



March 6, 2026

Sent via email to: sandiego@waterboards.ca.gov

San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Re: Bacteria TMDLs CEQA Scoping: 650426

Clean Water SoCal appreciates the opportunity to comment on the scoping elements for the Proposed Amendment to the Water Quality Control Plan for the San Diego Basin to Update Bacteria TMDLs in the San Diego Region.

Clean Water SoCal represents over 80 public water/wastewater agencies in Southern California. Clean Water SoCal members provide essential water supply, wastewater treatment and water disinfection for approximately 20 million people in San Diego, Orange, Los Angeles, Santa Barbara, Riverside, San Bernardino, and Ventura counties. Our members provide environmentally sound, cost-effective management of more than two billion gallons of wastewater each day and, in the process, convert wastewater into resources for beneficial uses such as recycled water and renewable energy.

During the February 17, 2026, CEQA scoping meeting, references were made to findings in the San Diego River Investigative Order (SDRIO). Clean Water SoCal wishes to emphasize that the public wastewater sector has significant concerns with the approaches used to quantify sewer exfiltration in the SDRIO.

The top concerns with exfiltration conclusion in the SDRIO are as follows:

- Using potable water as a surrogate for wastewater. We know that the solids, grease and biofilms clog filters, sieves, and orifices whereas potable water does not. To demonstrate this well-known characteristic a side-by-side test was performed in a wastewater lab. 500 ml of water and 500 ml of sewage were each poured through a separate .45-micron filter. The 500ml of water passed through the filter in 20 seconds. For the 500ml of sewage test, 70 ml passed through the filter in the first 30 minutes. After 30 minutes there was no visible flow. After 14.5 hours only 120 ml of sewage passed through the filter. The experiment is easily replicated and demonstrates how using potable water as a surrogate for sewage highly exaggerates the potential for exfiltration.



- Not accounting the diurnal flow patterns in the collection system. Exfiltration volume calculations were based on full pipe or close to full pipe flow conditions (1/3 to 1/2 depth to diameter ratio). Collection systems don't flow at full capacity all day. During low use periods in the day and especially at night flows are significantly less. Leakage rate calculations need to reflect the diurnal flow pattern, less flow equals less leakage potential.
- Losses of potable test water that are likely to occur in the test procedure itself. The water recovery system used vacuum trucks which are known to induce evaporation. Preliminary calculations performed by Clean Water SoCal technical staff indicate there is enough evaporation potential to account for all of the water loss observed during the tests.
- Not accounting for natural treatment/decay that occurs in soil. The San Diego Local Area Management Plan (LAMP) for protection of public health only requires five vertical feet separation between a septic system leach field and groundwater. If the MS4 receiving element is beyond five feet from the exfiltration source it is highly unlikely that any sewer pathogens/viruses will be transmitted to the MS4.
- Not investigating or confirming subsurface transport mechanisms from the collection system to the stormdrain (MS4) system. A simple investigation would include soil samples next to the sewer pipe testing for sewage indicators at the test sites where test water was not recovered. This type of soil sampling investigation was conducted by the City of San Diego at four locations within the SDRIO study area. The soil samples in the vicinity of the sewer were clean, no sewage indicators including HF 183.

The above concerns have been presented to the SCCWRP research team in-person and virtually. Clean Water SoCal also provided detailed descriptions of the above concerns and others in writing prior to publication of the SDRIO related manuscripts. A virtual presentation was also provided to San Diego Regional Water Quality Control Board staff by Clean Water SoCal.

On February 10, 2026, Clean Water SoCal representatives participated in a Stormwater Monitoring Council Exfiltration Workshop held at SCCWRP. Workshop participants included representatives from the stormwater quality sector, wastewater sector, regulators and academics. The outcome of the workshop will be further investigations to establish if exfiltration of sewage from collection system mainlines actually occurs and if it does occur does it enter MS4 systems or surface waters. Specific study plans to answer these questions are currently being developed.

Additionally, the first-of-its-kind nature of the prototype exfiltration measurement system utilized in the SDRIO needs to be considered. This is acknowledged in the SDRIO in section 8.4 Limitations of the Study. A highlighted excerpt from section 8.4 Limitations of the Study is provided below for reference.



8.4 Limitations of the study

While this project breaks new ground in many ways, there are also limitations on the extent to which actions may be decided. We itemize three of the largest below.

The first limitation is the assessment of exfiltration. While the data support that exfiltration could be amongst the largest sources of human fecal loading in the lower SDR, the measurements in this study are first-of-its-kind. Specifically, we measured volume loss in >80% of sewer pipes tested for exfiltration. However, this was conducted using a prototype measurement system. While we make the design, specifications, and standard operating procedures publicly available, confidence will only increase once additional researchers test this

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Sources of human fecal pollution in the lower SDR

technology in their collection systems. Similarly, we used a data-driven approach for calculating subsurface transfer of exfiltrated sewage into the storm drain system. A mechanistic study that tracks exfiltrated sewage to the stormwater system through groundwater or subsurface flow is critical to confirm the findings from this data-driven approach and better inform future management actions.

We respectfully request that the plan team hold off on making changes to the plan based on results from the SDRIO until those results can be confirmed and more widely accepted.

If there are any questions regarding these comments, please do not hesitate to contact me directly at (760) 415-4332 or sjepesen@cleanwatersocal.org

Sincerely,

Steve Jepsen, Executive Director – Clean Water SoCal

A handwritten signature in blue ink, appearing to read "Steve Jepsen", is written over a light blue horizontal line.