if not exclusively, from wastewater generated outside the District's service area. The Santee WRF currently recycles wastewater at a rate of 2 MGD. The entire Padre Dam MWD service area generates approximately 5.2 MGD of wastewater flow which may be diverted to the water recycling plant in the event that it is expanded in capacity.

In its 2005 Urban Water Management Plan (UWMP), the District cited an on-going groundwater recharge feasibility study which also assumes the source of wastewater will be the Santee WRF. As presented in the UWMP and the groundwater recharge feasibility study, there are sufficient wastewater supplies and expandable treatment capacity available at the Santee WRF to support a water reclamation program by the District, should it be financially feasible compared to alternate water supplies.



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