

**California Regional Water Quality Control Board  
San Diego Region**

**Response to Comments Report**

**Tentative Investigative Order No. R9 2019-0014**

***Technical and Monitoring Reports to Identify and Quantify the Sources and  
Transport Pathways of Human Fecal Material to the Lower San Diego River  
Watershed***

**June 12, 2019**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

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San Diego Region  
(San Diego Water Board)**

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## Introduction

This report contains the San Diego Water Board responses to written comments received on Tentative Order No. R9 2019-0014, *An Order Directing the City of San Diego, the City of Santee, the City of El Cajon, the City of La Mesa, the County of San Diego, the Padre Dam Municipal Water District, the Ramona Municipal Water District, San Diego State University, Metropolitan Transit System, and the California Department of Transportation to Submit Technical and Monitoring Reports to Identify and Quantify the Sources and Transport Pathways of Human Fecal Material to the San Diego River Watershed* (Tentative Order).

The San Diego Water Board provided public notice of the release of the Tentative Order on May 21, 2018 and provided a period of 30 days for public review and comment. The public comment period ended on June 20, 2018.

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## Comments and Responses

The written comments and staff responses are set forth in the table that follows. The table includes the San Diego Water Board's response to the comment, and any actions taken to revise the Tentative Order in response to the comment. The responses display substantive revisions to the Tentative Order in red-underline for added text and ~~red-strikeout~~ for deleted text. Other changes made to improve the organization and formatting of the Investigative Order or to correct typographical errors are not shown in red underline/strikeout to facilitate review of the Tentative Order.

### ABBREVIATIONS

<b>Abbreviation</b>	<b>Definition</b>
40 CFR	Title 40 of the Code of Federal Regulations
Basin Plan	Water Quality Control Plan for the San Diego Basin
Bight 2013	Southern California Bight Regional Monitoring Program
BIOL	Preservation of Biological Habitats of Special Significance
Caltrans	California Department of Transportation
CASA	California Association of Sanitation Agencies
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CFU	Colony Forming Units
CIWQS	California Integrated Water Quality System
COMM	Commercial and Sport Fishing
CSM	Conceptual Site Model
CWA	Clean Water Act
°F	Degrees Fahrenheit
FIB	Fecal Indicator Bacteria
GI	gastrointestinal
HA	Hydrologic Area
HAV	Hepatitis A. virus
HF183	Human Source Marker
HFM	Human Fecal Material
IND	Industrial Service Supply
LA	Load Allocation
MAR	Marine Habitat
ml	Milliliter
ml/L	Milliliter per Liter
MST	Microbial Source Tracking Study
MS4	Municipal Separate Storm Sewer System
MTS	Metropolitan Transit System
MWD	Municipal Water District
NAV	Navigation
NOAA	National Oceanic and Atmospheric Administration's
NEEAR	USEPA National Epidemiological and Environmental Assessment of Recreational Water (NEEAR)
NPDES	National Pollutant Discharge Elimination System
Ocean Plan	Water Quality Control Plan for Ocean Waters of California, California Ocean Plan
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
QMRA	Quantitative Microbial Risk Assessment
RARE	Rare, Threatened, or Endangered Species
REC-1	Contact Water Recreation

<b>Abbreviation</b>	<b>Definition</b>
REC-2	Non-Contact Water Recreation
RO	Reverse Osmosis
ROWD	Report of Waste Discharge
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SCAP	Southern California Alliance of POTWs
SCCWRP	Southern California Coastal Water Research Project
SHS	Surfer Health Study
SHELL	Shellfish Harvesting
SPWN	Spawning, Reproduction, and/or Early Development
SSO	Sanitary Sewer Overflow
State Water Board	State Water Resources Control Board
Statewide General SSO Order	State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
TMDL	Total Maximum Daily Load
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
USEPA 2012 Criteria	USEPA 2012 Recreational Water Quality Criteria Document. Docket Identification Number EPA-HQ-OW-2011-0466
U.S.G.S	United States Geological Survey
U.S.	United States
WLA	Waste Load Allocation
Water Code	California Water Code
WDR	Waste Discharge Requirements
WILD	Wildlife Habitat
WQO	State Water Board Water Quality Order
WQO	Water Quality Objective

No.	Comment	Response	Action Taken
<b>Marlene Best, City Manager, City of Santee; written comments dated June 18, 2018</b>			
1	<p>The City supports the Regional Board’s intent to establish a collaborative approach toward addressing an important water quality issue in the San Diego River watershed; however, we believe the Order is not the best approach.</p> <p>The Order’s focus on homeless encampments as a source of direct deposition of human fecal matter to the San Diego River and its tributaries raises significant socio-economic issues that are not easily solved by the entities currently included in the Order. Important stakeholders, such as law enforcement, entities providing services to homeless populations, and the Regional Board, are not part of the Order. For this reason, we believe the better approach is to establish a memorandum of agreement between stakeholders which is designed to establish structures for identifying key sources and pathways and collaborating on solutions.</p> <p><b>The City respectfully asks the Regional Board not to issue the Order and instead to explore a collaborative agreement between stakeholders.</b></p>	<p>The San Diego Water Board has renumbered Finding 46 of the Tentative Order as Findings 17 and 47 and revised these findings to establish that numerous homeless encampments are located on public lands or within public rights-of-way or similar areas on lands owned or controlled by public entities that are also MS4 entities named as Responsible Parties in the Tentative Order. It is reasonable to suspect that discharges of human fecal material from homeless encampments in many instances originate from lands owned or controlled by these entities and are discharged directly or indirectly to receiving waters within these jurisdictions. This provides an additional basis for requiring the public entities that also own and operate MS4s to investigate and quantify sources of human fecal material from homeless encampments near or adjacent to surface waters in the Lower San Diego River Watershed. In establishing these findings of the Tentative Order, the San Diego Water Board recognizes that the homeless encampments and population are a multifaceted issue involving complex societal and economic issues. Investigating and quantifying actual and suspected sources of human fecal material discharges including homeless encampments under the Tentative Investigative Order is a necessary prerequisite to strategic remedial planning for the Lower San Diego River</p>	<p>Finding 3 pertaining to legal authority is added to the Tentative Order.</p> <p>Finding 46 of the Tentative Order is revised consistent with the response and renumbered as Findings 17 and 47 in the Tentative Order.</p>

		<p>Watershed based on fecal pollution levels in receiving waters from human sources.</p> <p>Findings 17 and 47 of the revised Tentative Order provide the basis for requiring public agencies to investigate discharges from homeless encampments in the Lower San Diego River Watershed whether in their capacity as municipal separate storm sewer (MS4) owners or operators or as public agencies with land use authorities on public spaces from which discharges of waste can occur. Directive 1 of the Tentative Order properly requires Responsible Parties with potential responsibility for discharges from homeless encampments, located on lands where the Responsible Parties possess jurisdiction and the ability to exercise land use authorities, to participate in the investigation of this pollution pathway. The Tentative Order does not require the City of Santee (City) or any other designated Responsible Party to undertake activities to abate illegal encampments on its rights of way.</p> <p>There is nothing in the Tentative Order that precludes the City's proposal for a memorandum of agreement between the designated Responsible Parties designed to establish structures for identifying key sources and pathways and collaborating on solutions. The San Diego Water Board is supportive of cooperative agreements between the Responsible Parties and encourages the City to reach out to other Responsible Parties and collaborate on ways to address the directives of the Tentative Order. In order to achieve maximum efficiency and economy of resources,</p>	
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		<p>the San Diego Water Board encourages the Responsible Parties to collaborate on efforts to respond to the requirements of the Tentative Order. Such a collaborative effort would enable the sharing of technical resources, trained personnel, consultants and associated costs and provide an integrated approach to help ensure that the relative load contributions from each of the potential sources are quantified consistently and accurately.</p> <p>The San Diego Water Board has elected to proceed with issuance of the Tentative Order to provide the framework for the required investigation in lieu of relying on a memorandum of agreement approach. The Tentative Order is proposed for issuance under the authority of Water Code sections 13267, 13383 and 13225. Section 13267, subdivision (a) of the Porter Cologne Water Quality Control Act (Water Code), provides the San Diego Water Board with broad authority to investigate the quality of any waters of the state within the San Diego Region. Section 13267, subdivision (b) authorizes the San Diego Water Board to require persons who discharge, have discharged, or are “suspected of having discharged or discharging” waste within the San Diego Region to furnish technical or monitoring program reports. Water Code section 13225, subdivision (c), authorizes the San Diego Water Board to require “any state or local agency to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water.”(Finding 3 of the revised Tentative Order).</p> <p>Finding 3 is added to the revised Tentative Order</p>	
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		<p>as set forth below:</p> <p><u>“ 3. Legal Authority. Section 13267, subdivision (a) of the Porter Cologne Water Quality Control Act (Water Code), provides the San Diego Water Board with broad authority to investigate the quality of any waters of the state within the San Diego Region. Section 13267, subdivision (b) authorizes the San Diego Water Board to require persons who discharge, have discharged, or are “suspected of having discharged or discharging” waste within the San Diego Region to furnish technical or monitoring program reports.<sup>2</sup> “Waste” is broadly defined in Water Code section 13050(d) and includes “sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin . . . .” an includes human fecal material. Water Code section 13225, subdivision (c), authorizes the San Diego Water Board to require “any state or local agency to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water.”.</u></p> <p><u><sup>2</sup> Water Code section 13383, subdivision (a), , subdivision (a), contains similar provisions for discharges to surface waters and is applicable to and provides additional regulatory support for requiring the persons responsible to implement this Investigative Order.”</u></p> <p>Finding 17 is added to the revised Tentative Order as set forth below:</p>	
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		<p><u>“ 17. Homeless Encampments. Although not specifically identified in the San Diego Water Board or State Water Board-issued permits discussed below, the presence of homeless encampments and transient populations in public spaces such as parks, under transportation overpasses, near light rail stations, and riparian area corridors present a challenge to public agencies whether in their capacity as MS4 owners or operators or as public agencies with land use authorities on public spaces from which discharges of waste can occur. According to the San Diego River Park Foundation’s 2016 survey, there were approximately 116 encampments, or 290 individuals, living along the mainstem of the San Diego River from the City of Santee to western Mission Valley in the Lower San Diego River Watershed.<sup>9</sup> The encampments from the 2016 survey are identified in Figures 3 and 4. Many encampments exist on public rights-of-way areas, including those owned by Caltrans. Encampments may also exist on property owned by San Diego State University and Metropolitan Transit System.<sup>10</sup> Assuming that individuals living in the San Diego River or tributaries are not regularly using restroom facilities, they are likely defecating outdoors, resulting in a direct of human fecal material waste directly into the Lower San Diego River or its tributaries, or adjacent to such waters in a manner which may permit the waste to be transported (e.g. during storm events or high flows) into the waters. This is an illicit discharge that must be eliminated pursuant to Provision E.2.d of Order No R9-2013-0001, Provision C of Order No. 2013-0001-DWQ, and Provision B.1 of Order No. 2012-</u></p>	
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		<p><del>0011-DWQ. The Copermittees regulated by Order No. R9-2013-0001, San Diego State University, Metropolitan Transit System, and Galtrans must use their land use and enforcement authority to prevent and eliminate illicit discharges to the MS4, including discharges from homeless encampments. This requirement pertains to the San Diego River because urban streams such as the San Diego River are considered both an MS4 and a receiving water per Finding 11 of Order No. R9-2013-0001. Municipalities typically have the legal authority to prevent habitation of public open space areas in their municipal code and can thus prevent such illicit discharges.</del></p> <p><del><sup>9</sup> Email from Shannon Quigley-Raymond, San Diego River Park Foundation, to Helen Yu, San Diego Water Board, dated November 3, 2017.</del></p> <p><del><sup>10</sup> Email from Dr. Natalie Mladenov, San Diego State University, to Helen Yu, San Diego Water Board, dated March 14, 2019. “</del></p> <p>Finding 47 is added to the revised Tentative Order as set forth below:</p> <p><del>“ <b>47. Public Agency Responsibility for Investigation of Discharges Originating from Homeless Encampments on Public Lands.</b> As discussed in Finding 17 and Figures 3 and 4, numerous homeless encampments are located on public lands or within public rights-of-way or similar areas on lands owned or controlled by public entities that are also MS4 entities named as Responsible Parties in this Investigative</del></p>	
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		<p><u>Order. Based on available information and documented presence of human fecal material in the Lower San Diego River Watershed, it is reasonable to suspect that discharges of human fecal material from homeless encampments in many instances originate from lands owned or controlled by these entities and are discharged directly or indirectly to receiving waters within these jurisdictions. This provides an additional basis for requiring the owners and operators of the above MS4s to investigate and quantify sources of human fecal material from homeless encampments near or adjacent to surface waters in the Lower San Diego River Watershed.</u> “</p>	
<p>2</p>	<p><b>The City requests that Finding 46 be removed from the Order and that “direct deposition from homeless encampments” be removed from Finding 14 and from paragraph 1 of the Order Directive 1.</b></p> <p>Finding 46 of the Order states that homeless individuals who defecated outdoors, resulting in a discharge of human fecal material to the watershed tributary to the San Diego River or directly into the San Diego River, constitutes “an illicit discharge that must be eliminated per Provision E.2.d of Order No. R9-2013-0001...” It further states that the City “must...prevent and eliminate illicit discharges to...the San Diego River [because it] is considered both an MS4 and a receiving water per Finding 11 of Order No. R9-2013-0001.”</p>	<p>The San Diego Water Board acknowledges that homelessness is a complex socio-economic issue whose causes and effects do not have a simple remedy. The presence of homeless encampments and transient populations in public spaces such as parks, under transportation overpasses, near light rail stations, and riparian area corridors presents a challenge to public agencies whether in their capacity as MS4 owners or operators or as public agencies with land use authorities on public spaces from which discharges of waste can occur. Encampments exist on public rights-of-way areas, including those owned by Caltrans, and on property owned by San Diego State University and Metropolitan Transit System.<sup>1</sup> Assuming that individuals living in the San Diego River or tributaries are not regularly using restroom facilities, they are likely</p>	<p>Finding 46 of the Tentative Order is revised consistent with the response and renumbered as Findings 17 and 47 in the Tentative Order.</p> <p>Finding 14 of the Tentative Order is revised consistent with the response and renumbered as Finding 21 in the Tentative Order</p>

<sup>1</sup> Email from Dr. Natalie Mladenov, San Diego State University, to Helen Yu, San Diego Water Board, dated March 14, 2019

<p>The City requests that this Finding be deleted from the Order for the reasons set forth below, and that the requirement to conduct an investigative study of the direct deposition from individuals in homeless encampments likewise be deleted.</p> <p><b>The Regional Board exceeds its authority by considering the San Diego River and its tributaries to be both waters of the United States and point sources</b></p> <p>The Ordering Directives that focus on direct deposition of human fecal material are premised on the legally flawed finding that MS4 permittees are required to “prevent illicit discharges to...the San Diego River [because it] is considered both an MS4 and a receiving water per Finding 11 of Order No. R9-2013-0001.” <u>A person who dumps pollutants directly into the San Diego River is not discharging to the City’s MS4. In the same way, a person defecating in the river is not discharging to the City’s MS4.</u></p> <p>As the Co-permittees have challenged in petitions to the State Water Resources Control Board, it is contrary to the plain language and structure of federal law to consider a navigable water to be an MS4. See State Water Resources Control Board, Water Quality Petition A-2254(h). <i>The federal definitions of “municipal separate storm sewer system” does not include a water of the United States or its tributaries:</i></p> <p>Municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):</p>	<p>defecating outdoors, resulting in a discharge of human fecal material directly into the Lower San Diego River or its tributaries, or adjacent to such waters in a manner which may permit the waste to be transported (e.g. during storm events or high flows) into the waters. (Finding No. 17 of revised Tentative Order)</p> <p>Numerous homeless encampments are located on public lands or within public rights-of-way or similar areas on lands owned or controlled by public entities such the City of Santee that are also MS4 entities named as Responsible Parties in this Investigative Order. Based on available information and documented presence of human fecal material in the Lower San Diego River Watershed, it is reasonable to suspect that discharges of human fecal material from homeless encampments in many instances originate from lands owned or controlled by these entities and are discharged directly or indirectly to receiving waters within these jurisdictions. This provides an appropriate basis for requiring the MS4 entities such as the City of Santee to investigate and quantify sources of human fecal material from homeless encampments near or adjacent to surface waters in the Lower San Diego River Watershed (Finding 47 of the revised Tentative Order).</p> <p>Viral pathogens associated with human fecal material, in particular norovirus, are the primary etiologic agents of swimming associated gastrointestinal illness in the United States. The Southern California Coastal Water Research</p>	
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<p>Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWAQ that discharges to waters of the United States;</p> <p>Designed or used for collecting or conveying storm water;</p> <p>Which is not a combined sewer; and</p> <p>Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.</p> <p>40 CFR §122.26(b)(8). Designating a “water of the United States” to be an MS4 also runs afoul of the definition of MS4, because the City does not “own or operate” the San Diego River. In California, natural waterbodies are not owner by the municipality through which they flow. Such water bodies are generally administered by the State of California in the public trust for the right of the people to use such waters for certain purposes. <i>Mark v Whitney</i> (1971) 6 Cal.3<sup>rd</sup> 251, 259-260. The</p>	<p>Project (SCCWRP) Surfer Health Study<sup>2</sup> (SHS), the 2016-2017 Upstream Microbial Source Tracking Study (MST)<sup>3</sup> and other relevant studies have concluded that human fecal material is persistently present in the Lower San Diego River and its tributaries. The investigation required by this Tentative Order is limited to determining the relative contributions of suspected sources of human fecal material in the Lower San Diego River Watershed. The San Diego Water Board is targeting the investigation of multiple sources of human waste, one of which is from homeless people living near and defecating in and near the San Diego River and its tributaries.</p> <p>The City of Santee and other MS4 Copermittees have land use authority to control discharges of waste including human fecal material waste to the Lower San Diego River Watershed from properties subject to their land use authorities. A recent example of the importance of land use authority in addressing public health threats along the Lower San Diego River Watershed became very clear during the recent San Diego County health emergency from an outbreak of hepatitis A (HAV). Detected in early March 2017, with cases traced back to November 2016, the HAV outbreak in San Diego County was</p>	
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<sup>2</sup> Southern California Coastal Water Research Project (SCCWRP), SCCWRP Technical Report 943, The Surfer Health Study, A Three Year Study Examining Illness Rates Associated with Surfing During Wet Weather, September 2016, available at [ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/943\\_SurferHealthStudy.pdf](ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/943_SurferHealthStudy.pdf) (as of September 25, 2018).

<sup>3</sup> Steele et al., October 2017, Tracking Human Fecal Sources in an Urban Watershed During Wet Weather, Southern California Coastal Water Research Project, available at [ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1002\\_HumanMarkerTracking.pdf](ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1002_HumanMarkerTracking.pdf) (as of October 25, 2018)

<p>Legislature, acting within the confines of the common law public trust doctrine, is the ultimate administrator of the trust and may be the final arbiter of permissible uses of trust lands.</p> <p>Not only does the definition of “municipal separate storm sewer” not include waters of the United States or its tributaries, “waters of the United States” is separately defined and does not include “municipal separate storm sewer systems.” 40 CFR §122.2. By considering a water of the United States (the San Diego River) to be an MS4, the Regional Board renders the term, “waters of the United States” superfluous, contrary to basin rules of statutory interpretation. See <i>Hibbs v Winn</i> (2004 542 US 88, 101 (“A statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant...”))</p> <p>Further, the structure of the Clean Water Act does not permit the Regional Board to consider a water of the United States to be an MS4. The Clean Water Act is premised entirely on the discharge of a pollutant to an navigable water from a point source (33 USC §1311). A navigable water cannot discharge into itself, even where humans have modified the navigable water for purposes of conveying storm flows. See <i>Los Angeles County Flood Control District v. Natural Resources Defense Council, Inc.</i> (2013) 568 U.S. 78 (holding that the flow of polluted water from one portion of a river, through a concrete channel or other engineered improvement in the river, to a lower portion of the</p>	<p>exceptional in its scale and transmission characteristics. The majority of people who contracted Hepatitis A during the outbreak were homeless and drug using populations. The outbreak was spread person to person through contact with fecal contaminated environments. Some fecal contaminated environments are in the encampments in the Lower San Diego River and its tributaries. The emergency lasted for 5 months, took the lives of approximately 20 people and resulted in approximately 407 people being hospitalized.<sup>4</sup></p> <p><b><i>The Tentative Order’s Directive to Investigate Pollutant Loading of the Homeless Population Source Does not Run Contrary to Constitutional and Statutory Provisions</i></b></p> <p>The San Diego Water Board’s authority to require investigation under Water Code sections 13267 and 13383 is extremely broad. The Tentative Order cites multiple lines of evidence that provide ample evidence of the City’s discharges or suspected discharges of waste through its MS4 and ownership of public lands from which discharges are suspected of originating, as reflected in Findings 17, and 39 through 47 of the Tentative Order. These findings point towards the presence of human fecal material in the Lower San Diego River emanating from homeless encampments on lands owned and/or controlled by the City and other designated Responsible Parties.</p>	
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<sup>4</sup> Hepatitis Outbreak After Action Report, Hepatitis Outbreak 2017-2018, Produces San Diego County Agencies, May 2018, available at <https://www.sandiegocounty.gov/content/dam/sdc/cosd/SanDiegoHepatitisAOutbreak-2017-18-AfterActionReport.pdf> (as of September 25, 2018)



<p>same river, does not constitute a discharge of pollutants). The definition of “discharge of pollutant” under the Act “requires that the pollutant flow ‘to navigable waters from any point source.’ The most natural reading of this language is the point source is distinct from navigable water.” <i>Froebel v Meyer</i>, 217 F.3<sup>rd</sup> 928, 937 (7<sup>th</sup> Cir. 2000).</p> <p>Finding 46 is based on a legally flawed premise. The Regional Board exceeds its authority by require MS4 permittees to address the direct deposition of human fecal material to the San Diego River and its tributaries based on this finding. Because direct deposition of human fecal material into the San Diego River and its tributaries does not constitute an illicit discharge to the MS4, it is wholly improper to consider such discharges to be a violation of the City’s MS4 permit or to direct MS4 permittees to investigate and remediate such direct deposition by virtue of their MS4 discharges to the San Diego River.</p> <p><b>The Regional Board’s targeting of homeless individuals runs contrary to significant constitutional and statutory provisions</b></p> <p>The Order directs the City to undertake a study of certain effects of homelessness on water quality in the San Diego River and its tributaries and to determine how the data will be used to prevent discharges of human fecal material from homeless encampments (Finding 46, Order Directives 1 and 2). The Order implies that the City has authority to prevent homeless individuals from living in the San Diego River watershed (Finding 46). This overly simplistic drafting ignores significant constitutional</p>	<p>In order to consider whether a strategy to abate human fecal contamination in the Lower San Diego River Watershed should be developed, the San Diego Water Board must first require responsible dischargers to identify and quantify sources of human fecal material discharges including homeless encampments. Directive 1 of the Tentative Order properly requires all designated Responsible Parties to participate in the investigation of this pollution pathway. The Tentative Order does not require the City or any other Responsible Party to undertake activities to abate encampments on publicly owned lands.</p> <p>The Tentative Order requires investigation of fecal waste material discharges from homeless encampments to quantify the contribution to water quality impairments that may be caused or contributed to by transient and homeless persons defecating in or near the Lower San Diego River Watershed and what effect current management measures are having on controlling and reducing this pollution source.</p> <p>In areas where human fecal material is discharged or suspected to be discharged into a MS4, the Discharger who owns or operates that MS4 is responsible for controlling those dischargers in accordance with the requirements of its municipal storm water permit.</p> <p>Based on the foregoing response the Tentative Order is revised as follows:</p> <ol style="list-style-type: none"> <li>1. Finding 46 of the May 21, 2018 Tentative Order is revised consistent with the response and renumbered as Findings 17 and 47 in the</li> </ol>	
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<p>and statutory limitations on the City and Regional Board’s ability to target homeless individuals.</p> <p>Homelessness is a complex socio-economic issue whose causes and effects do not have a simple remedy. <i>The City’s ability to enact a program that prevents individuals from establishing encampments in the San Diego River and its tributaries is limited by fundamental constitutional rights of movement, association, expression, and equal protection of the laws.</i> See, e.g., <i>Allen v City of Sacramento</i> (2015) Cal.App4th 41; see also <i>State of Hawai’i v. Beltran</i> (2007) 116 Hawai’i 146.</p> <p>Even if the City was able to adopt a constitutionally sound program regulating access to the San Diego River and its tributaries, constitutional and statutory provisions restrict the City’s authority to fully enforce such as program against large groups of homeless individuals, such as veterans and homeless persons under 25 years of age, and its ability to remove personal property from encampments. Penal Code §§1463.012 (prohibiting wage garnishment against certain homeless veterans); 1463.011 (same for persons under age 25); <i>Lavan v. City of Los Angeles</i> (9<sup>th</sup> Cir. 2012) 693 F.3<sup>rd</sup> 1022 (due process protects seizure of homeless individual’s personal property). Further, without adequate shelters available for homeless individuals to use, for example. Enforcement of a facially constitutional ordinance may fail. See <i>Jones v. City of Los Angeles</i> (9<sup>th</sup> Cir. 2006) 444 F.3<sup>rd</sup> 1118, vacated after settlement by 505 F.3<sup>rd</sup> 1006. Bay targeting homeless persons, the Order may also implicate the Regional Board in an unconstitutional selective use of its authority. See</p>	<p>Tentative Order.</p> <p>2. Finding No. 14 of the May 21, 2018 Tentative Order is renumbered as Finding No. 21 in the Tentative Order and revised as follows in relevant part:</p> <p>“ 21. <b>Transport Pathways.</b> The discharge of human fecal material to the environment likely originates from various sources and may occur through a number of transport pathways, including but not limited to:.....</p> <ul style="list-style-type: none"> <li>• Direct <u>or indirect</u> deposition from homeless encampments.              .....</li> </ul>	
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	<p><i>Allen v. City of Sacramento</i> (2015) 234 Cal.App.4<sup>th</sup> 41, 63.</p> <p>For these reasons, if the Regional Board issues the Order, the City requests the following revisions:</p> <p><b><u>Request Revision 1.a.</u></b> Delete Finding 46.</p> <p><b><u>Request Revision 1.b.</u></b> Remove “directive deposition from homeless encampments” from Finding 14 and from paragraph 1 of the Order Directive 1.</p>		
<p>3</p>	<p><b>Provide sufficient time to prepare and implement the work plan.</b></p> <p>The Order requires the discharges to submit a Work Plan, not later than January 7, 2019, describing the proposed actions to be conducted in order to complete an investigative study or studies of the sources of human fecal material in wet weather discharges to the San Diego River (Order Directive 2). The Order recognizes that the investigative studies will be “complex and resource-intensive.” The Order does not clearly state whether the Board expects each discharge to prepare a separate work plan, or if a single work plan, with all dischargers under one plan, is what is preferred.</p> <p>If the intent was to have a single Work Plan, additional time will be required to complete such a request. Bringing eleven dischargers together to negotiate agreements (MOU), identify cost shares and funding sources, agree upon an approach, hire a consultant, and subsequently review and unanimously approve a Work Plan will take significantly more time than the six-month timeline provided.</p>	<p>Directive 3 of the Tentative Order requires the Responsible Parties to prepare and submit an Investigative Study Work Plan no later than January 7, 2019, describing the proposed actions to be conducted to complete the investigative study to identify sources of human fecal material in the San Diego River Watershed. The intent of the Tentative Order is to provide the Responsible Parties with the maximum flexibility to develop an Investigative Order Work Plan either separately and/or jointly.</p> <p>To achieve maximum efficiency and economy of resources, the San Diego Water Board encourages the Responsible Parties to consider jointly developing and submitting a single Investigative Study Work Plan. Such a collaborative effort would enable the sharing of technical resources, trained personnel, consultants and associated costs and provide an integrated approach to help ensure that the relative load contributions from each potential source are quantified consistently and accurately.</p> <p>The submittal of an Investigative Study Work Plan by an individual Responsible Party is also</p>	<p>Directive 3 of the Tentative Order is revised.</p>

<p>The City requests the following revisions to clarify the nature of the Work Plan (a work plan for each agency (discharger) vs. a single work plan for all agencies (discharges) and to extend the implementation time frame. IF a collaborative plan is desired, the City requests that, the deadline for the Work Plan be revised to correspond with the fiscal year and budgeting process:</p> <p><b>Request Revision 2.a.</b> Explicitly state the type of Work Plan is requested (individual agency vs. multi agency) and extend the timeline for implementing the Work Plan. If the desired approach is a single work plan for all dischargers, revise paragraph 3 of the Ordering Provisions to read as follows:</p> <p>No later than <b>January 7, 2019, one fiscal year after the effective date of this Order</b>, the Dischargers must submit <u>a single an</u> Investigative Study Work Plan <u>(with all dischargers under one plan)</u> describing the proposed actions to be conducted to complete the investigative study described in Directive 1. The Dischargers must implement the Investigative Study Work Plan within <del>60</del><u>90</u> days of submittal, unless otherwise directed by the San Diego Water Board. The Investigative Study Work Plan must include, but not be limited to, the following:</p> <p><b>Request Revision 2.b.</b> Explicitly state type of Work Plan that is requested (individual agency vs. multi agency) and extend the timeline for implementing the Work Plan. If the desired approach is for each discharger to develop their own, individual work plan, revise paragraph 3 of the Ordering Provision to read as follows:</p>	<p>permissible under Directive 3 of the Tentative Order. Work Plans developed by individual Responsible Parties would need to be consistent with other submitted Work Plans in terms of the chosen methodologies for investigations, including monitoring design, field sampling, lab analysis, and data interpretation to help ensure that results are directly comparable.</p> <p>An administrative draft of the Tentative Order was circulated for review and comment by the Responsible Parties on February 23, 2018. As a preliminary step in this matter the San Diego Water Board hosted a meeting, on March 28, 2018 to review the scope and requirements of the administrative draft Tentative Investigative Order for each Responsible Party. The finalized Tentative Order was circulated for formal review and comment on May 21, 2018. There has already been considerable time for the Responsible Parties throughout these administrative proceedings to at least have tentative discussions for developing a collaborative approach on the Investigative Study Work Plan.</p> <p>Amending Directive 3 of the Tentative Order to provide 180 days (6 months) following the effective date of the Tentative Order should allow sufficient time for Parties to negotiate agreements (e.g. MOU), identify cost shares and funding sources, agree upon an approach, and hire a consultant(s). The San Diego Water Board is also amending Directive 3 to make clear that an Investigative Study Work Plan can be prepared by an individual Responsible Party or through participation in a collaborative effort of</p>	
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	<p>No later than <b>January 7, 2019</b>, <del>the each</del> Dischargers must submit an Investigative Study Work Plan describing the proposed actions to be conducted to complete the investigative study described in Directive 1. The Dischargers must implement the Investigative Study Work Plan within <del>60</del><u>90</u> days of submittal, unless otherwise directed by the San Diego Water Board. The Investigative Study Work Plan must include, but not be limited to, the following:</p>	<p>the Responsible Parties to prepare a joint Work Plan, or both as determined by the Responsible Party. Based on these considerations Directive 3 is amended to read as follows:</p> <p><b>“Investigative Study Work Plan Describing Investigative Study Milestones.</b> No later than <u>180 days after the effective date of this Investigative Order, unless permission for a later date has been granted by the San Diego Water Board Executive Officer, January 7, 2019, the Dischargers, Responsible Parties</u> must submit an Investigative Study Work Plan describing the proposed actions to be conducted to complete the investigative study described in Directive 1. <u>The Investigative Study Work Plan can be prepared by an individual Responsible Party or through participation in a coalition of the Responsible Parties preparing a joint Work Plan, or both as determined by the Responsible Party.</u> The <del>Dischargers</del> <u>Responsible Parties</u> must implement the Investigative Study Work Plan within <del>60</del> <u>90</u> days of submittal, unless otherwise directed by the San Diego Water Board. The Investigative Study Work Plan must include, but not be limited to, the following:”</p>	
<p>4</p>	<p><b>There is no evidence supporting the requirement that the City investigate potential human fecal material sources and pathways that are outside its jurisdiction.</b></p> <p>It is inappropriate to include the City in the Tentative Order where there is insufficient evidence to link the City’s activities to the problem that the order seeks to address. See <i>In the Matter of the Petition of Chevron Products Company</i>, Oder WQO 2004-0005, SWRCB/OCC File A01343 (May 20, 2004).</p>	<p>Directive 1 of the Tentative Order is not intended to require Responsible Parties to investigate suspected sources or pathways of human fecal material discharges that are not caused, permitted or controlled by the Responsible Party or otherwise associated with the Responsible Party in the findings of the Tentative Order. However, Directive 1 also requires that Responsible Parties investigate pathways of human fecal discharges to the Lower San Diego</p>	<p>Directive 1 of the Tentative Order is revised. Footnote 25 is added to Directive 1.</p>

<p>The Order directs the City, as a “Discharger,” to complete an investigative study or studies of: (a) sanitary sewer overflow from publicly-owned sewer collection systems; (b) sewage spills from privately-owned lateral sewer lines; (c) exfiltration from publicly-owned sanitary sewer collection systems, privately-owned lateral sewer lines, and privately-owned on-site wastewater treatment systems; and (d) treated effluent from wastewater treatment plants.</p> <p>The City, however, does not own or operate a public sewer collection system or a wastewater treatment plant. The City has no jurisdiction or authority over the publicly owned sewer collection system or publicly wastewater treatment plant within the city limits. Further, the City does not regulate or have authority to access or regulate privately-owned lateral sewer lines or on-site wastewater treatment systems.</p> <p>The Order also appears to assume that the City owns or controls all portions of the San Diego River and its tributaries that flow through the City’s jurisdiction. Large portions of these natural waterbodies are owned and controlled by other entities and the City does not have any authority to enter or control these areas. The City does not have legal access to these areas for purposes of conducting monitoring.</p> <p>The City cannot exercise authority over another public agency’s jurisdiction, cannot regulate private property regulated by other public agencies, and cannot enter property owned by others without permission. For this reason, it is contrary to the <i>Chevron</i> court case decision for the Order to</p>	<p>River and its tributaries. For example, sewage leakage from the Padre Dam Municipal Water District’s sewage collection system may flow into the City’s MS4 system and be conveyed to the San Diego River. The Tentative Order does require the City to investigate such pathways.</p> <p>The San Diego Water Board does have the authority under Water Code section 13267 to direct the City to investigate water quality conditions at locations that are affected by the City’s discharges and beyond the jurisdictional boundaries of the City. If for example a downstream property owner fails to provide access to the City to conduct monitoring or investigation activities required under the Tentative Order, the San Diego Water Board could require the downstream property owner to provide access or conduct the monitoring itself.</p> <p>Based on these considerations the San Diego Water Board has amended Directive 1 of the Tentative Order to read in relevant part as follows:</p> <p>“1. No later than <u>48 months after the effective date of this Order-June 30, 2022</u>, the Dischargers must submit the results (Final Investigative Study Report) of an investigative study, or studies, to identify and quantify sources <u>and pathways</u> of human fecal material discharges, <u>from their respective jurisdictions</u><sup>25</sup>, to the <u>Lower</u> San Diego River and its tributaries.....”</p> <p>“.....In the Final Investigative Study Report the <u>Dischargers Responsible Parties</u> must</p>	
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	<p>obligate the City to undertake studies or monitoring of these facilities and areas.</p> <p><i>The City requests that the Order be revised to specify that each Discharger is only responsible for submitting an investigative study and monitoring of the sources of human fecal material within that Discharger's control.</i></p> <p><b>Requested Revision 3.a.</b> Revise the first paragraph of Order Directive 1 as follows:</p> <p>Investigation to Identify Sources of Human Fecal Material in Wet Weather Discharges in the San Diego River Watershed. No later than June 30, 2022, <del>the each</del> Dischargers must submit the results (Final Report) of an investigative study (or studies) to identify and quantify sources of human fecal material in wet weather discharges <u>and in that Discharger's control</u> to the San Diego River and its tributaries.</p> <p><b>Requested Revision 3.b.</b> Add the following sentence to the end of Order Directive 2:</p> <p>No monitoring is required in areas where a Discharger lacks legal access.</p>	<p>describe the following information for each of the above <u>applicable</u> suspected sources or pathways of human fecal material discharges to the <u>Lower San Diego River</u>:"</p> <p>The following Footnote 25 is added to Directive 1:</p> <p><u>" 25.: Responsible Parties shall comply with the requirements of this Order to the fullest extent of their legal authorities. A Responsible Party is not required to investigate suspected sources or pathways of human fecal material discharges to the extent it lacks legal authority and cannot reasonably obtain legal authority (such as access to private property) to conduct the required investigations. However, to maximize the accuracy and the cost-effectiveness of investigations, Responsible Parties are encouraged to communicate and coordinate their investigation efforts and take a holistic study approach at a watershed scale."</u></p>	
<p>5</p>	<p><b>Reduce monitoring and reporting obligations</b></p> <p><b>Clarify that Dischargers are not required to conduct monitoring unless there is a rain event that creates a discharge and are not required to conduct monitoring in areas where they lack legal access.</b></p> <p>The Order requires Dischargers to identify and quantify sources of human fecal material in wet weather discharges to conduct sampling and chemical analyses and to provide written progress reports twice each year, which include all results of</p>	<p>Water Code section 13267 authorizes the San Diego Water Board to direct the City to investigate and monitor water quality conditions at locations that are affected by the City's discharges and beyond the jurisdictional boundaries of the City. If for example a downstream property owner fails to provide access to the City to conduct monitoring, the San Diego Water Board could require the downstream property owner to provide access or conduct the monitoring itself.</p>	<p>Directive 3.a.(2) of the Tentative Order is revised.</p>

<p>the sampling (Order Directive 1 and 2). The required monitoring program will this be dependent on the occurrence of rain events during the applicable reporting periods. In San Diego County, there are large periods of time where there is insufficient rain to conduct sampling of wet weather discharges. The Order does not contain any provisions addressing how monitoring should occur where wet weather is insufficient to allow for monitoring. For this reason, the City requests that the Order be modified as follows:</p> <p><b>Requested Revision 4.a.</b> Add the following sentence to the end of Directive 2:</p> <p>No sampling or chemical analysis is required during a reporting period unless there is at least one precipitation event that produces a discharge from the MS4 and is preceded by 48 hours without a precipitation event that produces a discharge. No monitoring is required in areas where a Discharger lacks legal access.</p> <p><b>Align reporting requirements with existing reporting schedule</b></p> <p>The Order requires Dischargers to submit progress reports each July 15 and January 15, which describe actions taken during the previous six months, the results of all sampling, all scheduled activities, including a graphical depiction of the progress of the investigative study, any modifications to the work plan, and any delays encountered as well as efforts to mitigate delays.</p> <p>Preparing semiannual reports on the Work Plan creates additional reporting obligations that must be added to City’s established reporting schedule. The City already prepares reports on the Jurisdictional</p>	<p>Directive 3 of the Tentative Order currently allows Responsible Parties to propose a monitoring program which accounts for instances when rain is insufficient to accommodate sampling. To provide additional clarity, the San Diego Water Board, has modified the language of Directive 3.a.(2) as follows:</p> <p>“Data generation and acquisition including sample process design (i.e., monitoring locations, frequencies, as well as sample matrixes and target compounds) and contingencies for <u>monitoring and</u> collecting additional samples;”</p> <p>The Tentative Order requires Responsible Parties to submit a semiannual progress report to the San Diego Water Board which describes the actions taken towards achieving compliance with the Tentative Order during the previous six months and other specified information. The semiannual frequency of the progress reports is needed to verify the Responsible Parties continued forward progress towards achieving the goals of the Tentative Order over a four-year period until the required investigative study is completed. The San Diego Water Board will consider relaxing the frequency of the reports in the future if good progress is demonstrated and maintained by the Responsible Parties.</p>	
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<p>Runoff Management Plan (“JRMP”), the Water Quality Improvement Plan (“WQIP”), and the Trash Order provisions. A requirement to prepare these semiannual reports appears to disregard the City’s established reporting obligations and to prioritize reporting on the Work Plan over long-standing and long-anticipated programmatic elements, such as implementing the JRMP and WQIP, implementing the requirements of the Trash Order, TMDL implementation, and participating in the bacteria reopener and MS4 permit reissuance process.</p> <p><i>Because semiannual reporting on the Work Plan adds another “complex and resource-intensive” program without consideration of limited time and personnel resources already dedicated to water quality programs, the City requests the following revision:</i></p> <p><b><u>Requested Revision 4.b.</u></b> Revise item 4 a. and b. of the Ordering Provisions to read as follows:</p> <p><del>The Each</del> Dischargers shall prepare and provide written <del>semiannual</del> progress reports as provided below.</p> <p><del>Semiannual</del><u>Annual</u> progress reports must (1) describe the actions taken toward achieving compliance with this Investigative Order during the previous <del>six months</del><u>year</u>; (2) include all results of sampling, tests, and all other verified or validated data received or generated by or on behalf of the Dischargers during the previous <del>six months</del><u>year</u> in the implementation of the actions required by this Investigative Order; (3) describe all activities including, data collection and other field activities which are scheduled for the next <del>six months</del><u>year</u> and provide other information relating to the</p>		
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	<p>progress of work, including, but not limited to, a graphical depiction of the progress of the investigative study; (4) identify and modifications to the Investigative Study Work Plan or other work plan(s) that the Dischargers propose to the San Diego Water Board or that have been approved by San Diego Water Board during the previous <del>six months</del><u>year</u>; and (5) include information regarding all delays encountered or anticipated that may affect the future schedule for completion of the actions required, and a description of all efforts made to mitigate those delays or anticipated delays.</p> <p>All <del>semia</del><u>Annual</u> progress reports shall be submitted to the San Diego Water Board by the (<del>15<sup>th</sup></del><u>31<sup>st</sup></u>) day of <del>January and July</del><u>October</u> of each year following the <del>effective date of this Investigative Order</del><u>submission of the Work Plan</u>. Submissions of these <del>progress</del> reports shall continue until submittal of the Final Investigative Study Report verifying completion of the investigative study or studies required under Directive 1 of this Investigative Order.</p>		
<p>6</p>	<p><b>Clarify the relationship between this Order and the Bacteria TMDL</b></p> <p>They City is an entity subject to the requirements of the Bacteria TMDL, which addresses many of the same concerns that motivate the Order. If the Order is issued in some form, then the City requests clarification of the relationship between the two documents and asks that compliance with one be deemed compliance with the other.</p> <p><b><u>Requested Revision 5.</u></b> Clarify that compliance with the Order constitutes compliance with the Bacteria TMDL.</p>	<p>The Tentative Order directs Responsible Parties to submit the results of an investigative study, or studies, to identify and quantify sources of human fecal material discharges, from their respective jurisdictions, to the Lower San Diego River and its tributaries. Compliance with the Tentative Order requirements does not constitute compliance with the Bacteria Project I TMDL.</p> <p>The Tentative Order requires the Responsible Parties to submit technical and monitoring reports to 1) identify and quantify the relative contributions of suspected sources of human fecal material to the San Diego River, and 2)</p>	<p>None necessary</p>

		<p>determine if the management measures in use by the Responsible Parties in their respective water quality programs are adequately addressing the REC-1, REC-2, and SHELL beneficial use impairments caused by the presence of human fecal material in the San Diego River, its tributaries, and the downstream beach coastal waters (see Finding 57 of the revised Tentative Order).</p> <p>The Bacteria Project I TMDL establishes waste load allocations (WLAs) for point source dischargers of fecal coliform, total coliform, and enterococcus. This includes the owners and operators of municipal separate storm sewer systems (MS4s), Caltrans, and Padre Dam Municipal Water District (for fecal coliform only). The compliance dates to achieve the dry weather TMDL is April 4, 2021 and wet weather TMDL is April 4, 2031. The applicable WLAs and Load Allocations (LAs) for the Lower San Diego River Watershed are described in Tables 2A, 2B, and 2C in Finding 11 of the revised Tentative Order.</p> <p>The Tentative Order requires investigation of sources of human fecal material discharges. Results of the investigation should beneficially contribute to the Responsible Party's understanding of specific sources of human fecal material discharges, their relative contribution to water quality impairment, and the effectiveness of the Responsible Party's pollutant control strategies to effectively prohibit and reduce to the maximum extent practicable the specific sources of such discharges. This additional knowledge will help inform Responsible Party decisions to adaptively manage jurisdictional program</p>	
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		<p>strategies to increase ability to achieve compliance with the WLAs of the Bacteria Project I TMDL.</p> <p>Finding 20 of the revised Tentative Order acknowledges the City's initial steps towards compliance with the Tentative Order. Information gathered by the Tentative Order investigation should further inform the City if changes are needed to current management measures in either the MS4 or wastewater collection programs to control human sources of fecal material being discharged to receiving waters. The information gathered may also inform the San Diego Water Board on the need for future changes or additions to permit requirements to better control sources of human fecal material discharges.</p> <p>Compliance with the Bacteria Project I TMDL may be demonstrated by the City through one of the methods outlined in provision 6.b.(3) of Attachment E of the Regional MS4 Permit. Compliance with the Tentative Order should contribute to the Discharger's efforts to comply with the Bacteria Project I TMDL via any one of the methods available in the Regional MS4 Permit. However, compliance with the Tentative Order requirements does not constitute compliance with the Bacteria Project I TMDL.</p> <p>Information collected under the Tentative Order may provide a basis for demonstrating the necessity and scope of potential amendments to the Bacteria Project I TMDL, and other permits issued by the San Diego Water Board to reduce instances of human fecal material reaching</p>	
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		surface waters (see Finding 57 of the Tentative Order).	
7	<p><b>Provide funding for conducting the studies</b></p> <p>Section 6 of Article XIII B of the California Constitution requires the State to provide a subvention of funds to local agencies any time the Legislature or a state agency requires the local agency to implement a new program, or provide a higher level of service under an existing program. The Order requires the City to implement a new program to investigate the sources and pathways of human fecal material in wet weather discharges to the San Diego River. Issued pursuant to Water Code sections 13267 and 13383, the Order constitutes a state mandate. The City does not have authority to levy service charges, fees, or assessments sufficient to pay for the mandated program.</p> <p>Because the Order constitutes a state mandate, the City requests that the Regional Board comply with Section 17561 of the Government Code and undertake the following:</p> <p><b>Requested Revision 6.a.</b> Prepare and provide a bill appropriating the funds for the costs mandated by the Order, or alternatively, provide an appropriation for these costs in the Budget Bill for the next fiscal year.</p> <p><b>Requested Revision 6.b.</b> Revise the Order to cite that item of appropriation in the Budget Bill or that appropriation in any other bill that is intended to</p>	<p>The San Diego Water Board understands the concerns but disagrees with the assertion that the Tentative Order imposes state mandates requiring reimbursement on the Responsible Parties. The Tentative Order does not impose a new program or higher level of service on the Responsible Parties. Under mandates law, a program is defined as “a program which carries out the ‘governmental function of providing services to the public, or laws which, to implement a state policy, impose unique requirements on local governments and do not apply generally to all residents and entities in the state.”<sup>5</sup> This Tentative Order does not impose a program that carries out a governmental function of providing services to the public. Neither does it require that responsible parties provide a higher level of service than previously required of them. Rather, the Responsible Parties are required to investigate and report on whether they are adequately complying with existing prohibitions on discharges of waste in the Basin Plan and/or existing permits governing their waste discharges or suspected discharges. This does not amount to imposition of a new program or higher level of service. Moreover, even if the Tentative Order were properly viewed as imposing a new program or higher level of service, it does not constitute a state mandate requiring reimbursement because exceptions under mandates law apply. For example, the Tentative</p>	None necessary

<sup>5</sup> *County of Los Angeles v. Comm’n on State Mandates* (2003) 110.Cal.App.4th 1176, 1189, citing *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 56.

	<p>serve as the source from which the Controller may pay the claim of local agencies and school districts.</p>	<p>Order does not impose unique requirements on local government. First, the prohibitions on the discharge of human fecal material apply to all residents and entities in the State. Second, laws of general applicability are not entitled to subvention because they do not “force programs on localities.”<sup>6</sup> Even if the Tentative Order singled out local governments, such a fact would not be dispositive where local agencies are required to perform the same functions as private industry.<sup>7</sup> However, it is apparent that this Tentative Order applies equally to local agencies as well as state agencies. Its requirements are not unique to local government. Further, the local agency responsible parties are not required to use tax monies to pay for compliance with the requirements of this Tentative Order. The San Diego Water Board believes that the local agency responsible parties have fee authority, including storm water fee authority, to fund compliance with this Tentative Order. Senate Bill 231, effective January 1, 2018, defines “sewer” for purposes of Proposition 218 and its exception to voter approval for sewer, water and refuse collection fees. The definition specifically includes storm water and confirms that storm water fees are not subject to the voter approval requirement but instead to the majority protest procedure in Proposition 218. In addition, local agency responsible parties have authority to impose property-related fees under their police</p>	
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<sup>6</sup> *County of Los Angeles, supra*, 43 Cal.3d at pp. 56-58 (finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention).

<sup>7</sup> *Ibid.*

		power. The San Diego Water Board disagrees that the Tentative Order or any of its provisions impose state mandates requiring reimbursement.	
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No.	Comment	Response	Action Taken
<b>G. Allen Carlisle, General Manager/CEO, Padre Dam Municipal Water District (Padre Dam MWD); written comments dated June 20, 2018</b>			
8	<p>Although Padre Dam is supportive of the goals expressed in the Tentative Order, it is inappropriate to include Padre Dam in the order when there is insufficient evidence to link Padre Dam's activities to the problem which the order seeks to address. See <i>In the Matter of the Petition of Chevron Products Company</i>, Order WQO 2004-0005, SWRCB/OCC File A-1343 (May 20, 2004). As set forth in more detail in this letter, there is no evidence supporting the inclusion of Padre Dam in this Tentative Order. For this reason, Padre Dam respectfully asks to be removed from the Tentative Order. In the alternative, Padre Dam requests that the Tentative Order be modified to comply with the evidentiary requirements of <i>Chevron</i>.</p>	<p>The San Diego Water Board understands the concerns but disagrees with the assertion that Padre Dam Municipal Water District (Padre Dam MWD) should be entirely removed from the Tentative Order.</p> <p><b>Potential Contribution to Fecal Contamination from Padre Dam MWD’s Sewer Collection System</b></p> <p>Padre Dam Municipal Water District (Padre Dam MWD) owns and operates a sanitary sewer collection system in the City of Santee, the City of El Cajon, and the unincorporated community of Lakeside in the Lower San Diego River Watershed (Finding 32 of the Tentative Order). As stated in Finding 26, untreated sewage may be released from the sewer collection system via sanitary sewer overflows (SSO) including exfiltration and subsequently adversely impact the water quality in nearby storm drains and receiving waters. A human-associated fecal source marker HF183, a signal of human fecal wastes <sup>8</sup>, has been detected ubiquitously in the Lower San Diego River Watershed (Findings 14 through 16 of the Tentative Order), including creeks (e.g., Sycamore Creek, Forrester Creek, and Los Coches Creek) that drain areas where Padre Dam MWD’s sewer</p>	<p>Finding 38 is added to the Tentative Order consistent with the response.</p>

<sup>8</sup> Host-associated genetic markers that allow for fecal source identification and that are sensitive and specific to their target hosts have been used extensively as diagnostic tools to discern human sources of fecal material in watersheds. Genetic human markers such as HF183 include gene segments of the bacteria that are mostly associated with human feces. HF183 detects *Bacteroides* present in human fecal material.



No.	Comment	Response	Action Taken
		<p>collection system network is located.</p> <p>These facts support requiring Padre Dam MWD, as a discharger of waste that could affect water quality, to participate as a Responsible Party in the investigation and submittal of technical reports required in the Tentative Order pursuant to Water Code section 13267. This section broadly authorizes the regional water quality control boards to require persons who discharge, have discharged, or are “suspected of having discharged or discharging” waste that could affect water quality, to furnish technical or monitoring program reports. The extent to which Padre Dam MWD’s sewer collection system has adversely impacted the receiving waters of the Lower San Diego River Watershed is unknown at this time and is one of the purposes of the investigation required in the Tentative Order.</p> <p><b>Potential Contributions from Ray Stoyer WRP’s Treated Effluent and Additional Sources from Santee Lakes</b></p> <p>Padre Dam MWD collects, treats, and discharges tertiary treated and disinfected wastewater effluent to Santee Lakes which periodically overflow to Sycamore Creek, a tributary of the Lower San Diego River. An objective of the Tentative Order is to require Padre Dam MWD to participate with other designated Responsible Parties in identifying and qualifying the relative contributions of suspected sources of human fecal material discharges to the Lower San Diego River Watershed.</p>	

No.	Comment	Response	Action Taken
		<p>Pursuant to its NPDES permit, Order No. R9-2015-0002, as amended, Padre Dam MWD does not measure the tertiary treated effluent from the Ray Stoyer Water Recycling Facility (WRF) for the presence of the HF183 human genetic marker. Therefore, the degree to which effluent from this Facility may be causing or contributing to measurable levels of HF183 in the San Diego River or its tributaries is unknown (Finding 38 of the Tentative Order).</p> <p>In the Upstream Microbial Source Tracking Study, the human-associated fecal source marker HF183 was detected in quantifiable concentrations in wet weather water flows in Sycamore Creek downstream of where the Ray Stoyer WRF discharge enters the creek from Santee Lakes. Santee Lakes are frequently used by local residents for recreational activities, including fishing, RV parking, and boat paddling and provide habitat for various wildlife. As treated effluent passes through Santee Lakes, anecdotal exceedances of E. coli concentrations slightly above water quality objectives have been documented at the discharge point where Santee Lakes overflow to Sycamore Creek, suggesting fecal sources other than treated effluent may have been released to Sycamore Creek.</p> <p>Advanced treatment processes such as those employed by Padre Dam MWD, including tertiary treatment followed by disinfection, should result in inactivation and removal of most human pathogenic viruses and bacteria in the effluent to levels that are protective of human health.</p>	

No.	Comment	Response	Action Taken
		<p>Scientific research indicates that to predict the same level of health risk, significantly more elevated threshold values of HF183 are associated with treated effluents as compared to untreated sewage. The treated discharge from Ray Stoyer WRF is compliant with its permit requirements with respect to coliform bacteria effluent limitations and is not expected to cause or contribute to impairment of recreation beneficial uses in Sycamore Creek or the downstream Lower San Diego River. However, the discharge may still contribute to background signals of HF183 observed in Sycamore Creek. Quantifying the levels of background signals of HF183 coming from the Ray Stoyer WRF discharge, will assist in identifying and quantifying untreated sewage and human fecal waste material in downstream waters.</p> <p>Considering the lower health risk of disinfected tertiary effluent compared with that of raw sewage, and past monitoring reports demonstrating that the treated effluent discharge from the Ray Stoyer WRF to Santee Lakes is compliant with bacteria effluent limitations, the Tentative Investigative Order provides in Finding 38 that Padre Dam MWD can conclude the investigation of the Ray Stoyer WRF discharge by characterizing the HF183 levels in the treated effluent and determining the mass contribution of HF183 based on discharge volume information.</p> <p><b>Inapplicability of the Chevron Matter to Padre Dam MWD</b></p>	

No.	Comment	Response	Action Taken
		<p>As an initial matter, Order WQO 2004-0005, SWRCB/OCC File A-1343 (May 20, 2004) was withdrawn in 2006 as directed by court order following a challenge to the underlying regional water board order. See Order WQO-2006-0011.<sup>9</sup> However, even if it had not been withdrawn, the factors that were applied in the Chevron matter are not applicable to inclusion of Padre Dam MWD as a responsible party in the Tentative Order. In contrast to the facts at issue in the Chevron matter, there is substantial evidence in Findings 34 through 38 that support the conclusion that Padre Dam MWD discharges, discharged or is suspected of discharging or having discharged waste in the San Diego Region. Padre Dam MWD should remain designated as a Responsible Party for complying with the requirements of the Order.</p> <p>Based on all of these considerations Finding 38 is added to the Tentative Order as set forth below:</p> <p><u>“38. Padre Dam Municipal Water District, Ray Stoyer WRF is Designated as a Responsible Party. In the Upstream Microbial Source Tracking Study, HF183 was detected in quantifiable concentrations in wet weather water flows in Sycamore Creek downstream of where the Ray Stoyer WRF discharge enters the creek from Santee Lakes. Moreover, Santee Lakes are frequently used by local residents for recreational activities, including fishing, RV parking, and boat paddling. Santee</u></p>	

<sup>9</sup> State Water Board Order WQO 2006-0005, *In the Matter of the Petition of Chevron Products Company For Review of Technical Report Order For 4000 Portola Drive, Santa Cruz Issued by the California Regional Water Quality Control Board, Central Coast Region*, SWRCB/OCC File A-1343 (December 13, 2006) available on the State Water Board website at [https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2006/wqo/wqo2006\\_0011.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0011.pdf) (as of October 22, 2018)

No.	Comment	Response	Action Taken
		<p><u>Lakes also provide habitat for various wildlife. As treated effluent passes through Santee Lakes, anecdotal exceedances of E.coli concentrations slightly above applicable water quality objectives have been documented at the discharge point where Santee Lakes overflow to Sycamore Creek, suggesting fecal sources other than treated effluent may have been released to Sycamore Creek.</u></p> <p><u>Based on the above information, Padre Dam Municipal Water District's Ray Stoyer WRF discharges or is suspected of discharging waste in the Lower San Diego River Watershed. Padre Dam Municipal Water District's Ray Stoyer WRF is a discharger responsible for complying with the requirements of this Order and is designated as a Responsible Party. However, considering the lower health risk of disinfected tertiary effluent compared with that of raw sewage, and past monitoring reports demonstrating that the treated effluent discharge from the Ray Stoyer WRF to Santee Lakes is compliant with bacteria effluent limitations specified in Order No. R9-2015-0002, the San Diego Water Board has determined that Padre Dam Municipal Water District may choose to comply by evaluating the Ray Stoyer WRF effluent discharge as described below. Ray Stoyer WRF may quantify its contribution of HF183 to the Lower San Diego River Watershed by characterizing levels in its treated effluent and evaluating the mass contribution of HF183 based on discharge volume information. To comply in this manner, Padre Dam Municipal Water District must prepare a work plan to quantify the contribution of HF183 from the treated effluent discharges of the Ray</u></p>	

No.	Comment	Response	Action Taken
		<p><u>Stoyer WRF to Sycamore Creek pursuant to Directive 3 of this Investigative Order. This work plan can be prepared separately for the treated effluent portion only, or as part of the larger work plan, consistent with the requirements in Directive 3.</u> “</p>	
9	<p><b>Illegal Connections and Illicit Discharges To MS4s</b></p> <p>It is improper to require Padre Dam to investigate illegal connections and illicit discharges to MS4s. Padre Dam does not own or operate an MS4. Padre Dam lacks authority to conduct any studies or to regulate discharges or connections to any MS4. Because of the way the Tentative Order is drafted, however, all "Dischargers," including Padre Dam, are required to study illicit discharges and illegal connections to MS4s. In accordance with <i>Chevron</i>, there is no evidentiary basis for including Padre Dam in the Tentative Order.</p>	<p>The San Diego Water Board agrees that Padre Dam MWD does not own or operate a MS4. Padre Dam MWD does own and operate a sewage collection system which may potentially contribute human fecal material (e.g. via overflows including exfiltration of sewage) to nearby MS4s and receiving waters and threaten recreational beneficial uses of the receiving waters.</p> <p>Human fecal material has been widely detected in the Lower San Diego River Watershed (Finding 1, and Findings 10 through 16 in the Tentative Order). Under the Tentative Order, Padre Dam MWD, as well as other sewage collection agencies in the Lower San Diego River Watershed, are required to identify if their collection system is contributing to the presence of human fecal material in receiving waters, and if the collection system is contributing, determine the relative contribution. In an effort to share resources and lessen duplicative work or other efforts, the Tentative Order does not prohibit Padre Dam MWD from working with other Responsible Parties in the Tentative Order to investigate potential pathways and loading rates of human fecal material from sewage collection systems.</p>	None necessary

No.	Comment	Response	Action Taken
		See also response provided to Comment Nos. 3 and 8.	
10	<p><b>Direct Deposition From Homeless Encampments</b></p> <p>It is improper to require Padre Dam to investigate direct deposition from homeless encampments. Padre Dam does not own or operate any encampments and does not own or control the San Diego River or its tributaries. Further, Padre Dam lacks authority to study or regulate homeless encampments. Because Padre Dam has no authority over homeless encampments, there is no evidentiary basis for including Padre Dam in the Tentative Order.</p>	<p>The San Diego Water Board has revised Directive 1 of the Tentative Order to clarify that Responsible Parties must submit the results of an investigative study, (Final Investigative Study Report) to identify and quantify sources and pathways of human fecal material discharges, from their respective jurisdictions, to the Lower San Diego River Watershed. The revised Directive provides in Footnote 25 that a Responsible Party must comply with the requirements of the Tentative Order to the fullest extent of their legal authorities. A Responsible Party is not required to investigate suspected sources or pathways of human fecal material discharges to the extent it lacks legal authority and cannot reasonably obtain legal authority (such as access to private property) to conduct the required investigations.</p> <p>Suspected sources or pathways of human fecal material discharges to the Lower San Diego River are described in revised Finding 21 and restated below:</p> <ul style="list-style-type: none"> <li>“•Sanitary sewer overflows (<b>SSO</b>) from publicly-owned sewer collection systems;</li> <li>•Sewage spills from privately-owned lateral sewer lines;</li> <li>•Exfiltration from publicly-owned sanitary sewer collection systems (<b>a type of SSO</b>) and privately-</li> </ul>	Directive 1 of the Tentative Order is revised as provided in the response to Comment No. 4.

No.	Comment	Response	Action Taken
		<p>owned lateral sewer lines (<a href="#">a private lateral sewage discharge</a>);</p> <ul style="list-style-type: none"> <li>• <a href="#">Faulty</a> privately-owned on-site wastewater treatment systems (OWTS);</li> <li>• Illegal connections to MS4s;</li> <li>• Illicit discharges to MS4s; and</li> <li>• Direct <a href="#">or indirect</a> deposition from homeless encampments.</li> </ul> <p>To some extent, the human fecal marker, HF183, may be present in treated effluent from Padre Dam Water District’s Pay Stoyer Water Reclamation Facility.”</p> <p>Whereas Padre Dam MWD is not expected to directly measure wastes generated from homeless encampments, the sources of human fecal materials can be multiple (e.g., leaking sewers, homeless encampments, and septic tanks etc.) and their transport pathways intertwined. Consequently, a holistic investigation approach is necessary in which Responsible Parties designated in the Tentative Order should work together to investigate the sources, loading rates, and pathways of human fecal contamination in the watershed. As an example, Padre Dam MWD may participate in the monitoring of stations that potentially receive discharges from both leaking sewage pipes and homeless encampment contributions.</p>	
11	<b>Exfiltration and Sewage Spills From Private Property</b>	The Tentative Order does not require Padre Dam MWD to investigate contributions of human fecal material or pathogens from septic systems in the	None necessary



No.	Comment	Response	Action Taken
	<p>It is improper to require Padre Dam to investigate exfiltration from private sewer laterals and septic systems. Padre Dam does not own the private property on which these laterals are located and does not have authority over private septic systems. Discharges from private property are the responsibility of the private property owner and not of Padre Dam. There is no evidence that any of the private spills referenced in the Tentative Order were caused by or related to the manner in which Padre Dam operates its system. Under <i>Chevron</i>, there is no evidentiary basis for including Padre Dam in the Tentative Order.</p>	<p>Lower San Diego River Watershed. The Tentative Order applies to multiple Responsible Parties. Finding 41 of the Tentative Order notes that surfacing effluent or rising groundwater containing human fecal material attributable to faulty on-site wastewater treatment systems (OWTS) such as failing septic systems can discharge into and through nearby MS4s to receiving waters. Moreover, the County of San Diego Department of Environmental Health (DEH) has responsibility for permitting, managing, and regulating private septic systems. The County DEH is required under the Tentative Order in Finding 54 to report available information that can inform the investigation by MS4 entities to quantify the extent of the contribution, if any, of human fecal materials in discharges to the Lower San Diego River Watershed from OWTS.</p> <p>Padre Dam MWD, however, does provide wastewater services to properties with private laterals. The Tentative Order does require Padre Dam MWD to participate in identifying and quantifying the relative contribution of human fecal material suspected from the private laterals included within its service area. Private lateral discharges remain a potential threat to public health and water quality in the Lower San Diego River Watershed.</p> <p>Padre Dam MWD is a permittee under Order No. R9-2007-0005 and Order No. 2006-0003-DWQ and therefore is required to monitor and report private lateral discharges that it is aware of within the District's service area. Padre Dam MWD reported 28 spills from private laterals between the</p>	

No.	Comment	Response	Action Taken
		<p>years 2013-2018, discharging over 12,000 gallons of untreated sewage into the Lower San Diego River Watershed (Finding 32.b of the Tentative Order).</p> <p>The requirement in the Tentative Order for Padre Dam MWD to participate in quantifying the contributions of human fecal material from private lateral discharges and exfiltration from private laterals is essential to the San Diego Water Board’s overall understanding of the relative sources and contributions of human fecal material in the watershed.</p>	
12	<p><b>Exfiltration and Sewage Spills from Publicly-Owned Collection System</b></p> <p>Finally, it is improper for the Tentative Order to require Padre Dam to investigate exfiltration and sewage spills from the publicly owned collection system. As set forth below, although Padre Dam owns and controls its collection system, there is no evidence that exfiltration or spills from the system are linked in any way to the problem that the Tentative Order seeks to address.</p> <p><b>Evidence Demonstrates Water Quality Is Protective of Human Health</b></p> <p>The Tentative Order relies, in part, on a Surfer Health Study conducted at Ocean Beach, located at the mouth of the San Diego River, and at Tourmaline Beach as evidence supporting the requirement that Padre Dam investigate exfiltration and sewer spills. See, Finding 10-13. The Surfer Health Study,</p>	<p>The San Diego Water Board disagrees with the assertion that it is improper to require Padre Dam MWD to investigate exfiltration and sewage spills from its collection system. The San Diego Water Board addresses the factors Padre Dam MWD presents to support its claim below:</p> <p><u><i>Padre Dam MWD Comment: Evidence Demonstrates Water Quality Is Protective of Human Health</i></u></p> <p>With respect to water quality impairment in the Lower San Diego River Watershed, please refer to Responses to Comment No. 13.</p> <p>With respect to the validity and limitations (i.e., limited rain events in the study period) of the Surfer Health Study (SHS) design and results, please refer to Responses to Comment No. 24. Also note that whereas some pathogens, e.g., campylobacter, may come from wildlife, including birds, the genogroups of viruses studied in the SHS and Microbial Source Tracking (MST) studies,</p>	<p>Finding 38 is added to the Tentative Order consistent with the response.</p>

No.	Comment	Response	Action Taken
	<p>however, does not support the inclusion of Padre Dam in the Tentative Order.</p> <p>First, As the Tentative Order itself recognizes, the study results "do not exceed the most recent USEP A guidance for recreational beaches." Finding 11. This conclusion is based on EPA' s guidance for recreational beaches, which is based on studies, spanning a period of approximately 26 years. Under <i>Chevron</i>, it is improper for the Regional Board to ignore or misconstrue reliable standards. Further, the Basin Plan has no objectives for human fecal material, so there is no authority to regulate Padre Dam's activities based on anything other than fecal coliform or enterococcus. Because the Tentative Order recognizes that water quality is protective of human health and because the Basin Plan lacks authority to regulate on any indicator bacteria than fecal coliform or enterococcus, the Surfer Health Study appears to undermine the very premise and goal of the Tentative Order and is contrary to <i>Chevron</i>.</p> <p>Second, due to the limitations of the Surfer Health Study, the study does not link the increase in</p>	<p>especially norovirus subgroup GI and GII, are not zoonotic and can only come from human wastes. As part of the SHS, a Quantitative Microbial Risk Assessment was conducted which confirmed that among the human pathogens studied in the SHS, norovirus is the primary risk driver for GI illness (Chapter three of the SHS report), a conclusion consistent with recent scientific findings (Soller et al., 2010b) <sup>10</sup>.</p> <p>With respect to the degradation rates of HF183, a recent report published by SCCWRP shows a HF183 degradation rate of 0.88 day<sup>-1</sup> (with the 95% confidence interval of 0.12 day<sup>-1</sup>) at one freshwater site in Irvine, California in winter.<sup>11</sup> This degradation rate and associated confidence intervals suggest that 90% of HF183 will be degraded within 2.3 to 3.0 days, and 99% degraded within 4.6 to 6.1 days. Additionally, available literature (Ahmed et al., 2016)<sup>12</sup> which includes a review of HF183 degradation rates from various studies across the world shows that depending on environmental conditions (e.g. temperature and sunlight) and water composition (e.g., fresh vs. marine), degradation rates of HF183</p>	

<sup>10</sup> Soller et al., 2010b. Estimated human health risks from exposure to recreational waters impacted by human and non-human sources of fecal contamination. *Water Res.* 44 (16), 4674-4691, available at <https://www.ncbi.nlm.nih.gov/pubmed/20656314> (as of October 25, 2018)

<sup>11</sup> Cao et al., 2017, Determination of DNA-based Fecal Marker aging Characteristics for Use in Quantitative Microbial Source Tracking, SCCWRP Technical Report 978, available online at [http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/978\\_DNA\\_FecalMarkerAgingQuantMicrobialSourceTracking.pdf](http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/978_DNA_FecalMarkerAgingQuantMicrobialSourceTracking.pdf) (As of October 25, 2018)

<sup>12</sup> Ahmed et al., 2016, Current Status of Marker Genes of *Bacteroides* and Related Taxa for Identifying Sewage Pollution in Environmental Waters, *Water* 2016, 8, 231, doi: 10.3390/w8060231, available at <https://www.mdpi.com/2073-4441/8/6/231> (as of October 25, 2018)

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	<p>illnesses after rainfall events to activities of Padre Dam. In addition to concluding that water quality meets standards protective of human health, the study also notes that it used a system of self-reporting symptoms, stating this <i>"could bias the association between ocean exposure and illness away from the null if surfers artificially over-reported illness following exposure."</i> The survey text discussed measures taken to control this limitation, however stated that these measures <i>"would not control/or systematic bias."</i> Therefore, as the study relied on self-reporting techniques, the resulting conclusions have inherent bias, that clearly clouds the credibility of conclusions. The Surfer Health Study also took place during a drought, which meant that there were just 10 rainstorms during the study period. The study notes that <i>"a more balanced distribution between dry and wet weather exposure would have improved the precision of our wet weather exposure associations."</i> Thus, in addition to concluding that water quality meets standards protective of human health, it reached this conclusion despite the study design's bias toward over-reporting human illnesses.</p> <p>Third, the Surfer Health Study was not designed to distinguish between illnesses associated with human sources of pathogens and naturally occurring sources. Notably, the study recognizes that the study locations were close to avian nesting areas, Dog Beach, and other wildlife activity, making the results inconclusive regarding the source of the pathogens. Thus, the study does not link human illnesses with pathogens in human fecal materials. It is also important to recognize that the human DNA marker</p>	<p>may vary significantly, with 90% of degradation observed between 0.41 days and over 24 days. Storm hydrographs at a USGS gauge close to the bottom of the watershed (at Fashion Valley) show that for a typical rain event (e.g. of 0.1 inch/24 hours), the peak flow is normally observed within two days and the water table returns to its baseline levels in about a week. These time frames of two to seven days are within the reported time ranges for complete HF183 degradation. In other words, any fresh release of human fecal material, including HF183, in the inland portion (e.g., at Santee) of the study area may be carried to the bottom of the watershed in a typical rain event before the HF183 is degraded completely and detected in the receiving water thereafter.</p> <p><u><i>Padre Dam MWD Comment: Evidence Does Not Support Studies of Exfiltration from Padre Dam's System</i></u></p> <p>The San Diego Water Board understands that sewage exfiltration is more likely to occur in dry weather, however, the effects of exfiltration are not limited to dry weather. As an example, sewage exfiltration leads to fecal contamination of bedding materials and nearby soil (in dry weather). During rain events, storm water seepage and groundwater levels increase and can spread and carry fecal contaminants in the bedding materials and soil into nearby storm drains and receiving water. Sewer mains that are at low elevation and close to river beds are subject to inundation and surcharging in heavy rain events, which may also contribute to increased fecal contamination in nearby receiving water. The San Diego Water Board expects that all</p>	

No.	Comment	Response	Action Taken
	<p>HF183 does not exist for extended periods of time in the natural environment. It is not reasonable to conclude that any HF183 markers identified at the ocean could have come from Padre Dam's activities.</p> <p>In light of the evidence demonstrating that water quality is protective of human health and evidence failing to demonstrate any link between the increase in illnesses and human sources of pathogens causing those illnesses, there is no evidentiary link between human health effects and possible exfiltration or spills from Padre Dam's system. Under these circumstances, and in light of the following evidence, it is contrary to <i>Chevron</i> to require Padre Dam to conduct additional investigations into these activities.</p> <p><b>Evidence Does Not Support Studies of Exfiltration From Padre Dam's System</b></p> <p>It is inappropriate to require Padre Dam to study exfiltration from its collection system because exfiltration does not occur during wet weather and, only occurs during dry weather when ground water levels are low. As the Tentative Order notes, human health risks increase following wet weather, but, according to the Surfer Health Study, illnesses remain constant during dry weather. Exfiltration, however, occurs during dry weather, not wet weather. Further, during and up to two weeks after rain events, groundwater levels rise, leading to inflow and infiltration into the system. Thus, sewer exfiltration, being a dry weather phenomenon, is essentially proven, by the study itself, not to contribute to river or beach contamination.</p>	<p>contamination and transportation pathways will be thoroughly evaluated in order to appropriately establish the Conceptual Watershed Model required in Directive 2 of the Tentative Order.</p> <p>Order Nos R9-2007-0005 and 2006-0003-DWQ prohibit discharges of human fecal materials to receiving waters at all times. However, HF183 has been found in receiving waters in dry and wet weather, indicating that the prohibition is not being met. Results of the MST Study conducted after the SHS show that quantifiable concentrations of HF183 and enterococcus were detected from multiple stations along the main stem and tributaries of the Lower San Diego River in wet weather conditions. In addition, results of the Southern California Bight Regional Monitoring Program (Bight 2013) show that HF183 was detected in quantifiable concentrations in 22% and 44% of samples collected in dry and wet weather respectively from 22 coastal drainages in Southern California, including the San Diego River. During the Bight 2013 survey, HF183 was detected in about 28% of samples collected from the San Diego River during dry weather and in about 41% of samples collected from the San Diego River during wet weather. The frequency of detection of HF183 in the aforementioned studies justify including exfiltration from sewer systems in the Tentative Order as a potential source of human fecal material in the watershed.</p> <p>With respect to engineering design, note that sewage collection systems are not designed to remove contaminants (i.e. treat pollutants) as do</p>	

No.	Comment	Response	Action Taken
	<p><i>Wastewater Engineering</i> by Metcalf and Eddy, a standard engineering design book for the wastewater industry, demonstrates that fecal coliform and viruses are non-existent within three feet of the source of underground human fecal material, such as at the bottom of a septic tank leach field. Similarly, sewer exfiltration would be non-existent within a few feet. Exfiltration is a localized condition and, as a result, would not be transported during a subsequent rainfall event. Finding 30 recognizes that there is no data supporting exfiltration from Padre Dam's system to the San Diego River. Under these circumstances, there is no evidentiary basis for requiring Padre Dam to study exfiltration.</p> <p><b>Evidence Does Not Support Studies of Sewage Overflows From Padre Dam's System</b>                      It is inappropriate to require Padre Dam to study sewage overflows from its system. Padre Dam's system is already regulated by multiple water quality permits. Sanitary Sewer Overflows ("SSO") are specifically regulated by the <i>Statewide General WDR for Wastewater Collection Agencies</i>, State Water Resources Control Board Order No. 2006-0003-DWQ. See also Finding 20. Under the SSO WDR, all spills must be tracked, remediated, recovered as much as possible, reported, and managed in accordance with a sewer system management plan. According to the SSO permit, "implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisances." SSO WDR ¶ 15. Over the last four years, for example, there have been only seven spills, averaging less than 100 gallons each.</p>	<p>septic tank leach fields. Leach fields are intentionally designed so that specific pollutants such as pathogens will be attenuated or removed when wastewater infiltrates underlying soil through mechanisms such as microbial predation, filtration/adsorption, and inactivation. Sewage collection systems are designed to convey untreated wastewater to a treatment facility. Their design and function do not typically mimic leach fields – in terms of pipe design, material surrounding the pipes, the type of soil underlying the pipes, or the proximity to groundwater, storm drains, or receiving waters. The potential for sewage exfiltration from collection systems to adversely affect groundwater and surface water quality provides a reasonable basis to require agencies operating sewage collection systems to determine if exfiltration from the collection system is contributing human fecal material to surface waters.</p> <p><u><i>Padre Dam MWD Comment: Evidence Does Not Support Studies of Sewage Overflows from Padre Dam's System</i></u></p> <p>Order No. R9-2007-0005 prohibits any discharges upstream of a publicly owned treatment works, and Order No. 2006-0003-DWQ requires dischargers to ensure proper operation and maintenance of their sanitary sewer systems. Despite these requirements, both the SHS and the MST study results demonstrate HF183 is present in receiving waters of the Lower San Diego River Watershed. Accordingly, the Tentative Order's requirement for investigations into human fecal material source</p>	

No.	Comment	Response	Action Taken
	<p>Minimum flows from these spills entered a receiving water. Further, as Padre Dam's monitoring shows, its authorized discharges comply with all limitations in its permits. The Tentative Order requires additional monitoring of the very activities that Padre Dam already monitors and reports on. It is inappropriate and ineffective to require additional monitoring of these same activities.</p> <p><b>Evidence Does Not Support Studies of Treated Effluent From Padre Dam's Wastewater System</b></p> <p>It is inappropriate to require Padre Darn to study the treated effluent discharged from its treatment system. These discharges are already regulated by the Regional Board, Findings 32-34, 48. Under these regulatory permits, Padre Darn's treated effluent and receiving waters are already monitored for indicator bacteria. If monitoring shows an exceedance of indicator bacteria, Padre Darn must develop an action plan to address the cause and operational changes to minimize the impact of these causes. Finding 34. As the Tentative Order recognizes, the disinfection and treatment standards "results in the removal and inactivation of bacteria and pathogens to levels protective of human health[.]" Finding 53. Further, as the Tentative Order recognizes, there is no evidence that the HF183 marker can survive the treatment process. <i>Ibid.</i> Requiring additional monitoring for a separate indicator of bacteria, with no evidence it survives the treatment process or is linked with human health effects and with evidence that HF183 cannot survive long under natural conditions. It is inappropriate under these</p>	<p>sources, discharge pathways, and relative loading percentages of human waste to the Lower San Diego River Watershed is reasonable.</p> <p>The information produced from the Tentative Order required investigations will inform the Dischargers' conceptual model of human waste discharge and transport and will provide a basis for strategic remedial planning for the Lower San Diego River Watershed based on fecal pollution levels in receiving waters from human sources. Information collected under the Tentative Investigative Order can be used by both the San Diego Water Board and the Responsible Parties to evaluate the effectiveness of and improve as necessary, existing management measures in pollutant control programs and regulatory permits used to prevent or control discharges of human fecal material.</p> <p><u><i>Padre Dam MWD Comment: Evidence Does Not Support Studies of Treated Effluent from Padre Dam's Wastewater System</i></u></p> <p>Advanced treatment processes such as those employed by Padre Dam MWD, including tertiary treatment followed by disinfection, should result in inactivation and removal of most human pathogenic viruses and bacteria in the effluent to levels that are protective of human health. The treated discharge from Ray Stoyer WRF is compliant with its permit requirements with respect to coliform bacteria effluent limitations and is not expected to cause or contribute to impairment of recreation beneficial uses in Sycamore Creek or the downstream Lower San Diego River. However, the discharge may still contribute to background</p>	

No.	Comment	Response	Action Taken
	<p>circumstances to require additional studies of Padre Darn's treated effluent.</p> <p>In the end, the burden, including costs, of these studies and reports must bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. Water Code § 13267. The Tentative Order and Surfer Health Study demonstrate that the costs associated with the activities mandated by the Tentative Order far outweigh any benefits. The Tentative Order requires Padre Dam to undertake extensive but undefined studies, monitoring, and reporting of MS4s, homeless encampments, and sewage spills and exfiltration from public and private sewage facilities, including on-site waste treatment systems. These studies are required with little to no supporting evidence linking Padre Darn to MS4s, homeless encampments, private property, or to the human health effects the Tentative Order seeks to address. There is, therefore, no relationship between the burdens and costs associated with issuing the Tentative Order to Padre Dam.</p> <p>For all the reasons set forth above, there is no evidentiary basis supporting the inclusion of Padre Dam in the Tentative Order. Padre Dam respectfully requests to be removed from the Tentative Order. If Padre Dam remains a party to the Tentative Order, at a minimum, the Tentative Order needs to be revised consistently with <i>Chevron</i>.</p>	<p>signals of HF183 observed in Sycamore Creek. Data collected by SCCWRP shows that HF183 has been detected in recycled water at three or four orders of magnitude below levels found in raw sewage.<sup>13</sup> Quantifying the levels of background signals of HF183 coming from the Ray Stoyer WRF discharge, will assist in identifying and quantifying untreated sewage and human fecal waste material in downstream waters.</p> <p>Considering the lower health risk of disinfected tertiary effluent compared with that of raw sewage, and past monitoring reports demonstrating that the treated effluent discharge from the Ray Stoyer WRF to Santee Lakes is compliant with bacteria effluent limitations, the Tentative Order provides in Finding 38 that Padre Dam MWD can conclude the investigation of the Ray Stoyer WRF discharge by characterizing the HF183 levels in the treated effluent and determining the mass contribution of HF183 based on discharge volume information.</p>	

<sup>13</sup> September 7, 2016 email communication from Yiping Cao, Southern California Coastal Water Research Project to Helen Yu, San Diego Water Board available at San Diego Water Board.



<b>No.</b>	<b>Comment</b>	<b>Response</b>	<b>Action Taken</b>

No.	Comment	Response	Action Taken
<b>Steve Jepsen, Executive Director, Southern California Alliance of POTWs (SCAP) and Adam Link, Director of Government Affairs, California Association of Sanitation Agencies (CASA); written comments dated June 20, 2018</b>			
13	<p><b>The Tentative Order Seems to be Addressing A Water Contact Recreational Issue Currently In Conformance with USEPA Guidance</b></p> <p>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.</p> <p>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 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</p>	<p>The San Diego Water Board disagrees that it lacks the authority to issue the Tentative Order. The Tentative Order does not purport to establish regulations and is issued within the San Diego Water Board’s broad authority under the Water Code to investigate the quality of any waters of the state within the San Diego Region (Water Code section 13267(a)) and to require technical and/or monitoring reports where there is substantial evidence, as documented in this Tentative Order, that a person discharges, has discharged, is suspected of discharging or having discharged, or proposes to discharge waste in the San Diego Region. The Tentative Order specifies the reasons for issuance of the Tentative Order and documents substantial evidence that supports inclusion of each entity named as a responsible party.</p> <p>The San Diego Water Board understands the concerns, but disagrees with the assertion that under all weather conditions, receiving water quality in the Lower San Diego River Watershed conforms with the US EPA Bacteria Criteria for Water Contact Recreation from 2012 (the USEPA 2012 Criteria).<sup>14</sup> Furthermore, the San Diego Water Board considers it essential to investigate the sources and transport pathways of human fecal</p>	None necessary

<sup>14</sup> USEPA 2012 Recreational Water Quality Criteria Document. Docket Identification Number EPA-HQ-OW-2011-0466, available at USEPA website at <https://www.epa.gov/wqc/2012-recreational-water-quality-criteria>, (as of September 25, 2018)

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	<p>Board has not demonstrated the proposed Tentative Order is necessary.</p>	<p>waste material, which appears to be broadly present in receiving waters of the Lower San Diego River Watershed, despite the existence of various permits (i.e., Waste Discharge Requirements (WDRs) and NPDES permits) issued by the Water Boards (State Water Resources Control Board and San Diego Water Board) to control or prohibit fecal waste material waste discharges. The proposed issuance of the Tentative Order is based on the following considerations:</p> <ol style="list-style-type: none"> <li>1. Results of the Surfer Health Study (SHS) should not be directly compared with the USEPA 2012 Criteria.</li> </ol> <p>Whereas the SHS provides valuable information about the health risk associated with ocean exposure among surfers, due to intrinsic differences in study populations and study designs between the SHS and the USEPA NEEAR<sup>15</sup> studies (which formed the basis of the USEPA 2012 Criteria), the San Diego Water Board considers it prudent to follow the SHS report recommendations (Page 30) that “we recommend caution in the direct comparison of risk estimates from this study with USEPA guidelines.” As stated in Arnold et al.’s paper (2017)<sup>16</sup>, “the association (between illness and seawater exposure) in</p>	

<sup>15</sup> National Epidemiological and Environmental Assessment of Recreational Water studies, description available at [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?dirEntryId=66339&Lab=NERL](https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=66339&Lab=NERL) (as of October 25, 2018)

<sup>16</sup> Arnold et al., 2017, Acute Illness among Surfers after Exposure to Seawater in Dry- and Wet-Weather Conditions, American Journal of Epidemiology, 186 (7), 866-875, available at <https://academic.oup.com/aje/article/186/7/866/3813104> (as of October 25, 2018)

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		<p>this study may not reflect those of the general population, but among a highly exposed subgroup of athletes...”. Additionally, water quality measurement in the SHS study design was for nearshore locations distant from surf zones where ingestion of seawater is likely to occur during surfing events, limiting the direct application of illness rate observed at surf zones to nearshore environments. Thus, it cannot be concluded that the illness rates obtained in SHS are directly comparable to the allowable illness rates contained in the USEPA 2012 Criteria.</p> <p>2. Multiple lines of evidence suggest water quality impairment for the REC-1 beneficial use in various segments of the Lower San Diego River and tributaries, including the downstream beach at the river mouth (Dog Beach).</p> <p>a. As described in Finding 8 of the Tentative Order, in 2002 Fecal Indicator Bacteria (FIB) concentrations in the Lower San Diego River and Dog Beach (as well as Forrester Creek) exceeded existing Water Quality Objectives/Standards for the Contact Water Recreation (REC1 and REC2) beneficial uses contained in the San Diego Water Board Basin Plan and the California Ocean Plan.</p> <p>Based on the comparison of FIB (e.g., enterococci) concentrations with water quality objectives/standards for FIB, the Lower San Diego River, Dog Beach, and</p>	

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		<p>Forester Creek were classified as impaired, and placed on the Clean Water Act section 303(d) Impaired Water Body list in 2002. Recent findings in the SHS and subsequent Microbial Source Tracking (MST) study in the Lower San Diego River Watershed further confirm the persistent exceedances of FIB water quality objectives in these water bodies. For instance, Page 99 of the SHS report shows high levels of FIB (e.g. median enterococci concentration over 5,000 cfu/100ml,) in the Lower San Diego River in wet weather. Similarly, an exceedance rate of 40% (above the geometric mean of 35 cfu/100ml for enterococci) was observed at Dog Beach in wet weather.</p> <p>b. There is not enough evidence to conclude that Cumulative Risk Differences among surfers on 0-1 days following rain events are significantly lower than the USEPA 2012 Criteria guidance value of 32-36 illness/1000 people.</p> <p>Although the SHS provided valuable information about the illness rates among surfers, the SHS suffered from a small sample size particularly in wet weather, likely due to the drought conditions in the study periods. The SHS was conducted in drought years with below average total precipitation as well as below average number of days with precipitation greater than or equal to 0.1 inch/24 hr. Due to the</p>	

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		<p>small sample size, a relatively broad 95% confidence interval (CI, obtained with standard errors) around a mean of 25 (illness/1000 people) was obtained for the case of 0-1 days following rain events. The upper bound of the CI extends beyond 40 (illness/1000 people), suggesting that on those days, the GI illness rate (among surfers) is not statistically different from 32-36 or 40 illness/1000 people at a 95% confidence level. Considering that rainy days with greater rain intensities are associated with increased illness rate (compared with dry weather or not-exposed conditions), it's highly likely that the cumulative Risk Difference among surfers will further increase in normal or wet years of more rainy days (than in drought years), or of more intense rain events (e.g., the winter of 2016/17). Note that as a result of climate change, rain events of increased intensities are expected to occur more frequently in coastal regions of Southern California in the future (Kalaansky J. et al., 2018)<sup>17</sup>), and it is the San Diego Water Board's position that Board decisions should factor in effects of climate change.</p> <p>c. Illness rates in ocean waters nearshore are likely greater than in surf zones due to</p>	

<sup>17</sup> Kalansky et al., 2018, Precipitation and Drought in San Diego County as contained in San Diego County Ecosystems: The Ecological Impacts of Climate Change on a Biodiversity Hotspot. Available at <https://scripps.ucsd.edu/centers/adaptation/2018/04/07/san-diego-ecosystems-assessment-available-for-download-now/> (as of October 25, 2018)

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		<p>higher concentrations of pathogens in waters nearshore.</p> <p>Historical research (Bight 2013) has shown lower FIB concentrations in the surf zone than nearshore, likely due to dilution by ocean water. Similar results were also observed in the SHS. Additionally, a FIB concentration gradient from high to low was observed as sampling stations move away from the river mouth (where storm water discharges to ocean). Considering that higher FIB concentrations, and associated higher pathogen levels, correspond to increased illness rate in wet weather, it's very likely that water quality close to shore, where the general public recreate, is related to a greater illness rate than in the surf zone.</p> <p>Elevated concentrations of Human Marker (HF183) above published bench mark values have been observed in tributaries and the mainstem of the San Diego River.</p> <p>In a paper recently published by Boehm et al. (2018)<sup>18</sup>, Quantitative Microbial Risk Assessment (QMRA) was conducted which finds that, when raw sewage is the primary source of human pathogens (and HF183), a median concentration of 4100 copies of</p>	

<sup>18</sup> Boehm et al., 2018, Can We Swim Yet? Systematic Review, Meta-Analysis, and Risk Assessment of Aging Sewage in Surface Waters, *Environ. Sci. Tech.* , 52(17), 9634-9645, available at <https://pubs.acs.org/doi/abs/10.1021/acs.est.8b01948> (as of April 29, 2019).

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		<p>HF183 per 100ml in recreational waters corresponds to a benchmark illness rate of 30 GI illnesses per 1000 swimmers. In the Microbial Source Tracking (MST) study performed subsequent to SHS in the Lower San Diego River Watershed, HF183 concentrations above 4100 copies/100 ml<sup>15</sup> were widely observed in transient samples from tributaries and the mainstem of the San Diego River (data obtained from SCCWRP upon San Diego Water Board staff request<sup>19</sup>), suggesting the impairment of the REC-1 beneficial use in receiving waters if raw sewage is the primary source of contamination. Note that the San Diego Water Board is not proposing to use the benchmark value of 4100 copies/100 ml as a water quality objective (WQO) for HF183. At this time, this relevant value was only used as a line of evidence to illustrate the magnitude of water quality contamination in the watershed. Should the San Diego Water Board decide to pursue establishing a WQO for HF183 in the future, results of investigations on the composition of human fecal waste sources in the San Diego River watershed (as required by the Tentative Order) will be helpful in considering the development of such a WQO.</p> <p>d. Elevated concentrations of viral and bacterial pathogens, which are the causing</p>	

<sup>19</sup> October 25, 2017 email communication from Joshua Steele, Southern California Coastal Water Research Project to Helen Yu, San Diego Water Board available at San Diego Water Board.



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		<p>agents of GI illness, were consistently observed in storm water discharges in the San Diego River.</p> <p>In addition to HF183, as presented in Table 3 of the Tentative IO, the real causing agents of GI illness such as norovirus were frequently detected (96 % detection) at elevated concentrations (up to 495 gene copies/100 ml) in storm water discharges to the San Diego River. Note that less than 20 viral particles of norovirus can make a person sick (Teunis et al., 2008)<sup>20</sup>.</p> <p>3. Wide presence of human wastes in receiving waters despite various WDR and NPDES permits in place.</p> <p>Although various NPDES permits and waste discharge requirements (WDR) issued by the Water Boards are in place controlling or prohibiting discharges of human fecal wastes to receiving waters, SHS and MST study results show a widespread presence of human fecal material wastes in the receiving waters of the Lower San Diego River Watershed. This paradox justifies the investigation required by the Tentative Order on sources, pathways, as well as loading percentages of human fecal wastes so that the Dischargers can revise or update their conceptual model about human fecal waste material discharge and transport</p>	

<sup>20</sup> Teunis et al., 2008, Norwalk virus: How infectious is it? *Journal of Medical Virology*, 80(8), 1468-1476. Available at <https://uncch.pure.elsevier.com/en/publications/norwalk-virus-how-infectious-is-it> (as of October 25, 2018).

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		<p>and improve the overall effectiveness of their programs to prevent or reduce such discharges.</p> <p>In summary, because of the widespread presence of human fecal material in the Lower San Diego River Watershed, despite permits and other regulatory controls on discharges of such waste, the San Diego Water Board is investigating beach and inland receiving water quality in the Lower San Diego River Watershed due to concerns that discharges of waste threaten recreational beneficial uses, especially during and immediately after rain events. The San Diego Water Board has determined that it is necessary to investigate the sources, loading rates, and pathways of human fecal material waste discharges to ultimately abate the sources effectively.</p>	
14	<p><b>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</b></p> <p>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</p>	<p>The Tentative Order neither concludes that exfiltration from sanitary sewer systems is the primary source of human fecal material in the San Diego River watershed, nor does it conclude that exfiltration was the cause of increased illness rates observed during the SHS. Rather, the Tentative Order requires designated Responsible Parties having discharged or suspected of discharging or having discharged to the watershed to identify and quantify whether and to what extent their discharges are sources of human fecal material in the watershed.</p> <p>See also response to Comment No. 12 regarding exfiltration in wet and dry weather.</p>	None necessary

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	<p>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.</p> <p>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 leach field trench. (Metcalf &amp; Eddy, 3d Edition, pg. 1040, Table 14-7.)</p> <p>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.</p> <p>Finally, some of the systems identified in the Investigative Order are located significant distances</p>		

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	<p>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.</p> <p>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.</p>		
15	<p><b>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</b></p> <p>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.</p>	<p>The San Diego Water Board understands the concerns but disagrees with this comment.</p> <p>See the response to Comment No.13 for discussions about water quality impairment in the Lower San Diego River Watershed, and incomparability of the Risk Difference observed in the SHS with those in the US EPA 2012 Criteria.</p> <p>Human pathogens, including virus, bacteria, and protozoa present in human fecal material are the main causing agents of GI illness in humans following water contact recreation activities (US EPA 2012)<sup>21</sup>. Exfiltration of sewage, which contains human fecal material, has been extensively described in the literature (Sercu et al., 2011)<sup>22</sup>. Further, the study by Sercu et al. (2011)<sup>20</sup> “provided multiple lines of evidence that storm drains, and therefore surface waters and ocean</p>	<p>Finding 58 on Cost Considerations is added to the Tentative Order.</p>

<sup>21</sup> See Footnote 14, *Supra*

<sup>22</sup> Sercu et al., 2011 Sewage Exfiltration as a Source of Storm Drain Contamination during Dry Weather in Urban Watersheds, *Environ.Sci. Technol.*, 45, 7151-7157, available at <https://pubs.acs.org/doi/abs/10.1021/es200981k> (as of October 25, 2018)

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	<p>Even if illness rates identified in the Surfer Health Study (SHS) could be directly tied to Human Fecal Material (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.</p>	<p>coastal waters, can be impacted directly by sewer exfiltration.”</p> <p>The investigation required by the Tentative Order is expected to provide useful parameters and information on the characteristics and occurrence of sewage exfiltration. This information will enable public sewage collection system agencies and owners of private laterals or septic tank systems to better prioritize maintenance activities and prevent future occurrences of exfiltration or other types of SSOs. Characterization of the multiple sources of human fecal material in the Lower San Diego River Watershed will also provide a basis for increased understanding of potential public health risks in recreational water settings impacted by multiple pollution sources. The information may be used to help prevent disease outbreaks among the homeless transient population in the future. The San Diego Water Board encourages the Responsible Parties to fully evaluate the potential social and economic benefits associated with the Tentative Order requirements to investigate and quantify discharges of human fecal material.</p> <p>In requiring the reports described in the directives of the Tentative Order, the San Diego Water Board considered the costs presented in a draft conceptual work plan proposal prepared by SCCWRP dated February 20, 2019 in concert with the City of San Diego and the County of San Diego (SCCWRP proposal).<sup>23</sup> The study objectives and</p>	

<sup>23</sup> The draft workplan proposal is contained in Quantifying Sources of Human Fecal Contamination Loading at the San Diego River, A Conceptual Workplan developed by the Southern California Water Research Project, February 20, 2019, SCCWRP available on the San Diego Water Board

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		<p>proposed scope of work contained in the SCCWRP proposal are generally consistent with the requirements of this Investigative Order and include proposals for complex and resource-intensive studies with a projected cost totaling \$4.14 million dollars. While the precise costs of preparing the technical report(s) required by the Tentative Order may not be exactly as projected in the draft SCCWRP proposal, the San Diego Water Board concludes that the burden of incurred costs under the Tentative Order are expected to be similar to the projected costs noted above. The estimated costs bear a reasonable relationship to the benefits to water quality and human health to be gained considering the significant sources of pollution and associated public health risks involved. (See Finding 58 of the revised Tentative Order.) (See also Response to Comment 13 concerning the San Diego Water Board’s broad authority to investigate the quality of waters within its region.)</p>	
16	<p><b>The Tentative Order Requires Limited Purpose Agencies to Investigate and Potentially Address Human Fecal Material (HFM) Sources Outside of Their Control</b></p>	<p>The Tentative Order does require Responsible Parties to investigate suspected sources or pathways of human fecal material discharges to the Lower San Diego River Watershed.</p> <p>The San Diego Water Board has the authority under Water Code section 13267 to direct public</p>	<p>Directive 1 is revised as provided in the response to Comment No. 4</p>

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website at [Page 56](https://www.waterboards.ca.gov/sandiego/water_issues/programs/san_diego_river_io/docs/Fecal>Loading Workplan 20190314.pdf</a><br/>
    (as of May 10, 2019).</p>
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	<p>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.</p> <p>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 outlined 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.</p> <p>Additionally, the Tentative Order directs public agencies to investigate private laterals as source of</p>	<p>agencies who own and/or operate MS4s to investigate private lateral discharges into MS4s that originate from locations not under the ownership or control of the public agencies. This concept is implemented in Regional MS4 Permit provision E.2.b.(5) which provides that “Each Copermitttee must implement practices and procedures to prevent and limit infiltration of seepage from sanitary sewers (including private laterals and failing septic systems) to the MS4.” (Finding 41 of the Tentative Order). If for example a property owner fails to provide access to the Copermitttee public agency to conduct monitoring or investigate a discharge into its MS4, the San Diego Water Board could require the property owner to provide access or conduct the monitoring itself.</p> <p>The San Diego Water Board has revised Directive 1 of the Tentative Order to clarify that Responsible Parties must submit the results (Final Investigative Study Report) of an investigative study, or studies, to identify and quantify sources and pathways of human fecal material discharges, from their respective jurisdictions, to the Lower San Diego River and its tributaries. The revised Directive provides in new Footnote 25 that a Responsible Party is not required to investigate suspected sources or pathways of human fecal material discharges to the extent it lacks legal authority and cannot reasonably obtain legal authority (such as access to private property) to conduct the required investigation. See Directive 1 of the Tentative Order.</p>	

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	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.	Sewage collection system agencies regulated jointly under the San Diego Water Board's Order No. R9-2007-0005 and State Water Board Order No. 2006-0003-DWQ are required to monitor and report known private lateral discharges. The requirement in the Tentative Order for sewage collection agencies to participate in quantifying the contributions of human fecal material from private lateral discharges and exfiltration from private laterals is essential to the San Diego Water Board's overall understanding of the relative sources and contributions of human fecal material in the watershed.	
17	<p><b>The Tentative Investigative Order is Premature</b></p> <p>The proposed Tentative Order is premature until the Regional Board and collaborating agencies have developed the necessary statistically viable methodologies and proved technologies to</p>	The San Diego Water Board understands that both traditional methods (e.g., ASTM C1091-03a <sup>24</sup> or method as described in 2005, Brown and Caldwell report <sup>25</sup> ) and alternative methodologies (e.g., Electro-Scan <sup>26</sup> and tracer study methods as reported in Sercu et al., 2011 <sup>27</sup> ) can be used to	Finding 57 is revised in the Tentative Order.

<sup>24</sup> ASTM Designation C0191-03a, Standard Test Method for Hydrostatic Infiltration Testing of Vitrified Clay Pipe Lines Available for download from [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=2ahUKEwiDi62dwqTeAhXJjFQKHejsC1oQFjADegQICBAC&url=http%3A%2F%2Fgost-snip.su%2Fdownload%2Fstm\\_c\\_1091\\_03a\\_standard\\_test\\_method\\_for\\_hydrostatic\\_infiltr&usq=AOvVaw16KpAYRIJMHNZlebxUChq](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=2ahUKEwiDi62dwqTeAhXJjFQKHejsC1oQFjADegQICBAC&url=http%3A%2F%2Fgost-snip.su%2Fdownload%2Fstm_c_1091_03a_standard_test_method_for_hydrostatic_infiltr&usq=AOvVaw16KpAYRIJMHNZlebxUChq) (as of October 26, 2018)

<sup>25</sup> Status Report on the Development of a Reporting Methodology for Subsurface Discharges of Sewage, prepared for Orange County Sanitation District, September 2005, prepared by Brown and Caldwell, Available at <http://scap1.org/Collection%20Reference%20Library/Folder%20contains%20documents%20on%20Exfiltration%20in%20collection%20systems/OCSD%20Exfiltration%20Report.pdf> (as of October 26, 2018)

<sup>26</sup> San Francisco Sewer Inspection Methodology Presentation, October 13, 2016, Available on San Francisco Bay Water Board website at [https://www.waterboards.ca.gov/rwqcb2/water\\_issues/programs/TMDLs/sfbaybeachesbacteria/Sewer%20Inspection%20Presentation%20-%20SFPUC%202016-10-13.pdf](https://www.waterboards.ca.gov/rwqcb2/water_issues/programs/TMDLs/sfbaybeachesbacteria/Sewer%20Inspection%20Presentation%20-%20SFPUC%202016-10-13.pdf) (as of October 26, 2018)

<sup>27</sup> See Footnote 22, *Supra*



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	<p>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.</p> <p>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.</p> <p>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 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</p>	<p>quantify exfiltration rates. The Tentative Order does not prevent a Responsible Party from using any appropriate method to measure exfiltration from the collection system. By not specifying which method(s) to use to measure exfiltration from collection systems, the Tentative Order provides Responsible Parties with the flexibility to use site-appropriate methods to quantify human fecal material loading due to exfiltration. This flexibility is subject to the provision that the methods chosen allow comparability of results.</p> <p>(See also the responses provided for Comment No. 13 above regarding available benchmark values of HF183 and the San Diego Water Board determination that water quality in the San Diego River watershed is impaired.)</p> <p>The purpose of the Tentative Order is summarized in Finding 57, which is revised to state the following:</p> <p><b><u>“ 57. Need for Technical and Monitoring Reports. The San Diego Water Board is investigating the quality of the waters in the Lower San Diego River Watershed. The technical and monitoring reports required under this Investigative Order are needed because human fecal material, as indicated by HF183, elevated bacteria levels, and pathogens, are present in surface waters of the Lower San Diego River Watershed. The risk of GI illness in humans after water-contact activities is elevated by the presence of this human fecal waste material in the flowing water. This condition is occurring despite the requirements of multiple NPDES permits and WDRs that prohibit the</u></b></p>	

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	<p>of a final Investigative Order, we request that the Board hold a public workshop, including an adequate opportunity for public comment.</p>	<p><u>discharge of human fecal materials to receiving waters in the Lower San Diego River and its tributaries. The presence of human fecal materials is of significant concern because it adversely affects or threatens to adversely affect recreation and shell fish harvesting beneficial uses. The required reports are expected to result in the identification and quantification of the relative contributions of suspected sources of human fecal material to the Lower San Diego River Watershed, and will facilitate determinations about whether management measures used by the various dischargers in their respective programs are adequately addressing the REC-1, REC-2 and SHELL beneficial use impairments caused by the presence of human fecal material in the Lower San Diego River, its tributaries and the downstream beach coastal waters. With the required information, the San Diego Water Board expects to be able to effectively evaluate whether amendments to the Bacteria TMDL, permit modifications or other regulatory actions are necessary and appropriate to reduce and control discharges of human fecal material to surface waters, thereby reducing water quality impairments.</u>“</p> <p>The revised Tentative Order also specifies the nexus between the Responsible Parties and their potential contribution of human fecal material discharges to the Lower San Diego River Watershed as follows:</p> <ul style="list-style-type: none"> <li>• Findings 17, 41 and 47: Homeless Encampments;</li> </ul>	

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		<ul style="list-style-type: none"> <li>• Findings 22-33: Sanitary Sewer Collection Systems;</li> <li>• Findings 34-38: Publicly-Owned Treatment Works;</li> <li>• Findings 39-47: Municipal Separate Storm Sewer Systems; <i>and</i></li> <li>• Findings 48-54: On-site Wastewater Treatment Systems</li> </ul>	

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<b>Joe Kuhn, Storm Water Program Manager, City of La Mesa written comment dated June 18, 2018</b>			
18	<p><b>The January 7, 2019 work plan due date is too soon to formulate a work plan strategy and complete a work plan and initial CWM.</b></p> <p>The 6-month time frame is arbitrary and unrealistic.</p> <p>Legal review, potential cost sharing and Memorandum of Understanding (MOU) development, and administrative task of scoping the project takes considerable time. A minimum of 1 year following any final I/O approval date is needed for work plan/study/initial CWM development.</p>	<p>The Tentative Order has been in circulation since February 23, 2018 and there has already been ample opportunity for the City of La Mesa (City) to at least conceptually discuss and coordinate plans and potential agreements with the other Responsible Parties to conduct a joint study of the area. The City has some flexibility under Directive 3.d to propose a schedule for completion of activities and reports required under the Tentative Order. The only constraint is that the schedule provides for the submittal of a Final Investigative Study Report containing all of the required information no later than four years following the effective date of the Tentative Order in accordance with the revised due date in Directive 1.</p> <p>See the response provided for Comment 3 above.</p>	<p>Directive 3 of the Tentative Order is revised.</p>
19	<p><b>Semi-annual reporting is not necessary for accurate progress tracking. Please revise the Tentative Order to require Annual progress reports.</b></p> <p>Semi-annual reporting is overkill and will result in a costly, unnecessary, and nearly constant state of report scoping, preparation, and submittal.</p> <p>The City of La Mesa is a small jurisdiction with very limited staff and funding. The City currently has an extra ordinary amount of NPDES related reporting requirements for a City of its size. Straddled on 2</p>	<p>The Tentative Order requires Responsible Parties to submit a semiannual progress report to the San Diego Water Board which describes the actions taken towards achieving compliance with the Tentative Order during the previous six months and other specified information. The semiannual frequency of the progress reports is needed to verify the Responsible Parties continued forward progress towards achieving the goals of the Tentative Order over a four-year period until the required investigative study is completed. The San Diego Water Board will consider relaxing the frequency of the reports in the future if good</p>	<p>None necessary.</p>

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	<p>major watersheds, the City has a multitude of Jurisdictional, WQIP, TMDL, Trash, San Diego Bay and River I/O reporting requirements. Please change the I/O reporting requirements to annual.</p>	<p>progress is demonstrated and maintained by the Responsible Parties.</p>	
<p>20</p>	<p><b>Quantifying loading rates and requiring a CWM with a detailed 30 spatial/temporal analysis and waste migration stemming from homeless encampments is not feasible or reasonable.</b></p> <p>We suggest that the language in the I/O be altered to reflect reasonable study goals regarding studying this homeless issue. The study should attempt to assess the magnitude of the issue based on broad spatial observations, and comparison with water quality monitoring. Obtaining loading rates from homeless encampments is not feasible to obtain, nor is it reasonable to require any jurisdiction to calculate loading or investigate encampments outside of their jurisdiction.</p> <p>We suggest that language within the I/O regarding homeless encampments be re-written, indicating that it is implied that calculating loading rates directly from homeless encampments will be not be required, and that an alternative analysis attempting to address the magnitude of the issue as a whole pertaining to the human sources problem shall be sufficient.</p>	<p>The San Diego Water Board disagrees with the assertion that the Tentative Order’s requirement to identify and quantify loading rates from homeless encampments is not feasible or reasonable</p> <p>Depending on site conditions, different methods can be used to quantify fecal-material loading rates from homeless encampments. For instance, existing estimates of the number of homeless persons living in or along stormwater conveyances can be determined and used as the basis for estimating potential fecal loading to stormwater conveyances from outdoor defecation by homeless persons. A worst-case loading rate could be determined where it is assumed 100% of the feces from homeless persons are deposited into receiving waters. Remote sensing techniques could then be considered to develop a more comprehensive estimate of the homeless population that accounts for seasonal population changes. Additional types of data could be obtained to further refine the estimate of the load of fecal material entering the Lower San Diego River from the homeless population. Detailed information on the sanitation habitats of homeless persons and their use of public sanitation facilities could be collected. Evidence about how much human fecal material washes into stormwater conveyances or the Lower San Diego River during storm events could be obtained by conducting fecal material</p>	<p>None necessary</p>

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		<p>wash-off studies as well as upstream-downstream studies to measure fecal material contributions from homeless encampments.</p> <p>Both SCCWRP and San Diego State University have developed study proposals based on the approaches described above and the City of La Mesa could contact them for further information on these efforts.</p>	
21	<p><b>Methodology regarding quantifying loading rates from exfiltration from public and private sewers is unknown. Producing a CWM with 3D spatial/temporal analysis and waste migration pathways pertaining to sewer exfiltration is not feasible or reasonable.</b></p> <p>The City of La Mesa understands the intent of the I/O to investigate the sources of human based pathogens pertaining to sewer exfiltration. Unfortunately, there is no suggested methodology toward obtaining meaningful data including human pathogen loading rates directly from these systems.</p> <p>A study on individual sewer lines and extrapolating data across the SDR Basin will require multiple levels of assumptions, and we fear that the end results of a costly study will not represent anything worthwhile other than a validation that yes, exfiltration may occur within the joints of old sewer</p>	<p>The San Diego Water Board understands that both traditional (e.g., ASTM C1091-03a<sup>28</sup> or method as described in 2005, Brown and Caldwell report<sup>29</sup>) and novel (e.g., ElectroScan<sup>30</sup> and tracer study as reported in Sercu et al., 2011<sup>31</sup>) methodologies exist to quantify exfiltration rates. By not specifying which method(s) to use to measure exfiltration from collection systems, the Tentative Order allows the Responsible Parties flexibility to use site-appropriate methods to quantify human fecal material loading due to exfiltration. The Responsible Parties should coordinate efforts to ensure that exfiltration investigative results are comparable among the Responsible Parties.</p> <p>One of the primary goals of the investigation required under Directive 1 of the Tentative Order is to determine relative percentages of contributions (of human fecal material) from different sources, so that the major sources can be identified. Knowledge of loading rates, including sewage</p>	None necessary

<sup>28</sup> See Footnote 24, *Supra*  
<sup>29</sup> See Footnote 25, *Supra*  
<sup>30</sup> See Footnote 26, *Supra*  
<sup>31</sup> See Footnote 22, *Supra*

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	<p>systems, and with a derived loading rate that may not have any bearing on reality.</p> <p>We suggest that the I/O be modified to eliminate the requirement for calculating a loading rate stemming from exfiltration of public and private sewer systems. Instead, the I/O should allow for a more broad-based analysis comparing pipe conditions/locations and water quality monitoring data, or similar. This type analysis is scoped more in reality and would yield reasonable conclusions; rather than an inaccurate data crunching exercise at taxpayer's expense.</p>	<p>exfiltration rates from different sources are necessary to achieve the goals of the Tentative Order.</p> <p>As previously stated in the response to Comment No. 3 above, to achieve maximum efficiency and economy of resources, the San Diego Water Board encourages the Responsible Parties to collaborate on efforts responsive to the requirements of the Tentative Order. Such a collaborative effort would enable the sharing of technical resources, trained personnel, consultants and associated costs and provide an integrated approach to help ensure that the relative load contributions from each of the potential sources are quantified consistently and accurately.</p> <p>While the Responsible Parties may work jointly to determine what methods to use and what types of assumptions may be made, exfiltration rates should be determined for each of the individual sewage collection systems named in the Tentative Order. Because site conditions and proximity to storm drains or receiving waters may differ, broad-based analyses by simply comparing pipe materials and conditions may not be generally applicable across all of the sewage collection systems.</p> <p>The San Diego Water Board suggests a tool box approach which relies on multiple methods to answer specific questions and hypotheses raised in the Tentative Order. An example of such an approach was used in a study conducted by the City of Santa Barbara and the University of</p>	

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		<p>California Santa Barbara<sup>32</sup>. One of the overall goals of the study was to determine the origin of sewage contamination in selected storm drains within the City of Santa Barbara during dry weather and to develop a protocol for other communities to use for similar source tracking purposes. Strategies utilized included:</p> <ol style="list-style-type: none"> <li>1. Identifying storm drains that flow in dry weather, and where these flows initiate;</li> <li>2. Using Geographic Information System (GIS) mapping tools to identify where aging sewer lines are above and near flowing storm drains;</li> <li>3. Using less expensive procedures to evaluate sources of flows, such as canine scent tracking, field probes, nonhuman specific chemistry and microbiology;</li> <li>4. Using human waste specific markers to confirm human fecal origin at specific sites; and</li> <li>5. Using closed circuit television and/or dye testing in selected areas to confirm sanitary sewer and storm drain cross connections.</li> </ol>	

<sup>32</sup> Source Tracking Protocol Development Project, Submitted to the City of Santa Barbara, Creeks Division, June 1, 2011, Prepared by Patricia Holden, Bram Sercu, Laurie Van de Werfhorst, and Gary Anderson, Available on City of Santa Barbara website at <https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=16723> (as of October 26, 2018)



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22	<p><b>The City of La Mesa should not be required to participate in the development of a study or CWM which requires addressing homeless encampment loading within the San Diego River.</b></p> <p>The San Diego River homeless encampment issue seems to be a central theme of this Tentative I/O.</p> <p>The City of La Mesa has the ability to address homeless issues within the City limits only. Any I/O addressing any kind of homeless issues should be directed to the agency which is able to study/address the problem, not ancillary agencies without jurisdiction.</p>	<p>See the response provided for Comment No. 4 above.</p> <p>The San Diego Water Board has the authority under Water Code section 13267 to direct the City to investigate water quality conditions at locations that are affected by the City's discharges and beyond the jurisdictional boundaries of the City. If for example a downstream property owner fails to provide access to the City to conduct monitoring, the San Diego Water Board could require the downstream property owner to provide access or conduct the monitoring itself.</p>	<p>Directive 1 and Footnote 25 of the Tentative Order are revised.</p>

No.	Comment	Response	Action Taken
<b>David Barnum, General Manager, Ramona Municipal Water District written comment dated June 11, 2018</b>			
23	<p>We appreciate the opportunity to comment on the Tentative Order, and the following discussion provides our comments relative to the Tentative Order. It shows that there is insufficient evidence to link the District to the problem at issue in the Tentative Order. Therefore, the District respectfully requests that the San Diego Water Board remove it from the Tentative Order.</p>	<p>The San Diego Water Board has concluded that the evidence cited in renumbered Findings No. 47 through 53 in Part IV, section D of the Tentative Order does not support designation of Ramona Municipal Water District (Ramona MWD) as a Responsible Party in the Tentative Order for investigation of sources and extent of human fecal matter pollution at this time. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation in the event that evidence is developed supporting inclusion of Ramona MWD as a Responsible Party.</p> <p>See responses to Comment No. 25, 27 and 28.</p>	<p>The Tentative Order is revised to remove Ramona Municipal Water District from the title block and directives. Findings 47 through 53 of the Tentative Order are deleted.</p>
24	<p><b>Gastrointestinal (GI) Illness Threshold</b></p> <p>The SCCWRP Surfer Health Study evaluated potential increased rate illness prior to and after significant rainfall events (dry versus wet weather). The study identifies a baseline (average) GI illness rate of 18 cases per 1,000 surfers (surfer illnesses unassociated with rainfall or runoff). From the study, an average increase of 12 GI illnesses per 1,000 surfers was identified. Therefore, the average GI illnesses total is 30 illnesses per 1,000 surfers. The Surfer Health Study references the USEPA Water Quality Guidelines for recreational beaches from 2012 as recommending no more than an average of 32 to 36 cases of GI illness per 1,000</p>	<p>The San Diego Water Board understands the concerns but disagrees with the commenter's understanding about the applicability of SHS results.</p> <p>Please refer to the response to Comment No. 13 for discussions about water quality impairment in the Lower San Diego River Watershed and incomparability of the Risk Difference observed in the SHS with those in the US EPA NEEAR studies.</p> <p>The SHS design and results have been summarized in a technical paper (i.e., Arnold et al., 2017), which has been peer reviewed, accepted, and published in the American Journal of Epidemiology, a journal highly specialized in</p>	<p>None necessary</p>

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	<p>swimmers. We reviewed the 2012 USEPA Water Quality Guidelines and determined the basis of those guidelines to be based on the National Epidemiological and Environmental Assessment of Recreational Water (NEEAR) recommendations, comprised of data from 2004, 2004, 2005, 2007 and 2009, and well as the 1986 standards that were based on use of Highly Credible Gastrointestinal Illnesses (HCGI) studies. These studies, spanning a study period of approximately 26 years, establish an acceptable average GI illnesses rate of between 32 and 36 illnesses per 1,000 contact reactors. As the current estimate of average GI illnesses is 30 cases per 1,000 surfers, there does not seem to be a basis for imposing the Tentative Order, as the number of illnesses has not surpassed the established USEPA guideline for recreational waters. This conclusion is particularly relevant as the Surfer Health Study states that it uses the USEPA guidelines to define the illness constraints.</p> <p>Additionally, the Surfer Health Study has significant limitations. The predecessor studies, identified above, clearly based their conclusions on "credible" GI illnesses within their individual sampling groups. The Surfer Health Study (Section V, Paragraph B) identifies four main limitations of the study. The first limitation identified in the study is the use of self-reported symptoms, stating this <i>"could bias the association between ocean exposure and illness away from the null if surfers artificially over-reported illness following exposure."</i> The survey text discussed measures taken to control this limitation, however stated that these measures <i>"would not control for systematic bias."</i> Therefore, as the study</p>	<p>epidemiology studies. As explained in the paper, the authors addressed the system bias by 1) purposely measuring daily exposure and outcomes in separate modules; and 2) conducting negative control exposure analyses to evaluate association between <i>Enterococcus</i> levels and illness on days with no recent water exposure. Results of the negative control show that "unmeasured confounding or reporting bias is unlikely to explain the association between <i>Enterococcus</i> level and illness." In conclusion, the authors employed precautionary measures to minimize potential system errors in the study design, purposely evaluated the potential effects of system errors, and did not find signs that system errors impacted study results.</p> <p>The limitations associated with the "3-day" follow up window and drought condition in the study period have been factored into the San Diego Water Board's determination that the Risk Difference among surfers in normal or wet years is likely to be greater than reported in the SHS. This determination supports the issuance of the Tentative Order.</p> <p>The San Diego Water Board has broad authority to investigate the quality of waters of the state in its Region. It is not necessary that the Board establish that the SHS risk levels exceed USEPA standards or any other water quality standards as a prerequisite to its investigation.</p>	

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	<p>relied on self-reporting techniques, the resulting conclusions have inherent bias that clearly clouds the credibility of the conclusions.</p> <p>The Surfer Health Study identifies other study limitations. These limitations include limitations associated with limited ability to measure incident outcomes to within three days of seawater exposure, allowing illnesses caused by pathogens with longer incubation periods to be misclassified, which could bias results. The majority of the participants were enrolled on line and could not be physically verified to be surfing at study region beaches. Furthermore, two study winters took place during a drought in Southern California, which meant that there were just 10 rainstorms during the study period, with the study identifying <i>"a more balanced distribution between dry and wet weather exposure would have improved the precision of our wet weather exposure associations."</i></p> <p><u>In summary, the Surfer Health Study has no evidence to link the District with the issue to be studied and therefore the District should be removed from the Tentative Order.</u></p>		
25	<p><b>Fate and Distance Considerations</b></p> <p>During the Advisory Group meeting in April 2018, it was identified that the Human DNA Marker (HF183) could not exist for extended periods within the natural environment, because the material was a high profile food source for naturally occurring bacteria. As such, the attendees questioned the use of HF183 as a determining marker showing where possible beach contamination originated. It is clear</p>	<p>The San Diego Water Board has concluded that the evidence cited in Findings 47 through 53 in Part IV, section D of the Tentative Order does not support inclusion of Ramona Municipal Water District (Ramona MWD) as a Responsible Party in the Tentative Order for investigation of sources and extent of human fecal matter pollution at this time. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation in the event that evidence is developed</p>	<p>The Tentative Order is revised to remove Ramona Municipal Water District from the title block and directives. Findings 47</p>

No.	Comment	Response	Action Taken
	<p>that the fate characteristics of the HF183 marker supports the conclusion that waters originating in the extreme eastern portions of the San Diego River watershed (i.e. Ramona MWD, Padre Dam MWD, Santee, El Cajon, and other service areas) could not be detected at the beach, some 15 to 35 miles away. We do not dispute the apparent increased incidence of GI illnesses rates following ocean exposure after major rain or storm events. However, given the proximity of more likely contamination sources to the beach (i.e. bird nesting areas, known homeless encampments, human exposure along beach areas, and other wildlife or domestic animals), it is not likely that GI illnesses are associated with inland communities and more likely that they are associated with these local contamination sources. Furthermore, the Surfer Health Study clearly states that the quantities of human pathogens are unknown at this time, as the correlation between HF183 and human pathogens is not fully defined.\</p> <p>Specific to Ramona Municipal Water District, the remote nature of the District service area indicates that any human pathogens, from our service area, could not possibly be transported to the beach. Therefore, the District cannot contribute to the increased GI illnesses referenced by the Tentative Order. Information provided at the Advisory Group meeting showed little or no HF183 detection at the eastern most sampling location within the San Diego River watershed. <u>As such, there is no evidence to support including the District as a participating agency in the Tentative Order.</u></p>	<p>supporting inclusion of Ramona MWD as a Discharger. This determination is based on the considerations set forth below.</p> <p>The San Diego River Watershed is the second largest watershed (440 square miles) in San Diego County and has the greatest population base (approximately 509,000 people). Water resources in the watershed include the San Diego River main stem, numerous tributaries, five water supply reservoirs (El Capitan, San Vicente, Lake Jennings, Lake Murray, and Cuyamaca Reservoirs), a large groundwater aquifer, extensive riparian habitat, coastal wetlands, and tidepools. The San Diego River main stem flows approximately 52 miles (84 km) from its headwaters in the Cuyamaca Mountains northwest of the town of Julian to the Pacific Ocean, near the entrance to Mission Bay, forming an estuary at the river mouth.</p> <p>The San Diego River watershed can be divided into four distinct hydrological areas (HA) identified in the San Diego Water Board Basin Plan as</p> <ol style="list-style-type: none"> <li>1. Lower San Diego Hydrologic Area (HA 907.10)</li> <li>2. San Vicente Hydrologic Area (HA 907.20)</li> <li>3. El Capitan Hydrologic Area (HA 907.30)</li> <li>4. Boulder Creek Hydrologic Area (HA 907.40)</li> </ol> <p>The majority of the water supply reservoirs are located in the eastern half of the San Diego River watershed, upstream from the Lower San Diego HA.</p> <p>Ramona MWD is regulated under Order No. R9-2009-0005 (as amended), <i>Master Reclamation Permit for Ramona Municipal Water District San Vicente Wastewater Treatment Plant</i>, adopted by the San</p>	<p>through 53 in Part IV, section D of the Tentative Order are deleted.</p> <p>The Tentative Order is revised to remove the Julian Water Pollution Control Facility from the findings of the Tentative Order</p>

No.	Comment	Response	Action Taken
		<p>Diego Water Board on March 11, 2009. Order No. R9-2009-0005 establishes requirements for the treatment and distribution of recycled water from the San Vicente Water Reclamation Facility (San Vicente WRF). Disinfected tertiary treated recycled water produced at the San Vicente WRF is used for landscape irrigation at the San Vicente Golf Course and typically used for irrigation of groves at Spangler Peak Ranch.<sup>33</sup> Ramona MWD reported that about 425 acre-feet of recycled water was used for irrigation at San Vicente Golf Course and Spangler Peak Ranch in 2015. The San Vicente Golf Course and Spangler Peak Ranch are located in the Gower Hydrologic Subarea, (HSA) 907.23 which is a subarea located within the San Vicente HA 907.2.</p> <p>Surface waters of the Gower HSA (San Vicente Creek) eventually flow into and are impounded within the San Vicente Reservoir<sup>34</sup> including any potential contributions of human fecal material from the landscape irrigation discharges to San Vicente Creek. There is no evidence cited in the Technical Order of such discharges by Ramona MWD into San Vicente Creek. Furthermore, the Microbial Source Tracking (MST) Study <sup>35</sup> reported that the most upstream main channel sample site (Channel Road in Lakeside) observed no flow; this site is located downstream of</p>	

<sup>33</sup> Pursuant to Order No. R9-2009-0005 disinfected secondary-2.2 recycled water can also be used for irrigation at the Spangler Peak Ranch.

<sup>34</sup> San Vicente Reservoir is a reservoir created by the San Vicente Dam in San Diego County, California. It is located in the Cuyamaca Mountains, approximately 4.3 miles north of Lakeside off California State Route 67. The reservoir is formed by impounding the waters of San Vicente Creek, and the Colorado River via the First San Diego Aqueduct branch of the Colorado River Aqueduct from Lake Havasu.

<sup>35</sup> See Footnote 3, *Supra*

No.	Comment	Response	Action Taken
		<p>San Vicente Reservoir, which reported no discharge overflows during the 2016 and 2017 wet seasons. Ramona MWD’s landscape irrigation discharges are upstream of the San Vicente Reservoir and are likely hydrologically disconnected to the lower portions of the San Diego River. Therefore, the San Diego Water Board has concluded the that Ramona MWD landscape discharges were unlikely to contribute flow or human fecal material signals observed in the MST to the Lower San Diego River Watershed.</p> <p>The treatment processes employed by Ramona MWD, such as disinfection and filtration during wastewater treatment, should result in inactivation and removal of bacteria and most pathogens in recycled water to levels that are protective of human health. In addition, Ramona MWD utilizes reverse osmosis treatment which is effective in removing pathogens such as viruses, Giardia, and Cryptosporidium. Ramona MWD also maintains rules and regulations governing the design, construction, and use of recycled water distribution systems for its use sites. These rules and regulations require the use sites to implement practices to ensure recycled water is used in a manner protective of public health and water quality. Such practices include applying recycled water at appropriate rates to prevent ponding and excessive runoff.</p> <p>Based on the foregoing considerations, the detection of human fecal materials in receiving waters of the Lower San Diego River Watershed downstream from the San Vicente Reservoir during the SHS and MST study periods, including major rain events, is not likely associated with any discharges by the Ramona MWD</p>	

No.	Comment	Response	Action Taken
		<p>above the San Vicente Reservoir. The evidence cited in Findings No. 47 through 53 of the May 21, 2018 Tentative Order does not support inclusion of Ramona MWD as a Responsible Party in the Tentative Order for investigation of sources and extent of human fecal matter pollution at this time. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation in the event that evidence is developed supporting inclusion of Ramona MWD as a Responsible Party.</p> <p>See response to Comment No. 12 regarding the fate and transport of HF183.</p> <p>Based on the foregoing, Ramona MWD is deleted from the title block of the Tentative Order.</p> <p>The San Diego Water Board is also deleting Findings 47 through 53 in Part IV, section D of the Tentative Order.</p> <p>Ramona MWD is deleted from the Tentative Order directives as follows:</p> <p style="text-align: center;"><b>Order Directives</b></p> <p><b>IT IS HEREBY ORDERED</b>, pursuant to Water Code section 13267 and 13383, that the Cities of San Diego, Santee, El Cajon, La Mesa, the County of San Diego, the San Diego County Sanitation District, the Padre Dam Municipal Water District, <del>the Ramona Municipal Water District</del>, San Diego State University, Metropolitan Transit System, and the California Department of Transportation (Dischargers) must</p>	



No.	Comment	Response	Action Taken
		<p>submit to the San Diego Water Board.....</p> <p><b>Considerations Regarding Julian Water Pollution Control Facility</b></p> <p>In considering Ramona MWD's comment the San Diego Water Board has also reconsidered Findings 35, 36 and 37 of the May 21, 2018 Tentative Order pertaining to the Julian Water Pollution Control Facility (WPCF), owned and operated by the San Diego County Sanitation District. Wastewater from the Julian WPCF is discharged to a spray irrigation/disposal field located adjacent to Coleman Creek in the Inaja HSA 907.41 which is a subarea located within the Boulder HA 907.40. Coleman Creek joins the San Diego River and flows into the El Capitan Reservoir<sup>36</sup> approximately 17 miles downstream of the Julian WPCF effluent disposal field. Waste Discharge Requirements cited in Finding 37 of the Tentative Order specify that the Julian WPCF landscape irrigation discharge shall not cause a surface flow in the San Diego River or its tributaries. There is no evidence cited in the Technical Order that discharges by Julian WPCF are causing surface flows in Coleman Creek. Furthermore, the Microbial Source Tracking (MST) Study <sup>37</sup> (on Page 21) reported that the most upstream main channel sample site (Channel Road in Lakeside) observed no flow; this site is located downstream of El Capitan Reservoir, which reported no discharge overflows during the</p>	

<sup>36</sup> El Capitan Reservoir is a reservoir in central San Diego County, California. It is in the Cuyamaca Mountains, about 30 miles (50 km) northeast of the city of San Diego and two miles northwest of the town of Alpine. The reservoir is formed by El Capitan Dam impounding the waters of the San Diego River.

<sup>37</sup> See Footnote 3, *Supra*

No.	Comment	Response	Action Taken
		<p>2016 and 2017 wet seasons. The Julian WPCF landscape irrigation discharge is upstream of the El Capitan Reservoir and is likely hydrologically disconnected to the lower portions of the San Diego River. Based on these considerations the San Diego Water Board has concluded the Julian WPCF landscape discharges are unlikely to contribute flow or human fecal material to the lower San Diego River watershed. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation as more information is developed.</p> <p>Based on the forgoing Finding 34 of the tentative Order is revised as follows:</p> <p><b>“34. ....In the San Diego River watershed, there is one POTW that is authorized to discharge to receiving waters in the Lower San Diego River Watershed: the Padre Dam Municipal Water District’s Ray Stoyer Water Recycling Facility (Ray Stoyer WRF). ; and one POTW that is authorized to discharge to land (where the effluent is not intended to be reused): Julian Water Pollution Control Facility, owned and operated by the San Diego County Sanitation District.</b></p> <p>Findings 38, 39, 40 and 41 of the Tentative Order are deleted.</p> <p><del>38. Order No. 83-09, Waste Discharge Requirements for Julian Sanitation District, County of San Diego, was adopted on July 18, 1983. The County of San Diego Department of Public Works owns and operates the Julian Water Pollution Control Facility (Julian WPCF). Order No. 83-09</del></p>	

No.	Comment	Response	Action Taken
		<p><del>establishes requirements for the treatment and disposal of up to 40,000 gallons of secondary treated wastewater from the Julian WPCF</del></p> <p>39. <del>Treated wastewater from the Julian WPCF is discharged to a spray irrigation/disposal field. The Julian WPCF is located in the Inaja Hydrologic Subarea (907.41) which is located within the San Diego River Watershed.</del></p> <p>40. <del>Section A. 1 of Order No. 83-09 prohibits the disposal of wastewater in a manner that would result in ponding or surfacing of wastewater on lands beyond the disposal area as defined in the Report of Waste Discharge. Section A.6.h of Order No. 83-09 also specifies that the discharge of wastewater or sludge shall not cause a surface flow in the San Diego River or its tributaries.</del></p> <p>41. <del>Effluent from the Ray Stoyer Water Recycling Facility and the Julian WPCF is not measured for the presence of the HF183 human genetic marker. Therefore, the degree to which effluent from these facilities may be causing or contributing to measurable levels of HF183 in the San Diego River or its tributaries is unknown.</del></p>	
26	<p><b>Focus on Alleged Sewer Exfiltration</b></p> <p>During the Advisory Group meeting, several known sources of potential beach contamination were identified. Alleged sewer exfiltration was selected as the primary focus of the Tentative Order, citing cost effectiveness as a major decision factor. In fact,</p>	<p>Ramona MWD has not provided evidence to support the assertion that sources other than sewer exfiltration have a much higher likelihood of contributing to beach GI illnesses. In fact, the purpose of the Tentative Order is to quantify the overall and</p>	None necessary

No.	Comment	Response	Action Taken
	<p>study of alleged sewer exfiltration was identified to be the highest cost source to investigate, by an extreme margin, ignoring other more likely contamination sources in closer proximity to the beaches (i.e. homeless encampments, private sewer laterals, illicit or illegal sewer lateral to MS4 connections, wildlife, others). Sources other than alleged sewer exfiltration have a much higher likelihood of contributing to beach GI illnesses, which the Surfer Health Study identified to exist.</p> <p>As stated in the Surfer Health Study and the Tentative Order, increased surfer GI illnesses correspond to surfer exposure following rain or storm events, primarily during winter months. The Surfer Health Study shows that dry weather illnesses were essentially constant. Alleged sewer exfiltration is a dry weather event, not a wet weather event. During and after rain events, local groundwater levels rise and water may infiltrate into the sewer system if significant pipe defects exist. This potential infiltration extends well beyond the duration of the rain/storm event, up to weeks or months later. Thus, alleged sewer exfiltration, being a dry weather phenomenon (only where significant defects may exist is essentially proven, by the Surfer Health Study itself not to contribute to beach contamination.</p> <p><i>Wastewater Engineering</i> by Metcalf and Eddy, a standard engineering design book for the wastewater industry, provides treatment performance information for on-site treatment systems (Table 14-7). Similar to alleged sewer exfiltration, septic systems release water below the ground surface. From the textbook, fecal coliform and viruses are non-existent within</p>	<p>entity specific loadings of human fecal material to the watershed.</p> <p>See response to Comment No. 12 regarding exfiltration in wet and dry weather, fate and transport of HF 183, and the requirement for Padre Dam MWD to characterize the HF183 levels in its treated effluent.</p>	

No.	Comment	Response	Action Taken
	<p>three feet below the bottom of a septic tank leach field. Similarly, alleged sewer exfiltration would be non-existent within a few feet of such an alleged discharge point. Alleged exfiltration would be a localized, below-grade condition and as a result, would not be transported during a subsequent rainfall event.</p>		
27	<p><b>Proportionality</b></p> <p>The Tentative Order places a burden on the District in various ways, including identification of alleged sewer exfiltration location, bypassing of wastewater flows for undetermined durations for alleged exfiltration testing, and other costs. Based on the short duration of notification for the Tentative Order and the source of District funding, the District has had no ability to incorporate these cost items into its annual budgeting process. Furthermore, participation in the Tentative Order should be proportional and tailored to the agency's actual contribution to beach contamination as shown by sufficient evidence. The District is located over 35 miles from the beach and there is no evidence to show that the District is contributing to any beach contamination, <u>therefore the District should be removed from the Tentative Order.</u></p>	<p>See response to Comment No. 25. The San Diego Water Board has concluded that the evidence cited in Findings 47 through 53 in Part IV, section D of the Tentative Order does not support inclusion of Ramona MWD as a Responsible Party in the Tentative Order for investigation of sources and extent of human fecal matter pollution at this time. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation in the event that evidence is developed supporting inclusion of Ramona MWD as a Discharger.</p> <p>Findings 47 through 53 in Part IV, section D of the Tentative Order are deleted. See response to Comment No. 25, 28 and Comment No. 12 regarding the fate and transport of HF183.</p>	<p>The Tentative Order is revised to remove Ramona Municipal Water District from the title block, findings and directives of the Tentative Order.</p>
28	<p><b>Recycled Water.</b></p> <p>Finding 49 of the Tentative Investigative Order states:</p> <p><i>The Ramona Municipal Water District is regulated under Order No. R9-2009-0005 (as amended),</i></p>	<p>Processes such as disinfection and filtration utilized during wastewater treatment should result in inactivation and removal of bacteria and most pathogens in recycled water to levels that are protective of human health. In addition, Ramona MWD utilizes reverse osmosis treatment which is effective in removing pathogens such as viruses,</p>	<p>The Tentative Order is revised to remove Ramona Municipal Water District from the title</p>

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	<p><i>Master Reclamation Permit for Ramona Municipal Water District San Vicente Wastewater Treatment Plant, adopted by the San Diego Water Board on March 11, 2009. Order No. R9-2009-0005 establishes requirements for the treatment and distribution of recycled water from the San Vicente Water Reclamation Facility (San Vicente WRF). Recycled water produced from the San Vicente WRF is used for landscape irrigation at the San Vicente Golf Course and for irrigation of groves at Spangler Peak Ranch. The San Vicente Golf Course and Spangler Peak Ranch are located in the Gower Hydrologic Subarea, 907.23 that is in the San Diego River Watershed. Disinfected tertiary recycled water is used for landscape irrigation at the San Vicente Golf Course. Disinfected tertiary recycled water is typically used for irrigation of groves at Spangler Peak Ranch, however, pursuant to Order NQ. R9-2009-0005 disinfected secondary-2.2 recycled water can be used for irrigation at the Spangler Peak Ranch. Ramona Municipal Water District reported that about 425 acre-feet of recycled water was used for irrigation at San Vicente Golf Course and Spangler Peak Ranch in 2015.</i></p> <p>The cited information in Finding 49 is correct in that disinfected secondary-2.2 recycled water may be used for irrigation of Spangler Peak Ranch. However, the District <b>does not</b> provide disinfected secondary-2.2 water to Spangler Peak Ranch. Disinfected tertiary recycled water, including three-stage reverse osmosis treatment, is provided to both the San Vicente Golf Course and Spangler Peak Ranch. Disinfected tertiary recycled water will</p>	<p>Giardia, and Cryptosporidium. Ramona MWD also maintains rules and regulations governing the design, construction, and use of recycled water distribution systems for its use sites. These rules and regulations require the use sites to implement practices to ensure recycled water is used in a manner protective of public health and water quality. Such practices include applying recycled water at appropriate rates to prevent ponding and excessive runoff.</p> <p>See response to Comment No. 25. Ramona MWD's discharges are upstream of the San Vicente Reservoir. The detection of human fecal materials in receiving waters of the lower San Diego River Watershed downstream from the San Vicente Reservoir during the SHS and MST study periods, is not likely associated with any discharges by the Ramona MWD above the San Vicente Reservoir.</p> <p>The San Diego Water Board has concluded that the evidence cited in Findings 47 through 53 in Part IV, section D of the Tentative Order does not support inclusion of Ramona MWD as a Discharger in the Tentative Order at this time. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation if evidence is developed supporting inclusion of Ramona MWD as a Discharger.</p> <p>See response to Comment 12 regarding the requirement for Padre Dam MWD to characterize HF183 in its treated effluent.</p>	<p>block, findings and directives of the Tentative Order.</p>

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	<p>continue to be provided to both parties in the future. <u>Therefore, the District should be removed from the Tentative Investigative Order on this basis.</u></p> <p>Finding 51 of the Tentative Investigative Order states:</p> <p><i>Recycled water produced and distributed by Padre Dam, the Ramona Municipal Water District, and the City of San Diego is typically in compliance with discharge specifications for total coliform bacteria specified in Master Recycling Permits and treatment criteria for total coliform bacteria specified in title 22. Disinfection and filtration requirements specified in Title 22 are intended to ensure treatment, removal, and inactivation of bacteria and other pathogens to levels protective of human health. Recycled water, including residual levels of bacteria or pathogens, is primarily intended for landscape irrigation and is prohibited from being discharged to surface waters, including the San Diego River.</i></p> <p>The cited information in Finding 51 is correct. The District is, by permit, required to meet defined recycled water treatment standards, and to avoid discharge to surface waters. The District meets its permit requirements, and recycled water served to District customers maintains levels protective of human health. The statement above cites that the District maintains compliance with required discharge specifications. As the San Vicente Water Reclamation Facility incorporates additional treatment with three-pass reverse osmosis, discharges are typically below that required by discharge permit. <u>Therefore, the District should be</u></p>		

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	<p><u>removed from the Tentative Investigative Order on this basis.</u></p> <p>Finding 53 of the Tentative Investigative Order states:</p> <p><i><u>Disinfection and treatment to tertiary standards, as required by the Master Recycling Permits, results in the removal and inactivation of bacteria and pathogens to levels protective of human health, as measured by the presence or absence of total coliform. However, the effluent is not measured for the presence of the HF183 human genetic marker. Therefore, the degree to which effluent from these facilities may be causing or contributing to measurable levels of HF183 in the San Diego River or its tributaries is unknown.</u></i></p> <p>As presented above, it is clear that the location of the District within the San Diego River watershed results in no practical means by which the District might be contributing to coastal beach contamination. Maintaining compliance with established discharge standards results in discharges that are protective of human health. No definitive correlation between the HP183 marker and pathogens has been established.</p> <p>Finding 60 of the Tentative Investigative Order states:</p> <p><i>The Dischargers shall continue to take all steps necessary to reduce, eliminate or prevent the unauthorized discharges described in this Investigative Order within their jurisdiction through compliance with applicable WDRs and NPDES</i></p>		



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	<p><i>permits, including the full use of their separate legal authorities, statues (sic), ordinances, permits, contracts or similar means to require compliance.</i></p> <p>The District, regardless of the Tentative Order, is required to maintain compliance with all WDRs and/or other permits associated with the San Vicente Water Reclamation Facility. <u>As such, the District does not contribute to increased GI illnesses at the San Diego River watershed confluence, over 35 miles away.</u></p>		
29	<p><b>SUMMARY</b></p> <p>The District acknowledges that Water Code section 13267 allows the San Diego Water Board to require the District to furnish technical and monitoring program reports. However, as stated in Section 13267, "the burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports." Additionally, there must be evidence to link the District's activities to the issue that the Tentative Order is seeking to remedy. See <i>In the Matter of the Petition of Chevron Products Company/ Order WQO 2004-0005, SWRCB/OCC File A-1343</i> (May 20, 2004).</p> <p>Here, the Tentative Order's sole reference to the District is that the District uses recycled water to irrigate a golf course and groves located 35 miles</p>	<p>See response to Comment No. 25.</p> <p>The San Diego Water Board has concluded that the evidence cited in Findings 47 through 53 in Part IV, section D of the Tentative Order does not support inclusion of Ramona Municipal Water District (Ramona MWD) as a Responsible Party in the Tentative Order for investigation of sources and extent of human fecal matter pollution at this time. The San Diego Water Board can reconsider this matter in later phases of the Tentative Order investigation in the event that evidence is developed supporting inclusion of Ramona MWD as a Responsible Party.</p>	<p>The Tentative Order is revised to remove Ramona Municipal Water District from the title block, findings and directives of the Tentative Order.</p>

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	<p>away from the coastline. The permit allowing the District's use of recycled water prohibits discharge to surface waters including into the San Diego River or its tributaries. The District also provides its recycled water at a heightened disinfection process (tertiary). There is no evidence provided that District recycled water activities bear any relationship to the problem to be solved. The burden of the costs of complex and resource-intensive studies is substantial in that the District does not have a large general fund to pay for said investigation and reporting. Therefore, the cost would be borne by the ratepayers and must be legally justified as necessary to pay for the service provided. Given the information in this letter, the burden on the District is unreasonable and far outweighs any benefits. Also, the standards of <i>Chevron</i> have not been met.</p> <p>The District supports the goal of the Tentative Order to identify the sources and pathways of and reduce human fecal material in the San Diego River and its tributaries. The District also supports the overall intent to establish a collaborative approach to addressing this important water quality issue. However, as there is no evidentiary link to the District and there are no benefits to be derived from including the District in the Tentative Order, the District's ratepayers should not bear the burden of such studies contemplated by the Tentative Order. <u>The District respectfully requests that it be removed as a participating agency in the Tentative Order. If you have any questions, please let me know.</u></p>		

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<b>Amy M. Serieys, Deputy Attorney, California Department of Transportation                      written comment dated June 20, 2018</b>			
30	<p><b><i>Caltrans 's use of its enforcement authority to prevent illicit discharges</i></b>                      The Tentative I.O. correctly notes that Caltrans's National Pollutant Discharge Elimination System (NPDES) permit and Waste Discharge Requirements (WDRs) require discharges of pollutants from Caltrans's municipal separate storm sewer systems (MS4s) to be reduced to the maximum extent practicable (MEP). (Finding 45; Order No. 2012-0011-DWQ, page 7, Finding 7, Performance Standards.) The Tentative I.O. also notes that Caltrans must "effectively prohibit non-storm water discharges into its storm water conveyance system." (Finding 45.)</p> <p>In Finding 46, the Tentative I.O. discusses illicit discharges from homeless encampments. In particular, Finding 46 states:</p> <p>Assuming that individuals living in the San Diego River are not regularly using restroom facilities, they are likely defecating outdoors, resulting in the discharge of human fecal material to the watershed tributary to the San Diego River or directly into the San Diego River. This is an illicit discharge that must be eliminated per ... Provision B.I of Order No. 2012-0011-DWQ [Caltrans's NPDES Permit]. ... Caltrans must use [its] land use and enforcement authority to prevent and eliminate illicit discharges to the MS4, including discharges from homeless encampments.</p>	<p>Finding 45 of the Tentative Order correctly notes that Provision B.1 or Order No. 2012-0011-DWQ requires that the California Department of Transportation (Caltrans) ".....shall effectively prohibit non-storm water discharges into its storm water conveyance system unless such discharges are either: a) authorized by a separate NPDES permit; or b.) conditionally exempt .....". Finding 45 is revised to reflect that Caltrans is a responsible party in the Bacteria TMDL and must implement control measures to ensure that the effective prohibition of non-storm water discharges and implement BMPs to prevent or eliminate the discharge of bacteria from its right of way and to reduce bacteria waste loads by the compliance schedule described in the Bacterial TMDL (Caltrans MS4 Permit). Caltrans is a responsible party in this Tentative Order because it discharges, has discharged, and/or is suspected of discharging waste in the San Diego Region.</p> <p>As noted in Finding 47 of the Tentative Order, numerous homeless encampments are located on public lands or within public rights-of-way or similar areas on lands owned or controlled by public entities including Caltrans that are also MS4 entities named as Responsible Parties in the Tentative Order. Based on available information and documented presence of human fecal material in the Lower San Diego River Watershed, it is reasonable to suspect that discharges of human fecal material from homeless encampments in many instances originate from lands</p>	<p>Finding 47 of the Tentative Order is revised.</p>

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	<p>First, and in response, homelessness is a complex social-economic issue involving competing policies, resources, rights, stakeholders, and opinions. While Caltrans has taken extensive efforts to abate illegal encampments on its rights of way, as detailed below, the California Regional Water Quality Control Board, San Diego Region's (Board) findings oversimplify a delicate and multifaceted issue. (See e.g., <i>Orange County Catholic Worker et al. v. Orange County et al.</i>, No. 8:18-cv-0155-DOC-JDE (C.D. Cal., Complaint Filed Jan. 29, 2018).) The Board's statement suggests that Caltrans has total control over the activities of the unhomed who transit through its rights of way. As illustrated in numerous lawsuits across the State of California, this is far from the case.</p> <p>Second, the Tentative IO. makes nearly no mention of the numerous pollution prevention and source control policies and activities Caltrans has engaged in to deal with unhomed persons on its rights of way. For instance, Caltrans regularly-meaning weekly-inspects and patrols its rights of way to ensure the safety of drivers and the public in general. Caltrans routinely engages in trash and debris cleanup activities and sweeping. Caltrans also erected fences in the San Diego River Watershed to secure its rights of way. (Cf. Finding 16 where the Board limits Caltrans' s cleanup efforts to the Hepatitis A outbreak.)</p> <p>Caltrans's efforts do not stop here. Caltrans regularly removes homeless encampments from its rights of way. In fact, Caltrans contracts with hazardous waste removal companies to clean its rights of way</p>	<p>owned or controlled by these entities and are discharged directly or indirectly to receiving waters within these jurisdictions. This provides an additional basis for requiring MS4 entities, including Caltrans, to investigate and quantify sources of human fecal material from homeless encampments near or adjacent to surface waters in the Lower San Diego River Watershed (Finding 47 of the Tentative Order.)</p> <p>The San Diego Water Board recognizes that the homeless encampments and population are a delicate and multifaceted issue involving complex societal and economic issues. The San Diego Water Board also recognizes that the Caltrans is taking actions through implementation of the Caltrans Statewide Stormwater Management Plan and other strategies to remove homeless encampments and persons from its rights of way and to cleanup its rights of way after homeless encampments have been removed. The Tentative Order does not take a position on the adequacy of these efforts and is not requiring Caltrans to undertake any activities to abate illegal encampments on its rights of way.</p> <p>The San Diego Water Board's authority to require investigation under Water Code section 13267 is extremely broad. The San Diego Water Board's Order must be based on evidence that an entity discharges, has discharged, or is suspected of discharging or having discharged waste in order to be considered a responsible party for investigating the water quality impacts of the discharge. The Tentative Order cites multiple lines of evidence that meets this standard in Findings 13 through 17 of the Tentative Order. These findings point towards the presence of human fecal</p>	

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	<p>after homeless encampments have been removed. Such cleanup includes removing any human fecal material. Caltrans also routinely cooperates with the City of San Diego, the San Diego River Park Foundation, and other local and environmental agencies to remove homeless encampments outside of its rights of way. Additionally, since at least 2015, Caltrans developed maintenance policies for its crews to abate illegal encampments on its rights of way. (See e.g., Caltrans's Maintenance Manual, Vol. 1, Ch. 1, Pages 1-14 to 1-17. <sup>38</sup>)</p> <p>Third, and finally, Caltrans efforts are in full compliance with Caltrans's Statewide Stormwater Management Plan (dated July 20, 2016), which the Board approved.<sup>39</sup> Section 10.3, Illegal Connection/Illicit Discharge and Illegal Dumping, describes Caltrans' s procedures for handling illicit discharges, including: conducting routine inspection and maintenance, investigating, reporting, and taking corrective action (removing illicit discharge and/or providing progressive warnings). All of Caltrans's actions to handle illegal encampments on its rights of way comply with Caltrans's Statewide Stormwater Management Plan. And, the Plan does not require Caltrans to go beyond those measures already approved by the State Board.</p>	<p>contamination in the Lower San Diego River Watershed emanating from homeless encampments on lands owned and controlled by Caltrans and other named Responsible Parties.</p> <p>In order to consider whether a strategy to abate human fecal contamination in the Lower San Diego River should be developed, the San Diego Water Board must first require Responsible Parties to gather the necessary information to identify and quantify sources of human fecal material discharges including homeless encampments. Directive 1 of the Tentative Order properly requires all Responsible Parties with potential responsibility for discharges from homeless encampments to participate in the investigation of this pollution pathway.</p> <p>See responses to Comments 2 and 52.</p> <p>Finding 47 of the Tentative Order is revised as follows in relevant part:</p> <p>Provision B.1 of Order No. 2012-0011-DWQ requires that [Caltrans] shall effectively prohibit non-storm water discharges into its storm water conveyance system unless such discharges are either: a) authorized by a separate NPDES permit; or b.) conditionally exempt in accordance with provision</p>	

<sup>38</sup> The Caltrans Maintenance Manual is available on the Caltrans website at [http://www.dot.ca.gov/hq/maint/manual/2015/3\\_Chpt-1\\_July\\_2015\\_rev\\_1-02.pdf](http://www.dot.ca.gov/hq/maint/manual/2015/3_Chpt-1_July_2015_rev_1-02.pdf)

<sup>39</sup> The Caltrans Statewide Stormwater Management Plan is available at: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/caltrans/swmp/swmp\\_approved.pdf](https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/caltrans/swmp/swmp_approved.pdf)

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	<p>Based on the foregoing and other activities included in its existing programs, Caltrans maintains that it has already used its "land use and enforcement authority" to the maximum extent practicable to abate discharges from homeless encampments onto its rights of way.</p> <p>In sum, Caltrans disagrees with the Board's Finding; rather, Caltrans maintains such "discharges" are "effectively prohibited" by Caltrans consistent with Provision B.1 of Order No. 2012-011-DWQ.</p> <p><b><i>Findings should be added to include Caltrans's prevention, source control, structural and treatment efforts to remove or prevent the deposition of fecal material, trash and debris, and to ensure the safety of the public in its rights of way.</i></b></p> <p><b><i>Finding 46 should be updated to reflect Caltrans's current efforts to use its land use and enforcement authority to prevent illegal discharges and that such efforts comply with Caltrans's obligations under its NP DES permit.</i></b></p>	<p>B.2. of this NPDES permit. <u>Pursuant to the requirements in Attachment IV of Order No. 2012-0011-DWQ (as amended), as a responsible party named under the Bacteria TMDL, Caltrans shall implement control measures to ensure that the effective prohibition of non-storm water discharges and implement BMPs to prevent or eliminate the discharge of bacteria from its [rights of way] to meet the waste load reduction goals by the compliance schedule described in the Bacterial TMDL. Caltrans has discharged or is suspected of discharging waste into waters in the Lower San Diego River Watershed. Caltrans is a discharger responsible for compliance with the directives and provisions of this Investigative Order and is designated as a Responsible Party.</u></p>	
31	<p><b><i>Sources of human fecal material in the San Diego River Watershed</i></b></p> <p>The Tentative I.O. identifies six possible sources for the discharge of human fecal material into the San Diego River Watershed, including sanitary sewer overflows from public-owned sewer collection systems, sewage spills from privately-owned lateral sewer lines, and exfiltration from publicly-owned sanitary sewer collection systems, privately-owned lateral sewer lines, and privately-owned on-site</p>	<p>Comments noted. Please review the response provided for Comment No. 4 above for more information.</p>	<p>Directive 1 and Footnote 25 are revised in the Tentative Order.</p>

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	<p>wastewater treatment systems. (Finding 14.) Caltrans does not own, operate, or discharge to any of these potential sources, nor does the Board allege that Caltrans does so. As such, Caltrans cannot control sampling analysis from any these potential sources. More importantly, Caltrans's minor role in the San Diego River Watershed-most of Caltrans's facilities in the Watershed are maintained by other parties by agreement and/or only represent a small portion of the Watershed-should not now obligate Caltrans to fund costly studies from these potential sources that do not tie into any Caltrans facility.</p> <p>Additionally, Caltrans has no legal authority to prevent discharges from such sources or to "determine if the management measures in use by the various dischargers in their respective programs are adequately addressing the REC-1, REC-2, and SHELL beneficial use impairments caused by the presence of human fecal material in the San Diego River, its tributaries, and the downstream beach coastal waters," i.e., the Board's stated need for this Tentative I.O. (Finding 62.)</p> <p><b><i>The Board should: (1) clarify that Caltrans is only required to develop a work plan and investigative study for discharges from its rights of way, and (2) remove Directive 1.d from the Tentative IO.</i></b></p>		
32	<p><b><i>Named Dischargers</i></b>                      The Tentative I.O. omits maps showing real property ownership along the San Diego River Watershed. Such maps inform the Board on whether all relevant parties have been named in the Tentative I.O. Ownership maps also allow the dischargers and the</p>	<p>The San Diego Water Board understands the concerns but disagrees that the San Diego Water Board should include ownership maps in the Tentative Investigative Order, so that all relevant and necessary parties can be named.</p>	<p>None necessary</p>

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	<p>Board to discuss right-of-way access issues, which will inevitably arise in completing any meaningful work plan. Moreover, failing to name all adjacent property owners unfairly imposes responsibilities onto neighboring landowners and limits the power of the "land use and enforcement authority" relating to potential illicit discharges- clearly an issue of concern for the Board. Finally, the failure to include relevant parties early on in the process undercuts the potential effectiveness of any work plan which might be developed.</p> <p><b><i>The Board should include ownership maps in the Tentative IO. so that all relevant and necessary parties can be brought into this Order.</i></b></p>	<p>The San Diego Water Board has made a reasonable effort to identify key dischargers in the Tentative Order that are potentially associated with the human fecal material pollution levels in the Lower San Diego River. It is not necessary at this phase of the investigation to identify all potential dischargers for the San Diego Water Board to proceed with requirements for key potential dischargers to investigate and quantify sources associated with their activities. The San Diego Water Board may amend the Order to add additional parties in later phases of the Tentative Order investigation where a substantial body of evidence to support such an action is produced.</p> <p>In some cases, designated Responsible Parties in the Tentative Order, specifically the municipalities, may have adequate jurisdiction over property owners and know where they are located. Furthermore, it is the expectation of the San Diego Water Board, that the Responsible Parties will cooperatively communicate, and where jurisdictional boundaries are an issue, attempt to resolve the issue independent of the San Diego Water Board.</p> <p>The San Diego Water Board has the authority under Water Code section 13267 to direct Caltrans to investigate water quality conditions at locations that are affected by Caltrans discharges and beyond the jurisdictional boundaries of Caltrans. If for example a downstream property owner fails to provide access to the Caltrans to conduct monitoring, the San Diego Water Board could</p>	



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		require the downstream property owner to provide access or conduct the monitoring itself.	
33	<p><b><i>Semiannual Progress Reports</i></b></p> <p>The Tentative IO. will require all dischargers to submit semiannual progress reports on the 15<sup>th</sup> of January and July of each year. (Directive 4.) Considering the limited number of wet weather events in southern California, semiannual reports would be redundant. Moreover, the Board's July semiannual deadline coincides with year-end reporting at Caltrans. In particular, Caltrans must prepare the Caltrans Storm Water Management Program Annual Report and the Caltrans Storm Water Management Program District Work Plan for the State Board. As such, Caltrans requests that the Tentative I.O. require no more than annual progress reports, due in January of each year.</p> <p><b><i>Require only annual progress reports due in January of each year.</i></b></p>	Comment noted. Please review the response provided for Comment 5 above.	Directive 3.a.(2) of the Tentative Order is revised.

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<b>Karen Landers, General Counsel, Metropolitan Transit System written comment dated June 20, 2018</b>			
34	<p>The Tentative Order, however, requires MTS to undertake an investigation or study of potential sources and pathways of human fecal material to the San Diego River and its tributaries without any evidence that MTS contributes many of the sources identified. It is inappropriate to include MTS in the order when there is insufficient evidence to link MTS's activities to the problem which the order seeks to address. See In the Matter of the Petition of Chevron Products Company, Order WQO 2004-0005, SWRCB/OCC File A-1343 (May 20, 2004).</p> <p>Further, the Tentative Order's focus on homeless encampments raises significant socio-economic issues that are not easily solved by the entities currently included in the Tentative Order. Important stakeholders, such as law enforcement, entities providing services to homeless populations, and the Regional Board, are not part of the Tentative Order.</p> <p>For these reasons, we believe the better approach is to establish a memorandum of agreement between stakeholders, which is designed to establish structures for identifying key sources and pathways and collaborating on solutions. MTS respectfully asks the Regional Board not to issue the Tentative Order and instead to explore a collaborative agreement between stakeholders.</p>	<p>The San Diego Water Board's authority to require investigation under Water Code section 13267 is extremely broad. As an initial matter, Order WQO 2004-0005, SWRCB/OCC File A-1343 (May 20, 2004) was withdrawn in 2006 as directed by court order following a challenge to the underlying regional water board order. (See Order WQO-2006-011.)<sup>40</sup> However, even if it had not been withdrawn, the factors that were applied in the Chevron matter are not applicable here to the determination to include Metropolitan Transit System as a responsible party. In contrast to the facts at issue in the Chevron matter, there is ample evidence in Findings 43-44 and 46-47 that support the conclusion that Metropolitan Transit District discharges, discharged or is suspected of discharging or having discharged waste in the San Diego Region.</p> <p>The Tentative Order cites multiple lines of evidence that establish that Metropolitan Transit System (MTS) is appropriately named as a responsible party in Findings 1, 13 through 17, 43, 44, 46 and 47 of the Tentative Order. These findings point towards the presence of human fecal contamination in the Lower San Diego River Watershed originating from sources including homeless encampments on lands owned and controlled by MTS and other named Responsible Parties..</p>	None necessary

<sup>40</sup> See Footnote 9, *Supra*

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		<p>In establishing these findings in the Tentative Order, the San Diego Water Board recognizes that homelessness and homeless encampments and population are a multifaceted issue involving complex societal and economic issues. In order to develop a strategy to abate human fecal contamination in the Lower San Diego River, the San Diego Water Board must first require responsible dischargers to gather the necessary information to identify and quantify sources of human fecal material discharges including such discharges from homeless encampments. Directive 1 of the Tentative Order properly requires all dischargers with potential responsibility for discharges from homeless encampments to participate in the investigation of this pollution pathway. The Tentative Order does not require MTS or any other Responsible Party to undertake activities to abate illegal encampments on its rights of way.</p> <p>As reflected in the identified findings, MTS is a permittee under the State Water Board's General Permit for the Discharge of Storm Water from Small MS4s, Order 2013-0001-DWQ<sup>41</sup>, as amended, and must comply with permit provision responsibilities to control discharges of pollutants into and from its MS4. Further, MTS is a public</p>	

<sup>41</sup> See Water Quality (WQ) Order No. 2013-0001, as amended by Order WQ-20015-0133-EXEC, Order WQ 2018-0001 EXEC and Order WQ 2018-0007 EXEC, *National Pollutant Discharge Elimination System (NPDES) General Permit for Waste Discharge Requirements (WDRs) for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4s)* available on the State Water Board website at [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/phase\\_ii\\_municipal.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html) (as of October 22, 2018)

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		<p>agency with jurisdiction and land use authorities over public spaces within its jurisdiction. Activities within those public spaces may include discharges of human waste material to receiving waters. This provides an additional basis for requiring MTS to investigate and quantify sources of human fecal material discharges near or adjacent to surface waters in the Lower San Diego River Watershed.</p> <p>There is nothing in the Tentative Order that precludes the MTS proposal for a memorandum of agreement between Responsible Parties designed to establish structures for identifying key sources and pathways for collaborating on solutions. The San Diego Water Board is supportive of cooperative agreements between the Responsible Parties and encourages MTS to reach out to other Responsible Parties and collaborate on ways to address the directives of the Tentative Order. As previously stated in the response to Comment Nos. 3 and 21 above, to achieve maximum efficiency and economy of resources, the San Diego Water Board encourages the Responsible Parties to collaborate on efforts responding to the requirements of the Tentative Order. Such a collaborative effort would enable the sharing of technical resources, trained personnel, consultants and associated costs and provide an integrated approach to help ensure that the relative load contributions from each of the potential sources are quantified consistently and accurately.</p>	
35	<p><b>Remove direct deposition from homeless encampments as a potential source or pathway of human fecal material to the San Diego River</b></p>	<p>Finding No. 46 of the May 21, 2018 Tentative Order has been revised consistent with the response set forth below and renumbered as</p>	<p>Findings 17 and 47 are added to</p>

No.	Comment	Response	Action Taken
	<p>The Tentative Order requires MTS to undertake studies, in part, of the following sources and pathways of human fecal material in the San Diego River and its tributaries:</p> <ul style="list-style-type: none"> <li>• Illegal connections to MS4s</li> <li>• Illicit discharges to MS4s</li> <li>• Direct deposition from homeless encampments</li> </ul> <p>The requirement for MTS to investigate direct deposition relies, in large part, on the designation of the San Diego River as an MS4, and of homeless encampments as illegal connections and discharges to the MS4, as set forth in Finding 46. Finding 46 of the Tentative Order states, in part, that MTS is required to use its "land use and enforcement authority to prevent and eliminate illicit discharges to the MS4, including discharges from homeless encampments. This requirement pertains to the San Diego River because urban streams such as the San Diego River are considered both an MS4 and a receiving water per Finding 11 of Order No. R9-2013-0001." MTS requests that this Finding be deleted from the Tentative Order for the reasons set forth below, and that the requirement to conduct an investigative study of the direct deposition from individuals in homeless encampments likewise be deleted.</p> <p><b>The Regional Board exceeds its authority by considering the San Diego River and its tributaries to be both waters of the United States and point sources.</b></p>	<p>Findings 17 and 47 of the revised Tentative Order.</p> <p>Revised findings 17 and 47 of the Tentative Order establish that numerous homeless encampments are located on public lands or within public rights-of-way or similar areas on lands owned or controlled by public entities that are also MS4 entities such as MTS. It is reasonable to suspect that discharges of human fecal material from homeless encampments in many instances originate from lands owned or controlled by these entities and are discharged directly or indirectly to receiving waters within these jurisdictions. Human fecal material may also be transported from lands within the control of MTS (and other public lands owned by other public agencies) into and through MS4s owned and operated by the MS4 entities.</p> <p>It is also reasonable to conclude that human fecal material may be discharged from homeless encampments on lands owned or controlled by MTS directly into the Lower San Diego River or its tributaries, or adjacent to such waters in a manner which may permit the waste to be transported (e.g. during storm events or high flows).</p> <p>These considerations provide an additional basis for requiring MS4 entities such as MTS to investigate and quantify sources of human fecal material from homeless encampments near or adjacent to surface waters in the Lower San Diego River Watershed.</p> <p>Section 13267 of the Water Code broadly authorizes the San Diego Water Board to require persons who discharge, have discharged, or are</p>	<p>the Tentative Order.</p>

No.	Comment	Response	Action Taken
	<p>It is improper to require MTS to study direct deposition from homeless encampments pursuant to Finding 46, which is based on a permit that does not cover MTS, because that Finding is contrary to the law.</p> <p>First. MTS is a Phase II MS4 and is not subject to Order R9-2013-0001. A finding in Order R9-2013-0001 does not apply to MTS. Thus, Finding 46 in the Tentative Order, which is based on Order R9-2013-0001, does not support a conclusion that the San Diego River is part of MTS's MS4, or that direct discharges to the San Diego River are a violation of MTS's permit. It is, therefore, inaccurate and inappropriate to state that direct discharges to the river constitute a violation of MTS's MS4 permit.</p> <p>Second, it is contrary to the plain language and structure of the Clean Water Act to consider a navigable water to be an MS4. A person who dumps pollutants directly into the San Diego River is not discharging to MTS's MS4. In the same way, a person defecating in the river is not discharging to MTS's MS4. Finding 46 of the Tentative Order is based on a legally flawed determination, that is itself subject to a petition with the State Water Resources Control Board. See, e.g., State Water Resources Control Board, Water Quality Petition A-2254(h).</p> <p>The federal definition of "municipal separate storm sewer system" does not include a water of the United States or its tributaries:</p>	<p>suspected of having discharged waste that could affect water quality to furnish reports as is required by this Tentative Order. (Finding 2 of revised Tentative Order) The Tentative Order requires MTS to identify and quantify sources of human fecal material that is 1) discharged into its MS4; or 2) otherwise discharged from public spaces within MTS's jurisdiction directly into the Lower San Diego River or its tributaries or adjacent to such waters in a manner which may permit the waste to be transported (e.g. during storm events or high flows) into the waters.</p> <p>The Tentative Order does not require more than what is required of MTS by the Phase II Small MS4 General Permit. through its legal authority as a public entity, or through its ability to coordinate assistance from its member agencies.</p> <p>The Tentative Order is an Investigative Order and not a Cleanup and Abatement Order. The Tentative Order does not require MTS or any other Responsible Party to undertake activities to abate sources including illegal encampments.</p> <p>MTS asserts that it "<i>cannot act to conduct investigations or studies or take enforcement actions without assistance from other agencies.</i>" The Tentative Order does not preclude MTS from requesting assistance from other agencies in conducting investigations or taking enforcement action, especially if individuals in homeless encampments on MTS' property are engaging in criminal activity (as stated in the comment).</p> <p>As noted in the Response to Comment No. 34</p>	

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	<p>Municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):</p> <p>Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWAQ that discharges to waters of the United States;</p> <p>Designed or used for collecting or conveying storm water;</p> <p>Which is not a combined sewer; and</p> <p>Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.</p> <p>40 CFR §122.26(b)(8).</p> <p>Not only does the definition of "municipal separate storm sewer" not include waters of the United States or its tributaries, "waters of the United States" is separately defined and does not include "municipal separate storm sewer systems." 40 C.F.R. § 122.2. By considering a water of the United States (the San Diego River) to be an MS4, the Regional Board renders the term "waters of the United States" superfluous, contrary to basic rules of statutory</p>	<p>above, there is nothing in the Tentative Order that precludes the MTS proposal for a memorandum of agreement between Responsible Parties designed to establish structures for identifying key sources and pathways and collaborating on solutions. The San Diego Water Board is supportive of cooperative agreements between the Responsible Parties and encourages MTS to reach out to other Responsible Parties and collaborate on ways to address the directives of the Tentative Order. As previously stated in the response to Comment Nos. 3 and 21 above, to achieve maximum efficiency and economy of resources, the San Diego Water Board encourages the Responsible Parties to collaborate on efforts responding to the requirements of the Tentative Order. Such a collaborative effort would enable the sharing of technical resources, trained personnel, consultants and associated costs and provide an integrated approach to help ensure that the relative load contributions from each of the potential sources are quantified consistently and accurately.</p>	

No.	Comment	Response	Action Taken
	<p>interpretation. See <i>Hibbs v. Winn</i> (2004) 542 U.S. 88, 101 ("A statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant ... ")</p> <p>Further, the structure of the Clean Water Act does not permit the Regional Board to consider a water of the United States to be an MS4. The Clean Water Act is premised entirely on the discharge of a pollutant to a navigable water from a point source. 33 U.S.C. § 1311. A navigable water cannot discharge into itself, even where humans have modified the navigable water for purposes of conveying storm flows. See <i>Los Angeles County Flood Control District v. Natural Resources Defense Council, Inc.</i> (2013) 568 U.S. 78 (holding that the flow of polluted water from one portion of a river, through a concrete channel or other engineered improvement in the river, to a lower portion of the same river, does not constitute a discharge of pollutants). The definition of "discharge of a pollutant" under the Act "requires that the pollutant flow 'to navigable waters from any point source.' The most natural reading of this language is that the point source is distinct from navigable water." <i>Froebel v. Meyer</i>, 217 F.3d 928,937 {7th Cir. 2000}.</p> <p>Finding 46 is based on a legally flawed premise. The Regional Board exceeds its authority by requiring MS4 permittees to address the direct deposition of human fecal material to the San Diego River and its tributaries based on this finding. Because direct deposition of human fecal material into the San Diego River and its tributaries does not constitute an illicit discharge <i>to the MS4</i>, it is wholly improper to</p>		



No.	Comment	Response	Action Taken
	<p>consider such discharges to be a violation of MTS's MS4 permit or to direct MTS to investigate and remediate such direct deposition by virtue of its MS4 discharges to the San Diego River.</p> <p><b>The Regional Board's targeting of homeless individuals runs contrary to significant constitutional and statutory provisions</b></p> <p>Homelessness is a complex socio-economic issue whose causes and effects do not have a simple remedy. MTS's ability to enact a program that prevents individuals from establishing encampments in the San Diego River and its tributaries is limited by fundamental constitutional rights of movement, association, expression, and equal protection of the laws. See, e.g., <i>Allen v. City of Sacramento</i> (2015) 234 Cal.App.4th 41; see also <i>State of Hawai'i v. Beltran</i> (2007) 116 Hawai'i 146. By targeting homeless persons on the basis of homelessness, the Tentative Order may also implicate the Regional Board in an unconstitutional selective use of its authority. See <i>Allen v. City of Sacramento</i> (2015) 234 Cal.App.4th 41, 63. The Regional Board, however, has authority to issue an order directly to individuals discharging to the river, as <i>dischargers</i>, which MTS cannot do.</p> <p>In addition, MTS's ability to investigate and study homeless encampments is limited by the scope of MTS's enabling legislation. MTS was established as a special district by the California Legislature in 1975 pursuant to Public Utilities Code § 120000 <i>et seq.</i> MTS is authorized to operate or to let contracts to operate public mass transit guideways within the</p>		

No.	Comment	Response	Action Taken
	<p>Cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego and Santee, as well as within all of the unincorporated areas of the County of San Diego not served by the North San Diego County Transit Development Board.</p> <p>MTS's enabling legislation does not grant land use or police power to MTS in the same nature that cities possess. This means that MTS cannot act to conduct investigations or studies or take enforcement actions without assistance from other agencies that possess such power. On the ground, this means that MTS generally requires assistance from local law enforcement to arrest and remove homeless encampments. A police officer or sheriff deputy must be present to take an individual into custody for such violations or for felonies. MTS also requires cooperation and assistance from the City of San Diego Lifeguard Swift Water Rescue Team to access the islands in the San Diego River. A long-term solution will require participation and assistance from the applicable social service agencies to create and identify housing alternatives for the San Diego River homeless encampment population. Requiring MTS to undertake studies and activities outside of the scope of its authority is improper.</p> <p>Importantly, individuals in homeless encampments on MTS's property are engaging in criminal activity. Their direct deposition of fecal material cannot be imputed to MTS as if MTS were directly discharging into the River. Because the Tentative Order requires MTS to undertake actions outside of MTS's scope of authority and to take actions that are subject to</p>		

No.	Comment	Response	Action Taken
	<p>significant constitutional and statutory limitations, MTS believes the Tentative Order is the wrong way to address the water quality effects from homeless encampments. We believe the better approach is for the Regional Board to issue an order directly to individuals discharging to the river and to establish a memorandum of agreement between stakeholders, designed to establish structures for identifying key sources and pathways and collaborating on solutions.</p> <p>MTS respectfully asks the Regional Board not to issue the Tentative Order and instead to explore a collaborative agreement between stakeholders. If this Tentative Order issues over MTS's objection, MTS requests the following revisions:</p> <p><b>Requested Revision 1.a.</b> Delete Finding 46.</p> <p><b>Requested Revision 1.b.</b> Remove "direct deposition from homeless encampments" from Finding 14 and from paragraph 1 of the Order Directive 1.</p>		
36	<p><b>There Is No Evidence Supporting the Requirement for MTS to Study Sewage Discharges</b></p> <p>The Tentative Order requires MTS to undertake studies, in part, of the following sources and pathways of human fecal material in the San Diego River and its tributaries:</p> <ul style="list-style-type: none"> <li>• Sewage spills from privately-owned lateral sewer lines</li> </ul>	<p>The San Diego Water Board has revised Directive 1 of the Tentative Order to clarify that Responsible Parties must submit the results (Final Investigative Study Report) of an investigative study, or studies, to identify and quantify sources of human fecal material discharges from their respective jurisdiction to the San Diego River and its tributaries.</p> <p>The revised Directive provides in Footnote 25 that Responsible Parties must comply with the requirements of the Tentative Order to the fullest extent of their legal authorities. A Responsible Party</p>	<p>Directive 1 of the Tentative Order is revised and Footnote 25 is added to the Tentative Order.</p>

No.	Comment	Response	Action Taken
	<ul style="list-style-type: none"> <li>• Exfiltration from publicly-owned sanitary sewer collection systems</li> <li>• Exfiltration from privately owned lateral sewer lines and privately owned OWTS</li> <li>• Sanitary sewer overflows from publicly owned sewer collection systems</li> <li>• Treated effluent from wastewater treatment plants</li> </ul> <p>MTS does not own or operate a public sewer collection system or wastewater treatment plant. MTS does not have authority to regulate private property on which private laterals and private septic systems are located. Discharges from wastewater treatment plants, publicly owned sewage systems, and private property are not the responsibility or even within the authority of MTS. Thus, there is no evidentiary basis under <i>Chevron</i> for requiring MTS to investigate these potential sources and pathways.</p> <p>MTS requests that the Tentative Order be revised to specify that each Discharger is only responsible for submitting an investigative study and monitoring of the sources of human fecal material within that Discharger's control</p> <p><b>Requested Revision 2.a</b> Revise the first paragraph of Order Directive 1 as follows:</p> <p>Investigation to Identify Sources of Human Fecal Material Discharges in the San Diego River Watershed. No later than June 30, 2022, <del>the</del> <u>each</u> Dischargers must submit the results (Final Investigative Study Report) of an investigative study, or studies, to identify and quantify sources of human fecal material in wet weather discharges <u>and in that</u></p>	<p>is not required to investigate suspected sources or pathways of human fecal material discharges to the extent it lacks legal authority and cannot reasonably obtain legal authority (such as access to private property) to conduct the required investigations.</p> <p>See also response to Comment Nos. 4 and 10.</p>	

No.	Comment	Response	Action Taken
	<p><u>Discharger's control</u> to the San Diego River and its tributaries.</p>		
37	<p><b>MTS's MS4 permit does not require MTS to Implement the Bacteria TMDL</b></p> <p>The Tentative Order states that MTS is responsible for complying with the Bacteria TMDL. Finding 44. TMDLs are not self-implementing. The Bacteria TMDL is implemented, in part, through incorporation of its requirements into MS4 permits. Section F.5.i of the Phase II MS4 General Permit, requires MTS to comply with all applicable, approved TMDLs that assign a Waste Load Allocation to MTS and which have been identified in Attachment G of the Phase II MS4 General Permit. As of June 2018, Attachment G of the Phase II MS4 General Permit does not list MTS as an entity required to comply with any Waste Load Allocations in any of the TMDLs in the Regional Board's jurisdiction. Thus, MTS's MS4 permit does not include MTS as an entity required to comply with the Bacteria TMDL. To the extent the Tentative Order modifies the requirements of MTS's MS4 permit, it is improper for the Tentative Order to amend the permit.</p>	<p>Finding 44 of the Tentative Order is revised to clarify the responsibilities of MTS for compliance with the Project I Bacteria TMDL..</p> <p>The San Diego Water Board designated MTS as a Regulated Small MS4 subject to the Phase II MS4 General Permit on February 8, 2017 by adopting Resolution No. R9-2017-0006. The State Water Board subsequently amended the Phase II MS4 General Permit on December 19, 2017<sup>42</sup> to incorporate 1) new and revised implementation requirements based on corresponding regional water board adopted TMDL waste load allocations (WLAs), and (2) final compliance dates for the TMDL WLAs. This amendment incorporated the San Diego Water Board adopted Bacteria TMDL WLAs into the Phase II MS4 General Permit. The State Water Board Executive Director subsequently amended Attachment B of the Phase II MS4 General Permit to add San Diego Metropolitan Transit System (MTS) as a Non-Traditional Small MS4 discharger on March 13, 2018 by approving Order WQ 2018-0007-EXEC<sup>43</sup>. Finding 12 of Order WQ 2018-0007-EXEC</p>	<p>Finding 44 of the May 21, 2018 Tentative Order is revised and renumbered as Finding No. 46.</p>

<sup>42</sup> See unofficial conformed copy Water Quality (WQ) Order No. 2013-0001, as amended by Order WQ-20015-0133-EXEC, Order WQ 2018-0001 EXEC and Order WQ 2018-0007 EXEC, , *National Pollutant Discharge Elimination System (NPDES) General Permit for Waste Discharge Requirements (WDRs) for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4s)* available on the State Water Board website at [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/phase\\_ii\\_municipal.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html) (as of October 22, 2018)

<sup>43</sup> Water Quality Order 2018-0007-EXEC, Amending Water Quality Order 2013-0001-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000004, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4), approved by the State Water Board Executive Officer on March 13, 2018. Available on the State Water Board website at [https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2018/wqo2018\\_0007\\_exec.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0007_exec.pdf) (as of October 25, 2018).

No.	Comment	Response	Action Taken
	<p><b>Requested Revision 3.</b> Revise Finding 44 as follows:</p> <p>Provision C of Order No. 2013-0001-DWQ states that "(p)ermittees shall implement controls ... to reduce the discharge of pollutants from their MS4s to waters of the United States to the MEP." Provisions F.5.a.1.(ii)(a) and F.5.a.1.(ii)(b) require permittees to have adequate legal authority to 1) effectively prohibit non-stormwater discharges through the MS4 and 2) detect and eliminate illicit discharges and illegal connections to the MS4. <del>As owners and operators of small MS4s that are responsible for complying with the Bacteria TMDL WLAs, San Diego State University and Metropolitan Transit System must reduce bacteria leading to the San Diego River Watershed using their legal authority described above by the compliance schedule described in the Bacteria TMDL.</del></p>	<p>provides that:</p> <p>“ 12 . MTS operations are within land uses associated with Municipal MS4s and are considered contributors to the impairment of the waterbodies listed for sediment and bacteria. Therefore, MTS should anticipate compliance with the requirements for implementing 1) the Bacteria Project 1 – Twenty Beaches and Creeks TMDL and 2) the Sediment – Los Penasquitos Lagoon TMDL contained in Attachment G of the Small MS4 General Permit. It is expected that MTS will be specifically named in Attachment G of the Small MS4 General Permit as having requirements under these TMDLs at a future reissuance of the Permit (i.e. occurring after the most recent update on December 19, 2017).”</p> <p>However, this Tentative Order does not require or purport to require MTS to comply with the Bacteria TMDL. Instead, it references the fact that MTS is named as a responsibility party in the TMDL and the State Water Board’s recognition in the Phase II Small MS4 General Permit that MTS should anticipate compliance with the Bacteria TMDL as evidence that MTS discharges, has discharged and/or is suspected of discharging or having discharged waste in the Region.</p> <p>Finding No. 44 of the Tentative Order is renumbered as follows:</p> <p><b>“44 San Diego State University and Metropolitan Transit System are Designated as a Responsible Parties.</b> Provision C of <del>Order No. 2013-0001-DWQ</del> the Small MS4 General Permit</p>	

No.	Comment	Response	Action Taken
		<p>states that “[p]ermittees shall implement controls...to reduce the discharge of pollutants from their MS4s to waters of the United States to the MEP.” <del>Provisions F.5.a.1.(ii)(a) and F.5.a.1.(ii)(b) require permittees to have adequate legal authority to 1) effectively prohibit non-storm water discharges through the MS4, and 2) detect and eliminate illicit discharges and illegal connections to the MS4. As owners and operators of small MS4s that are San Diego State University is responsible for complying with the Bacteria TMDL WLAs to reduce bacteria loading to the Lower San Diego River Watershed. San Diego State University and Metropolitan Transit System must reduce bacteria loading to the San Diego River watershed using their legal authority described above by the compliance schedule described in the Bacteria TMDL. As noted in Finding 12 of State Water Board Order WQ 2018-0007-EXEC, Metropolitan Transit System operations are within land uses associated with Municipal MS4s and are considered contributors to the impairment of the waterbodies of the Lower San Diego River Watershed listed as impaired for bacteria. While Metropolitan Transit System has not yet been named in Attachment G of the Small MS4 General Permit as having requirements under the Bacteria TMDL, in that same Finding, the State Water Board finds that Metropolitan Transit District should anticipate compliance with the requirements for implementing the Bacteria TMDL contained in Attachment G of the Small MS4 General Permit following a future amendment to the Small MS4 General Permit.<sup>16</sup> Based on the above information, both San Diego State University and Metropolitan</del></p>	

No.	Comment	Response	Action Taken
		<p><u>Transit District discharge or are suspected of discharging waste to waters in the Lower San Diego River Watershed. Each of these entities is a discharger responsible for complying with the directives and provisions of this Investigative Order and is designated as a Responsible Party.</u></p> <p>Footnote 16 is added to the Tentative Order as follows:</p> <p><u>Water Quality Order 2018-0007-EXEC, Amending Water Quality Order 2013-0001-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000004, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4), approved by the State Water Board Executive Officer on March 13, 2018. Available on the State Water Board website at <a href="https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0007_exec.pdf">https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0007_exec.pdf</a> (as of October 25, 2018)</u></p>	
38	<p><b>Align reporting requirements with existing reporting schedule</b></p> <p>The Tentative Order requires Dischargers to submit progress reports twice each year, which describe actions taken during the previous six months, the results of all sampling, all scheduled activities, including a graphical depiction of the progress of the investigative study, any modifications to the work</p>	<p>Comment noted. No changes are required to the Tentative Order. Please review the response to Comment No. 5 above.</p>	<p>Directive 3.a.(2) of the Tentative Order is revised as noted in the response to Comment No. 5. .</p>



No.	Comment	Response	Action Taken
	<p>plan, and any delays encountered as well as efforts to mitigate delays.</p> <p>Preparing semiannual reports on the Work Plan creates reporting obligations that must be added to MTS's established reporting schedule. MTS already prepares reports under multiple General Industrial Permits and its MS4 permit. A requirement to prepare these semiannual reports appears to disregard MTS's established reporting obligations and to prioritize reporting on the Work Plan over long-standing and long-anticipated programmatic elements, such as implementing the industrial and MS4 stormwater management programs. Because semiannual reporting on the Work Plan adds another "complex and resource-intensive" program without consideration of limited time and personnel resources already dedicated to water quality programs, MTS requests the following revision:</p> <p><b>Requested Revision 4</b> Revise paragraph 4 of the Ordering Provisions to read as follows:</p> <p><del>The Each</del> Dischargers shall prepare and provide written semiannual progress reports as provided below:</p> <p>(a) Semiannual progress reports must: (1) describe the actions taken toward achieving compliance with this Investigative Order during the previous six months; (2) include all results of sampling, tests, and all other verified or validated data received or generated by or on behalf of the Dischargers during the previous six months in the implementation of the actions required by this Investigative Order; (3)</p>		

No.	Comment	Response	Action Taken
	<p>describe all activities including, data collection and other field activities which are scheduled for the next six months and provide other information relating to the progress of work, including, but not limited to, a graphical depiction of the progress of the investigative study; (4) identify any modifications to the Investigative Study Work Plan or other work plan(s) that the Dischargers proposed to the San Diego Water Board or that have been approved by San Diego Water Board during the previous six months; and (5) include information regarding all delays encountered or anticipated that may affect the future schedule for completion of the actions required, and a description of all efforts made to mitigate those delays or anticipated delays.</p> <p>(b) All semiannual progress reports shall be submitted to the San Diego Water Board by the <u>thirty-first (31<sup>st</sup>)</u><del>(15<sup>th</sup>)</del> day of <del>October</del> <u>January and July</u> of each year following the <u>submission of the Work Plan</u> <del>effective date of this Investigative Order</del>. Submission of these progress reports shall continue until submittal of the Final Investigative Study Report verifying completion of the investigative study or studies required under Directive 1 of this Investigative Order.</p>		

No.	Comment	Response	Action Taken
<b>Drew Kleis, Deputy Director, City of San Diego                      written comment dated June 20, 2018</b>			
39	<p><b>The City requests that a finding be included that states the purpose of the IO and how the Regional Board intends to use the information gathered to determine compliance.</b> Given the cost and workload required to comply with the IO as currently drafted, the City would like to have a clearer understanding of the specific utility of each of the new procedures and duties the IO imposes.</p>	<p>Findings 1 and 56, 57 and 58 of the Tentative Order are revised or added to provides summary information on the purpose of the Tentative Order in sufficient detail. No additional explanatory detail in the Tentative Order is necessary. In order for the San Diego Water Board to develop a strategy to abate human fecal contamination in the San Diego River, the San Diego Water Board must first require Responsible Parties to gather the necessary information required under the Tentative Order to identify and quantify sources of human fecal material discharges.</p>	<p>None necessary</p>
40	<p><b>Overall, the City feels it is premature to issue this IO until a formal health-based HF183 numeric threshold is established and the necessary analytical methods and technologies have become available and are validated to enable accurate quantification of loading from different sources of human waste, as required by the IO.</b> None of the studies used for the assertions that HF183 has been measured in high frequencies have quantified levels of HF183 for public health exposure or risk comparisons. Nor is there a regional or state established numeric objective. Both of those should be fully assessed and quantified prior to reliance upon mere presence of HF183 as a link to public health and risk exposure.</p> <p>In addition, methods for analyzing samples to quantify sewer exfiltration rates and, more critically, the quantitative loading from this source to surface</p>	<p>The lack of a health-based threshold for HF183 is not a basis for not moving forward on the investigation of water quality in the Lower San Diego River Watershed and issuance of the Tentative Order. As discussed in Bullet 2.d of the response to Comment No. 13, when raw sewage is the primary source of fecal contamination, a median concentration of 4100 gene copies/100ml for HF183 corresponds to a bench mark illness rate of 30 illness/1000people. To better reflect local conditions in the Lower San Diego River Watershed, (e.g., additional sources of human fecal wastes are present in addition to leakages from sewage collection systems), information obtained in the Tentative Order investigation, such as the relative percentages of human waste loadings, could be considered in any future efforts to calculate an appropriate HF183 threshold applicable to the watershed.</p>	<p>Directive 3 of the Tentative Order is revised as provided in the response.</p>

No.	Comment	Response	Action Taken
	<p>waters, are still experimental and unproven, with no verified or broadly accepted approach yet available. The City is currently partnering with the Southern California Coastal Water Research Project (SCCWRP) to attempt to estimate volumetric losses from our sanitary sewer collection system, but this effort won't be completed for another two years and it is uncertain whether it will be capable of quantifying waste, pathogen, and/or HF183 load from this specific source to surface waters during wet weather. Therefore, if IO issuance/adoption is unavoidable, then the Board needs to lengthen the schedule for the completion of the IO deliverables should be extended to allow sufficient time for testing and demonstration of this experimental exfiltration assessment methodology to assess its capability to quantitatively link such volume losses to waste, pathogen, and/or HF183 loads to/in surface waters, as well as to quantitatively distinguish such loading from the other speculated human sources.</p>	<p>With respect to exfiltration tests, the San Diego Water Board understands that both traditional (e.g., ASTM C1091-03a<sup>44</sup> or method as described in 2005 Brown and Caldwell report<sup>45</sup>) and alternative (e.g., ElectroScan<sup>46</sup>) exfiltration tests are readily available. The San Diego Water Board initiated discussions about appropriate exfiltration tests with the City of San Diego (City) in June 2017, if not earlier. The City has already had some time to look into appropriate exfiltration methods.</p> <p>The San Diego Water Board understands that in establishing the appropriate Conceptual Watershed Model, investigations on the fate and transport, as well as loading rates of sewage may need constant refinement and update as new information becomes available. The San Diego Water Board acknowledges these challenges. The City has some flexibility under Directive 3.d of the Tentative Order to propose a schedule for completion of activities and reports required under the Tentative Order. The only constraint is that the schedule provides for the submittal of a Final Investigative Study Report containing all of the required information no later than four years following the effective date of the Tentative Order in accordance with the revised due date in Directive 1.</p> <p>Directive 3 has been amended to read as follows:  <b>“Investigative Study Work Plan Describing Investigative Study Milestones.</b> No later than</p>	

<sup>44</sup> See Footnote 24, *Supra*

<sup>45</sup> See Footnote 25, *Supra*

<sup>46</sup> See Footnote 26, *Supra*

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		<p><u>180 days after the effective date of this Order, unless permission for a later date has been granted by the San Diego Water Board, January 7, 2019, the Dischargers-Responsible Parties,</u> must submit an Investigative Study Work Plan describing the proposed actions to be conducted to complete the investigative study described in Directive 1. <u>The Investigative Study Work Plan can be prepared by an individual Responsible Party or through participation in a coalition of the Responsible Parties preparing a joint Work Plan, or both as determined by the Responsible Party.</u> The <u>Dischargers Responsible Parties</u> must implement the Investigative Study Work Plan within <del>60</del> <u>90</u> days of submittal, unless otherwise directed by the San Diego Water Board. The Investigative Study Work Plan must include, but not be limited to, the following:.....”</p>	
41	<p><b>A mid-point assessment of the statistical validity of results should occur to make sure the frequency of HF183 can be linked to public health exposure.</b>                      Once a numeric objective for HF183 public health risk exposure is determined, IO compliance should be evaluated at a midway point to assess the validity of results, and to ensure that the data being collected will serve the intended purpose. If results during the mid-point assessment appear inconclusive, the Water Board should work with agencies to revise and/or improve methodologies or decide whether the study may not provide conclusive data and should be rejected.</p>	<p>The San Diego Water Board agrees that mid-point assessment as described in this comment will be helpful to examine project progress and keep the project on the right track. The semiannual progress reports required by the Tentative Order can be a good venue for this. The San Diego Water Board encourages the City to take advantage of the semiannual reports provision in Directive 4 of the Tentative Order to perform the appropriate evaluation and propose necessary changes as the project moves along.</p>	None necessary
42	<p><b>The schedule for the completion of the IO deliverables should be delayed until one or more</b></p>	<p>The Tentative Order deliverables need not be delayed until State laboratory certifications for</p>	Provisions 6 and 7.d of the

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	<p><b>state certifications for HF183 analytical methods are established.</b> California laboratories are certified for specific methods and analytes; the certifications are not blanket certifications. Even if the U.S.EPA has an approved analytical method, the state of California has not yet created a certification for any of the HF183 methods, meaning there is no laboratory that is or can be state certified to analyze for HF183. Adding language that allows flexibility until such state certifications exist will sufficiently address this.</p>	<p>HF183 analytical methods are established. Lab certification by the State is not a requirement for the type of data collection required by this Tentative Order. As an example, in the statewide evaluation to generate the 305(b)/303(d) Integrated Report (IR), ELAP certification is not a requirement, and data collected with appropriate QAPP approved by the Water Board is sufficient for the data to be included in the IR assessment.</p> <p>The Tentative Order requires the submittal of a QAPP together with the Work Plan. The San Diego Water Board will review the QAPP to ensure data of good quality will be collected in the project.</p> <p>Provision 6 of the Tentative Order is revised as follows to address the comment:</p> <p>“6. All samples must be analyzed by California State-certified laboratories using methods approved by the USEPA, <u>or otherwise approved by the San Diego Water Board</u>, for the type of analysis to be performed.</p> <p>Provision 7.d of the Tentative Order is revised to as follows to address the comment:</p> <p>“A transmittal letter that indicates if all the analytical work was supervised by the director of the laboratory, and contains the following statement:  <i>“All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with USEPA procedures <u>or otherwise approved by the San Diego Water Board</u>.”</i> “</p>	<p>Tentative Order are revised as provided in the response.</p>

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43	<p><b>The IO compliance timeline for initial required actions such as the work plan is unreasonable given the number of Responsible Parties, and should be extended.</b></p> <p>Given the complexities of this watershed and wide variety of responsibilities of the Responsible Parties, the time for coordination between the parties to prepare and submit the proposed Investigative Study work plan of 180 days, as well as the requirement to implement it within the following 60 days, is not feasible. As a governmental entity, the City must enter into agreements with the other parties to conduct a joint study of the area. The contracting process alone takes two to four months and additional considerations need to be given to allow for a successful outcome. The City requests the schedule be modified to allow for the development of the work plan to be 365 days.</p>	<p>An administrative draft of the Tentative Order was circulated for review and comment by the named Dischargers on February 23, 2018. As a preliminary step in this matter the San Diego Water Board hosted a meeting, on March 28, 2018 to review the scope and requirements of the administrative draft Tentative Investigative Order for each Discharger. The finalized Tentative Order was circulated for formal review and comment on May 21, 2018. The Tentative Order has been in circulation since that time and there has already been opportunity for the City to at least conceptually discuss and coordinate plans and potential agreements with the other parties to conduct a joint study of the area. The City has some flexibility under Directive 3.d to propose a schedule for completion of activities and reports required under the Tentative Order. The only constraint is that the schedule provides for the submittal of a Final Investigative Study Report containing all of the required information no later than four years following the effective date of the Tentative Order in accordance with the revised due date in Directive 1.</p> <p>Directive 3 of the Tentative Order has been revised as provided in the response to Comment No. 3.</p>	<p>Directive 3 of the Tentative Order is revised as provided in the response to Comment No. 3.</p>
44	<p><b>The City requests the Bacteria TMDL schedule be amended in the Basin Plan because some TMDL milestones will pass before the human source study is completed in four years.</b> The information from the human source study should be used to inform the TMDL process and determine program implementation methodologies. The study will</p>	<p>Amendments to the compliance schedule in the Bacteria TMDL must be done through a Basin Plan amendment which is outside the scope of this Tentative Order.</p>	<p>None necessary</p>

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	<p>provide important information including, but not limited to (a) the investigation of exfiltration rates from the sanitary sewage system, and (b) the impact of homeless individuals on water quality.</p>		
45	<p><b>The need to control and prevent illicit discharges from homeless encampments is a difficult and multifaceted policy issue that requires resources beyond bare "legal authority to prevent habitation of public open spaces" to be adequately addressed. In addition, the City requests the Board's assistance with informing all property owners along the San Diego River with direct discharges of the need to maintain their property.</b></p> <p>The City understands the purpose behind the IO's section regarding homeless encampments, but it is critical to note that the homelessness issue is extremely complex, and not easy to solve. We appreciate your acknowledgement of the City's efforts to minimize the effects of human bacteria from homeless individuals. The City implemented the Clean SD Program knowing that homelessness is a larger societal issue that covers many aspects that goes beyond water quality, and that cannot be addressed solely through the Municipal Separate Storm Sewer System (MS4) permit. Starting in May 2017, the Clean SD Program initiated a broad array of services. A pilot project to remove waste and graffiti in nine areas of the City with a high incidence of illegal dumping and homeless encampments was implemented.</p> <p>Between September 1, 2017, and June 1, 2018, the City has conducted waste and debris cleanups and homeless camp abatements in the San Diego River and other channels, collecting over 116 tons of waste</p>	<p>The San Diego Water Board agrees that homelessness is a complex societal issue that encompasses complex multifaceted aspects that goes beyond water quality and cannot be addressed solely through the Regional MS4 Permit. The San Diego Water Board also acknowledges that control of illicit discharges from homeless encampments may require resources beyond implementation of the City's "legal authority" to control discharges of waste in both dry and wet weather as required by the Regional MS4 Permit.</p> <p>In order to consider development of a strategy to abate human fecal material contamination in the Lower San Diego River Watershed, the San Diego Water Board must first require responsible dischargers to gather the necessary information to identify and quantify sources of human fecal material discharges including homeless encampments. Directive 1 of the Tentative Order properly requires all dischargers with potential responsibility for discharges from homeless encampments to participate in the investigation of this pollution pathway. The Tentative Order does not require the City or any other Discharger to undertake activities to abate illegal encampments on its lands or rights of way.</p> <p>Also see responses provided for Comments No. 2, 17 and 47 regarding the homelessness issue.</p>	None necessary



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	<p>and debris from the San Diego River, over 43 tons from Chollas Creek, and over 630 tons from other areas of the City. As part of the Clean SD Program, the City has been sanitizing sidewalks in the nine focus areas and throughout the City to control and prevent transmission of disease. In addition, an on-call crew is also available to promptly respond to citizens' requests to remove waste from streets, sidewalks and alleys throughout the week. Street sweeping and storm drain inlet cleaning in focused areas of the East Village Community have removed high volumes of waste frequently observed.</p> <p>The public awareness campaign continues to reach out to promote the program and increase public awareness and participation. City executes enforcement actions against those individuals found illegally dumping waste or failing to properly maintain their properties in accordance with the San Diego Municipal Code. Administrative citations range from \$100-\$1,000. The City requests Board assistance with informing all property owners along the San Diego River with direct discharges of the need to maintain their property.</p>	<p>In the comment the City requests San Diego Water Board assistance with informing all property owners along the Lower San Diego River with direct discharges of the need to maintain their property. Informing property owners along the San Diego River with direct discharges of the need to maintain their property is an appropriate part of efforts to eliminate discharges. An informed and knowledgeable public community is essential for the City's success in achieving measurable reductions in MS4 pollutant discharges and improvements in receiving water quality in the Lower San Diego River Watershed.</p>	
46	<p><b>The connection between public sewer system and private systems should be clarified.</b>                      Acknowledge the City's efforts to minimize the effects of human bacteria from private laterals. The City responds to all reported sewage spills regardless of size, or whether they're from a private or public sewer source. The City has undertaken considerable efforts to minimize the effects of human bacteria by implementing a rigorous condition assessment and pipe replacement program to ensure minimal exfiltration since 2001.</p>	<p>"Private systems" refers to privately owned laterals or collection systems which are tributary to publicly owned sewage collection systems. Pursuant to the San Diego Water Board's Order No. R9-2007-0005 and State Water Board Order No. 2006-0003-DWQ, the City reports known sewage discharges that are caused by blockages or other problems within privately owned laterals or collection systems that are tributary to the City's sewage collection system. The City also includes in its reports the potential water quality impacts of the</p>	None necessary

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		<p>private lateral discharge. Under the Regional MS4 Permit section E.2.b.(5), the City is also required to implement practices and procedures to prevent and limit infiltration of seepage from sanitary sewers (including private laterals and failing septic systems) to the MS4. The requirement in the Tentative Order for sewage collection agencies and MS4 agencies to participate in quantifying the contributions of human fecal material from private lateral discharges and exfiltration from private laterals is essential to the San Diego Water Board’s overall understanding of the relative sources and contributions of human fecal material in the watershed.</p> <p>The San Diego Water Board acknowledges the City’s efforts to minimize the effect of human sources of bacteria on the Lower San Diego River and its tributaries in Findings 18 and 19 of the Tentative Order.</p>	
47	<p><b>The City recommends that all sewer agency data be normalized by the number of spills per 100 miles of sewer mains, so different sewer agency data are comparable.</b></p>	<p>The San Diego Water Board does not object to normalizing the number and volume of spills per 100 miles of sewer to make the number and volume of spills between different sewer agencies more comparable. However, that information was not already available to the Board during drafting of the Tentative Order. The City and other regulated entities will need to provide the total number of miles of their sanitary sewer collections systems that are within the Lower San Diego River watershed and the total number and volume of spills that occurred within the watershed between January 1 2013 and December 31, 2018 for the</p>	<p>None necessary</p>

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		San Diego Water Board to normalize the data as requested.	
48	<p><b>As allowed in Orders R9-2017-0081 and R9-2017-0082, the City requests that, during each semi-annual reporting period, each Responsible Party be allowed to provide its own alternative data interpretations, study conclusions, and recommendations for those instants where there is not agreement by all Responsible Parties, if any, for the San Diego Water Board to consider. Alternatively, if this request is not considered, then the City requests the revision of Investigative Order, Directive 1(d) to allow for adaptive management within existing programs (i.e. WQIPs, SMPPs), instead of creating a duplicative reporting structure.</b></p> <p>The City also takes pride in providing excellent reclaimed water treatment and recycled water distribution. The City's annual averages of total coliform in our recycled water program at the North City Water Reclamation Plant have been non-detect since 2014, a fact that should be included under finding #50, because the data indicate it is not a source likely to cause exceedances of contact or non-contact recreation standards of indicator bacteria.</p>	<p>Directive 4 of the Tentative Order requires the Responsible Parties to prepare semiannual progress reports describing the actions taken towards complying with the Tentative Order the previous six months. San Diego Water Board concurs with the City's request for additional flexibility in the requirement and is modifying it to clarify that the semiannual progress reports can be prepared by an individual Responsible Party or through participation in a collaborative effort of the Responsible Party to prepare a joint progress report, or both as determined by the Responsible Party. The intent of the revision is to provide the Responsible Parties with the maximum flexibility to develop the required progress report.</p> <p>Directive 4 of the Tentative Order is revised as follows:</p> <p><u>"4. The <del>Dischargers Responsible Parties</del> shall prepare and provide written semiannual progress reports as provided below. <del>The semiannual progress reports can be prepared by an individual Responsible Party or through participation in a coalition of the Responsible Parties preparing a joint progress report, or both as determined by the Responsible Party.</del>"</u></p> <p>Irrespective of the above revision, Responsible Parties named in the Tentative Order should work together in the investigation. Providing data and interpretations in single reports collectively prepared by all Responsible Parties will facilitate communications and help to achieve consistent</p>	<p>Directive 4 of the Tentative Order is revised as provided in the response.</p> <p>Findings No. 47 through 53 of the Tentative Order pertaining to recycled water systems are deleted as provided in the response.</p>

No.	Comment	Response	Action Taken
		<p>understandings and conclusions as well as the study objectives, and hence is highly encouraged.</p> <p>The San Diego Water Board acknowledges that annual average total coliform concentrations in recycled water from the North City Water Reclamation Plant have been non-detect since 2014. In addition, due to the treatment provided at water reclamation facilities which remove and inactivate pathogens, the San Diego Water Board is deleting Part IV, section D., Recycled Water Systems, Finding Nos, 47 through 53 from the Tentative Order and will not require recycled water agencies to investigate contributions of human fecal material from discharges of recycled water to land.</p>	
49	<p>The City requests that Finding 11 accurately reflect that the Surfer Health Study was conducted across San Diego and southern Orange Counties, and that water quality samples were collected at the San Diego River mouth and Tourmaline Beach.</p>	<p>Comment noted. The San Diego Water Board has renumbered Finding 11 of the May 21, 2018 Tentative Order to Finding 14 and revised it to reflect that a majority of surfing sessions (about 85%) occurred at 13 beaches in the San Diego County, with 40% of surfing activities occurring at the two sentinel beaches, Ocean Beach and Tourmaline Beach. Note that no data in the SHS report (2017) was presented on the numbers of surfing sessions occurring in beaches as far north as South Orange County or as far south as Imperial Beach (i.e., Figure S3). Additional clarification is also provided that the SHS results should not be directly compared with the USEPA guidance values.</p> <p>Finding 11 of the May 21, 2018 Tentative Order is renumbered as Finding 14 and revised as set forth below:</p>	<p>Finding 14 is revised as provided in the response.</p>

No.	Comment	Response	Action Taken
		<p>“14. <b>Surfer Health Study.</b> In the winters of 2013/2014 and 2014/2015, a Surfer Health Study (SHS) was conducted by the City of San Diego and County of San Diego, in partnership with the Southern California Coastal Water Research Project (SCCWRP), at <del>Ocean Beach (located at the mouth of the San Diego River) and Tourmaline Beach</del> beaches in the region to determine if the REC-1 beneficial use was supported in wet weather by measuring illness rates of surfers after their ocean exposure. <u>A majority of surfing sessions occurred at 13 beaches across San Diego County, with 40% of surfing activities taking place at two sentinel surfing beaches in the City of San Diego, including Ocean Beach, at the mouth of the San Diego River, and Tourmaline Surfing Park, adjacent to Tourmaline Creek and a storm drain. The SHS results</u> indicated an increased rate of gastrointestinal illness following ocean exposure compared with not entering the water (25 illnesses/1000 swimmers, vs. 18 illnesses/1000 swimmers). This illness rate increased even further following wet weather (up to 30 illnesses/1000 swimmers). The SHS results, <u>obtained among surfers during two study winters of a drought period in Southern California, predict less health risk than</u> the most recent USEPA guidance for recreational beaches from 2012, which recommends no more than an average 32 to 36 gastrointestinal illnesses per 1,000 swimmers. <u>However, intrinsic differences in the study designs between the SHS and epidemiology studies conducted by USEPA should be considered in evaluating the SHS results using the USEPA guidance. The target population studied in the SHS (i.e. adult surfers) does not include the sensitive population (i.e., children) used in the</u></p>	

No.	Comment	Response	Action Taken
		<p><u>USEPA studies. Additionally, it has been reported that bacteria concentrations in surf zones, where the majority of surfing activities occur, are lower than in the near-shore beach water of ankle depth <sup>6</sup>, where young children typically recreate in the water under exposed conditions. Therefore, it cannot be concluded that ocean waters in the nearshore recreational zone do not present a health risk based on SHS results.</u></p> <p><u>Further, in addition to HF183, etiologic agents such as norovirus and campylobacter were consistently detected at elevated concentrations in the flowing water of the Lower San Diego River during rain events. The detection of human pathogens and HF183, as well as enterococci at levels exceeding USEPA criteria, indicates the contamination of the receiving water by human fecal material despite the existing regulatory prohibitions and restrictions on discharges of human fecal waste, including sewage wastewater, upstream in the watershed.”</u></p> <p><u><sup>6</sup> Bight 2003 Report by SCCWRP, available online at <a href="http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/526_B03_micro.pdf">http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/526_B03_micro.pdf</a> (as of October 25, 2018)</u></p>	

No.	Comment	Response	Action Taken
<b>Richard E. Crompton, Director, County of San Diego written comment dated June 20, 2018</b>			
50	<p>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>47</sup>.</p> <p><b>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.</b></p>	<p>Comment noted. No changes are made in the Tentative Order.</p> <p>The San Diego Water Board agrees that among surfers in the study periods, the SHS results did not exceed the most recent USEPA guidance for recreational beaches from 2012, which recommends no more than an average 32 to 36 gastrointestinal illnesses per 1,000 swimmers. This conclusion is especially true for dry weather conditions in the SHS periods, among surfers. However, the San Diego Water Board does not believe the health risk values observed among surfers should be directly extended to the general public. Additionally, the health risk observed in the surf zone should not be directly extended to the zones near shore. Please refer to the responses to Comment No.13 for detailed discussion about water quality impairment in the Lower San Diego River Watershed and incomparability of the Risk Difference observed in the SHS with those in the US EPA NEEAR studies.</p> <p>The San Diego Water Board agrees that ubiquitous presence of human markers was also observed at other coastal watersheds throughout Southern California. However, as the Tentative Order is focused on the Lower San Diego River Watershed,</p>	None Necessary

<sup>47</sup> Regional Assessment of Human Fecal Contamination in Southern California Coastal Drainages, Published in International Journal of Environmental Research and Public Health, August 4, 2017, Available on the Southern California Coastal Water Research Project website at [http://ftp.sccwrp.org/pub/download/DOCUMENTS/JournalArticles/999\\_RegionalAssessmentOfFecalContamination.pdf](http://ftp.sccwrp.org/pub/download/DOCUMENTS/JournalArticles/999_RegionalAssessmentOfFecalContamination.pdf) (as of October 25, 2018)

No.	Comment	Response	Action Taken
		the San Diego Water Board does not see the need to discuss conditions at other watersheds in the Tentative Order.	
51	<p>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.</p> <p>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>48</sup> Therefore, the TMDL's emphasis on controlling bacteria within the stormwater conveyance system appears misguided.</p> <p><b>Finding 62 should be modified to allow for near-term changes to the Bacteria TMDL and other permits based on the scientific work that has already been completed to date.</b></p>	<p>The San Diego Water Board disagrees that Finding 62 of the May 21, 2018 Tentative Order (renumbered as Finding 57 in the revised Tentative Order) should be modified to allow for near-term changes to the Bacteria Project I TMDL.</p> <p>Finding 57 supports the directives of the Tentative Order to collect specific information to identify and quantify the relative contributions from suspected sources of human fecal material and to determine if the management measures in use by various dischargers as part of specific regulatory programs (e.g. storm water and sewage collection systems) are adequately addressing the REC-1, REC-2, and SHELL beneficial use impairments caused by the presence of human fecal material in the Lower San Diego River, and its tributaries.</p> <p>Information collected pursuant to this investigation will help inform the San Diego Water Board's understanding of the effectiveness of the management measures in use by various dischargers in their respective programs, and if those measures are adequately addressing the beneficial use impairments caused by the presence of human fecal material in the Lower San Diego River, and its tributaries. With the required information, the San Diego Water Board expects to be able to effectively evaluate whether amendments to the Bacteria TMDL, permit</p>	None Necessary

<sup>48</sup> Human Health Risk Implications of Multiple Sources of Fecal Indicator Bacteria in Recreational Waterbody. Soller, J., et al., 2014



No.	Comment	Response	Action Taken
	<p>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.</p>	<p>modifications or other regulatory actions are necessary and appropriate to reduce and control discharges of human fecal material to surface waters, thereby reducing water quality impairments. Finding 57 does not limit the San Diego Water Board's ability to make near term changes to either the Bacteria Project I TMDL or other permits.</p> <p>The San Diego Water Board is in the process of evaluating the detailed recommendations for changes to the Bacteria Project I TMDL requirements and other requirements in the Regional MS4 Permit that were provided in the December 2017 Report of Waste Discharge submitted by the Copermittees. Revisions to the Regional MS4 Permit will be considered in the as yet unscheduled public proceedings to reissue the Regional MS4 Permit.</p>	
52	<p><b>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.</b></p> <p>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</p>	<p>Finding No. 46 of the May 21, 2018 Tentative Order has been revised consistent with the response set forth below and renumbered as Findings 17 and 47 of the revised Tentative Order.</p> <p>Revised findings 17 and 47 of the Tentative Order establish that numerous homeless encampments are located on public lands or within public rights-of-way or similar areas on lands owned or</p>	<p>Findings 17 and 47 are added to the Tentative Order.</p>

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	<p>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(8)(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.</p>	<p>controlled by public entities that are also MS4 entities such as the County of San Diego. It is reasonable to suspect that discharges of human fecal material from homeless encampments in many instances originate from lands owned or controlled by these entities and are discharged directly or indirectly to receiving waters within these jurisdictions. This provides an additional basis for requiring MS4 entities such as the County of San Diego to investigate and quantify sources of human fecal material from homeless encampments near or adjacent to surface waters in the Lower San Diego River Watershed.</p> <p>It is reasonable to conclude that human fecal material may be discharged from homeless encampments originating on lands owned or controlled by the County of San Diego directly into the Lower San Diego River or its tributaries, or adjacent to such waters in a manner which may permit the waste to be transported (e.g. during storm events or high flows) through MS4s. Section 13267 of the Water Code broadly authorizes the San Diego Water Board to require persons who discharge, have discharged, or are suspected of having discharged waste that could affect water quality to furnish reports as is required by this Tentative Order. (Finding 2 of revised Tentative Order) The Tentative Order requires the County of San Diego to identify and quantify sources of human fecal material that is 1) discharged into its MS4; or 2) otherwise discharged from public spaces within the County of San Diego's jurisdiction directly into the Lower San Diego River or its tributaries or adjacent to such waters in a</p>	

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		<p>manner which may permit the waste to be transported (e.g. during storm events or high flows) into the waters.</p> <p>See also the response to Comment Nos. 1 and 2.</p>	
53	<p>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.</p> <p>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.</p>	<p>The San Diego Water Board agrees that homelessness is a complex societal issue that encompasses complex multifaceted aspects that goes beyond water quality and cannot be addressed solely through the Regional MS4 Permit. The San Diego Water Board also acknowledges that control of illicit discharges from homeless encampments requires resources beyond implementation of the County's "legal authority" to control discharges of waste in both dry and wet weather as required by the Regional MS4 Permit.</p> <p>Investigating and quantifying actual and suspected sources of human fecal material discharges including those from homeless encampments under the Tentative Investigative Order is a necessary prerequisite to strategic remedial planning for the Lower San Diego River Watershed based on fecal pollution levels in receiving waters from human sources. Under this approach, once identified and characterized, human fecal material sources can be prioritized and targeted for remediation/abatement, leading to fewer exceedances of recreational water quality standards and associated public health advisories, and overall improved water quality conditions in the Lower San Diego River Watershed and the downstream beach coastal waters. Directive 1 of</p>	None necessary

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	<p>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.</p> <p><b>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.</b></p>	<p>the Tentative Order properly requires all Responsible Parties with potential responsibility for controlling discharges from homeless encampments to participate in the investigation of this pollution pathway.</p> <p>See also responses provided for Comment Nos. 1, 2, 30, 34 and 45.</p>	
54	<p><b>Studying the contribution of septic systems is more appropriately conducted outside the scope of this Investigative Order.</b></p> <p>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</p>	<p>The County of San Diego Department of Environmental Health (County DEH) estimated based on parcel maps that there are about 8,000 on-site wastewater treatment systems (septic systems) in the Lower San Diego River Watershed. Areas with greater densities of OWTS include Lakeside and Eucalyptus Hills. Using estimates from the County DEH's Local Agency Management Plan, a two-to-three-bedroom single family can generate up to 300-</p>	<p>Findings 50 and 52 of the Tentative Order are revised as indicated in the response.</p> <p>Findings 53 and 54 of the</p>

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	<p>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.</p> <p>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>49</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</p>	<p>450 gallons of wastewater per day. As a result, wastewater discharged from septic systems within the Lower San Diego River Watershed could range from 2.4-3.6 million gallons per day. Although this may constitute a small percentage of total wastewater generated within the Lower San Diego River Watershed, septic systems still discharge a significant volume of wastewater within the watershed that may adversely impact groundwater and surface water quality if not adequately managed. If groundwater and surface waters are interconnected in those areas, there could be a potential for OWTS to adversely impact surface waters. Improperly functioning or failing OWTS in such areas also have a higher likelihood to adversely impact groundwater or surface water.</p> <p>As provided in Finding 49 of the Tentative Order, the State Water Board adopted the <i>Water Quality Control Plan for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems</i> (OWTS Policy) on June 19, 2012. Section 9.3.2 of the OWTS Policy requires local agencies (such as the County DEH) with LAMPs to maintain a water quality assessment program to determine the general operation status of OWTS and to evaluate the impact of OWTS discharges and assess the extent to which groundwater and local surface water quality may be adversely impacted. Section 9.3.3 of the OWTS Policy also requires local agencies with LAMPs to develop a monitoring program and requires local agencies every 5 years to submit an assessment of</p>	<p>Tentative Order are revised as indicated in the response.</p>

<sup>49</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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	<p>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.</p> <p>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.</p> <p>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</p>	<p>whether water quality is being impacted by OWTS, identifying any changes in the LAMP that will be undertaken to address impacts from OWTS. Information prepared by the County DEH pursuant to the aforementioned sections of the OWTS Policy could be used as a starting point in determining whether OWTS are contributing human fecal material in the Lower San Diego River Watershed.</p> <p>San Diego County DEH does not discharge waste from the OWTS it regulates so is not named as the responsible party in the Tentative Investigative Order to investigate and quantify contributions of human fecal materials to surface waters within the Lower San Diego River Watershed. However, Water Code section 13225, subdivision (c), authorizes the San Diego Water Board to require "any state or local agency to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water." (Finding 2 of the Tentative Order). Pursuant to Water Code section 13225, Finding 54 of the Tentative Order requires San Diego County's DEH to report available information that can inform the investigation to quantify the extent of the contribution, if any, of human fecal materials in discharges to the Lower San Diego River Watershed from OWTS.</p> <p>The County DEH can also streamline the required investigation and ensure efficient use of its resources by focusing its efforts on areas within the Lower San Diego River Watershed where there is a higher potential for septic systems to contribute human fecal material to surface waters such as:</p>	

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	<p>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.</p>	<ul style="list-style-type: none"> <li>• Areas with large concentration of septic systems such as Lakeside, Santee, and Eucalyptus Hills;</li> <li>• Areas with older or aging septic systems;</li> <li>• Areas where there may be interconnection between surface water and groundwater; <i>and</i></li> <li>• Areas with shallow groundwater.</li> </ul> <p>Finding 50 of the Tentative Order is revised as follows in relevant part:</p> <p>“ 50. ....According to County DEH, there are <del>approximately about 17,5000</del> 8000 OWTS located in the Lower San Diego River Watershed that are regulated under the conditional waiver of WDRs. <u>County DEH is the local agency responsible for permitting, regulating, and managing OWTS in San Diego County.</u> “</p> <p>Finding 52 of the Tentative Order is revised as follows in relevant part:</p> <p>“ <b>52. Requirements to Protect Water Quality from OWTS Discharges.</b> <u>Effluent from OWTS is typically dispersed using leach fields, in which effluent applied beneath the ground surface infiltrates into the soil. As the effluent infiltrates into the soil; mechanisms such as microbial predation, filtration/adsorption, and inactivation (die-off) remove and attenuate pathogenic bacteria, viruses, and protozoa.</u> The OWTS Policy and LAMP <u>also</u> both establish setback distances to be maintained between wastewater treatment components and wastewater dispersal areas and surface waters. Setbacks are included as a means of reducing pathogenic risks by coupling</p>	

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		<p>pathogen inactivation rates with groundwater travel time to a well or other potential exposure route (e.g. water contact activities). Setbacks also provide <u>additional</u> attenuation of other wastewater constituents through physical, chemical, and biological processes. Section 11.4 of the OWTS Policy specifies that any OWTS that has affected, or will affect, groundwater or surface water to a degree that makes it unfit for drinking or other uses (<u>e.g., water contact activities</u>) or is causing a human health or other public nuisance condition shall be modified or upgraded to abate its impact. Section 11.1 of the OWTS Policy also requires property owners to repair or replace any OWTS that has pooling effluent or that discharges effluent to the ground surface.</p> <p>Finding 53 is added to the Tentative Order is revised as follows:</p> <p><b>“ 53. Potential OWTS Water Quality Impacts..</b>  <u>Despite the pathogen removal mechanisms inherent in OWTS in areas where groundwater and surface waters are interconnected, effluent discharged from OWTS can potentially be transported from shallow groundwater to surface waters and adversely impact surface waters. In addition, in the event an OWTS fails and effluent from the OWTS pools on the ground surface, the effluent could potentially runoff from the leach field and introduce pathogens to surface waters. Groundwater and surface waters in areas with a large concentration of OWTS are also more susceptible to being adversely impacted by OWTS.</u> “</p>	



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		<p>Finding 54 is added to the Tentative Order as follows:                      “54. <b>County of San Diego Responsibilities under this Investigative Order.</b> <u>The County DEH estimated that there are about 8000 OWTS located within the Lower San Diego River Watershed. Areas in the Lower San Diego River Watershed with greater densities of OWTS include Lakeside and Eucalyptus Hills. If groundwater and surface waters are interconnected in those areas, there could be a potential for OWTS to adversely impact surface waters. Improperly functioning or failing OWTS in such areas also have a higher likelihood to adversely impact groundwater or surface water. San Diego County’s DEH, does not discharge waste from the OWTS it regulates so is not named as the responsible party in this Investigative Order to investigate and quantify contributions of human fecal materials to surface waters within the Lower San Diego River Watershed. However, pursuant to Water Code section 13225, San Diego County’s DEH is required to report available information that can inform the investigation to quantify the extent of the contribution, if any, of human fecal materials in discharges to the Lower San Diego River Watershed from OWTS. To comply in this manner, San Diego County DEH must prepare a work plan to quantify the extent of the contribution, if any from OWTS, pursuant to Directive 3 of this Investigative Order. This work plan can be prepared separately for the OWTS treated effluent portion only, or as part of the larger work plan, consistent with the requirements in</u></p>	

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		<a href="#"><u>Directive 3</u></a> “	
55	<p>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.</p> <p><b>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.</b></p>	<p>Directive 3 of the Tentative Order requires the Responsible Parties to prepare and submit an Investigative Study Work Plan describing the proposed actions to be conducted to complete the investigative study to identify sources of human fecal material in the Lower San Diego River Watershed.</p> <p>The San Diego Water Board has revised Directive 3 of the Tentative Order to provide that an Investigative Study Work Plan can be prepared by an individual Responsible Party or through participation in a collaborative effort of the Responsible Parties to prepare a joint Work Plan, or both as determined by the Responsible Party. The intent of the Tentative Order is to provide the Responsible Parties with the maximum flexibility to develop deliverables required under the Tentative Order Work Plan either separately and/or jointly.</p> <p>See response to Comment No. 3.</p>	<p>Directive 3 of the Tentative Order is revised as provided in the response to Comment No. 3.</p>

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<b>Yazmin Arellano, Deputy Director, City of El Cajon                      written comment dated June 20, 2018</b>			
56	<p>The Tentative Order's focus on homeless encampments as a source of direct deposition of human fecal matter to the San Diego River and its tributaries raises significant socio-economic issues that are not easily solved by the entities currently included in the Tentative Order. Important stakeholders, such as law enforcement, entities providing services to homeless populations, and the Regional Board, are not part of the Tentative Order. For this reason, we believe the better approach is to establish a memorandum of agreement between stakeholders which is designed to establish structures for identifying key sources and pathways and collaborating on solutions.</p> <p><b>The City respectfully asks the Regional Board not to issue the Tentative Order and instead to explore a collaborative agreement between stakeholders.</b></p>	<p>The San Diego Water Board agrees that homelessness is a complex societal issue that encompasses complex multifaceted aspects that goes beyond water quality and cannot be addressed solely through the Regional MS4 Permit. The San Diego Water Board also acknowledges that control of illicit discharges from homeless encampments requires resources beyond implementation of the City of El Cajon's (City) "legal authority" to control discharges of waste in both dry and wet weather as required by the Regional MS4 Permit.</p> <p>Investigating and quantifying actual and suspected sources of human fecal material discharges including those from homeless encampments under the Tentative Investigative Order is a necessary prerequisite to strategic remedial planning for the Lower San Diego River Watershed based on fecal pollution levels in receiving waters from human sources. Under this approach, once identified and characterized, human fecal material sources can be prioritized and targeted for remediation/abatement, leading to fewer exceedances of recreational water quality standards and associated public health advisories, and overall improved water quality conditions in the Lower San Diego River Watershed and the downstream beach coastal waters. Directive 1 of the Tentative Order properly requires all Responsible Parties with potential responsibility for controlling discharges from homeless</p>	None necessary

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		<p>encampments to participate in the investigation of this pollution pathway.</p> <p>There is nothing in the Tentative Order that precludes the City’s proposal for a memorandum of agreement between the designated Responsible Parties designed to establish structures for identifying key sources and pathways and collaborating on solutions. The San Diego Water Board is supportive of cooperative agreements between the Responsible Parties and encourages the City to reach out to other Responsible Parties and collaborate on ways to address the directives of the Tentative Order. In order to achieve maximum efficiency and economy of resources, the San Diego Water Board encourages the Responsible Parties to collaborate on efforts to respond to the requirements of the Tentative Order. Such a collaborative effort would enable the sharing of technical resources, trained personnel, consultants and associated costs and provide an integrated approach to help ensure that the relative load contributions from each of the potential sources are quantified consistently and accurately.</p> <p>See also responses provided for Comment Nos. 1, 2, 20, 30, 34 and 45.</p>	
57	<p><b>Acknowledge recent and existing efforts underway</b></p> <p>The City requests that Finding 16 be revised to acknowledge recent and existing efforts underway by jurisdictions other than the City of San Diego.</p>	<p>The San Diego Water Board recognizes that the City is taking actions to removes homeless encampments and persons from its rights of way and to clean-up its rights of way after homeless encampments have been removed. The Tentative Order does not take a position on the adequacy of these efforts and is not requiring the City to</p>	None necessary

No.	Comment	Response	Action Taken
	<p><b>Requested Revision 1.</b> Revise Finding 16, or insert a separate finding as follows:</p> <p>The City of El Cajon has undertaken and supported many efforts to identify sources of bacteria within the City's jurisdiction, and more specifically, potential human contributions. The City has been proactively addressing transient encampments within Forester Creek and its tributaries within the City. El Cajon Police and Public Works crews routinely inspect sections of the creek, and have facilitated hundreds of inspections and encampment cleanups on public properties, removing many tons of solid, hazardous, and bio-waste from the environment. The City's Police Department has actively participated with the East County Homeless Task Force to collaboratively address concerns and impacts of the transient and homeless population.</p>	<p>undertake any activities to abate illegal encampments on its rights of way.</p> <p>The intent of the Tentative Investigative Order is to identify and quantify the sources and pathways of human fecal material discharges in to the San Diego River Watershed. In order to develop a strategy to abate human fecal contamination in the Lower San Diego River Watershed, the San Diego Water Board must first require responsible dischargers to gather the necessary information to identify and quantify sources of human fecal material discharges including homeless encampments. Directive 1 of the Tentative Order properly requires Responsible Parties with potential responsibility for discharges from homeless encampments to participate in the investigation of this pollution pathway.</p> <p>See response to Comment No. 56.</p>	
58	<p><b>Provide sufficient time to prepare the Investigative Study Work Plan</b></p> <p>The Tentative Order requires the City to begin the Investigative Study by constructing a conceptual watershed model (Model). The Model is to be based on available data on the occurrence of human fecal material discharges, pathways of human fecal material, waste composition and concentration, and other complex data related to sources and pathways of human fecal material. The Model is to be submitted as part of the Investigative Study Work Plan (Work Plan), no later than January 7, 2019.</p>	<p>An administrative draft of the Tentative Order was circulated for review and comment by the named Dischargers on February 23, 2018. As a preliminary step in this matter the San Diego Water Board hosted a meeting, on March 28, 2018 to review the scope and requirements of the administrative draft Tentative Investigative Order for each Discharger. The finalized Tentative Order was circulated for formal review and comment on May 21, 2018. There has already been an opportunity for the City to at least conceptually discuss and coordinate plans and potential agreements with the other parties to conduct a joint study of the area.</p>	<p>Directives 1 and 3 are revised as described in the responses to Comment Nos. 3 and 4.</p>

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	<p>The Tentative Order does not provide sufficient time for the named parties to establish the legal arrangements necessary to facilitate the development of the Model or the Work Plan. The Tentative Order requires the City (and all other named parties) to submit an Investigative Study Work Plan (Work Plan), no later than January 7, 2019. The Work Plan must describe the proposed actions to be conducted in order to complete an investigative study or studies of the sources of human fecal material in wet weather discharges to the San Diego River (Order Directive 3). The Tentative Order requires investigative studies that will be complex and resource-intensive. Before it can begin preparing a work plan for a very complex and resource intensive study, the City needs to review the Regional Board's adopted order, solicit and hire a consultant, negotiate agreements with the consultant and/or negotiate collaborative agreements with other Dischargers subject to the Tentative Order, and obtain funding for the consultant and/or collaborative agreements. After a Work Plan is in draft form, it will need to be circulated and approved by all participating entities before it can be submitted to the Regional Board.</p> <p>The City understands that the Tentative Order is anticipated to be adopted at the Regional Board's August meeting, providing just four months to procure funding, establish legal arrangements and prepare the Model and Work Plan. Four months is wholly inadequate to coordinate with other Dischargers, obtain budgetary amendments, solicit professional services, negotiate contracts, and prepare the Model and Work Plan for a "complex</p>	<p>See response to Comment No. 3 revising Directive 3 to require submittal of the Investigative Study Work Plan no later than 180 days after the effective date of the Tentative Order, unless permission for a later date has been granted by the San Diego Water Board.</p> <p>The City has some flexibility under Directive 3.d to propose a schedule for completion of activities and reports required under the Tentative Order. The only constraint is that the schedule provides for the submittal of a Final Investigative Study Report containing all of the required information no later than four years following the effective date of the Tentative Order in accordance with the revised due date in Directive 1 of the Tentative Order.</p>	

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	<p>and resource-intensive" investigation. Therefore, the City requests the following revisions to extend the deadline for the Work Plan to correspond with the fiscal year and budgeting process:</p> <p><b>Requested Revision 2.</b> Revise paragraph 3 of the Ordering Provisions to read as follows:</p> <p>Investigative Study Work Plan Describing Investigative Study Milestones. No later than <u>January 7, 2019, eighteen months after the effective date of this Order,</u> the Dischargers must submit an Investigative Study Work Plan describing the proposed actions to be conducted to complete the investigative study described in Directive 1. The Dischargers must implement the Investigative Study Work Plan within <del>60</del> <u>180</u> days of submittal, unless otherwise directed by the San Diego Water Board. The Investigative Study Work Plan must include, but not be limited to, the following:</p>		
59	<p><b>Reduce monitoring and reporting obligations</b></p> <p>The Tentative Order requires Dischargers to submit progress reports each July 15 and January 15, which describe actions taken during the previous six months, the results of all sampling, all scheduled activities, including a graphical depiction of the progress of the investigative study, any modifications to the work plan, and any delays encountered as well as efforts to mitigate delays. Preparing semiannual reports on the Work Plan creates reporting obligations that must be added to City's established reporting schedule. The City already prepares reports on the Jurisdictional</p>	<p>Comment noted. The semiannual frequency of the progress reports required under Directive 4 of the Tentative Order is needed to verify the Dischargers continued forward progress towards achieving the goals of the Tentative Order over a four-year period until the required investigative study is completed. The San Diego Water Board will consider relaxing the frequency of the reports in the future if good progress is demonstrated and maintained by the Responsible Parties.</p> <p>In the response to Comment No. 48, the San Diego Water Board concurred with the City of San Diego's request for additional flexibility in the</p>	<p>Directive 4 is revised as provided in the response to Comment No. 48.</p>

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	<p>Runoff Management Plan ("JRMP"), the Water Quality Improvement Plan ("WQIP"), and the Trash Order provisions. A requirement to prepare these semiannual reports appears to disregard the City's established reporting obligations and to prioritize reporting on the Work Plan over long-standing and long-anticipated programmatic elements, such as implementing the JRMP and WQIP, implementing the requirements of the Trash Order, TMDL implementation, and participating in the bacteria reopener and MS4 permit reissuance process. Because semiannual reporting on the Work Plan adds another "complex and resource-intensive" program without consideration of limited time and personnel resources already dedicated to water quality programs, the City requests the following revision:</p> <p><b>Requested Revision 3.</b> Revise paragraph 4.b of the Ordering Provisions to read as follows:</p> <p>All semiannual progress reports shall be submitted to the San Diego Water Board by the <u>thirty-first (31st) (15th)</u> day of <u>October January and July</u> of each year following the <u>submission of the Work Plan-effective date of this Investigative Order</u>. Submission of these progress reports shall continue until submittal of the Final Investigative Study Report verifying completion of the investigative study or studies required under Directive <u>12</u> of this Investigative Order.</p>	<p>requirement and is modifying Directive 4 to clarify that the semiannual progress reports can be prepared by an individual Responsible Party or through participation in a collaborative effort of the Responsible Parties to prepare a joint progress report, or both as determined by the Responsible Party. The intent of the revision is to provide the Responsible Parties with the maximum flexibility to develop the required progress report.</p> <p>See response to Comment Nos. 5 and 48.</p>	
60	<b>Provide funding for conducting the studies</b>	The San Diego Water Board disagrees that the State of California must provide a subvention of	None necessary



No.	Comment	Response	Action Taken
	<p>Section 6 of Article XI 11 B of the California Constitution requires the State to provide a subvention of funds to local agencies any time the Legislature or a state agency requires the local agency to implement a new program, or provide a higher level of service under an existing program. The Tentative Order requires the City to implement a new program to investigate the sources and pathways of human fecal material in wet weather discharges to the San Diego River. Issued pursuant to Water Code sections 13267 and 13383, the Tentative Order constitutes a state mandate. The City does not have authority levy service charges, fees, or assessment sufficient to pay for the mandated program.</p> <p>Because the Tentative Order constitutes a state mandate, the City requests that the Regional Board comply with Section 17561 of the Government Code and undertake the following:</p> <p><b>Requested Revision 4.a.</b> Prepare and provide a bill appropriating the funds for the costs mandated by the Tentative Order, or alternatively, provide an appropriation for these costs in the Budget Bill for the next fiscal year.</p> <p><b>Requested Revision 4.b.</b> Revise the Tentative Order to cite that item of appropriation in the Budget Bill or that appropriation in any other bill that is intended to serve as the source from which the</p>	<p>funds to local agencies for the work required by the Tentative Order.</p> <p>The Tentative Order was issued in accordance with Water Code section 13267 which provides that the San Diego Water Board may require dischargers, past dischargers, or suspected dischargers to furnish those technical or monitoring reports as the San Diego Water Board may specify, provided that the burden, including costs, of these reports, must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.</p> <p>The San Diego Water Board disagrees with the assertion that the Tentative Order imposes state mandates requiring reimbursement on the Responsible Parties. The Tentative Order does not impose a new program or higher level of service on the Responsible Parties. Under mandates law, a program is defined as “a program which carries out the “governmental function of providing services to the public, or laws which, to implement a state policy, impose unique requirements on local governments and do not apply generally to all residents and entities in the state.”<sup>50</sup> The Tentative Order does not impose a program that carries out a governmental function of providing services to the public. Neither does it require that the Responsible Parties provide a higher level of service than previously required of them. Rather, the Responsible Parties are required to investigate and report on whether they are adequately</p>	

<sup>50</sup> *County of Los Angeles v. Comm'n on State Mandates* (2003) 110.Cal.App.4th 1176, 1189, citing *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 56.

No.	Comment	Response	Action Taken
	<p>Controller may pay the claims of local agencies and school districts.</p>	<p>complying with existing prohibitions on discharges of waste in the Basin Plan and/or existing permits governing their waste discharges or suspected discharges. This does not amount to imposition of a new program or higher level of service.</p> <p>Moreover, even if the Tentative Order were properly viewed as imposing a new program or higher level of service, it does not constitute a state mandate requiring reimbursement because exceptions under mandates law apply. For example, the Tentative Order does not impose requirements unique to local government. First, the prohibitions on the discharge of human fecal material apply to all residents and entities in the State. Second, laws of general applicability are not entitled to subvention because they do not “force programs on localities.”<sup>51</sup> Even if the Tentative Order singled out local governments, such a fact would not be dispositive where local agencies are required to perform the same functions as private industry.<sup>52</sup> However, it is apparent that the Tentative Order applies equally to local agencies as well as state agencies. Its requirements are not unique to local government. Further, the local agency responsible parties are not required to use tax monies to pay for compliance with the requirements of this Tentative Order. The San Diego Water Board believes that the local agency responsible parties have fee authority, including storm water fee authority, to fund compliance with this Order. Senate Bill 231, effective January 1,</p>	

<sup>51</sup> *County of Los Angeles, supra*, 43 Cal.3d at pp. 56-58 (finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention).

<sup>52</sup> *Ibid.*

No.	Comment	Response	Action Taken
		2018, defines “sewer” for purposes of Proposition 218 and its exception to voter approval for sewer, water and refuse collection fees. The definition specifically includes storm water and confirms that storm water fees are not subject to the voter approval requirement but instead to the majority protest procedure in Proposition 218. In addition, local agency responsible parties have authority to impose property-related fees under their police power. The San Diego Water Board disagrees that the Tentative Order or any of its provisions impose state mandates requiring reimbursement.	