



# County of San Diego

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June 20, 2018

Roger Mitchell  
California Regional Water Quality Control Board  
San Diego Region  
2375 Northside Drive, Suite 100  
San Diego, CA 92108-2700

Dear Mr. Mitchell:

**656543: Comment – 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***

The County of San Diego ("County") appreciates the opportunity to provide comments on the Tentative Investigative Order No. R9-2018-0021 ("Tentative Order"). We also appreciate the approach the Regional Water Quality Control Board ("Regional Water Board") has taken to first issue a Draft, then host a workshop with named entities and consider comments prior to releasing a Tentative Order for public review and comment.

The County supports the overall intent of the Tentative Order, which is to identify and quantify sources of human fecal material within the San Diego River Watershed. To that end, the County has been proactively taking steps to identify and eliminate, where possible, sources of human fecal contamination. For example, the County has intensified its efforts to identify and clean up waste created by outdoor encampments throughout the entire unincorporated area, including within the San Diego River Watershed. We are committed to maintaining a sustained effort going forward and have devoted additional budget and staffing resources to address unsanitary outdoor encampments.

The County has played a lead role in initiating and funding a number of investigations and studies that provide important new information to water quality managers and other decision makers. Much of the information used to support issuance of this Tentative Order was in fact collected through studies initiated and funded voluntarily by the County and its partners. Examples include the Surfer Health Study<sup>1</sup> (conducted in winters of 2014 and 2015 with upstream sampling conducted in winter 2016), the Bacteria Total Maximum Daily Loads

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<sup>1</sup> [http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/943\\_SurferHealthStudy.pdf](http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/943_SurferHealthStudy.pdf)

(TMDLs) Cost-Benefit Analysis<sup>2</sup> (conducted in 2016-2017), and bacteria source tracking studies in San Diego River<sup>3</sup> (winter 2017), Forrester Creek<sup>4</sup> (conducted in fall 2017), and Los Coches Creek<sup>5</sup> (conducted in winters of 2017 and 2018). The County and other partners have also recently initiated and are funding a project as of October 2017 with the Southern California Coastal Water Research Project (SCCWRP) to test the feasibility of using biofilms as a new tool to identify sources of human waste within the MS4 network and in waterways. Additional studies regarding the use of human microbial source tracking methods to trace sources of dry weather flows from MS4 outfalls are scheduled for the summer of 2018. These studies represent a total County investment of \$5 million since 2013.

The good news is that, based on findings of the Surfer Health Study, conditions at San Diego County beaches, even during wet weather conditions, appear to be better than many people had anticipated. Gastrointestinal illness rates measured during the study were significantly below the illness thresholds the United States Environmental Protection Agency uses to set its federal water quality criteria for indicator bacteria. Despite these encouraging findings, the County recognizes there is still much work to be done in pursuit of improved water quality and public health conditions in our coastal watersheds. The ubiquitous presence of human-specific biomarker, HF183, detected in the San Diego River Watershed suggests a new focus is warranted in our strategy for reducing bacteria in local waterways. It should be noted that the presence of HF183 is not unique to the San Diego River Watershed. In fact, recent studies conducted by SCCWRP produced similar results for many other coastal watersheds throughout Southern California<sup>6</sup>. **Finding 13 should be updated to acknowledge that the issue of contamination from human fecal material is not unique to the San Diego River Watershed.**

The County strongly agrees with a key finding from the Bacteria TMDL Cost-Benefit Analysis – that targeting reduction of human waste sources will be the most cost-effective strategy for reducing bacteria in a way that actually lowers public health risk and expands recreational opportunities. The issuance of this Tentative Order indicates that the Regional Water Board, too, supports efforts to address these high risk sources. The County suggests that identifying and reducing sources of human fecal waste should be a primary pathway through which regulated agencies demonstrate compliance with the Bacteria TMDL. This pathway is not available in the Bacteria TMDL as it is presently written. Unfortunately, the TMDL was written to mandate reduction of fecal indicator bacteria generally, without consideration of the variable risk posed by different sources of bacteria. Scientific papers published since the 2010 adoption of the TMDL demonstrate that non-human bacteria sources such as wildlife and pets do not pose as much risk to water recreators as human sources<sup>7</sup>. Therefore, the TMDL's emphasis on controlling bacteria within the stormwater conveyance system appears misguided. **Finding 62 should be modified to allow for near-term changes to the**

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<sup>2</sup>[https://www.waterboards.ca.gov/rwqcb9/water\\_issues/programs/basin\\_plan/docs/issue3/Final\\_CBA.pdf](https://www.waterboards.ca.gov/rwqcb9/water_issues/programs/basin_plan/docs/issue3/Final_CBA.pdf)

<sup>3</sup> [ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1002\\_HumanMarkerTracking.pdf](ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1002_HumanMarkerTracking.pdf)

<sup>4</sup> Forrester Creek Source Tracking Study. <http://www.projectcleanwater.org/download/san-diego-river-wqip-annual-report-2016-2017/>

<sup>5</sup> San Diego River Watershed Wet Weather Microbial Source Tracking Study.

<http://www.projectcleanwater.org/download/san-diego-river-wqip-annual-report-2016-2017/>

<sup>6</sup>[http://ftp.sccwrp.org/pub/download/DOCUMENTS/JournalArticles/999\\_RegionalAssessmentOfFecalContamination.pdf](http://ftp.sccwrp.org/pub/download/DOCUMENTS/JournalArticles/999_RegionalAssessmentOfFecalContamination.pdf)

<sup>7</sup> Human Health Risk Implications of Multiple Sources of Faecal Indicator Bacteria in Recreational Waterbody. Soller, J., et al., 2014

**Bacteria TMDL and other permits based on the scientific work that has already been completed to date.** As written, Finding 62 suggests that regulatory changes may be deferred until after work on the Investigative Order is completed (i.e., after 2022). In addition to reorienting the TMDL to focus compliance actions on addressing high risk human sources, the Regional Water Board should provide regulated parties additional time to comply. Extending compliance schedules is appropriate because, as this Tentative Order acknowledges, there is a great deal of uncertainty about which source or sources of human fecal matter are most significant in this and other watersheds. Regulated parties will need time to retool their programs to focus on the highest risk sources identified by the studies required by this Order. Final compliance with the TMDL's dry weather numeric targets is due in 2021, which is prior to when the required studies are due to the Regional Water Board. The County and its partners laid out detailed recommendations for changes to the Bacteria TMDL and related provisions of the MS4 Permit as part of the Report of Waste Discharge, which was submitted to the Regional Water Board in December 2017. Please refer to that document for specific details on our recommendations.

**Finding 46 should be modified or removed to avoid potential appeals of this Investigative Order based on an inappropriate definition of "MS4" that goes well beyond the definition in the federal Clean Water Act.** Finding 46 states that homeless defecating outdoors results in a discharge of human fecal material to the San Diego River or its tributaries, and is an illicit discharge to the stormwater conveyance system. The County disagrees that discharges of human fecal material from homeless encampments directly into the main stem of the San Diego River or a tributary are necessarily subject to provisions of the Municipal Stormwater Permit. The Municipal Stormwater Permit only regulates MS4s, defined in the federal Clean Water Act regulations (40 CFR 122.26(B)(8)) as conveyances owned or operated by the municipality. Many segments of the San Diego River and its tributaries are not owned or operated by a public agency and, therefore, are not appropriately defined as MS4s. Maintaining such as statement as a factual basis for this Order introduces conflict that could delay commencement of important work.

**Homeless encampment cleanups are ongoing throughout the watershed. Studying their relative contribution as a source of human fecal material to the San Diego River and its tributaries would best be conducted outside the scope of an investigative order.** The issue of homelessness transcends the water quality arena, and is complicated by many difficult-to-solve social issues such as affordable housing and mental health. The County recognizes the impact outdoor defecation may have on water quality and we support efforts to identify and quantify this source relative to the magnitude of other sources. As noted above, the County has intensified its efforts to clean up waste created by outdoor encampments throughout the entire unincorporated area, including within the San Diego River Watershed. Prior to receiving the Tentative Order, the County had initiated work with SCCWRP and other study partners to explore potential approaches to better understanding the impact of homeless encampments on water quality. The County acknowledges the Regional Water Board's offer of \$50,000 in November 2017 to study fecal contributions from the homeless. However, the Regional Water Board declined to join this SCCWRP study.

Preliminary analysis shows that identifying homeless encampments appropriate for such a study would be extremely challenging. First, encampments are being cleaned up frequently enough that it would be difficult to design a long-term study to assess their impact. SCCWRP has indicated that 30-60 wet weather samples would be required to determine whether

encampments have a measurable impact on downstream water quality. To conduct such a study, an encampment or multiple encampments would likely have to remain in place over multiple wet weather seasons. Because some winters in San Diego are very dry, it may even be difficult to collect the required number of samples within the time frame of the Investigative Order. Other factors complicating such a study include ensuring access to encampments on private property as well as safety issues. **The County requests removal of the requirement to address outdoor defecation of homeless in this Tentative Order but we encourage continued dialogue about ways to utilize data generated during ongoing cleanup efforts to help quantify the potential magnitude of this source.**

**Studying the contribution of septic systems is more appropriately conducted outside the scope of this Investigative Order.** Currently, the County regulates all septic systems with wastewater flows under 10,000 gallons per day. State Water Code Section 13282 allows the Regional Water Board to authorize a local agency to regulate and issue permits for septic systems “to ensure that systems are adequately designed, located, sized, spaced, constructed, and maintained”. Through the adoption of the Local Agency Management Plan (LAMP), the Regional Water Board has authorized the County to issue septic permits in both incorporated and unincorporated areas of the County. The purpose of the LAMP is to allow continued use of septic systems in accordance with the state Onsite Wastewater Treatment System (OWTS) Policy and to expand the program to allow use of alternative septic systems, which provide advanced wastewater treatment prior to discharge in areas with limiting soil or groundwater conditions. The LAMP sets criteria for the design, installation, and permit requirements for all septic systems in the County.

Records show the number of properties served by septic systems in the San Diego River Watershed is minimal compared to the number of properties served by public sanitary sewer systems. Approximately 3.5% of the wastewater flow volume within the San Diego River Watershed is attributable to properties served by septic systems<sup>8</sup>. Due to the limited contribution to overall wastewater flow from septic systems within this watershed, resources would be better spent focusing the initial phases of investigation on publicly owned sewer collection systems and private sewer laterals. Unlike the public sanitary sewer collection systems and the stormwater conveyance systems, septic systems are almost entirely owned and operated on private properties by people and entities not named in this Tentative Order. Gaining access to these systems would be very challenging for the responsible parties and may limit the representativeness of study findings. Furthermore, the County is limited under the scope of the LAMP and lacks the regulatory authority to compel private owners to take corrective action for existing systems that are not “failing” (i.e. meet the criteria of Tier 4 of the State’s OWTS Policy) or that are otherwise covered by the conditional waiver of discharge afforded by the Policy.

There is no existing data showing that septic systems are a contributing source to human fecal contamination within the San Diego River Watershed. If the Regional Water Board considers septic systems to be a contributor to impaired water quality, this should be addressed through the State OWTS Policy and LAMP requirements, rather than through an Investigative Order such as the Tentative Order, which is being issued to responsible parties that neither own nor operate septic systems.

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<sup>8</sup> Statistic based on population and septic system data from the Bacteria TMDL Cost-Benefit Analysis, using 2.87 individuals per household (2016 County of San Diego US Census Bureau).

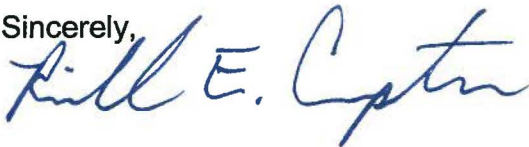
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Although the County disagrees that septic systems should be included within this Tentative Order and requests that this element be removed from the Tentative Order, the County is committed to understanding whether septic systems have the potential to contribute human fecal contamination to waterways. To this end, the County is currently working with SCCWRP on a study in the Eucalyptus Hills drainage area within the San Diego River Watershed. Understanding this drainage area, which has minimal homeless activity and is primarily composed of septic systems rather than sanitary sewer, should help us better understand whether septic systems are a significant potential source of human fecal material to waterways. Depending on the results of the study, further actions or studies may be warranted. The County is happy to discuss the ongoing study in detail with Regional Water Board staff and other interested parties.

Finally, provision 1.D on page 21 of the Tentative Order requires the Final Report to include "How the data obtained in this Investigation will be used to assess the effectiveness of the Discharger's programs in preventing discharges of human fecal material into the San Diego River, its tributaries, and downstream beaches." While we agree this is a critical step following collection of the required data, we are concerned about how the requirement is phrased. How data obtained through these studies will be used to inform management decisions will be unique to each responsible party. There is limited value in requiring this information to be presented in a joint work product. Many existing plans, such as Sanitary Sewer Management Plans (SSMPs), Water Quality Improvement Plans (WQIPs), Local Agency Management Plans (LAMPs), and others are already in place. **Rather than creating a new deliverable that will exist apart from these already established plans, the Tentative Order should be amended to require each responsible party to use data obtained from the required studies to update existing plans at the appropriate time.**

If you have any questions or comments, please contact Todd Snyder, Program Manager, at (858) 694-3672 or by e-mail at [Todd.Snyder@sdcounty.ca.gov](mailto:Todd.Snyder@sdcounty.ca.gov).

Sincerely,



RICHARD E. CROMPTON, Director  
Department of Public Works

cc: Todd Snyder, Department of Public Works