

# **SUPPORTING DOCUMENT 6**

## **Responses to Comments**

<b>ABBREVIATIONS</b>	
BMI	benthic macroinvertebrate index
BMP	best management practice
Board	California Regional Water Quality Control Board, San Diego Region
Cal/EPA	California Environmental Protection Agency
CAO	Cleanup and Abatement Order
CAP	Corrective Action Plan
CDC	Citizens Development Corporation
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CERF	Coastal Environmental Rights Foundation
COC	chemical of concern
Creek	San Marcos Creek
CSI	chemical score index
CSM	conceptual site model
CWA	Clean Water Act
DBSA	DB Stephens & Associates
DDE	dichlorodiphenyldichloroethylene
DO	dissolved oxygen
EGC	Executive Golf Course
FS	feasibility study
HA	Hydrologic Area
HAB	harmful algal bloom
HHRA	human health risk assessment
HSP	Health and Safety Plan
IBI	Index of biotic integrity
IGP	Industrial General Permit

<b>ABBREVIATIONS</b>	
IO	Investigative Order
IS/MND	Initial Study/Mitigated Negative Declaration
Lake	Lake San Marcos
MARU	Monitoring Assessment and Research Unit
MS4	municipal separate storm sewer system
N/A	not applicable
N+N	nitrates and nitrites
O&M	operations and maintenance
OEHHA	Office of Environmental Health Hazard Assessment
PAHs	polycyclic aromatic hydrocarbons
QAPP	Quality Assurance Project Plan
RAP	Remedial Action Plan
RI/FS	Remedial Investigation/Feasibility Study
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SAP	Sampling and Analysis Plan
SCP	Site Cleanup Program
SDRILG	San Diego Region Irrigated Lands Group
SLERA	screening-level ecological risk assessment
SMGC	St. Mark Golf Course
State Water Board	State Water Resources Control Board
SWS	selective withdrawal system
TCAO	Tentative Cleanup and Abatement Order
TEC	threshold effect concentration
TIE	toxicity identification evaluation
U.S. EPA	U.S. Environmental Protection Agency
USMC	Upper San Marcos Creek
VWD	Vallecitos Water District

<b>ABBREVIATIONS</b>	
Watershed	Upper San Marcos Creek watershed
WDR	Waste Discharge Requirements
WMA	Watershed Management Area
WQIP	Water Quality Improvement Plan
WQO	water quality objective

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
<b>Comment 1: Greg Thomas, September 28, 2023 [For full text of comment, refer to Supporting Document 5, pages 4 to 6]</b>				
1	N/A	Issues with the Water Reduction Landscape Reimbursement Program of San Diego County.	The County of San Diego used herbicide along the lakefront and in storm drains “at this time last year.” “Days later,” 15+ birds “around the impacted area” died. Mr. Thomas stated that he stored samples of a dead bird for lab analysis that were never analyzed. Mr. Thomas referenced the San Marino Water project, which will result in a “filtration system that will be clogged up with the county chicken manure compost, which is also poisonous to water tables.”	<p>San Diego Water Board staff emailed Mr. Thomas and recommended a complaint be submitted to the Cal/EPA complaints database. Board staff provided Mr. Thomas with information on how to submit the complaint. Board staff also sent Mr. Thomas’s email to Compliance Assurance Unit staff for review. Stormwater Management Unit staff followed up with the County, which stated it investigated this claim in 2022 and concluded that the bird died due to avian bird flu.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
<b>Comment 2: County of San Diego, October 5, 2023 [For full text of comment, refer to Supporting Document 5, pages 8 to 415]</b>				
2	N/A	Summary of County's efforts toward nutrient load reduction in Santa Margarita River Watershed Area.	Commenter provided a copy of the draft Santa Margarita River Water Quality Restoration Plan for Nutrients (Plan) prepared by the San Diego Water Board, email correspondence related to the Plan, and a Word file containing comments on the Plan as attachments to the email. Commenter highlighted the efforts of the County to address nutrients in the Santa Margarita WMA and the County's commitment to addressing nutrient-related challenges and restoring beneficial uses across the region. Commenter stated that “a lot of similar strategies and efforts are	<p>San Diego Water Board staff appreciate the information and draft plans submitted.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			being undertaken in the Upper San Marcos watershed and will be highlighted in our public comments." (See Comment 7.)	
<b>Comment 3: Hollandia Dairy Inc., October 23, 2023 [For full text of comment, refer to Supporting Document 5, pages 417 to 443]</b>				
3	N/A	Hollandia Dairy Inc. should not be named as a Discharger.	"The order fails to provide a nexus between a Confined Animal Feeding Operation ("CAFO") that ceased operations over twenty years ago and the presence of nutrients and ammonia in the Watershed, Creek, or the Lake today." Contributions to pollutant loads in groundwater and stormwater near the Hollandia Dairy Inc. property are not significantly different from other areas of the Watershed, based on the 2017 RI/FS Report submitted for the case as well as a 2017 response to comments document addressing Board staff comments on this report. Commenter also provided a PowerPoint presentation dated March 24, 2016, that summarizes "preliminary opinions" on the magnitude and impacts of historical dairy discharges and supports the assertion that "[Hollandia's] contributions [of nutrients to the watershed] have long since been purged from both the Creek and the Lake."	<p>San Diego Water Board staff partially agree with this comment.</p> <p>Board staff reviewed the TCAO and determined that additional information is needed to provide a nexus between the historical CAFO at Hollandia Dairy Inc. and current water quality conditions in the Watershed, Creek, and Lake.</p> <p>Board staff modified the TCAO to remove Hollandia Dairy Inc. as a named Discharger. The San Diego Water Board may amend the TCAO to add Dischargers in the future if the Board is made aware of or finds additional evidence to support the amendment.</p>
<b>Comment 4: Hollandia Dairy Inc., November 1, 2023 [For full text of comment, refer to Supporting Document 5, pages 445 to 452]</b>				
4	N/A	Hollandia Dairy Inc. identified 40 facilities that are likely sources of	Hollandia Dairy Inc. identified 40 current and historical agricultural and recreational facilities in the Watershed that have not	San Diego Water Board staff reviewed the list of facilities (farms/nurseries/wineries) provided by Hollandia in Exhibit A that were flagged as

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
		nutrients to the Watershed, Lake, or Creek.	been named in the TCAO, but which are likely to be sources of nutrients to the Watershed, Lake, or Creek.	having a “Medium” potential to release nutrients within the Watershed. Board staff have not issued any enforcement letters, nor observed any discharges to Creek water from these facilities. Therefore, it is not appropriate to name these facilities in the TCAO. The San Diego Water Board may amend the TCAO to add Dischargers in the future if the Board is made aware of or finds additional evidence to support the amendment. Board staff did not modify the TCAO in response to this comment.
<b>Comment 5: Vallecitos Water District, November 3, 2023 [For full text of comment, refer to Supporting Document 5, pages 454 to 463]</b>				
5a	N/A	VWD requests that the San Diego Water Board decline to adopt the CAO because it will add unnecessary costs and delays to a cleanup process that is already underway, and because it will divert scarce resources away from projects that benefit the environment.	“A large portion of the tasks in the CAO are simply more study and environmental review. This will cause additional delay and prevent the named parties from completing projects that have been planned for years...Lastly, many of the CAO’s requirements relate to assessment and operation of Municipal Separate Storm Sewer Systems (“MS4s”). The District [VWD] does not own or operate an MS4 and has no ability to implement these aspects of the CAO. Nonetheless, the CAO would impose responsibility, costs and potentially civil liability for MS4 projects on the District. For that reason, and the reasons set forth in greater detail below, the District requests that the Regional Board decline to adopt the CAO.”	Comment noted. The Board will consider adoption of the TCAO at the scheduled Board meeting as well as public comments provided during the meeting. Board staff did not modify the TCAO in response to this comment. See also responses to comments 5c and 5d.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
5b	Directives	The Dischargers named in the CAO should be able to implement the existing cleanup plan for the Lake and Creek without additional regulation by the San Diego Water Board.	VWD has been involved in lake cleanup efforts since at least 2010 and was involved in drafting the framework for the Participation Agreement between the San Diego Water Board and several public agencies. The Board issued an Investigative Order to the Lake owner in 2011. The parties to the Participation Agreement as well as the Lake owner prepared the RI/FS Report and submitted it to the Board in 2016. Board staff “expressly approved the RI/FS and authorized the parties to the Participation Agreement to move forward with the plans described therein.” The parties moved forward; however, project implementation was delayed due to various factors. The modified timeline is “evidence of a good faith effort of the parties to work with the Regional Board to implement the RI/FS.” There is now money in a trust to implement the projects included in the RI/FS. The parties should be given an opportunity to complete these projects before the Regional Board takes further action.	See response to comment 5a.  San Diego Water Board staff disagree with the comment. Board staff appreciate the efforts by VWD and other parties to remediate the conditions at the Lake over several years. However, progress toward cleanup has been slow since 2019 and has been inconsistent with San Diego Water Board Resolution No. R9-2017-0038. Over the years, the parties have submitted various schedules or timelines to Board staff but have failed to adhere to their own voluntary schedules. Further, Board staff have asked the parties for responses to questions about data gaps, changes in the remedial strategy, and additional pilot studies in the Watershed. Board staff have not received answers to these questions or only received partial answers.  Board staff did not modify the TCAO in response to this comment.
5c	Directives	The CAO duplicates existing efforts.	“The RI/FS is a comprehensive plan that...will result in the Lake and Creek meeting Water Quality Objectives.” The CAO would divert resources to unnecessary studies and modeling. The San Diego Water Board is obligated under	San Diego Water Board staff disagree that the TCAO is duplicative of existing efforts. The TCAO builds on previous efforts and will provide structure to restore beneficial uses in the Lake and Creek.



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>California Water Code sections 13267 and 13304 to ensure that costs “have an actual benefit and are reasonably tied to the actions of those subject to the orders.” The Board has failed to do so.</p>	<p>If adopted, the TCAO would require the Dischargers to perform studies and submit technical and monitoring reports. Water Code section 13267 authorizes the San Diego Water Board to require any person who has discharged, discharges, or is suspected of having discharged or is discharging waste within its region to prepare technical and monitoring reports. The burden, including the costs, of these reports shall bear a reasonable relationship to the needs and the benefits to be obtained from the reports. The technical and monitoring reports required by this Order are necessary to (a) assess the impact of the discharges to the Creek, (b) assess the potential risks posed by discharges to human health, aquatic life, aquatic-dependent wildlife, and beneficial uses of the Lake and Creek, (c) assure compliance with the cleanup and abatement directives contained in this Order, and (d) assess the appropriateness of cleanup and abatement measures to remediate the impacts of the discharge consistent with Basin Plan requirements and Resolution No. 92-49, and protect the waters of the state from the conditions of pollution. Based on the nature and consequences of the discharge and its effects, San Diego Water Board staff finds that the burden of the technical and monitoring reports bears a reasonable relationship to the need for the reports and to the benefits to be obtained from the reports. Therefore, the technical and</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>monitoring reports required by the TCAO are consistent with the requirements of Water Code 13267.</p> <p>Further, Water Code section 13304, subd. (a), requires responsible parties to “upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.” Technical and monitoring reports are consistent with “other remedial action,” including overseeing cleanup and abatement efforts.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
5d	N/A	It is not possible for VWD to comply with the Order.	The CAO assigns joint and several liability to all of the named Dischargers, which is an abuse of discretion and an unlawful application of Water Code sections 13267 and 13304. VWD does not own, operate, or maintain a storm sewer system and, therefore, cannot implement any of the directives related to storm sewer systems.	<p>San Diego Water Board staff partially agree with this comment.</p> <p>Water Code section 13304 authorizes the Water Boards to issue “cleanup and abatement” orders requiring a discharger to clean up and abate waste “where the discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.” Water Code section 13304 does not require the San Diego Water Board to apportion responsibility when issuing cleanup and</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>abatement orders. The State Water Board has a long-standing policy of assessing joint and several liability against all responsible parties in cleanup cases. (State Water Board Order WQ 2013-0109 (Salvatore).) “Nowhere in the statutory language does section 13304 say the polluting entity must clean up or abate only its proportionate contribution to that waste.” (<i>Atlantic Richfield Co. v. California Regional Water Quality Control Bd.</i> (2022) 85 Cal.App.5th 338, 374.) However, VWD is not required to implement any actions over which VWD lacks sufficient authority.</p> <p>Board staff revised the TCAO to assign specific directives to applicable Dischargers. VWD will only be responsible for the portions of the TCAO that are specifically assigned to VWD or all Dischargers. VWD will not be responsible for portions of the TCAO assigned to the MS4 Dischargers only.</p>
5e	N/A	The TCAO would interfere with implementation of a lawful court order.	The Southern District of California approved a settlement of claims against VWD regarding contamination of Lake San Marcos in February 2021. The settlement addresses the same contamination in the same locations as those of the TCAO. The TCAO seeks to make VWD liable for the full cost of compliance with the TCAO, which is contrary to the Court’s findings and order.	<p>San Diego Water Board staff disagree with this comment.</p> <p>While the San Diego Water Board is not bound by the parties’ private settlement, the Board appreciates the parties’ efforts to address the conditions in the Creek and Lake. The San Diego Water Board was not a party to the settlement, was not obligated to participate in the litigation settlement discussions regarding cost</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>allocation between the parties, and did not opine on the cost of the cleanup. Water Code section 13304 authorizes the San Diego Water Board to issue a cleanup and abatement order requiring any person who has discharged waste into the waters of the state to clean up the waste, abate the effects of the waste, or take other necessary remedial action. In issuing a cleanup and abatement order pursuant to Water Code section 13304, the San Diego Water Board is not bound by, or required to consider, a private settlement agreement. Regarding joint and several liability, see response to comment 5d.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
5f	Directives	The TCAO violates the statute of limitations under Porter-Cologne.	The San Diego Water Board is barred from issuing the TCAO to VWD based on the statute of limitations of 3 years. Sanitary sewer overflows dating back to 1987 are the only basis for naming VWD in the TCAO, which is outside the statute of limitations.	<p>San Diego Water Board staff disagree with this comment.</p> <p>The State Water Board has held that the statute of limitations on actions brought under the Porter-Cologne Water Quality Control Act does not apply to cleanup and abatement orders. (State Water Board Order No. WQ 84-6 (<i>Loqsdon</i>).) For example, in November 2021, VWD discharged, or permitted the discharge of, 986 gallons of wastewater to San Marcos Creek. VWD reported that no wastewater was recovered.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>Further, where there is a continuing wrong, the statute of limitations does not run. Here, VWD's discharge is continuing to cause a condition of pollution and nuisance at the Creek and Lake. (Civil Code, § 3490; <i>Mangini v. Aerojet-General Corp.</i> (1991) 230 Cal.App.3d 1125, 1142.)</p> <p>Board staff revised Finding C.3 of the TCAO to state: "In November 2021, Vallecitos Water District discharged, or permitted the discharge, to San Marcos Creek 986 gallons of wastewater. Vallecitos Water District reported that no wastewater was recovered."</p>
5g	N/A	There is no causal link between VWD and the remedies required in the TCAO.	The TCAO does not reference any sanitary sewer overflows that occurred in the 3 years that reached the lake or creek since the Court approved the RI/FS Report as the remedial action plan to clean up the lake and creek.	<p>San Diego Water Board staff disagree with this comment. See response to comment 5f.</p> <p>Please note that the RI/FS Report is not a RAP but a feasibility study. RAPs are much more detailed and focus on implementation of remedies selected in an RI/FS Report.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
5h	N/A	The TCAO dictates the means of compliance.	The TCAO requires VWD to consider and propose remedies not included in the RI/FS Report. The TCAO also requires VWD to violate Propositions 218 and 26, which prohibit VWD from spending ratepayer funds on anything other than what the fee was designated for.	<p>Statement noted. San Diego Water Board staff disagree with this comment.</p> <p>The TCAO, if adopted, would require the Dischargers to submit a RAP to Board staff for review and approval. The RAP will describe the activities needed to clean up or abate waste to achieve Creek and Lake WQOs and restore and</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>maintain beneficial uses. Board staff have not approved the RI/FS Report as a RAP. As explained above, the RI/FS Report is a feasibility study that included proposed remedies. Since the RI/FS Report was completed in 2017, the Dischargers have changed some of the remedies (e.g., selective withdrawal system) and removed others (e.g., stream restoration work) from the list of proposed remedies. The Dischargers have not provided Board staff with a clear explanation or rationale for the changes in the proposed remedies. Therefore, the TCAO requires the Dischargers to prepare a Feasibility Analysis that evaluates the technical and economic feasibility of Creek and Lake remedies to achieve Creek and Lake WQOs and restore and maintain beneficial uses (Directive B of the TCAO). To comply with Directive B of the TCAO, the Dischargers may rely on the foundational work in the RI/FS Report and revise that report as appropriate. Reevaluating the feasibility of the proposed remedies will also allow the Dischargers to consider/evaluate remedies that reduce waste loads in Creek water.</p> <p>The comment also raises concerns that compliance with the TCAO will violate Propositions 218 and 26, which require voter approval to levy certain types of fees. (See Cal. Const., arts. XIII C and D.) The TCAO does not direct how a discharger expends its funds to</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>comply with the order. Thus, adoption of the TCAO is not subject to Propositions 218 and 26. If a discharger levies additional fees to comply with the TCAO, it may be subject to the requirements of Propositions 218 and 26 and the fee may be subject to voter approval. However, stormwater drainage fees and reasonable regulatory costs may be exempt from voter approval requirements in Propositions 218 and 26. (<i>Department of Finance v. Commission on State Mandates</i> (2022) 85 Cal.App.5th 535, 570, 593, review denied (Mar. 1, 2023); Senate Bill No. 231 (2017-2018 Reg. Sess.); Cal. Const., art. XIII C, § 1, subd. (e).)</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
<p><b>Comment 6: Citizens Development Corporation, November 3, 2023 [For full text of comment, refer to Supporting Document 5, pages 465 to 478]</b></p>				
6a	N/A	<p>The primary focus of the TCAO is to mandate additional study and investigation, and not progress toward “cleanup and abatement,” which is limited to four lines of the 44-page TCAO.</p>	<p>There is no schedule or timeline for abatement. The San Diego Water Board has determined it is the appropriate lead agency for compliance with CEQA, and is overseeing the production of an IS/MND document. It is imperative that this process move forward expeditiously so that remedial actions can be implemented at the lake and in the watershed.</p>	<p>San Diego Water Board staff disagree with this statement.</p> <p>As discussed above, Board staff prepared the TCAO due to the lengthy history of voluntary cleanup, the lack of progress, and delays in the voluntary cleanup efforts. (See response to comment 5b.) If adopted, the TCAO will provide a structured framework and timeline for the Dischargers to progress expeditiously with remedial actions. The studies required by the TCAO will inform the selection of cleanup remedies that do not require ongoing</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p data-bbox="1843 274 2526 672">maintenance, address data gaps that have not been answered since submittal of the RI/FS Report in 2017, and increase efforts toward source control in the watershed. (See also response to comment 6b.) Source identification and pollution prevention control will have a greater positive and long-term impact on the conditions in the Lake than solely focusing on remediation efforts in the Lake. The abatement schedule will depend on the remedies selected as part of the implementation of the TCAO.</p> <p data-bbox="1843 711 2526 771">Board staff did not modify the TCAO in response to this comment.</p>



<p style="text-align: center;"><b>6b</b></p>	<p style="text-align: center;">Directives A and B</p>	<p>The San Diego Water Board should review WQIP reports submitted by the co-permittees and revise the TCAO to acknowledge the efforts documented therein.</p>	<p>Extensive annual reporting has been submitted to the San Diego Water Board pertaining to the watershed in compliance with watershed municipalities' obligations under the municipal stormwater permit. The TCAO does not acknowledge the significant efforts within this program and makes no reference to whether these data and information sources have been reviewed by the Board for the purposes of the Lake San Marcos/Upper San Marcos Creek cleanup action. It is therefore impossible for CDC to assess whether the TCAO directives have been completed, or the degree to which they might have been completed, as a result of many years of monitoring, assessment, and iterative implementation of water quality improvement plans. We urge the Board to review the existing WQIP reports and reassess Directives A and B to clearly reflect what additional actions are needed to clean up and abate watershed discharges.</p>	<p>San Diego Water Board staff disagree with this comment but recognize the extensive efforts of the MS4 co-permittees to comply with Order No R9-2013-0001 (as amended by Orders R9-2015-0001 and R9-2015-0100) (i.e., Phase I MS4 Permit).</p> <p>Board staff responsible for the development of the TCAO worked collaboratively with Stormwater Management Unit staff to review the annual reporting data submitted by the Phase I MS4 co-permittees for the Creek and the Lake. Board staff identified several inconsistencies within the narrative presented by the comment, as explained below.</p> <p>CDC, the City of San Marcos, the County of San Diego, the City of Escondido, and VWD submitted a revised RI/FS Report in 2017 to the Board. The RI/FS Report presents a watershed model built to estimate the amount of nutrients running off from the Watershed and entering the Lake. Limnotech staff calibrated the RI/FS model using 2012-2015 stormwater data. The RI/FS Report states in Section 8.8.2 that "remedy modeling indicates that the Creek-to-Lake nutrient load reduction of approximately 40 percent is appropriate to realize a significant and reasonable improvement in Lake [dissolved oxygen], algae, and nutrient conditions to restore and maintain beneficial uses". LimnoTech staff explained to Board staff, in a call on January 30, 2024, that this 40 percent nutrient reduction goal</p>
--	---	---	--	--

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>is a reduction simulated using the RI/FS model calibrated using 2012-2015 data and is independent from consideration of dry or wet seasons.</p> <p>SCP Board staff reviewed portions of the most current WQIP reports, in consultation with Stormwater Unit staff, and compared the Carlsbad WMA WQIP wet and dry weather goals for the USMC HA to the 40 percent reduction goal of the RI/FS Report. The Carlsbad WMA WQIP states in Section 3.5.3.2, "Goals for the Upper San Marcos HA were derived from the modeling results of the feasibility study's [RI/FS] potential strategies." However, the Carlsbad WMA WQIP final wet weather goal for the USMC HA is a 40 percent nutrient load reduction compared to data collected in 2010-2011 (i.e., baseline) and must be reached by 2033 (see Table 42 of the Carlsbad WMA WQIP). Further, the WQIP final dry weather goal is a 100 percent nutrient load reduction to be reached by 2028. Therefore, the WQIP goals are <u>different</u> from the model-derived RI/FS watershed goal. Stormwater Unit staff communicated this issue to the co-permittees in a comment letter dated May 28, 2021 (see comment 4.a.iv of the letter). Board staff note that the co-permittees have not addressed the May 2021 comments, but relied on the RI/FS goal without fully understanding how it was obtained. This misunderstanding may</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>have caused the co-permittees to report that they reached their nutrient load reduction goals each year since 2017 (see Section 4.1.1.2 and Table 4-3 of the Upper San Marcos Creek Monitoring Assessment Report for 2022-2023) and to conclude that no further nutrient load reduction measures should be taken in the watershed.</p> <p>Monitoring data collected in 2019 in an unnamed fork of the Creek in the Twin Oaks HA by the SDRILG, data collected in the Lake since 2016 by Great Ecology and Mission Environmental LLC, and data collected by the co-permittees (see Table 4-4 of the 2022-2023 USMC Monitoring Report report) report WQO exceedances that contributed to algae blooms in the Lake since 2016.</p> <p>While the WQIP has been foundational to the efforts in the Watershed, additional work in the Watershed is necessary, and findings from implementation of Directives A and B of the TCAO must be used to update the WQIP USMC HA goals and propose corrective actions in the Watershed. Board staff have not modified the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
6c	Directive A.4 [revised to Directive A.2]	Directive A.4 is scientifically unachievable or duplicative.	CDC urges that risk assessment directives be stricken, or at minimum that the directive scopes of work be updated to reflect the large degree of scientific uncertainty (for cyanotoxin-related directives) and the site-specific data submitted to the San Diego Water Board (for sediment condition-related directives). If retained, the scopes of the risk assessments should specify precise data gaps referenced in the TCAO and the specific mode(s) of risk assessment necessary to resolve the directed cleanup and abatement.	<p>San Diego Water Board staff disagree with removing Directive A.4. Directive A.4 would require the Dischargers to submit a Risk Assessment Report to the Board after implementing the Risk Assessment Work Plan. The Risk Assessment Report will answer the Study Questions in Directive A.3 and inform the Board of whether the Dischargers can still safely use Lake water to irrigate the SMGC, can move forward with implementation of the SWS as currently proposed, whether Lake recreational beneficial uses can be safely enjoyed, and assess Creek and Lake sediment quality. Board staff also recognize that some uncertainties in the results may occur. As part of the Risk Assessment Report, the Dischargers can include a discussion about scientific uncertainties related to the results (see Directive A.4.c). It is important for the Board to understand the uncertainties and recognize any limitations of the report's conclusions and recommendations. For additional information on the Risk Assessment Work Plan and Risk Assessment Report (Directives A.3 and A.4), see response to comment 6q.</p> <p>The comment requests that the TCAO specify precise data gaps. The Study Questions in Directive A.3 present the risk assessment data gaps. An example of a "precise data gap" is in Study Question 3.c which asks the Dischargers</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>to assess whether wastes in the Lake sediments are at concentrations that pose a risk to in-Lake sediment dwelling biota. Specifically, the RI/FS SLERA assessed acute toxicity to sediment-dwelling biota, but not chronic toxicity. Further assessments of chronic toxicity to sediment-dwelling biota will be important to measure the effects of exposure to relatively lower, less toxic concentrations. The SLERA also found midges in the Lake were impacted by toxicity but did not identify which constituents were causing the toxicity. Further, the SLERA did not evaluate Creek sediment toxicity although the Creek is 303(d) listed for benthic community effects that could be contributed to by any or all of the following elements: bifenthrin, DDE, indicator bacteria, nitrogen, phosphorus, pyrethroids, selenium, total dissolved solids, and water and sediment toxicity. These data gaps prevent the Dischargers from confirming the list of COCs to be removed and/or abated to restore the Creek and Lake beneficial uses and meet WQOs. Study questions of Directives A.3.c and A.3.d will help the Dischargers fill these data gaps.</p> <p>The comment requests that the Board specify “specific mode(s) of risk assessment necessary to resolve the directed cleanup and abatement.” The San Diego Water Board does not typically specify the manner of compliance necessary for the Dischargers to comply with a cleanup and</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>abatement order. However, Board staff encourage the Dischargers to use a risk assessment mode that is consistent with the previously submitted risk assessments (e.g., RI/FS Report). Board staff can work closely with the Dischargers in developing the Risk Assessment Work Plan (Directive A.3) to provide additional guidance and ensure that the work plan will answer the Study Questions in Directive A.3. (See also response to comment 6q.)</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6d	Directive B	<p>“CDC interprets the directive to “revise the remedial decision matrix” as a complete revision of the approved feasibility study and is entirely inappropriate at this time....Action is needed, not further study and years of delay.”</p>	<p>“Revisions of the remedial decision matrix will not substantially change the menu of remedies. The three feasibility directives included in Directive B have already been completed: 1) Many CSMs have been produced, and conditions have not substantially changed over many decades. 2) Our review of the “Green” methods found the current feasibility analysis (DBSA 2016) [RI/FS Report] to be consistent and furthermore that the principles can be incorporated into planning documents that are currently being prepared. 3) CDC strongly believes that the Lake and Watershed conditions are well understood and that a reanalysis of methods and technologies will not substantially change the selected remedies.”</p>	<p>Board staff disagree with this comment.</p> <p>Directive B of the TCAO requires the Dischargers to submit a feasibility analysis to the San Diego Water Board. However, Directive B does not require a complete revision of the RI/FS Report. The Dischargers may rely on the foundational efforts of the RI/FS Report, as appropriate. Revising the feasibility analysis provides an opportunity for the Dischargers to reevaluate the Creek and Watershed remedies.</p> <p>Since the 2017 RI/FS Report, the parties have modified the proposed remedies. (See, e.g., San Diego Water Board staff letter on Draft Watershed Corrective Action Plan for Lake San Marcos, Comment No. 2 (November 8, 2021).) Further, the parties have diverted cleanup efforts</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>in the Watershed to focus on compliance with the Phase I MS4 Permit and Order No. R9-2016-0004, the General WDR for discharges from commercial agricultural operations. However, these other efforts have not successfully restored the Creek and Lake to meet WQOs and restore beneficial uses. (See responses to comments 6b and 7b.) Therefore, remedies that the Dischargers previously proposed but never tested, additional, or a different set of remedies may be necessary to fulfill the requirements of Directive B. The Dischargers may rely on existing data/analysis from the RI/FS Report and other studies to identify and evaluate the appropriate remedies to achieve WQOs and restore and maintain beneficial uses in the Lake and Creek. Dischargers must explain the rationale for selecting remedies in the Feasibility Analysis.</p> <p>In preparing the CSM, the Dischargers may rely on existing CSMs, as appropriate. The CSM may need to be revised based on the results of the Risk Assessment (Directive A.4) and to include the Creek-specific receptors of waste.</p> <p>Directive B.2 requires the Dischargers to evaluate the use of cleanup methods and technologies with reduced environmental footprints and resilient to climate change effects. The Dischargers state that the “review of “Green”</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>methods found the current feasibility analysis (DBSA 2016) [RI/FS Report] to be consistent.” Board staff encourages the Dischargers to include their findings in the Feasibility Analysis (Directive B). Further, the Dischargers will also need to evaluate other remedies (e.g., Creek remedies, modified Lake remedies) during the Green Cleanup Methods and Technology evaluation. Board staff understand the statement “the [Green Cleanup Methods and Technology] principles can be incorporated into planning documents that are currently being prepared” to refer to the implementation phase of greener cleanups and agree with that statement. However, an implementation phase must rely on a planning phase, confirming the need for the Dischargers to comply with Directive B.2.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6e	Directive D.1	Production of a Remedial Action Plan of an unknown nature/format within 120 days appears infeasible.	“Production of a Remedial Action Plan of an unknown nature/format within 120 days appears infeasible due to any of the following: the considerable scientific complexity of the request and our experience that the back-and-forth comment/response feedback loops take time for both the Joint Parties consultant team and RWQBC staff. CDC urges that instead of this directive, the RWQCB	<p>Board staff disagree with this comment. Directive D.1 of the TCAO would require the Dischargers to prepare and submit RAPs to the San Diego Water Board within 120 calendar days of the Board approving the Feasibility Analysis (Directive B).</p> <p>The 120-day timeline to submit the RAPs is appropriate because the Dischargers may rely on existing plans that were previously developed. Board staff encourage the</p>



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			reconsider their position on the “Corrective Action Plan” (CAP) pathway which has been underway for several years. We urge the RWQCB to continue to work with the consultant team through that process (which could incorporate additional information requested in the TCAO). It is our view that the CAP pathway can address many of the data requests presented in the TCAO to meet the minimum information needs to adequately provide a documented record and basis for action.”	<p>Dischargers to rely on existing plans, as appropriate, in complying with Directive D.1. Board staff anticipate that the Dischargers will be able to rely on significant portions of the existing plans to prepare the RAPs. However, the RAPs should be based on remedies identified in the Feasibility Analysis (Directive B) and integrate information obtained through compliance with Directive A (i.e., identification of sources of waste and risk assessments).</p> <p>Board staff revised the TCAO to include Provision L.8 (i.e., “Extension Request”) in the event that Dischargers elect to propose a deadline change.</p>
6f	Directives E, F, and G	Directives E, F, and G are unclear due to the expansive scope. Reconsider the language and specify what monitoring should be included in progress reports, what qualifies as an exceedance, and the geographic extent of what is contemplated in the TCAO.	“Directives II.E, II.F, and II.G are unclear due to the expansive scope. We urge the RWQCB to reconsider the language and specify what monitoring should be included in progress reports, what qualifies as an exceedance, and the geographic extent of what is contemplated in the TCAO.” The context of how these directives might drive enforcement also relate to Directive L.9, which requires submittal of “any relevant facts.” CDC considers it unreasonable that, as owner of Lake San Marcos, CDC might be held responsible for not reporting a discharge in the Watershed, not investigating a discharge, and not recommending a remedy that might apply	<p>Board staff disagree with this comment.</p> <p>The comment is concerned that Directives E, F, and G are overly broad due to the language in Directive L.9. To clarify, Directive L.9 requires the Dischargers to submit to the San Diego Water Board any relevant facts that were not submitted in a report and to correct any information that was incorrectly submitted to the Board. Directive L.9 provides the Dischargers with an opportunity to add or correct information that the Dischargers submitted to the Board. Directive L.9 does not require CDC to investigate, report, or abate all discharges in the Watershed.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>to a third party to which CDC has no relation, and that might be of a technical nature that CDC is not qualified to address. CDC urges this directive be stricken, or at minimum that considerable effort be undertaken to make this directive clear. Finally, this an additional instance where the mandated effort appears to be directed toward further investigation and study, and is unlikely to result in action to clean Up or abate eutrophication.</p>	<p>The comment requests the Board to clarify the geographic extent of the TCAO: The geographic extent of the Site is defined in Finding D and includes the Watershed, the Creek, and the Lake.</p> <p>The comment requests the Board to clarify what qualifies as an exceedance: The “Exceedance” term in Directive F encompasses two types of issues at the site: (1) observations of Creek and/or Lake WQO exceedances and/or (2) impairment of Creek and/or Lake beneficial uses that are not resolved after implementation of remedies. Creek and Lake beneficial uses are described in Finding O. WQOs are described in Finding P, which includes both numeric and narrative WQOs for the Creek and Lake.</p> <p>The comment requests the Board to reconsider the language and specify what monitoring should the Dischargers include in progress reports: Directive E requires the Dischargers to submit Semiannual Progress Reports which evaluate the implementation of the remedies. Board staff cannot specify the monitoring program that should be included in the semiannual progress reports because the monitoring program will be dependent on the Performance Monitoring Plan the Dischargers will propose under Directive D.1.m. Further, the Performance Monitoring Plan</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>will be dependent on the remedial actions selected for implementation following Directives B and D.1.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6g	N/A	The Board should comply with its CEQA obligations quickly.	CEQA compliance is critical, yet this context is missing entirely from the TCAO. CDC urges the San Diego Water Board to focus its efforts to comply with its lead agency obligations under state law. “It is imperative that [the CEQA] process move forward expeditiously so that remedial actions can be implemented at the lake and in the watershed.”	Board staff disagree with this comment. Issuance of the TCAO is exempt from CEQA as stated in Finding Q. Additional CEQA obligations will occur in association with RAP implementation. Board staff anticipate engaging in the CEQA analysis when the Dischargers submit the RAPs (Directive D) for approval. Board staff intend to complete any environmental analysis in a timely manner to support the proposed remedies. For more information about CEQA, see response to comment 7u. Board staff have not modified the TCAO in response to this comment.
6h	Finding B.I.b	Clarify what “Lake Sources” are subject to in the cleanup and abatement.	“Lake Sources” includes the phrasing “Specific chemical conditions...provoke internal nutrient recycling.” Generally, CDC interprets this language to refer to historical deep lake stratification, which is no longer the case with the operation of the aeration system (for two dry seasons, 2022 and 2023) and which is anticipated to operate for the foreseeable future. In addition, the language suggests that boat activity, a beneficial use, releases constituents of concern to the Lake water via resuspension	<p>Board staff agree that deep lake stratification is not occurring thanks to operation of the current aeration system and that recreational boat use is not a discharge source.</p> <p>CDC and other parties have explored the use of aeration to prevent the stratification of Lake waters in the summer, which contributes to algal growth in the Lake. However, the existing aeration system has been operated as a pilot study. Therefore, the use and effectiveness of the aeration system as a long-term remedy is</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			of sediments; CDC does not believe it is appropriate to list recreational boat use as a discharge source.	<p>unclear. A RAP describing a long-term Lake aeration remedy has not been submitted or approved by Board staff.</p> <p>Finding B.1.a. of the TCAO describes the sources and concentrations of waste in the Lake and describes the nutrient recycling from Lake sediment as a major mechanism for making waste available in Lake water in the summer.</p> <p>Recreational boat use is a mechanism by which existing contamination in the Lake can be disturbed and redistributed to cause internal nutrient recycling in the Lake. The TCAO has been modified to clarify that recreational boat use is not a source of waste to the Lake.</p>
6i	Finding B.2	Update Tables 1 through 3 to include constituents and concentrations organized by location and time.	Per the Clean Water Act 303(d) listings found in the Basin Plan, the Lake and/or Creek are not impaired with respect to several of the listed constituents. For some of the listed constituents, natural/ambient/baseline concentrations vary in time and/or do not necessarily exceed WQOs (e.g., nitrate in the Lake). For clarity of which constituents are of concern to the RWQCB, we suggest a table listing which constituents are of concern in space (Lake/Watershed) and time (wet/dry season Lake and stormwater/dry season Creek surface waters). Tables 1, 2 and 3 are incomplete with respect to the	San Diego Water Board staff do not recommend modification of TCAO tables 1 through 3. Tables 1 through 3 do not represent a complete listing of COCs but rather are meant to highlight COCs that Board staff know have been causing WQO exceedances and/or beneficial use impairments in the Creek and/or Lake. Also, as explained in responses to comments 6c and 6p, studies are needed to determine which constituent(s) cause toxicity in the Creek and Lake sediments. Further, compliance with Directive A (i.e., identification/mitigation of sources of waste and risk assessments) will provide the Dischargers with an opportunity to confirm the list of

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			constituents of concern listed and have not been prepared for the Upper San Marcos Creek watershed. Furthermore, for constituents listed here on the basis of sediment concentration data, see additional discussion below on beneficial uses impairment (i.e., for Finding H.1). Please clarify.	constituents to cleanup and/or abate pursuant to Directive C.  Board staff did not modify the TCAO in response to this comment.
6j	Finding C.1	CDC does not operate the EGC and SMGC.	CDC accepts replenishment water from surface flows and groundwater sources (both actively pumped and passively in hydrological communication with Lake San Marcos) to maintain beneficial uses licensed by the state.	Comment noted. Board staff appreciate the clarifications regarding operations of the wells at EGC and SMGC. The TCAO has been revised for clarity that CDC discharges groundwater to the Lake from groundwater wells at SMGC and EGC.
6k	Findings C.4, C.5, and C.6	The TCAO should clarify the purpose of including VWD, Hollandia Dairy, and Wildcat Dairy as Dischargers.	It is unclear what the San Diego Water Board's expectations are with regard to the historical discharges referenced for VWD, Hollandia Dairy Inc., and Wildcat Dairy LLC, or any linkage between these parties and TCAO directives.	Regarding VWD as a Discharger, see response to comment 5f. Regarding the dairies, please see responses to comments 3 and 10.
6l	Finding E	Data do not support the finding that there is direct contact with or inhalation of toxins at Lake San Marcos.	Provide data and information specific to Lake San Marcos to justify the assertion that a "potential threat to human health" exists; for example, including a concentration, objective, or other regulatory threshold that has been exceeded for both/either of the referenced exposure modes in this section, or for "ingestion of residential crops" (from Finding G).	San Diego Water Board staff disagree with this comment. Cyanotoxins do pose a threat to human health. Board staff collected grab samples at the Lake in May 2021 and <i>Microcystis sp.</i> and <i>Dolichospermum sp.</i> Cyanobacteria were present. Further, Great Ecology has conducted phytoplankton surveys annually in Lake water since 2012, which systematically report the presence of cyanobacteria that may produce cyanotoxins. Board staff reviewed publications (e.g., Jia H.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>Shi et al., Environmental Science &amp; Technology 2023) that confirm the need to investigate human exposure to <i>Microcystis sp.</i> emissions from freshwater lakes in the atmosphere (i.e., aerosolized microcystin). (Also see responses to comments 6q and 7am). The reference to “ingestion of residential crops” in finding G.5 refers to SMGC’s irrigation overspray with Lake water that may contain cyanotoxins that can cause a nuisance and is not related to setting regulatory thresholds.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6m	Finding F.1	Clean Water Act 303(d) listings generated by the San Diego Water Board and incorporated into the Basin Plan may be a component of how the order better conveys findings regarding “Lake Nutrient Levels.”	Internal nutrient cycling is complex, and release of nutrients from sediments is not dependent on pH of overlying water (as is suggested), nor is bacterial activity responsible for release of nutrients from sediment into the water column. The statement that algae may release cyanobacteria toxins to water and air is an extreme oversimplification that misrepresents available science and is generally not supported by data.	Comment noted. San Diego Water Board staff agree that internal nutrient cycling is complex as described in the RI/FS Report and later reports submitted to Board staff. Board staff revised the TCAO to state, “The Lake also receives nutrients from internal nutrient cycling, a complex phenomenon that releases nutrients stored within the sediments to the lake water column depending on several biogeochemical factors.” Regarding the statement that algae may release cyanobacteria toxins to water and air, see response to comment 6l. Finding M.1 describes the constituents for the Lake and Creek listed in the Clean Water Act 303(d) List of Water Quality Limited Segments. Board staff did not modify the TCAO in response to this part of the comment.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
6n	Finding F.2	This section misrepresents the current situation at the lake and is an inappropriate 'finding' regarding current conditions.	The aeration system currently and demonstrably prevents stratification of the lake during the dry weather season when stratification might otherwise be expected. DO concentrations are not dependent on lake stratification. Please clarify this finding.	See response to comment 6h. Board staff did not modify the TCAO in response to this comment.
6o	Finding G	Historical algal blooms and fish kills have historically been discrete events and are not a constant condition; the representation in the TCAO thereby misrepresents both historical and current conditions.	With regard to current conditions, the language in the TCAO asserts a "proven" condition of nuisance yet couches the examples with nonfactual language (e.g., "cyanobacteria may produce toxins" [G4]; "overspray can aerosolize waste and pollutants" [G5]; "water...can create a condition of nuisance" [G5]). It is inappropriate for the RWQCB to make a "proven" finding on the basis of conjecture; CDC objects to inclusion of this finding in the TCAO. Furthermore, the presence of hydrogen sulfide is generally inconsistent with the current aerated condition of the Lake (including the upper shallow lake, which is naturally mixed). The incorporated references to RI/FS appendices E (Historical Lake Data), F (Aerial Photos Hollandia-Prohoroff 1938-2015), and H (Vegetation Survey) do not appear relevant with regard to establishing presence of hydrogen sulfide. CDC is unaware of any complaints of hydrogen sulfide odors; if data or information regarding a hydrogen sulfide nuisance condition exists, please	Finding G of the TCAO appropriately describes a condition of nuisance at the Lake due to algal blooms and decays that is consistent with the definition of nuisance in Water Code section 13050, subdivision (m). Due to the impairments and eutrophication in the Lake, algal blooms consistently occur at the Lake on a seasonal basis. These algal blooms interfere with recreational uses at the Lake and can produce toxins that are injurious to health. Further, decaying algae produce foul odors (e.g., due to hydrogen sulfide) that are indecent, an offense to the senses, and interfere with the comfortable enjoyment of life and property for nearby Lake residents. These algal blooms affect a considerable number of persons, including nearby Lake residents and others visiting the Lake. Board staff received numerous complaints from nearby Lake residents regarding the smell of the Lake and breathing issues during algal blooms and decays. These algal blooms are caused by the impairments in the Lake due to the eutrophication of Lake conditions.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>provide it. Finally, for the record, when algal blooms and fish kills have occurred in the past, CDC has responded by removing and disposing algal mats and dead fish to the extent feasible and thus abated the nuisance condition; CDC therefore believes including such a finding using nonfactual language and without specific information or data is misleading to the general public, and is unaware of any additional measures that could be taken to abate the algal mat and fish kill nuisance conditions beyond our current performance.</p>	<p>The TCAO also discusses the potential presence of a threat to human health caused by constituents in Lake water which “may have cyanotoxins or odors during algal blooms or decays.” Research confirms that cyanotoxins can aerosolize via wind and other weather conditions. (See response to comment 6l.) Additional research is necessary to understand the reach and intensity of cyanotoxin aerosolization around the Lake. In preparing the Risk Assessment Work Plan (Directive A.3), Board staff encourage the Dischargers to assess: (1) obtain baseline Lake water quality conditions related to cyanotoxins, and (2) collect irrigation water during HAB events to evaluate risks to residents living near the Lake and the SMGC as part of the Risk Assessment. Dischargers should consider and analyze this data before they choose and implement a remedial strategy (i.e., before Directives B and D). Board staff believe this investigative work is important if the Dischargers choose to implement a “selective withdrawal system” (SWS) remedy, a system based on the removal of Lake water for irrigation purposes.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6p	Finding H	Several items within this finding are over-simplified or do not reflect	Algae are a natural and essential component of healthy aquatic ecosystems. It is the excessive algae growth that affects	San Diego Water Board staff partially agree with the comment. Board staff agree that cyanobacteria presence does not equate to



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
		current conditions at Lake San Marcos.	<p>beneficial uses and is the impairment. There is no indication that fish are unable to find food, nor that there is a deficit of aquatic plants. CDC suggests this section be clarified.</p> <p>The RI/FS risk assessment (Appendix AK) includes assessment of uncertainties in toxicity testing, and concludes that toxicity risk to sediment-dwelling biota “appears to be limited” due to low-level screening toxicity reference values (TRV) levels, The data indicate that several contaminants listed in the TCAO are not bioavailable (for both aerobic and anoxic conditions), and thus do not impair beneficial uses. The Board’s finding of impairment is insufficiently documented and/or unwarranted, and listing of the lake sediment contaminants of concern inappropriate....The EPA 2002 document indicates that toxicity testing presents information on not only the presence of toxicants at potentially toxic levels, but also whether such toxicants are bioavailable and indeed toxic. Toxicity tests are a part of EPA 2002’s recommendations (Section 7.2) and are an appropriate line of evidence to assess whether beneficial uses are attained. Such analyses were conducted and presented in Appendix C of Great</p>	<p>cyanotoxin presence. However, during algal blooms with high concentrations of cyanobacteria, especially those dominated by only a few species, it is likely that toxins are being produced. Without collecting sufficient samples for cyanotoxin analyses (i.e., more than one sample), it is not possible to state whether cyanotoxins are/were present in the Lake. Therefore, Finding H appropriately describes the potential presence of cyanotoxins in Lake water. Board staff did not revise the TCAO in response to this statement: “The presence of a natural product such as microcystin at an unknown concentration is insufficient as a basis to establish beneficial use impairment...A finding of impairment is inappropriate” because Board staff agree with the following statement instead, as explained in detail in Finding H.1: “It is the excessive algae growth that affects beneficial uses and is the impairment.”</p> <p>Regarding the potential risk to human health due to cyanotoxins, please see response to comment 6l.</p> <p>Regarding the following statement: “such analyses [TIEs] were conducted and presented in Appendix C of Great Ecology 2016. The tests indicate the lack of toxicity broadly. As tests were conducted on two widely accepted sensitive species, it is incorrect to conclude that beneficial</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>Ecology 2016. The tests indicate the lack of toxicity broadly. As tests were conducted on two widely accepted sensitive species, it is incorrect to conclude that beneficial uses are impaired by the constituents listed, particularly in shallow areas of the lake (which is and has been subject to vertical mixing and oxygenated conditions) where no statistically significant toxicity whatsoever was observed. The exceptions (low-level toxicity in deep lake sediment sample exposures for one of the two species tested) were followed up using additional TIEs (toxicity identification evaluation) studies, and much if not all observed toxicity found to be attributable to ammonia in the deep lake (which was at the time not aerated and thus subject to stratification and long periods of anoxia, which is a known driver of production/loading of ammonia in sediments). The data indicate that several contaminants listed in the TCAO are not bioavailable (for both aerobic and anoxic conditions), and thus do not impair beneficial uses.</p> <p>...</p> <p>The presence of a natural product such as microcystin at an unknown concentration is</p>	<p>uses are impaired by the constituents listed.” Board staff reviewed Appendix C of the 2016 Great Ecology report<sup>1</sup> and disagree with this statement. Section 4.1 of Appendix C recommends additional TIEs because of inconclusive results at one sampling location where toxicity was observed but the toxicant could not be identified. Appendix C clearly identified ammonia as the cause of toxicity in one part of the Lake; however, the Dischargers need to conduct additional TIEs for that sampling location where ammonia was not causing toxicity to benthic communities (i.e., sampling station B). (Also see responses to comments 6c and 6q.)</p> <p>The comment seems to misunderstand the second paragraph of Finding H.1. Therefore, Board staff revised the TCAO to clarify that Lake sediments <u>may</u> cause an impairment to beneficial uses, and that Integrated Report data confirms the Creek WARM and WILD beneficial uses are impaired: “The presence of pollutants in Lake sediments may pose a risk to benthic communities. Surficial Lake sediment chemistry analyzed by Great Ecology on behalf of CDC in June 2013, September 2013, and January 2014 identified concentrations of arsenic, cadmium, copper, nickel, zinc, total dichlorodiphenyldichloroethylene (DDE), alpha</p>

<sup>1</sup> Great Ecology. 2016. Lake San Marcos Investigation: Surficial Sediment Investigation Report. Submitted to Citizens Development Corporation. January.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>insufficient as a basis to establish beneficial use impairment. Cyanobacteria are present in all areas of the lake at all seasons....The presence of cyanobacteria does not mean that dominant cyanobacteria species are capable of producing microcystin (or any other cyanotoxin), nor that in whatever circumstances that a species is producing cyanotoxins (which is generally a stress-response), nor that such toxins are produced at levels which might be toxic. It is assumed that the single referenced quantified record of microcystin is the single record from September 7, 2005, which were characterized as "low level" at the time (see RI/FS Appendix AD, page 9), and for which the report discussion noted that confirmation by LC/MS was appropriate. Confirmation testing was performed and found that the initial result could not be confirmed (page 10); footnote on page 11 states: "Looks like our HPLC gave us false positives on the Microcystin-RR."...The RI/FS risk assessment "concluded that there are not likely to be adverse health impacts to human recreations users at the Lake and Creek," and that risks to golf course workers was substantially less than those of Lake recreationalists. A finding of impairment is inappropriate.</p>	<p>and gamma chlordane, and total PAHs exceed threshold effect concentrations (TECs) established for these constituents. The CSCI scores for the Creek are lower than 0.79 upstream of the Lake, indicating the Creek ecology is altered and the WARM and WILD beneficial uses are impaired."</p> <p>Finding H of the TCAO states that it is the excessive algae growth that affects the REC-1, WARM, and WILD beneficial uses.</p> <p>San Diego Water Board staff revised Finding H.3 of the TCAO as follows: "The Non-Contact Water Recreation (REC 2) beneficial use is impaired year-round in the northern, shallower part of the Lake because of excess sedimentation and evaporation. The accumulation of sediments and lack of dredging in the Lake create navigational issues in the shallower part of the Lake. These shallow water conditions may impact the success of proposed Lake mitigative actions that need access by boat to Lake water (e.g., phosphorus inactivation)."</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>Recreational use of the lake is limited within the shallowest, northmost portion of the lake year-round (i.e., it is not a seasonal condition as is referenced in the TCAO).</p>	
6q	<p>Directive A.3 [revised to Directive A1]</p>	<p>Risk assessments required by the TCAO are unachievable.</p>	<p>Standards are not available for cyanotoxins generally and available literature notes that exposure thresholds are not available for all potential cyanotoxins. A risk assessment would, at this point given the state of the science, be inconclusive and include several data gaps or significant levels of uncertainties. A risk assessment approach is therefore an inappropriate tool for the issue due to uncertainties in the science and, could it be performed, would not provide value to any stakeholder. Items 3a and 3b are unachievable until standards are promulgated by state or federal agencies for all cyanotoxins.</p> <p>Data does not support the need for additional risk assessment, aside from potential effects of eutrophic conditions. There is no indication that the benthic community is degraded. The Board has in</p>	<p>San Diego Water Board staff disagree with this comment. Cyanotoxins Action Levels for Contact Water Recreation beneficial use exist in the state for several cyanotoxins and Board staff use them for Integrated Report waterbody assessments. (See e.g., Toxicological Summary and Suggested Action Levels to Reduce Potential Adverse Health Effects of Six Cyanotoxins Report, OEHHA, Table 3 of the California Planktonic HAB Posting Guidance<sup>2</sup>, and U.S. EPA Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin<sup>3</sup>.) The Dischargers may use existing levels to answer the study questions in Directive A.3.</p> <p>Board staff agree that there is variability in algae blooms; however, there are species present in the Lake that can produce toxins. Board staff recommend collecting water grab and/or mat</p>

<sup>2</sup> California Voluntary Guidance for Response to HABs in Recreational Inland Waters. See Table 3 in the Planktonic HAB Posting Guidance Section | State Water Board, CDPH, and OEHHA. [Accessed February 2024]

<sup>3</sup> U.S. EPA Office of Water (4304T) Health and Ecological Criteria Division. Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin. May 2019

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>the past agreed that if the benthic community were impaired, an obvious potential source of impairment would be overlying eutrophic conditions. While the lake remains in a eutrophic state, it is impossible to determine whether any sediment impairment (if it were present) would be attributable to eutrophic conditions or an alternative mode of degradation.</p>	<p>samples throughout one bloom season to analyze for cyanotoxin concentrations in both Lake water and irrigation water for the SMGC. This will inform the Dischargers and the Board of the appropriateness of the currently proposed SWS and SGMC irrigation practices.</p> <p>Board staff disagree with the following statements: “There is no indication that the benthic community is degraded” (see response to comment 6p); and “it is impossible to determine whether any sediment impairment (if it were present) would be attributable to eutrophic conditions or an alternative mode of degradation.” Similar risk assessments have been conducted to assess other freshwater sediment environments (e.g., Phase I MS4 Permit, U.S. EPA TIE for the Great Lakes). In these other instances, Dischargers used TIEs to identify the cause of toxicity to aquatic organisms. U.S EPA has published methodologies<sup>4</sup> to assist Dischargers in conducting TIEs. The Dischargers can use these methods to evaluate the sources of toxicity and potential risk or causes of impacts from pollutants in Lake sediments. For organic contaminants, the Dischargers can also combine TIEs with effects-directed analysis (EDA) to narrow down the number of contaminants to</p>

<sup>4</sup> Methods for Aquatic Toxicity Identification Evaluation Phases I and II, published by U.S. EPA in February 1991, and in September 1993, respectively.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>evaluate and target chemical analysis to those chemicals that contribute significantly to a measurable toxic effect.<sup>5</sup> (Also see responses to comments 6c and 6p.)</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6r	Directive B.3.b	Specify which constituents of concern (i.e., from Finding B.1.2) are subject to the evaluation and success metrics for each (e.g., water concentration, seasonal load [mass], sediment concentration, Secchi depth/water clarity, or other).	TCAO-directed estimations of nitrogen load reductions would not be informative, since the Board has indicated that WQOs (i.e., concentrations) are the metric of import (Directive C.1). There is a lack of clarity in success metrics and it is unclear why nitrogen, but not phosphorus or any other constituents of concern, is the sole listed constituent in Directive B.3.b. As this is a Cleanup and Abatement Order, CDC urges the RWQCB to specify which constituents of concern (i.e., from Finding B.1.2) are subject to the evaluation and success metrics for each (e.g., water concentration, seasonal load [mass], sediment concentration, Secchi depth/water clarity, or other).	<p>The Dischargers may propose success metrics for the Creek and Lake under Directive B. Directive F explains that additional measures may be needed if WQO exceedances and/or beneficial use impairments are still observed after implementation of the remedies. An example of success metrics in the Creek and Lake would be an increase in CSCI scores in the Creek (e.g., above 0.79) and the absence of HAB events in the Lake combined with nutrient concentrations meeting the Basin Plan narrative objective.</p> <p>In addition to requiring a technical and economic evaluation of the Lake and Creek/Watershed remedies, Directive B.3 lists data gaps present following the submittal of the RI/FS Report. Because the RI/FS Report provided estimations of phosphorus load reduction goals but not nitrogen load reduction goals, Directive B.3.b specifically addresses the lack of reduction goal</p>

<sup>5</sup> Robert M. Burgess, Kay T. Ho, Werner Brack, and Marja Lamoree. September 2013. Effects-Directed Analysis (EDA) and Toxicity Identification Evaluation (TIE): Complementary but Different Approaches for Diagnosing Causes of Environmental Toxicity. Environmental Toxicology and Chemistry, Vol. 32, No. 9. [accessed 2024 February 20] DOI: 10.1002/etc.2299

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>for nitrogen. Further, the RI/FS Report data found algae growth is more often limited (63 percent of the time) by nitrogen than phosphorus. Therefore, reducing nitrogen load is important for limiting algae growth in Lake water. Finally, Directive B.3 is broad and compliance with Directive B.3 must include the list of <u>all</u> constituents responsible for the WQO exceedances and beneficial use impairments of the Creek and Lake.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6s	N/A	<p>CDC urges the San Diego Water Board to prioritize and focus on the beneficial uses affected by eutrophic conditions as was outlined in Investigative Order R9-2012-0033 [sic].</p>	<p>Over several decades of iteratively reviewing vast and comprehensive datasets, the RWQCB has not found Lake San Marcos to be impaired for what might generally be classed ‘anthropogenic’ pollutant discharges (e.g., metals, polycyclic aromatic hydrocarbons, etc.). (Note: the Lake listing for copper is based on a watershed issue, not a concentration in lake water or sediment [RWQCB 2021]). CDC has comprehensively demonstrated over a decade of investigation that the lake is not impaired with respect to ecological health, excepting effects of eutrophication. The lake is demonstrably a valued sportfishing resource, supports a diverse avian community, is underlain with nontoxic</p>	<p>The San Diego Water Board staff assumes that the comment is referring to IO No. R9-2011-0033.</p> <p>The San Diego Water Board issued the IO to CDC to investigate nutrient impairments in the Lake. The TCAO builds and expands on the efforts of the IO, with the goal of achieving WQOs and restoring beneficial uses.</p> <p>As described in Finding H of the TCAO, beneficial uses in the Lake and Creek remain impaired. Finding H of the TCAO describes the impaired beneficial uses in the Lake and Creek. Finding M.1 also describes the 303(d) impairments for the Lake and Creek, including for ammonia as nitrogen, nutrients, and phosphorus.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			sediments, and supports healthy emergent aquatic vegetation.	<p>Board staff disagree with the following statement: “The lake...is underlain with nontoxic sediments,” as explained in responses to comments 6c and 6p.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
6t	N/A	Delays in CEQA compliance.	<p>“CDC and other stakeholder parties have expended considerable efforts in drafting documents, revising narratives, and responding to comments regarding the document content, structure, and analyses; and have been invoiced for the RWQCB’s efforts for its compliance obligations. It is our understanding that the RWQCB determined in mid-2023, despite progress toward an acceptable final draft document, that the draft IS/MND review would be suspended to accommodate future potential changes to the project. This suspension of document preparation will delay installation of remedies at the Lake which are currently being permitted (e.g., construction of the selective withdrawal system), and delay progress toward other remedial actions (including dredging of the upper lake basin, phosphorus inactivation treatments in the watershed, source control measures in the watershed, etc.)” The current IS/MND project description is</p>	<p>The San Diego Water Board acknowledges its obligations towards CEQA compliance. Board staff will continue to cooperate/collaborate with the Dischargers regarding the completion of CEQA documents, also see response to comment 6g.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			consistent with proposed cleanup actions, and re-working project elements within the current project description will result in significant additional delays in implementation of remedies (on a scale of years). CDC strongly urges the Board to re-engage the CEQA process immediately so that onsite remedies can address impairments.	
<b>Comment 7: Citizens Development Corporation, County of San Diego, City of San Marcos, and City of Escondido, November 3, 2023 [For full text of comment, refer to Supporting Document 5, pages 480 to 527]</b>				
<b>General Comments [refer to Supporting Document 5, pages 480 to 487]</b>				
7a	N/A	Our high-level concerns with the TCAO relate to the overarching nature of the document, which is focused on collection of additional data instead of on cleanup or abatement.	The largest impact to reducing nutrients in the watershed can be made by updating and implementing the CAPs as opposed to additional investigation/study efforts. A comprehensive assessment—the RI/FS—was completed in 2016 and approved by the Board. Various pilot studies were then conducted to assess the viability of the corrective actions selected in the RI/FS.	San Diego Water Board staff disagree with this comment. See responses to comments 6a and 7k. Board staff did not modify the TCAO in response to this comment.
7b	N/A	Request for adaptive management process in concert with all existing and future programs.	The Joint Parties believe that some of the data gaps of concern are being and/or have an opportunity to be addressed through ongoing programs such as WQIP implementation by the co-permittees. The parties desire an adaptive management process to connect this effort with all existing and future programs to accelerate actions to improve water quality.	San Diego Water Board staff disagree that the data gaps of concern are being and/or have an opportunity to be addressed through the implementation of the WQIP or other programs (e.g., Order Nos. R9-2016-0004 and R9-2016-0005, general WDRs for discharges from commercial agricultural operations). See also responses to comments 6b and 7v.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>Regarding the agricultural discharges under Order No. R9-2016-0004, the SDRILG states in its 2022 Annual Monitoring Report that “[t]he regional analysis indicates that the current exceedances of WQBs [Water Quality Benchmark, equivalent to WQOs for the Creek] for Total Phosphorus is essentially ubiquitous in the developed areas throughout the county, and is set too low to be universally achieved in sampling areas covered by the SDRILG. Either a more achievable benchmark should be considered, <u>or benchmarks should be set for constituents that would be indicative of excessive aquatic growth, which is consistent with the Basin Plan objectives</u>.” (Emphasis added.) Board staff note that SDRILG recognizes the importance of setting nutrient reduction goals that achieve standards in San Diego Region waters that help reduce algae bloom occurrences.</p> <p>Finally, TCAO Directives provide the Dischargers with the opportunity to connect cleanup efforts with the agricultural WDR Orders, Phase I MS4 Permit, and other programs and to reconcile the programs’ goals moving forward for the benefit of the Creek and Lake. The TCAO recognizes opportunities for the Dischargers to build on existing efforts, such as:</p> <ul style="list-style-type: none"> <li>- Investigations under Directive A allow Dischargers to find and confirm areas of</li> </ul>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>the watershed where waste concentrations, including those of nutrients, are the highest and propose mitigation to control those waste discharges.</p> <p>-</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7c	N/A	The document as envisioned would require additional investigation and study of elements that are unclear or infeasible or are already underway as described in Appendices B, C, and D of comment package 7.	The TCAO as written would result in duplicative studies and reports requiring substantially more time, but would not yield additional substantial information or data. Additionally, implementation funding would be depleted by expenditure on further study and analysis.	<p>San Diego Water Board staff disagree with this comment.</p> <p>Board staff disagree that the “TCAO additional investigation and study of elements are unclear or infeasible.” Directives in the TCAO include specific study questions that the Dischargers must answer and are site-specific. (See responses to comments 5h, 6c, 6q, and 7r.)</p> <p>Board staff disagree that investigative requirements of the TCAO (i.e., Directives A, F, and G) are duplicative and that other programs described in Appendices B, C, and D of the comment include investigations that are responsive to investigative requirements of the TCAO (i.e., Directives A, F, and G) for the following reasons: (1) the WQIP and Phase I MS4 efforts are insufficient and inadequate to comply with the TCAO, as explained further in response to comment 6b, (2) none of the programs presented in Appendix D include</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>mandatory waste source identification measures and therefore the program managers cannot enforce source control as required in Directives A.1/A.2, and F/G, (3) the County of San Diego and City of San Marcos agricultural programs focus on inspections and site-specific corrective actions, and program managers do not conduct any receiving surface water monitoring, (4) Order No. R9-2016-0004 directs the SDRILG to conduct monitoring of receiving surface water, but does not require the SDRILG to identify and characterize waste and waste sources in the Watershed that drain to the Lake and Creek outfalls, and (5) programs described in Appendices B, C, and D, do not include routine Creek and Lake sediment sampling and analysis or cyanotoxin analysis in Lake water.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7d	N/A	The Joint Parties are prepared to work with the San Diego Board to finalize this Bridge document, and the CAPs.	The board has indicated that the CAPs as envisioned and coordinated with the Board would no longer be approved under the TCAO. The Board requested the production of a draft 'bridge document' to describe how the feasible remedies outlined in the RI/FS are to be "modified" using new data acquired from pilot testing. These additions were included in the draft CAPs.	Comment noted. See response to comment 6e regarding the use of existing plans to comply with Directive D. Board staff did not modify the TCAO in response to this comment.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7e	N/A	The Board paused review of the IS/MND in the summer of 2023.	This has delayed any permitting by the Board or other state or municipal agencies, and any ground-disturbing activities relating to the approved remedies/corrective actions. It is our understanding that provisions of CEQA prevent the 'piecemealing' or separation of project elements, and thus the pause in the CEQA process prevents action on any and all of the selected remedies.	See response to comment 6g. Board staff did not modify the TCAO in response to this comment.
7f	N/A	Our preference is to start work as soon as possible and not lose another rainy season and summer.	To summarize, the parties have been moving forward on producing CAPs. However, CAP initiatives have been suspended while the 'bridge document' is produced and approved by the Board. Board consideration of the 'bridge document' has stalled, despite the full project descriptions outlined in the draft CAP and CEQA documents. Currently, both the CAPs and CEQA document processing have been paused, and it appears they will not be allowed to advance until the provisions of the TCAO are implemented. The Joint Parties have worked collaboratively with the Board for many years, despite lawsuit and funding issues. The Joint Parties are ready to update and submit the CAPs, finalize the bridge document, and engage with the San Diego Board on finalizing the CEQA	San Diego Water Board staff appreciate the parties' commitment to moving forward with cleanup efforts. The Dischargers, however, have not completed the pilot tests proposed in 2019 and have not performed any work in the Watershed since 2019. Further, the parties have not responded to Board staff's requests for an updated feasibility analysis which takes into account the data collected since 2017 and supports the changes to remedial approach proposed since the RI/FS. Regarding CEQA, see response to comment 6g.  Board staff did not modify the TCAO in response to this comment.

<b>Comment No.</b>	<b>TCAO Section</b>	<b>Comment Summary</b>	<b>Abbreviated Comment Description</b>	<b>San Diego Water Board Staff Response</b>
			document, and engage with the San Diego Board on finalizing the CEQA document.	
7g	Directives A and A.1 <b>[revised to Directive A.3]</b>	Remove Directive A or remove Directive A.1.	Request removal of Directive A altogether with the option to remove Directive A.1 and submit the report under Directive A.2 using current data collected as part of MS4 Permit and WQIP. [See Table 4 of Appendix A of comment package 7.]	San Diego Water Board staff disagree with removing Directive A as explained in response to comment 6b. Board staff also disagree with removing Directive A.1 and using data collected as part of the WQIP effort to fulfill Directive A.2 as explained in response to comment 7v.  Board staff did not modify the TCAO in response to this comment.
7h	Directive A.2 <b>[revised to Directive A.4]</b>	Change the due date for Directive A.2.	Change the due date to 6 months from CAO adoption (if Directive A.1 is removed) [See Table 4 of Appendix A of comment package 7.]	See response to comment 6b. San Diego Water Board staff disagree with removing Directive A from the TCAO.  Board staff did not modify the TCAO in response to this comment.
7i	Directive A.3 <b>[revised to Directive A.1]</b>	Remove Directive A.3.	Data gaps either have been addressed or will be addressed under different programs. For remaining elements, uncertainty will remain, and remedies are unlikely to change regardless of risk assessment results. [See Table 4 of Appendix A of comment package 7.]	San Diego Water Board staff disagree with this comment. Directive A.3 is a work plan to address data gaps identified in the HHRA and the SLERA. This comment suggests that different programs (i.e., Phase I MS4 Permit WQIP, Order Nos. R9-2016-0004 and R9-2016-0005, general WDRs for discharges from commercial agricultural operations) can address data gaps listed in Directive A.3. However, these programs do not include Lake water monitoring of cyanotoxins, nor do they include Creek and Lake sediment toxicity testing, and are therefore

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>inappropriate to answer the study questions listed in Directive A.3. Further, as explained in responses to comments 6l, 6o, and 7am, the Dischargers need to provide a supplementary HHRA. Finally, as explained in responses to comments 6c and 6p, studies are needed to determine which constituent(s) cause toxicity in the Creek and Lake sediments. Therefore, data collected under these programs is inadequate to address requirements under Directive A.3.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7j	Directive A.4 [revised to Directive A.2]	Remove Directive A.4.	Data gaps either have been addressed or will be addressed under different programs. For remaining elements, uncertainty will remain, and remedies are unlikely to change regardless of risk assessment results. [See Table 4 of Appendix A of comment package 7.]	<p>San Diego Water Board staff disagree that the data gaps listed in Directive A.4 will be addressed through the implementation of different programs. (See response to comment 7i.)</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7k	Directive B	Remove Directive B.	A valid Feasibility Study has been prepared and approved by the Board; outstanding information can be incorporated into CAPs. [See Table 4 of Appendix A of comment package 7.]	<p>San Diego Water Board staff disagree with this comment.</p> <p>Regarding the RI/FS Report as a feasibility study and previously proposed remedies, please see response to comment 5h. The proposed remedies in the RI/FS Report have not been fully tested, despite the Dischargers conducting seven pilot tests between March 2017 and April 2022. (See Resolution R9-2017-0038 and the</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>Dischargers' corrective action schedules.) Five out of the seven pilot tests that the Dischargers conducted focused on improving Lake water quality, not Creek water quality. Directive B is necessary because it requires the Dischargers to focus their efforts on issues originating in the Watershed and to propose remedial actions for the benefit of the Creek <u>and</u> Lake. Directive B supports the Dischargers' ability to realign the focus of the RI/FS with Resolution No. R9-2017-0038 and the Participation Agreement, which sought proposed remedies for both the Creek and Lake.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
71	Directive D.1	Revise submittal deadline language for Directive D.1.	We request that the language be revised to reference CAP documents currently in preparation. We propose submittal of a Lake CAP 120 days following approval of the CAO, and a Watershed CAP 150 days following approval of the CAO. CAP documents will be revised to include integrated information from other programs by reference and with adaptive management components. [See Table 4 of Appendix A of comment package 7.]	<p>San Diego Water Board staff disagree with this comment. Directive D.1 requires Dischargers to submit RAPs no later than 120 calendar days after the Feasibility Analysis is approved by the Board, which is more time than what is requested in the comment. Further, Dischargers can build upon existing plans, as explained in response to comment 6e.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7m	Directive D.2	Begin no later than 60 calendar days after the San Diego Water Board approves the Remedial Action Plans.	"Agreed. The Parties are ready to get to work." [See Table 4 of Appendix A of comment package 7.]	Comment noted. San Diego Water Board staff did not modify the TCAO in response to this comment.



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7n	Directive E	Components of this report are unclear and appear to duplicate other existing monitoring programs.	Please revise for clarity. Flexibility from the San Diego Water Board would be appreciated with regard in particular to 'special studies' or pilot effort reports, or other documents in general. [See Table 4 of Appendix A of comment package 7.]	Please see response to comment 7at.  Board staff did not modify the TCAO in response to this comment.
7o	Directive F	Remove Directive F.	Remove. This directive appears to duplicate efforts currently underway under separate municipal and/or other programs. [See Table 4 of Appendix A of comment package 7.]	San Diego Water Board staff disagree with this comment. Directive F requires the Dischargers to submit an Exceedance Characterization Work Plan if two consecutive wet or dry weather semiannual progress reports identify WQO exceedances and/or an impairment of beneficial uses in the Creek and/or Lake. The objective of the Exceedance Characterization Work Plan is to determine (1) why remedial goals are not being achieved, and (2) if the Dischargers need to modify and/or complement the implemented remedies to comply with Directive C (i.e., Cleanup or Abate Discharged Waste). The Dischargers through the Exceedance Characterization Work Plan would propose a site investigation to locate the waste source(s) causing the Creek and/or Lake WQO exceedances and beneficial uses impairment. (See responses to comments 7r and 7v.) Board staff revised TCAO Directive F to clarify that "The Dischargers shall implement the approved Work Plan within 60 days of receiving written approval from the Board."

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7p	Directive G	Duplicate directive.	This reporting requirement appears to be duplicative and perhaps extensive depending on interpretation. Please clarify; see attached comments. [See Table 4 of Appendix A of comment package 7.]	<p>San Diego Water Board staff disagree with this comment. The report associated with Directive G will present the Dischargers' investigation findings related to the case scenario where WQO exceedances and/or an impairment of beneficial uses in the Creek and/or Lake are still observed after the Dischargers implemented remedies. The Exceedance Investigation and Characterization Report of Directive G is essential to inform the Dischargers of corrective actions they may need to take to achieve cleanup goals. Board staff disagree with the statement that the "reporting requirement [under Directive G] appears to be extensive depending on interpretation." The reporting requirement under Directive G is only limited to the scope of work that Dischargers will propose under Directive F and subsequently approved by the Board.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>

***Detailed comments: Appendix A to Comment Package 7 [refer to Supporting Document 5, pages 487 to 502]***

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7q	Directives A1 and A2 [revised to Directives A.3 and A.4]	Suggest providing two options for Directive A.	<p><b>Option 1:</b> Remove Directive A in its entirety, as work is already being done under MS4 Permit and implementation of WQIP. See response below.</p> <p><b>Option 2:</b> Remove Directive A.1 and Directive A.2.a. Keep Directive A.2.b to submit MS4 Investigation and Mitigation report with a suggested 6-month time frame. Analytical and programmatic data collected as part of the MS4 Permit and WQIP could be summarized and assessed to provide the information requested. Any data gaps identified by the Board after submittal of the report could be addressed through existing monitoring programs and the WQIP adaptive management process.</p>	<p>San Diego Water Board staff disagree with this comment. Regarding Option 1, see responses to comments 6b and 7b. Regarding Option 2: (a) the Dischargers have broadly identified sources of waste in the Watershed based on the existing efforts in the RI/FS Report Watershed Model; however, a refined identification is necessary to implement source control actions, and (b) the Phase I MS4 Permit requirements are insufficient on their own to achieve the source identification and control goals of the TCAO. (See response to comment 7v).</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7r	Directive F	Remove Directive F.	Remove Directive F and refer to modifications suggested for Directive G. Directive G could be modified to submit an Assessment and Exceedance Characterization Report, beginning 5 years from the CAO implementation date and every 5 years thereafter. This would provide a more thorough assessment of all data being collected through the implementation of the RAPs and other Watershed programs. It would also allow for an analysis of trends, remedial actions, and other jurisdictional programs being implemented throughout the HA. Additional characterization or source investigation	<p>San Diego Water Board staff disagree with this comment.</p> <p>The goal for the work plan required under Directive F is to determine 1) why the remedial goals are not being achieved and 2) if modification or enhancement of the existing remedies is required to achieve compliance with Directive C (i.e., clean up or abate waste). Board staff disagree with removing Directive F, as explained in response to comment 7o. This work plan is in the TCAO to ensure Dischargers will answer study questions in Directive F and explain how and in what timeframe they will modify the implemented remedies to comply with</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>work identified by the Waterboard after the submission of the reports could be conducted through existing programs (MS4 Permit, WQIP, RAPs).</p>	<p>WQOs and restore beneficial uses for the Creek and Lake.</p> <p>Regarding the use of other existing programs' data (e.g., WQIP for the Phase I MS4 Permit) to conduct additional characterization or source investigation work post-remedy implementation, Board staff disagree for the following reasons: (1) WQIP data is inadequate and insufficient to answer study questions listed in Directive F, as explained in response to comment 7v, (2) the SAP under the WQIP is not designed to answer study questions listed in Directive F (e.g., designed to only investigate the source of highest priority water quality conditions identified in the WQIP that do not necessarily align with the TCAO COCs), and (3) WQIP study goals are different from the TCAO remedial action goals that Dischargers will propose under Directive D and, therefore, efforts under the WQIP are inadequate. However, Dischargers may use WQIP data in conjunction with data they will propose to collect in the Directive F work plan. Directive F allows Dischargers more flexibility than the WQIP SAP in terms of COCs, sampling location prioritization, and sampling type, location, and frequency.</p> <p>This comment states, "all data being collected through the implementation of the RAPs [i.e., through Directives D and E] and other</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>Watershed programs [e.g., Phase I MS4 WQIP]...would provide a more thorough assessment...beginning 5 years from the CAO implementation date and every 5 years thereafter.” Board staff disagree with this statement for the following reasons: (1) data collected after the implementation of the TCAO include pre-remedy implementation data that is not relevant to answer the Directive F study questions, (2) data collected through the implementation of the RAPs is inadequate to answer Directive F study questions because the data collected under D.1.m is performance monitoring data. The performance monitoring plan under Directive D.1.m is not designed to provide in-depth information about potential causes of WQO exceedances and/or beneficial use impairments. The Dischargers will present performance monitoring data in Directive E to serve as the basis for the determination of a need to pursue investigations under Directive F. Therefore, Board staff need to review the work plan required in Directive F before Dischargers conduct any refined investigation work under Directive G, (3) reliance on other programs’ data only does not provide a thorough and expedited assessment for the reasons listed in the previous paragraph, and (4) a submittal every 5 years is not satisfactory because the Dischargers need to investigate causes of WQO exceedances and beneficial uses impairments as soon as they</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p><u>identify remedies as deficient</u> through compliance with Directives E and F.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7s	Finding I	No indication has been made that the remedies were insufficient.	Data gaps have been taken into account during pilot project development and implementation planning to date. No indication has been made that the remedies were insufficient; the focus has appropriately, and with the approval of the RWQCB, remained on managing nutrient loading in the watershed and the lake, not other pollutants. The RI/FS process is not intended to address and resolve all potential issues at a site, it is intended to collect available data and information (the RI portion) and assess the feasibility of solutions (the FS portion). The feasibility study part of this process identifies remedies based on efficacy, cost, and social acceptability. The assertion that remedies have changed is correct insofar as additional information (including pilot study results and investigation reports submitted to the Board which addressed critical data gaps) has been collected and evaluated to fine-tune the remedies identified in the RI/FS. Please also reference Appendices B, C, and D [of comment package 7].	<p>San Diego Water Board staff disagree with this comment. CDC, the City of San Marcos, the City of Escondido, VWD, and the County of San Diego submitted the RI/FS Report to the San Diego Water Board in 2016. (See Finding I of the TCAO.) On December 2, 2020, Board staff sent a letter to the Dischargers that expressed concerns regarding 1) the lack of pilot studies in the Watershed, 2) modifications to the SWS remedy without supporting justification, 3) the lack of solutions to address sources of nutrients in the Watershed, and 4) data gaps in the human health and ecological risk assessment. The Dischargers have not fully addressed Board staff's concerns.</p> <p>Board staff have not indicated that the proposed Lake remedies are insufficient. However, it is important for the parties to address the above concerns. Addressing these concerns will provide assurances to the Board and public that the proposed remedies are sufficient to address the impairments at the Creek and Lake, ensure public health is protected, restore Creek and Lake beneficial uses, and meet WQOs for the Creek and Lake.</p>

<b>Comment No.</b>	<b>TCAO Section</b>	<b>Comment Summary</b>	<b>Abbreviated Comment Description</b>	<b>San Diego Water Board Staff Response</b>
<b>7t</b>	N/A	Watershed Remedial Objectives	[See Appendix B of comment package 7, Supporting Document 5 pages 503 to 516.] The Phase I MS4 Permit Responsible Agencies for the Upper San Marcos Creek watershed are currently implementing a suite of different strategies through their jurisdictional programs to address nutrient concentrations that are much more inclusive than street sweeping and general stormwater BMPs. The joint parties respectfully request that ongoing and future strategy implementation efforts by the co-permittees are represented and are considered in context with the CAO directives. The joint parties also believe that the ongoing WQIP and RI/FS processes together are meeting the objectives of the Storm Sewer Systems Investigation and Mitigation Plan and subsequent reporting directives. The joint parties respectfully request to further collaborate with the San Diego Water Board and seek to address any potential perceived data gaps through ongoing existing efforts.	San Diego Water Board staff disagree with this comment. Board staff explain in responses to comments 6b, 7b, and 7v that the WQIP has been foundational to the efforts in the Watershed, but additional work is necessary. Board staff did not modify the TCAO in response to this comment.
<b>7u</b>	Finding Q	CEQA Document	Remedial Action Objectives and remedies identified in the RI/FS were approved by the Board, and were not premature nor speculative. The parties respectfully request that The RWQCB allow the parties to update and resubmit the Draft CAPs	San Diego Water Board staff agree with this comment except regarding the CEQA-related statements. Finding Q in the TCAO addresses the San Diego Water Board's CEQA responsibilities in considering the adoption of the TCAO. Finding Q clarifies that CEQA review of

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>after a discussion so the edits and updates can be targeted. The joint parties request that the updated CAPs be presented to the Board and that the CEQA process be re-opened at the beginning of Q2 of 2024, as remedial activities cannot be started until the CEQA document is certified.</p>	<p>the TCAO at the time of consideration would be premature and speculative because additional information is necessary to evaluate the Dischargers' proposed remedies and the environmental impacts of those proposed remedies. Thus, adoption of the TCAO is exempt from CEQA because the requirements of the TCAO to submit plans will not cause a direct or indirect impact on the environment.</p> <p>Regarding the use of existing plans, see response to comment 6e.</p> <p>Regarding CEQA, please see responses to comments 6g and 6t.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7v	<p>Directives A.1 and A.2 [revised to Directives A.3 and A.4]</p>	<p>Directives A.1 and A.2 are duplicative of efforts already being conducted through the MS4 Permit and implementation of the WQIPs.</p>	<p>Storm sewer system outfalls within the Upper San Marcos Creek watershed are routinely monitored and assessed for several priority pollutants under the MS4 Permit requirements, including all 303(d) listed compounds. Additionally, numeric goals and objectives for Upper San Marcos Creek watershed were specifically developed towards Lake San Marcos and the RI/FS Report. Progress towards these goals and other storm sewer system assessments are reported annually and submitted to the Board as part of the WQIP</p>	<p>San Diego Water Board staff disagree that Directives A.1 and A.2 are duplicative of Phase I MS4 Permit requirements and implementation of the WQIPs. The requirements of the TCAO are specifically tailored to address the impairments in the Lake, Creek, and Watershed. Implementation of the TCAO will address these impairments in an efficient and timely manner. Regarding the Phase I MS4 Permit, also see response to comment 6b.</p> <p>The comment alleges that implementation of the Phase I MS4 Permit and the WQIP's iterative</p>



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>Annual Reporting Process. It is our desire to address any potential perceived data gaps in the watershed through ongoing existing and future efforts in lieu of this directive.</p>	<p>process will be sufficient to address the impairments at the Lake, Creek, and Watershed. Despite years of implementing requirements of the Phase I MS4 permit and associated WQIPs, the Lake, Creek, and Watershed beneficial uses remain impaired. Board staff are concerned that additional time to implement the Phase I MS4 permit will not address the impairments in a timely manner for reasons explained in responses to comments 6b and 7b. Further, the Phase I MS4 Permit requirements are insufficient on their own to achieve the source identification and control goals of the TCAO because (1) the MS4 monitoring locations are too few and too infrequently monitored to identify sources of waste in the Watershed; (2) the MS4 monitoring locations are downstream of major sources identified in the RI/FS Report and likely insufficient and inadequate to identify upstream sources; and (3) monitoring and assessment under the WQIP does not include routine sediment sampling and analysis for the Creek and Lake.</p> <p>While the Dischargers may rely on the existing efforts in the RI/FS Report Watershed Model, the Dischargers should sample storm sewer system components upstream of the Lake to identify significant contributors of waste to the MS4. Identifying upstream sources of waste to the MS4 will allow the Dischargers to consider</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>implementation of mitigation measures to control waste discharges. Controlling upstream sources of waste before implementing remedial actions will help ensure that the remedial actions are successful over time.</p> <p>While the Phase I MS4 Permit monitoring data is likely insufficient and inadequate to investigate the sources in the Watershed, the data will still be useful and existing monitoring locations can be incorporated into the monitoring requirements of the TCAO. Data from the Phase I MS4 Permit stations can be used to comply with Directive A.1, which requires the Dischargers to submit a Storm Sewer Systems Investigation Plan. However, to rely on the Phase I MS4 Permit data, the Dischargers should explain how the data helps identify and characterize waste and waste sources. As explained in detail in response to comment 6b, the goals mentioned in the WQIP have proved insufficient and inadequate to reduce nutrient loading to the Lake; the Lake and Creek remain listed as impaired on the Integrated Report 303(d) List.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7w	Directives A.1.a, A.1.b, A.1.c, and A.1.d <b>[revised to Directives A.3.a, A.3.b, A.3.c, and A.3.d]</b>	The work has already been done or is underway. See Appendices B, C, and D of comment package 7, Supporting Document 5 pages 503 to 527.	<p>Directive A.1.a: Many conceptual site models have been considered at various spatial scales. See Appendices B, C, and D.</p> <p>Directive A.1.b: Many maps have been produced (including those in the RI/FS). See Appendices B, C, and D.</p> <p>Directive A.1.c: Municipal agencies have conducted many watershed evaluation studies and implemented a comprehensive monitoring program. See Appendices B and C.</p> <p>Directive A.1.d: Municipal agencies have conducted many watershed evaluation studies and implemented a comprehensive monitoring program. Moreover, agricultural sources, which are a known source, are subject to additional regulations through the source control program which is currently underway. See Appendices B, C, and D.</p>	<p>San Diego Water Board staff disagree with these comments.</p> <p>Regarding Directive A.1.a, see responses to comments 6d, and 7ai.</p> <p>Regarding Directive A.1.b, the Dischargers may use existing maps if they are appropriately scaled, and detailed to help the Dischargers identify, characterize, and mitigate waste and waste sources in the Watershed that drain to the Lake and Creek outfalls.</p> <p>Regarding Directive A.1.c, see response to comment 7r.</p> <p>Regarding Directive A.1.d, see responses to comments 6b, 7b, 7c, 7r, and 7v.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7x	Directive A.1.f.i <b>[Board staff removed this Directive]</b>	Please remove requirement from the TCAO that requires maintenance of BMPs (i.e., removal and characterization of residual sediments in the Storm Sewer System).	Per the Phase I MS4 Permit, each co-permittee implements a schedule of operation and maintenance activities for MS4 and related structures. MS4 structures such as storm drain inlets, linear MS4 conduits, open channels and detention basins are inspected and cleaned accordingly by appropriate staff. Existing and future programs described in Appendix B, C, and D can be used to address this request and any associated data gaps. Please remove this requirement from the TCAO.	San Diego Water Board staff agree.  Board staff revised the TCAO to remove Directive A.1.f in response to this comment. Further, Board staff revised Directive A.2.b to require the reporting of the Dischargers' recommendations regarding mitigation measures: "iv. Evaluation of the effectiveness of existing strategies, BMPs activities, and Storm Sewer System maintenance schedules to prevent waste in the Watershed from entering the Lake and Creek waters. v. Recommendations for additional investigation activities, modification of existing strategies, BMPs activities, and Storm Sewer System maintenance schedules, and mitigation activities, if deemed necessary. Mitigation can include: a. Installation of structural treatment control BMPs, where necessary and possible, in the Storm Sewer Systems to prevent the entry of waste into the storm drains to the maximum extent possible. b. Maintenance of newly installed BMPs, as necessary, to prevent degradation of their performance...." Finally, Board staff added Directive D.2 "Mitigation implementation" to require the Dischargers to implement recommendations in Directive A.2.b prior to implementing any remedy in Directive A.3.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7y	Directives A.1.f and A.1.g [revised to Directive A.3.f]	Remove these requirements: Installation of structural treatment control BMPs, where necessary and possible, in the Storm Sewer Systems to prevent or mitigate the entry of waste into the storm drains to the maximum extent possible. Maintenance of BMPs, as necessary, to prevent degradation of their performance. The Plan shall include a reasonable schedule for completion of all activities and submission of a final Storm Sewer Systems Investigation and Mitigation Report, described in Directive B.2.	Existing and future programs described in Appendix B, C, and D can be used to address this request and any associated data gaps. Remove these requirements from the TCAO.	See response to comment 7x for Directive A.1.f. San Diego Water Board staff disagree with removing Directive A.1.g because the activity completion schedule is for activities the Dischargers will propose in the work plan required under Directive A.1. The activity completion schedule is absent from programs described in Appendices B, C, and D. Board staff did not modify the TCAO in response to this comment.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7z	Directive A.2 [revised to Directive A.4]	Remove requirements in Directive A.2.a and A.2.b since this work is already being done under the MS4 Permit and WQIP	Programs are already being implemented through the MS4 Permit and WQIP. Monitoring and assessment programs are in place to analyze and characterize discharges from MS4 outfalls. Non-stormwater discharges and those carrying pollutants are prioritized for further investigations and follow up. Because there are existing O&M programs in place for the storm sewer systems, and these are referred to in the MS4 and the WQIP plans, there is no need for an additional report.	<p>San Diego Water Board staff disagree that Directive A.2 should be removed. Activities associated with the Phase I MS4 Permit are insufficient to prevent excessive waste from reaching the Creek and Lake. However, data and information collected under the Phase I MS4 Permit and WQIP can be used, in conjunction with other data, in the Storm Sewer System Investigation Plan (Directive A.1). To rely on the Phase I MS4 Permit and WQIP data, the Dischargers should demonstrate that the data are appropriate to address identify and characterize waste and waste sources in the Watershed that drain to the Lake and Creek outfalls.</p> <p>Existing O&amp;M programs referenced in the WQIP do not require the same data collection and abatement requirements as the TCAO. Thus, existing reports are insufficient to meet the Directives requirements of the TCAO. See also responses to comments 6b, 7b, and 7v.</p> <p>San Diego Water Board staff did not modify the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7aa	Directive A.2.b [revised to Directive A.4.b]	Modify Directive A.2.b to include the possibility of using existing data.	If this requirement will remain in the TCAO the parties request that modifications be made to the language so that existing data and information collected through the MS4 Permit and WQIP can be summarized and assessed to provide the necessary information to address perceived data gaps. MS4 outfalls and Upper San Marcos Creek have been routinely monitored under existing programs since 2016. Data is assessed annually and submitted as part of the WQIP annual report. A “Storm Sewer System Investigation” Report could be compiled using the wealth of existing data and information already collected. This report could be tailored specifically to answer any questions the Waterboard may have. We would request additional discussion with the Waterboard on the questions they would like answered.	San Diego Water Board staff disagree with this comment. See responses to comments 6b, 7b, 7v, and 7z. Board staff will review the Storm Sewer Systems Investigation Report and work collaboratively with the Dischargers to ensure the report is complete and appropriately informs the Board and the Dischargers of: (1) sources and magnitude of waste, (2) the effectiveness of existing strategies, BMP activities, and Storm Sewer System maintenance schedules, and (3) whether additional investigation activities, modification of existing strategies, BMP activities, Storm Sewer System maintenance schedules, and mitigation activities, are necessary.  Board staff did not modify the TCAO in response to this comment.
7ab	Directive A.2.b [revised to Directive A.4.b]	Suggestions of language modifications to Directive A.2.b	Storm Sewer Systems Investigation and Mitigation Report. The Dischargers shall submit a Storm Sewer Systems Investigation and Mitigation Report (Report) to the Board no later than 6 months from the effective date of this Order. The Report shall include the following: i. Description of sampling protocols implemented through current monitoring programs ii. Location, type, and number of samples	San Diego Water Board staff agree with some of the proposed modifications and revised the TCAO as follows: “2. Storm Sewer Systems Investigation and Implementation and Report. a. Implementation. The MS4 Dischargers shall implement the Storm Sewer Systems Investigation and Plan according to the Activity Completion Schedule described in Directive A.3.f. b. Storm Sewer Systems Investigation and Report. The MS4 Dischargers shall submit the

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>shown on detailed site maps and tables.</p> <p>iii. Concentration and trends of each constituent monitored in receiving waters and MS4 outfalls.</p> <p>iv. Evaluation of the effectiveness of strategies and BMP activities implemented within the USMC HA.</p> <p>vii. Recommendations for additional investigation and mitigation activities to be implemented through the WQIP adaptive management process, if deemed necessary.</p>	<p>Storm Sewer Systems Investigation and Report (Report) to the Board no later than 60 calendar days after the MS4 Dischargers have implemented the last field activity. The Report shall include the following:</p> <ul style="list-style-type: none"> <li>i. Sampling protocols implemented.</li> <li>ii. Location, type, and number of samples shown on detailed site maps and tables.</li> <li>iii. Concentration and interpreted lateral extent of each constituent.</li> <li>iv. Evaluation of the effectiveness of existing strategies, BMPs activities, and Storm Sewer System maintenance schedules to prevent waste in the Watershed from entering the Lake and Creek waters.</li> <li>v. Recommendations for additional investigation activities, modification of existing strategies, BMPs activities, and Storm Sewer System maintenance schedules, and mitigation activities, if deemed necessary. Mitigation can include: <ul style="list-style-type: none"> <li>a. Installation of structural treatment control BMPs, where necessary and possible, in the Storm Sewer Systems to prevent the entry of waste into the storm drains to the maximum extent possible.</li> <li>b. Maintenance of newly installed BMPs, as necessary, to prevent degradation of their performance.”</li> </ul> </li> </ul> <p>Finally, Board staff added Directive D.2 “Mitigation implementation” to require the</p>



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				Dischargers to implement recommendations in Directive A.2.b before implementing any remedy.
7ac	Directives A.2.b.i, A.2.b.ii, and A.2.b.iv through A.2.b.vii [Directives A.2.b.i and A.2.b.ii revised to Directives A.4.b.i and A.4.b.ii, Board staff removed Directives A.2.b.iv and A.2.b.v, Directives A.2.b.vi and A.2.b.vii revised to Directives A.4.b.v.a and A.4.b.v.b]	Modify Directive A.2.b.	Existing and future programs described in Appendices B, C, and D can be used to address this request and any associated data gaps. Please remove these requirements from the TCAO.	San Diego Water Board partially agree with comment and revised the TCAO Directives A.2.b.iv through A.2.b.vii (see response to comment 7ab). Regarding the use of existing programs described in Appendices B, C, and D, see responses to comments 6b, 7b, 7c, 7v, and 7z.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7ad	Directive A.2.b.iii [revised to Directive A.4.b.iii]	Revise Directive A.2.b.	iii. Concentration and interpreted lateral extent of each constituent. Request to modify this requirement to assess the concentration of each constituent only. It would be difficult to impossible to define the lateral extent of constituents, especially during wet weather conditions. Parties can only sample MS4 outfalls and receiving water locations that are accessible and not on private property.	<p>San Diego Water Board staff disagree with this comment.</p> <p>To comply with Directives A.1.c and A.1.d, the Dischargers shall propose sampling locations near suspected waste sources at intervals adequate to detect the highest contributor(s) in these areas of the Watershed. This sampling design will allow the Dischargers to identify the lateral extent of each constituent near suspected waste sources that are accessible and report this information through compliance with Directive A.2.b.iii. The Dischargers are encouraged to work collaboratively with any necessary parties to achieve the goals of the TCAO. The San Diego Water Board can provide assistance to facilitate data collection, as appropriate.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7ae	Directive A.3.a [revised to Directive A.1.a]	Remove Directive A.3.a.	An HHRA was prepared and available as Appendix AK of the RI/FS; data gaps are acknowledged. However, the RI/FS cites that much of the methodology is conservative and overestimates risk. The HHRA notes that exposure to “golf course workers [and] golfers” were “considered to be insignificant, and less than those associated with recreational activities at the Lake.” Recreational users and recreational anglers were assessed regarding	<p>San Diego Water Board staff disagree with this comment.</p> <p>The Dischargers have not reported to Board staff any cyanotoxin results for the analysis of SMGC’s irrigation sprinkler water during an algal bloom at the Lake. Further, the RI/FS Report HHRA recommends follow-up water column sampling to determine cyanotoxins’ concentrations in Lake water; however, the Dischargers did not collect these samples. The</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>“incidental ingestion and dermal contact with sediments, incidental ingestion and dermal contact with surface water, and consumption of fish caught within the Lake” and found that there were “not likely” to be adverse health effects to those users for those exposure modes. It is unlikely that exposure of residents would be greater than that of golf course workers or recreational users at the lake. If the directive is based on cyanotoxins, we further believe that were data available, standards are insufficient to develop an HHRA. The State of California OEHHA has cited a drinking water standard for one common cyanotoxin (microcystin) and acknowledges aerosol exposure to recreational users of water bodies, but a relevant standard has not been promulgated for the exposure routes contemplated in this directive, excepting those already assessed in the RI/FS. We request this directive be removed from the TCAO.</p>	<p>above missing data prevent the Dischargers from fully assessing risk to SMGC workers, residents living near the SMGC, and Lake recreational users. Therefore, Board staff disagree with not evaluating the risk to residents living next to the SMGC, as further explained in responses to comments 6l, 6o, and 6q.</p> <p>Relevant standards are discussed in response to comment 6q.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7af	Directive A.3.b [revised to Directive A.1.b]	Remove this Directive.	The State of California OEHHA has cited a drinking water standard for one common cyanotoxin (microcystin), and calculated “suggested” action levels for three classes of cyanotoxins. However, a HHRA would restate uncertainties already stated in the RI/FS assessment (Appendix AK), and in	<p>San Diego Water Board staff disagree with this comment.</p> <p>Board staff disagree with the statement that “conclusions of an HHRA would not provide any value to stakeholders and remedies would not change as a result of any assessment.” An</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>addition be subject to spatiotemporal variability in Lake conditions. Response actions including public notice postings and manual removal of algal mats are already undertaken preemptively and exceed State recommendations/guidelines. Conclusions of an HHRA would not provide any value to stakeholders and remedies would not change as a result of any assessment. We request this directive be removed from the TCAO.</p>	<p>HHRA complementary of the RI/FS Report HHRA is critical to protect public health as it will inform Lake recreationists and residents if/when the cyanobacteria blooms, often present at the lake, are producing toxins at harmful concentrations (also see response to comment 6c). Indeed, public posting notices do not contain quantitative and qualitative toxin data. (Also see responses to comments 6l, 6o, and 6q). Further, MARU staff note that removing mats and/or disturbing planktonic blooms can cause toxins to be released from the cells, which remain in the water after the visible bloom is gone. Finally, see Board staff suggestions related to uncertainties due to spatiotemporal variability in response to comment 6q.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7ag	<p>Directive A.3.c [revised to Directive A.1.c]</p>	Remove Directive A.3.c.	<p>A comprehensive evaluation of sediments was produced and generally indicated a lack of toxicity, with the exception of areas with high levels of ammonia in sediments. While data gaps exist, effects of eutrophication (such as high ammonia) can be assumed to be dominant during much of the year and present risk. However, other sources of risk “appear to be limited” and hazard quotients (when present) “were generally low” (RI/FS Appendix AK). However, eutrophication remains a</p>	<p>San Diego Water Board staff disagree with this comment.</p> <p>Data gaps exist regarding the causes of toxicity to biota in Lake and Creek sediments as explained in responses to comments 6c, 6i, and 6p. Board staff have data regarding baseline Creek biological health conditions (i.e., CSCI scores) that can be used by the Dischargers to show improvements in Creek water and sediment quality conditions. Remedies may change depending on the constituent(s) causing</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>condition at the lake, and the risk previously identified (high ammonia) can be assumed to be present and difficult to distinguish from low level effects on in-Lake sediment-dwelling biota. As this directive would not provide new information to stakeholders, and remedies would not change regardless. We request this directive be removed from the TCAO.</p>	<p>toxicity in Creek and Lake sediments. Therefore, the Dischargers need information obtained through compliance with Directive A.3.c, and more broadly with Directive A.3.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7ah	<p>Directive A.3.d [revised to Directive A.1.d]</p>	<p>Duplicative efforts in the Watershed.</p>	<p>The San Marcos Creek Specific Plan Project, which is directly upstream of the lake is currently under a Clean Water Act Section 401 Water Quality Certification (401 permit) to mitigate impacts to wetland and non-wetland waters. The 401-permit required to develop compensatory mitigation and long-term management of the mitigation areas. Baseline data collected for the project indicates that SWAMP ratings are poor and IBI/BMI scores are low [i.e., degraded habitat for benthic communities]. Proposed wetland mitigation measures for the project include approximately 64 acres of wetland establishment, reestablishment, enhancement, preservation, and buffers. In addition to the improvements in wetlands acreage and biological functions and services, the project mitigation includes mitigation measures that will result in improvements to water quality. The project</p>	<p>San Diego Water Board staff disagree with this comment.</p> <p>The San Marcos Creek Specific Plan Project is focused on a limited stretch of Creek (approximately 2 miles) and associated CSCI/IBI/BMI scores are and will only be representative of that part of the Creek. However, the TCAO identifies the Creek flowing through the entire Watershed as a water body the Dischargers need to protect. Therefore, Board staff recognize that the efforts described in the comment may improve Creek health conditions in that segment, but these efforts will be insufficient on their own to comply with the TCAO Directives. Therefore, Board staff disagree that the TCAO requires a duplicative effort, rather, it requires the Dischargers to provide complementary efforts.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			is expected to result in an overall improvement to water quality through the improvement in the overall SWAMP rating over time from poor to good and IBI/BMI scores. It is expected that the cumulative effect of the project will result in less sediment input (lower turbidity and suspended solids), lower levels of nutrient pollutants (generally nitrogen, phosphorus, and bacteria), and an overall decrease in all other common urban runoff pollutants (hydrocarbons, metals, etc.).	
7ai	Directive A.3.e [revised to Directive A.1.e]	Use existing documents.	Many CSMs have been generated and presented to the San Diego Water Board. Notwithstanding the above request that risk assessment directives be removed from the CAO, existing documents are sufficient to provide a model basis.	San Diego Water Board staff concurs. If a CSM already exists, Board staff invite the Dischargers to include it in the Work Plan required by Directive A.3. However, the Dischargers must verify the existing CSM is appropriate for use in the current effort (e.g., considers waste entering the Creek and Creek receptors).  Board staff did not modify the TCAO in response to this comment.
7aj	Directive A.3.f [revised to Directive A.1.f]	Use existing documents.	Many efforts are underway and SAPs exist for water and sediment collected from the Lake and Creek, and apply to other monitoring. Notwithstanding the above request that risk assessment directives be removed from the CAO, existing documents are sufficient to accomplish sampling and analysis.	San Diego Water Board staff concurs. If a SAP already exists, Board staff invite the Dischargers to include it in the Work Plan. However, the Dischargers must verify the SAP is appropriate for use in the current effort.  Board staff did not modify the TCAO in response to this comment.

<b>Comment No.</b>	<b>TCAO Section</b>	<b>Comment Summary</b>	<b>Abbreviated Comment Description</b>	<b>San Diego Water Board Staff Response</b>
7ak	Directive A.3.g [revised to Directive A.1.g]	Use existing documents.	Many efforts are underway and QAPPs exist for water and sediment collected from the Lake and Creek, and apply to other monitoring. Notwithstanding the above request that risk assessment directives be removed from the CAO, existing documents are sufficient to accomplish this directive.	San Diego Water Board staff concur. If a QAPP already exists, Board staff invite the Dischargers to include it in the Work Plan. However, the Dischargers must verify the QAPP is appropriate for use in the current effort.  Board staff did not modify the TCAO in response to this comment.
7al	Directive A.3.h [revised to Directive A.1.h]	Directive A.3.h should be clarified.	Many HSPs have been prepared for efforts described in Appendices B and C, and for other Lake and Creek investigations and studies. This directive should be clarified. HSPs are not work plans, and several items (standard operating procedures, for example) are included in SAPs and/or QAPPs, though the level of detail may differ across existing programs. With regard to HSP approvals, the normal standard is for an employer/consultant/subcontractor to provide a safe work environment for employees.	San Diego Water Board staff encourage the Dischargers to rely on and revise existing plans, to the extent appropriate, to comply with Directive A.3.h.  Board staff did not modify the TCAO in response to this comment.
7am	Directive A.4 [revised to Directive A.2]	We request this directive be removed from the CAO.	The purpose of risk assessment does not include recommendations or management actions, but those components of the directives have been accomplished within the RI/FS process. The risk assessment was completed by appropriately qualified practitioners and released to the public, comments solicited, and the RI/FS recommendations and management actions approved by the RWQCB (and	San Diego Water Board staff partially agree with this comment. Board staff disagree with removing Directive A.4 and the statement that the Dischargers adequately completed the risk assessments. Board staff received complaints from Lake residents after the RI/FS HHRA was submitted. Residents requested to know if Lake water being sprayed on the SMGC contains harmful levels of cyanotoxins. Therefore, a

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>remains available to the public on Geotracker). In addition, several public workshops and RWQCB hearings have been held. The public will again have the opportunity to comment as part of the CEQA process, which will also include a public hearing. This directive has been completed; we request this directive be removed from the CAO.</p>	<p>supplementary HHRA needs to include a cyanotoxin-related risk assessment (i.e., Directives A.3.a and A.3.b). (Also see response to comment 6o.) Board staff will invite the public to review and comment on the results of the supplementary HHRA prior to the Dischargers selecting and implementing remedies. Further, as explained in responses to comments 6c, 6i, 6p, and 6q, the Dischargers have not found the cause(s) of Creek and Lake sediment toxicity. Finally, risk assessments results will inform the Dischargers of the appropriateness of the selected remedial strategy (e.g., integration of the SWS in the strategy) and appropriateness of current SMGC irrigation practices.</p> <p>Considering that (1) Dischargers never evaluated the appropriateness of current SMGC irrigation practices or conducted additional TIEs on Lake sediments and any TIEs on Creek on sediments (see responses to comments 6c, 6i, 6p, and 6q), (2) Board staff have received citizens' complaints since 2017 that have not been addressed by the Dischargers to the date of this response to comments (i.e., Dischargers did not collect and analyze samples to evaluate the presence of cyanotoxins in aerosolized irrigation water) (3), that Board staff do not anticipate initiating the CEQA process until Dischargers comply with Directive D which</p>



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>depends on findings in the report required in Directive A.4, and (4) that evaluating a potential threat to human health involves multiple cyanotoxin sampling events throughout at least one or two bloom seasons (i.e., one or two years); Dischargers need to comply with Directive A.4 to provide Board staff, the Board, and the public, information on this issue <u>expeditiously</u>. The Dischargers should have sufficient time and evidence to adequately respond to the public's concerns regarding the risk assessment. For this reason, Directive A.4 requires at least one public workshop in the City of San Marcos to present the risk assessment results to the public.</p> <p>Board staff did not revise the TCAO in response to this comment.</p>
7an	Directive B.1	The joint parties do not believe there is a basis for additional risk assessment efforts since proposed directives in the TCAO would not result in any change to proposed targeted remedies.	A CSM was prepared for both the Creek and the Lake as part of the prior RI/FS work. Both Human Health and Ecological screening level risk assessments were performed using that CSM as part of the RI/FS process. The contaminants of concern that were considered in these analyses included all of those that are listed in the TCAO. The CSM and the results of the Human Health and Ecological risk assessments were presented in the Final RI/FS Report dated September 30, 2016. The RWQCB reviewed that report, provided	<p>San Diego Water Board staff agree that it is inappropriate to base remedial action feasibility solely on results of risk assessment results. The Dischargers can rely on existing plans to comply with the TCAO, as explained in response to comment 6e. However, the basis for the need for supplementary risk assessments and a Feasibility Analysis are explained in responses to comments 5h, 6c, 6d, 7f, 7k, and 7s.</p> <p>Board staff revised the TCAO to change the deadline to submit the Feasibility Analysis of Directive B to <b>180</b> days after San Diego Water</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>comments, and approved it on June 5, 2017. However, the RI/FS incorporated not only the elements described in this directive (as were required, and broadly inclusive of protection of human health and the environment), but also cost, efficacy, and social acceptability. It is inappropriate to base remedial action feasibility solely on results of risk assessment results.</p> <p>The joint parties do not believe there is a basis for additional risk assessment efforts since proposed directives in the TCAO would not result in any change to proposed targeted remedies. We recommend that additional risk assessment investigations that the RWQCB may want to have performed, be done so, at its direction without re-opening and repeating the RI/FS process. Furthermore, 120 days is insufficient time to produce a Feasibility Analysis – the RI/FS process took many years to complete, and the CEQA process has taken 7 years to date and is incomplete.</p>	<p>Board staff approve the Storm Sewer System(s) Investigation Report of Directive A.4.</p>
7ao	Directive B.2	<p>Evaluation of the use of greener cleanup methods and technologies have been broadly achieved.</p>	<p>A comparison between remedies selected through the RI/FS process and the EPA document cited indicates that the guidance has broadly been achieved. Opportunities to incorporate additional “Greener Cleanup” components can be evaluated as CAPs</p>	<p>San Diego Water Board staff disagree with the Dischargers’ proposal to conduct the “Green Cleanup Methods and Technology” evaluation under Directive D (i.e., RAP preparation and implementation) instead of Directive B. (See response to comment 6d.) The Dischargers must conduct this evaluation under the Feasibility</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			[under Directive D] are generated and implemented.	<p>Analysis (i.e., Directive B) for all remedial alternatives they will evaluate because the Feasibility Analysis is where the Dischargers will evaluate cleanup technologies. The Dischargers will describe in the RAPs how they will implement remedies chosen in the Feasibility Analysis. It is the intention that the Dischargers conduct the “Green Cleanup Methods and Technology” evaluation during the Feasibility Analysis to use this evaluation to help choose appropriate cleanup technologies, which will then be described in the RAPs.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7ap	Directive B.3	We request that the Board remove this requirement as it is duplicative.	The DBSA RI/FS included a comprehensive Feasibility Analysis that was approved by the San Diego Water Board. We request that the Board remove this requirement as it is duplicative. In addition, the production of corrective action plan documents (the proposed/preferred pathway) provides an opportunity to evaluate the specific technical and economic feasibility of remedies. Finally, if the expansive reevaluation scope of the TCAO is retained, 120 days is insufficient time to produce such an effort (the RI/FS took many years to prepare, and the CEQA document has been in preparation for five years and is incomplete).	<p>San Diego Water Board staff disagree with removing this requirement of Directive B. Board staff requested these analyses be conducted in several oral and written communications with the Dischargers (see response to comment 7s). The Dischargers have not fully addressed Board staff’s concerns. Therefore, Board staff cannot fully evaluate the changes in remedies proposed since the submittal and approval of the RI/FS Report.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7aq	Directive D.1.a	We recommend that any modifications to the Preferred Remedial Approach that the RWQCB would like to consider at this point in the process be thoroughly vetted, and if warranted, be implemented under an Adaptive Management approach to the current remedy.	As noted above, after extensive investigation and assessment, a Remedial Action Plan was developed in conjunction with the prior RI/FS process. That plan included the following five separate components or activities: Supplementary Agricultural BMPs (Alternative W3), Stream Restoration (Alternative W4), Diffused Aeration (Alternative L2), Flocculation/Settling/Phosphorous Inactivation (Alternative L4) and Selective Withdrawal (Alternative L6). The Final RI/FS Report identified these activities as the Preferred Remedial Alternative and provided details for each. The RWQCB reviewed the Final RI/FS Report setting forth the Preferred Remedy, provided comments, and approved it on June 5, 2017. We recommend that any modifications to the Preferred Remedial Approach that the RWQCB would like to consider at this point in the process be thoroughly vetted, and if warranted, be implemented under an Adaptive Management approach to the current remedy.	<p>San Diego Water Board staff agree with having in-depth analysis of remedial alternatives, which is included in the TCAO under Directive B. Further, Board staff included an “adaptive management process” through Directives A.1, A.2, B, C, D, E, F, and G. Through compliance with Directives A.1 and A.2, the Dischargers will identify waste sources and propose strategies to stop waste from reaching the Creek and Lake waters. Through compliance with Directives B, C, D, E, F, and G, the Dischargers will: (1) propose and implement remedies, (2) monitor and report the effects of remedy implementation, (3) evaluate remedy effectiveness with regards to the remediation goals, (4) if remedies are deficient, propose an investigation of the causes of deficiencies, and (5) recommend corrective actions to improve the remedial strategy.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
7ar	Directive D.1.b through D.1.k	Remove Directives D.1.b through D.1.k.	Since this was completed in the approved RI/FS and furthered with pilot testing and the preparation of Draft CAPs, we request removing this from the directive.	San Diego Water Board staff disagree with removing these Directives. However, the Dischargers can build upon existing reports and plans, as appropriate, as explained in response to comment 6e.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				Board staff did not modify the TCAO in response to this comment.
7as	Directive D.1.l and D.1.m	We request this directive be modified.	The Joint Parties agree that monitoring (and reporting) is an essential component of remedy implementation. Several remedies will be subject to permitting (e.g., for groundwater discharge and alum application) and/or CWA 401 certification (for dredging) and thereby incorporate permit compliance monitoring and other requirements that are not anticipated to be known simultaneously early in the permitting process. A single, unified performance monitoring plan is infeasible. In addition, some of the language in the TCAO is unclear: for example, there are no California lake standards for biota (unlike streams and coastal waters), and the approved RI/FS remedial action objectives are distinct from WQOs. We request that this directive element be updated to reflect that remedial efforts will be accomplished on different time schedules and monitoring programs will be responsive to regulatory agency requirements.	<p>San Diego Water Board staff partially agree with this comment. Board staff agree that implementation of some of the remedies may be subject to permitting. However, permit compliance monitoring aims at ensuring compliance with permits, not compliance with the TCAO (i.e., confirm the Lake and Creek/Watershed remedies are effective and remediation goals are achieved). Therefore, the Dischargers can use permit compliance monitoring plans if the Dischargers can demonstrate these plans are appropriate to confirm the Lake and Creek/Watershed remedies are effective and remediation goals are achieved. Board staff agree that a unified performance monitoring plan is infeasible. This is why the TCAO language in Directive D.1 describe several RAPs.</p> <p>Board staff did not modify the TCAO in response to this comment.</p> <p>Regarding lake standards for biota, Board staff recommend using TIEs and/or EDAs. (See responses to comments 6c, 6p, and 6q.)</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
7at	Directive E	Unclear Directive and duplicative.	<p>“Progress reports have been submitted to the RWQCB as the pilot test activities described in the Corrective Action Plans have been completed. Most recently, these included the Lake San Marcos Bridge Document which was submitted on March 14 of 2023 and the Aeration Pilot Study Report that was submitted in December of 2022., the Lake San Marcos Aeration System Revised Study Workplan that was submitted on March 7 or of 2022, and the Lake San Marcos Aeration System Diffuser Test Monitoring and Observations report which was submitted on October 29 or 2021. Although the primary purpose of some of these submittals was to outline and refine the scopes of work associated with the individual remedial components that were identified as the Preferred Approach in the RI/FS Report as part of an adaptive management approach, they still provided updates on the status and progress of the remedial activities. The Parties anticipate they will continue to provide periodic progress reports as directed by the RWQCB.”</p>	<p>Directive E requires the reporting of remedy performance through the submittal of semi-annual progress reports and is a logical step after Directive D.2 (i.e., remedy implementation). No other directive requires reporting of this information. The reports the Dischargers will submit to comply with Directive E will serve as a basis for the determination of whether the Dischargers need to prepare an Exceedance Characterization Work Plan (i.e., Directive F). Board staff recognize that the submittals referenced in the comment have provided relevant performance information so far and Board staff anticipate the elements required in Directive E will be similar.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
<b><i>Comment 8: LSM Golf Course Partners LLC, October 23, 2023 [For full text of comment, refer to Supporting Document 5, pages 569 to 531]</i></b>				
8	Finding C.2	Portions of Finding C.2 are unsubstantiated. There is insufficient basis for listing LSM Golf Course Partners LLC as a Responsible Party.	Data have not been presented that demonstrate that total phosphorus, TSS, and ammonia from area storm drains are the “highest,” nor that any such concentrations have any linkage with SMGC operations. Concentration and loading data were found to be variable, and modeling indicates that, on a watershed basis, potential concentrations [originating at the St Mark Golf Course] are about 1 percent of the total. Neither of these conditions are sufficient bases for listing LSM Golf Course Partners LLC as a discharger for a problem that is appropriately scaled at the watershed level, and for which proposed directives are scaled at the watershed level. Watershed contributions of nutrients are far greater for the watershed in general than for golf courses in the watershed, which constitute 4 percent of the total nutrient loading for ALL golf courses within the watershed (of which there were 4).	Board staff have reviewed LSM Golf Course Partners LLC’s comments. Based on the information provided by the comment letter, Board staff revised the TCAO to remove LSM Golf Course Partners LLC as a Discharger from the TCAO.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
<b>Comment 9: Symphony Asset Pool XXI LLC, October 23, 2023 [For full text of comment, refer to Supporting Document 5, pages 533 to 535]</b>				
9	Finding C.2	<p>Finding C.2 is unwarranted. The rationale applied in justification for listing Symphony Asset Pool XXI LLC is unreasonable on the basis that our listing is not equitable with other entities in the Watershed.</p> <p>Runoff from EGC co-mingles with discharges from other properties and discharges go to the County Municipal Separate Storm Sewer System.</p>	<p>Justification for identifying Symphony Asset Pool XXI LLC as a discharger appears to be based on the “use of herbicides and fertilizers...that CAN [emphasis added] run off the property with non-stormwater or stormwater discharges.” If this is the standard that the San Diego Water Board wishes to apply, there are hundreds of entities in the watershed to which this standard applies that should be, but were not, named in the TCAO.</p> <p>Runoff from our facility is to an MS4 operated by the County of San Diego, and any runoff from our facility co-mingles with discharges from other properties. Symphony Asset Pool XXI LLC is subject to municipal regulations, including those applying to stormwater, as are all other property owners within the watershed. The San Diego Water Board has found the County to be a discharger for its regulated activity but finds very few other property owners in the Lake San Marcos watershed to be ‘dischargers.’ Symphony Asset Pool XXI LLC objects to the selectively applied dual-listing rationale.</p>	<p>Board staff have reviewed Symphony Asset Pool XXI LLC’s comments. Based on the information provided by the comment letter, Board staff revised the TCAO to remove Symphony Asset Pool XXI LLC as a Discharger from the TCAO.</p>



Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
<b>Comment 10: Wildcat Dairy, November 3, 2023 [For full text of comment, refer to Supporting Document 5, pages 537 to 668]</b>				
10	N/A	Wildcat Dairy, Wilgenburg Dairy, Wilgenburg Dairy Farm, and Ed Wilgenburg should be removed from the TCAO.	The TCAO is incorrect in its assertion that Wildcat Dairy, LLC, is “formerly known as Wilgenburg Dairy.” As described above, the Wilgenburg Dairy in operation in 1987 was owned and operated by Jacob Wilgenburg. After moving to Bakersfield, Wilgenburg Dairy was then dissolved around 1994 and a new business entity was established with different owners. The new entity was the Wilgenburg Dairy Farm, which operated as a general partnership. It is this entity that was converted into Wildcat Dairy, LLC, in Colorado in 2005. Liabilities follow a conversion of a business, but they do not follow a successor business outside of special circumstances that must be	Board staff have reviewed Wildcat Dairy LLC’s comments. Based on the information provided in the comment letter, Board staff revised the TCAO to remove Wildcat Dairy LLC as a Discharger from the TCAO.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>specifically alleged. Other than merely naming Wilgenburg Dairy as a discharger, the TCAO offers no other findings, or evidence as to why Wildcat Dairy is, in effect, the successor of Wilgenburg Dairy for any liability of Wilgenburg Dairy that may allegedly have accrued when it was in operation in San Marcos, California. Rather, the TCAO implies a conclusion that Wildcat Dairy is the continuation of the Wilgenburg Dairy and thus liabilities of the Wilgenburg Dairy pertaining to the present condition of Lake San Marcos (of which there are none as will be explained further in this comment letter) are fairly attributable to Wildcat Dairy. This is called the “mere continuation” theory of successor liability.</p>	
<p><b><i>Comment 11: San Diego Coastkeeper and Coastal Environmental Rights Foundation, November 3, 2023 [For full text of comment, refer to Supporting Document 5, pages 670 to 674]</i></b></p>				
11a	N/A	Coastkeeper and CERF generally support the TCAO.	Generally, Coastkeeper and CERF support immediate and aggressive action to clean up the various wastes, pollutant sources, and other toxins which continue to pose a threat to human health and choke the life out of Lake San Marcos and Upper San Marcos Creek.	Acknowledged. San Diego Water Board staff appreciate the general support for the TCAO. San Diego Water Board staff did not modify the TCAO in response to this comment.

<b>Comment No.</b>	<b>TCAO Section</b>	<b>Comment Summary</b>	<b>Abbreviated Comment Description</b>	<b>San Diego Water Board Staff Response</b>
<b>11b</b>	N/A	The TCAO lacks information about the creek.	The contiguous riparian vegetation along the Creek serves as an important wildlife corridor connecting upstream and downstream viable habitat areas, as it is one of the few undeveloped, natural stretches in the otherwise heavily developed area of central San Marcos. The Creek supports delicate riparian, marsh, and wetland habitats that include rare plant species considered sensitive by various local, state, and federal agencies such as the southern tarplant, southwestern spiny rush, and the Southern California black walnut.	Acknowledged. San Diego Water Board staff did not modify the TCAO in response to this comment.
<b>11c</b>	N/A	Prior actions by both the Regional Board and the Dischargers have failed to significantly improve conditions in the Lake and the Creek.	Prior efforts have been unsuccessful in restoring the beneficial uses of the Lake and the Creek. As set forth in detail in the TCAO, Lake San Marcos remains heavily polluted, potentially threatening human health through direct contact, or even via inhalation of harmful toxins produced by algal blooms.	Comment noted. San Diego Water Board staff did not modify the TCAO in response to this comment.

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
11d	N/A	Catalogue entire regulatory history.	The TCAO should include a section or appendix cataloguing the entire regulatory history surrounding Lake San Marcos and Upper San Marcos Creek. Cataloguing all prior orders, resolutions, agreements, reports, studies, public comments, administrative records, etc., which have led to the current states of affairs would help the public, including Coastkeeper and CERF, better understand which strategies, remedies, approaches, and/or BMPs have been successful or unsuccessful, and thus which approaches should be accordingly pursued moving forward.	<p>San Diego Water Board staff disagree with this comment.</p> <p>A significant portion of the San Diego Water Board staff's records relating to the regulatory history of the Creek and Lake are available on the State Water Resources Control Board's Geotracker database: <a href="#">Geotracker</a>. The Geotracker records include the 2011 IO, Addendum B to the Participation Agreement (2011), the 2017 Resolution, and regulatory correspondence since the SCP began oversight of the case in 2015. These documents and the RI/FS include general discussions about the regulatory history of the Creek and Lake. San Diego Water Board staff did not modify the TCAO in response to this comment.</p>
11e	N/A	Request "better guardrails" and closer San Diego Water Board oversight.	The TCAO sets forth an extremely long, multi-step process, each step of which provides the Dischargers with too much discretion with regard to each plan, report, feasibility analysis, action plan, etc. Coastkeeper and CERF request the San Diego Water Board require an additional level of objectivity in the reporting and assessment. From Coastkeeper and CERF's extensive experience, reports and studies conducted by consultants, hired and paid for by dischargers, tend to lack complete objectivity, underestimate the magnitude of waste and pollutants, and	<p>San Diego Water Board staff disagree with this comment.</p> <p>Board staff included guardrails in the TCAO by requiring the Dischargers to provide documents prepared under the direction of appropriately qualified professionals (Directive L.2) and to sign a penalty of perjury statement for each document they submit (Directive I). Board staff rely on submittals from the Dischargers to ensure compliance with the TCAO. The TCAO provides opportunities for Board staff to review the Dischargers' submittals for thoroughness, content, and rigor. The San Diego Water Board</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>correspondingly underestimate the size, scale, and cost of the required remedial measures. Models, even when using generally accepted methodologies, can be easily tweaked to significantly change the size, scale, scope, and cost of remedial measure or BMPs. Coastkeeper and CERF request the Regional Board directly hire a third party or third parties to conduct the various investigations, studies, and analyses set forth in the Directives, and use a cost recovery mechanism through which the Dischargers would reimburse the Board. Alternatively, the Board and Dischargers could mutually agree upon a third party or third parties, which could conduct the investigations, studies, and analyses with Board oversight.</p>	<p>can request the Dischargers perform supplemental monitoring or reporting, as necessary to ensure compliance with the TCAO. Before accepting any reports, Board staff will thoroughly review the submittals for completeness. Further, requiring a third party to perform the Dischargers work would be inappropriate because it would dictate the manner of compliance. (See State Water Board Resolution 92-49.)</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
11f	<p>Table 4 [revised to Directives A.1 and A.2]</p>	<p>Lack of a “backstop” deadline between Directives A.3 and A.4.</p>	<p>The lack of a backstop is problematic given the Dischargers’ prior track record and the ongoing threat to human health. A deadline of 180 days for Directive A.4 after approval of the work plan required by Directive A.3 is suggested.</p>	<p>San Diego Water Board staff disagree with this comment.</p> <p>Directive A.4 requires the Dischargers to submit the Risk Assessment Report no later than 60 calendar days after completion of the Work Plan tasks and receipt of all final laboratory data. Further, the Dischargers are required to implement the approved work plan under Directive A.3 within 30 days of receiving written approval from the San Diego Water Board. These deadlines together provide a scheduling framework that Board staff find to be reasonable</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
				<p>for completion of the risk assessment and consistent with timeframes established in similar orders (i.e., IOs and CAOs) issued by the Board. Finally, Board staff could pursue enforcement as appropriate as noted in Directive M.3.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>
11g	Directive F	The Exceedance Characterization Work Plan should also be triggered by dry weather exceedances.	As the Dischargers are potentially exceeding water quality objectives during dry weather, we request that a dry weather trigger be added to Directive F.	<p>San Diego Water Board staff agree with the comment.</p> <p>Board staff revised Directive F of the TCAO to include the following language: “The Dischargers shall prepare and submit an Exceedance Characterization Work Plan to the San Diego Water Board if two consecutive wet or dry weather Semiannual Progress Reports identify 1) Lake or Creek WQO exceedances or 2) impairment of beneficial uses. The Dischargers shall ensure the Exceedance Characterization Work Plan is received by the Board within 30 calendar days following the submittal of the second wet or dry weather Semiannual Progress Report.”</p>
11h	Directive E	The San Diego Water Board should provide greater oversight during the initial phases of the Directives.	While Directive E requires semi-annual progress reports, as written, this provision seems applicable only after remedial measures are implemented. Given the numerous steps, plans, reports, and analyses required by the TCAO, and the potential for significant gaps in time	<p>San Diego Water Board staff disagree with this comment.</p> <p>San Diego Water Board staff developed the TCAO to focus on the remedial work to cleanup and abate the conditions of pollution and nuisance at the Creek and Lake. Board staff</p>

Comment No.	TCAO Section	Comment Summary	Abbreviated Comment Description	San Diego Water Board Staff Response
			<p>between the completion of each step, the TCAO must require pre-remediation progress reports from the Dischargers. Hence, we request the TCAO require publicly available quarterly reports to update the Board and the public regarding the status and expected timelines for all Directive requirements for the first two years following TCAO adoption, with semiannual reporting required thereafter.</p>	<p>anticipate the preparation of progress reports prior to remedy implementation would be overly burdensome on the Dischargers. Board staff currently meet monthly with the Dischargers and will continue to do so. Board staff will upload monthly meeting minutes to Geotracker until the Dischargers implement remedies. Semi-annual reports are sufficient post-remedy implementation to determine compliance with the TCAO and progress towards completing the remedial actions. The public can review all reports submitted pre- and post-remedy implementation to the San Diego Water Board and cleanup progress at any time on GeoTracker or by asking the San Diego Water Board case manager. Finally, Board staff anticipate providing updates in Executive Officer's Reports to the Board on a periodic basis.</p> <p>Board staff did not modify the TCAO in response to this comment.</p>