



June 20, 2018

Submitted via Email to SanDiego@waterboards.ca.gov

Mr. Roger Mitchell
San Diego Regional Water Quality Control Board
2375 Northside Dr., Ste. 100
San Diego, CA 92108-2700

Subject: Comment - Tentative Order No. R9-2018-0021

Dear Mr. Mitchell:

The California Association of Sanitation Agencies (CASA) and Southern California Alliance of POTWs (SCAP) appreciate the opportunity to comment on **Tentative Investigative Order No. R9-2018-0021**, *An Investigative Order Requiring the Submittal of Technical and Monitoring Reports to Quantify the Sources and Transport Pathways of Human Fecal Material to the San Diego River Watershed*.

For 60 years, CASA has been the leading voice for public wastewater agencies on regulatory, legislative and legal issues. CASA is an association of local agencies, engaged in advancing the recycling of wastewater into usable water, generation of renewable energy, and other valuable resources. Through these efforts CASA's members help create a clean and sustainable environment for Californians. SCAP represents and advocates for over 80 public agencies providing water and wastewater service for 19 million people in 7 counties of southern California. Both CASA and SCAP have member agencies listed in the Tentative Order and in the San Diego region.

CASA does not routinely comment on matters within individual regions, except in circumstances such as this, where the proposed regional action could have significant statewide implications. To the extent that the San Diego Regional Water Quality Control Board (Regional Board) actions related to this Tentative Investigative Order (Tentative Order) could affect how other regions approach issues pertaining to obligations of wastewater collection and treatment facilities to investigate or take actions related to quantifying sources and transport of Human Fecal Material (HFM) in a given watershed, all of CASA's members statewide have a significant interest the development and implementation of the Tentative Order. We are highly concerned about the scope and approach contained in the Tentative Order for the following reasons:

The Tentative Order Seems to be Addressing A Water Contact Recreational Issue Currently In Conformance with USEPA Guidance

To be valid under the Administrative Procedures Act, Regional Board regulations must be necessary and derived from the agency's authority. Currently, the San Diego Basin Plan has no water quality objective for HFM, only for total and fecal coliform, enterococci, and E. Coli. The Basin Plan incorporates a chart containing the USEPA Bacteriological Criteria for Water Contact Recreation, but no criteria for HFM, raising the question of authority for the Tentative Order.

In addition, the Tentative Order specifies that the Region's number of illnesses following ocean exposure (25 illnesses/1000 swimmers) is slightly greater than the number of illnesses of those not entering the water (18 illnesses/1000 swimmers). See Tentative Order at pg. 5, para. 11. The Tentative Order also

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states that, during wet weather, the illness rate inches up to 30 illnesses/1000 swimmers. All of these values are well below the 2012 USEPA Guidance for recreational beaches (32-36 illnesses/1000 swimmers). Therefore, the Regional Board has not demonstrated the proposed Tentative Order is necessary.

The Likelihood of Sewer System Exfiltration Being a Significant Contributor to Illness in the Watershed as a Result of Wet Weather Events is Exceptionally Low

The Tentative Order mandates agencies (including wastewater collection and treatment agencies) develop technical and monitoring reports to identify and quantify the sources and transport pathways of HFM to the San Diego River Watershed. The justification for requiring these activities is the 5 illness/1000 swimmer increase following ocean exposure after a rain/storm event, as described in the Surfer Health Study (SHS). However, attributing the entire illness rate (or even a significant portion thereof) to human derived pathogens as a result of sewer system exfiltration is not supported by evidence. A whole host of alternative sources are far more likely to be responsible for any increase in illness rates during wet weather events, including but not limited to nearby avian nesting areas, homeless encampments, and other wildlife activity. In addition, questions exist about the accuracy of human epidemiological studies on illness through surveys, such as the SHS.

Even if focused exclusively on HFM, it is highly unlikely that illnesses are caused by human pathogens present as a result of exfiltration from wastewater systems. Although it is possible that small amounts of wastewater exfiltration may occur in some areas, this process would primarily occur during dry weather when groundwater levels are low. Studies have shown that microbes in the soil consume much of the bacteria and viruses that may be present, and engineering texts have consistently demonstrated that few if any viruses exist even three feet below a leachfield trench. (Metcalf & Eddy, 3d Edition, pg. 1040, Table 14-7.)

During wet weather events, sewer systems primarily experience inflow and infiltration, with water entering the pipes, not water leaving or exfiltration. The odds that a storm drain or water body more than three feet away from an exfiltrating sewer pipe has virulent pathogen contributions as a result of a wet weather event are slim to none. SCAP is willing to provide technical data to demonstrate this removal as the Regional Board considers the Tentative Order.

Finally, some of the systems identified in the Investigative Order are located significant distances from the areas of concern. According to SCCRWP scientists, human markers for pathogens have a short life, and in the case of potential sewer exfiltration, pathogens would be contained in soil matrix and would take months, if not years, to reach surface water. These facts weigh against exfiltration being a primary or even a significant contributor to the slight increase in the number of illnesses by recreational beneficial users as described in the Tentative Order.

The Scope of Investigation Contemplated Under the Tentative Order is Unreasonable and Unnecessary in the Absence of Illnesses Above Guidance Criteria or a Demonstrated Nexus to Exfiltration

Given the absence of illnesses in amounts exceeding the USEPA criteria of 32-36 illnesses/1000 swimmers, and the absence of a nexus between the slight increase of illness rates following ocean exposure after a rain/storm event and alleged wastewater exfiltration, no demonstrated reasonable relationship exists between the burden (including costs) of performing many of the investigation and monitoring activities required under the Tentative Order and the potential value of the information gathered.

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Even if illness rates identified in the Surfer Health Study (SHS) could be directly tied to HFM, which is not demonstrated in the Tentative Order or in the SHS, these illness rates are within acceptable established criteria. As a result, the limited impacts to beneficial uses fail to justify the scope of investigation contemplated by this Tentative Order. In fact, SCCWRP's own cost-benefit analysis demonstrates that the costs of the investigations contemplated under the Tentative Order outweigh any potential benefits.

The Tentative Order Requires Limited Purpose Agencies to Investigate and Potentially Address HFM Sources Outside of Their Control

Even if the entities listed in the Tentative Order have some control over sources of HFM, such as homeless encampments, the proper mechanism to minimize the effects of human bacteria from homeless individuals is certainly not through a Regional Water Quality Control Board order targeting sewer collection systems. Homelessness is a much larger societal issue that goes far beyond agencies responsible for managing and maintaining sanitary sewer and storm drain systems. The nexus is simply insufficient to justify the scope of this investigative order as drafted.

Moreover, the burden placed on the dischargers identified in the Tentative Order should be proportional to their contribution to the problem. As specified in Water Code sections 13267(b) and 13225(c), the burden of complying with the Tentative Order, including cost, must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Collectively, the monitoring and reporting actions outline in the Tentative Order would cost the identified agencies millions of dollars, an amount that is clearly unreasonable without any HFM objectives, illnesses exceeding USEPA criteria, or a direct nexus to wastewater exfiltration inputs. The quantities of pathogens found at the beach are reasonably expected to be comparatively low compared to other likely sources of HFM, including homeless encampments and possible direct inputs from swimmers themselves or boaters.

Additionally, the Tentative Order directs public agencies to investigate private laterals as source of human bacteria in the watershed. In most, if not all cases, sewer laterals are privately owned and outside of the control of the local public agency.

The Tentative Investigative Order is Premature

The proposed Tentative Order is premature until the Regional Board and collaborating agencies have developed the necessary statistically viable methodologies and proved technologies to accurately assess the HFM loading from the different sources of human bacteria. Methods for analyzing and sampling to determine exfiltration rates and loading contributions have not yet been developed, and no verified and broadly accepted approach is yet available. Research to quantify volumetric losses from sanitary sewer collection systems is ongoing but is not likely to be completed for another several years.

Moreover, the studies relied upon in the Tentative Order have not quantified HFM levels for public health exposure or risk comparisons. And as previously stated, there is no established HFM objective in the Basin Plan (only fecal and total coliform, E. Coli, and enterococcus). We reiterate our concern that the basis for the Tentative Order is a non-adopted water quality objective, and that where the Basin Plan has no objectives for human fecal material, the Regional Board lacks the authority to regulate in this manner.

Finally, the Tentative Order lacks specific findings that state the purpose of the Order, the clear nexus between those entities tasked with and their relative contribution to (and ability to manage) HFM sources in the San Diego Watershed, and how the Regional Board intends to use the information and

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data gathered under the Tentative Order to determine compliance or other actions. Supportable findings of this nature are necessary if the Regional Board is to proceed with a final Order.


This item is of significant importance to both CASA and SCAP member agencies within the San Diego region and our larger statewide membership. Given this, prior to issuance of a final Investigative Order, we request that the Board hold a public workshop, including an adequate opportunity for public comment.

We appreciate the opportunity to provide comments on the Tentative Investigative Order and look forward to addressing these issues. If there are any questions or if additional correspondence is desired, please reach us at 760.479.4112 / sjepson@scap1.org or 916.446.0388 / alink@casaweb.org.

Sincerely,



Steve Jepsen, Executive Director
Southern California Alliance of POTWs



Adam D. Link, Director of Government Affairs
California Association of Sanitation Agencies