REVISED DRAFT STAFF MEMO

PROPOSED AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION TO UPDATE THE BACTERIA OBJECTIVES FOR FRESH, ESTUARINE AND MARINE WATERS DESIGNATED FOR WATER CONTACT RECREATION - BASED ON THE STATEWIDE BACTERIA PROVISIONS

JANUARY 31, 2020

I. Summary

The Water Quality Control Plan (Basin Plan) for the Los Angeles Region contains bacteria water quality objectives for the protection of water contact recreation (REC-1), limited contact recreation (LREC-1), non-contact recreation (REC-2) and shellfish harvesting (SHELL) in the Los Angeles Region. Across the state, regional water quality control boards (Regional Water Boards) have adopted similar objectives, for their areas of jurisdiction, into their Basin Plans. However, on August 7, 2018, the State Water Resources Control Board (State Water Board) adopted statewide bacteria provisions containing updated bacteria water quality objectives for water contact recreation (REC-1) in fresh, estuarine, and marine (ocean) waters. These objectives are based on the United States Environmental Protection Agency's (EPA's) 2012 recommended CWA Section 304(a) criteria for bacteria to protect primary contact recreation in coastal and non-coastal waters. The statewide bacteria provisions also contain implementation approaches for applying the objectives, including ways to address natural sources of bacteria, as well as seasonal and flow conditions that may affect the water contact recreation beneficial use.

These provisions were developed to establish consistent water quality objectives for California's waters, and to provide Regional Water Boards with tools and direction in addressing specific issues related to applying the statewide numeric bacteria water quality objectives. The statewide provisions supersede all existing numeric bacteria objectives for REC-1 in the nine Regional Water Boards' Basin Plans. The provisions do not, however, supersede narrative water quality objectives. They were approved by the Office of Administrative Law on February 4, 2019 and by U.S. EPA on March 22, 2019 and are now in effect. Therefore, the bacteria water quality objectives for water contact recreation (REC-1) in the Los Angeles Region's Basin Plan are no longer applicable.

The proposed amendment to the Basin Plan for the Los Angeles Region will update the water quality objectives for bacteria, that are applied to fresh, estuarine and marine waters designated for water contact recreation (REC-1), by removing the current objectives and replacing them with those provided in the statewide provisions. This action will be consistent with the intent of the statewide provisions and will avoid any misperceptions as to which REC-1 numeric objectives for bacteria are applicable in the Los Angeles Region.

The sections below present: the history of REC-1 bacteria objectives in the Los Angeles Region, a summary of the statewide Bacteria Provisions, the proposed changes to the Los Angeles Region's bacteria water quality objectives, and environmental considerations related to CEQA.

II. History of Bacteria Objectives for Water Contact Recreation (REC-1) in the Los Angeles Region

U.S. EPA's original recommended criteria for waters designated for water contact recreation were based on the results of a series of epidemiological studies conducted in the late 1940s and early 1950s, which are summarized in an article by Stevenson (1953) titled "Studies of Bathing Water Quality and Health". These studies showed that there was a significantly greater illness rate in individuals who swam in water with an average total coliform density of 2,300 organisms per 100 ml compared to those who swam in water with an average total coliform density of 43 organisms per 100 ml.

Fecal coliform thresholds were developed in the 1960s based on the fraction of total coliforms that were fecal coliforms at the original study sites. The change from total coliform to fecal coliform was made because fecal coliform was considered a better indicator of fecal contamination. Based on the ratio of fecal coliforms to total coliforms, it was estimated that statistically significant swimming-associated gastrointestinal illness would be observed at 400 organisms/100 ml for fecal coliform. The National Technical Advisory Committee (NTAC) of the Department of the Interior, which oversaw these initial epidemiological studies, suggested that a detectable risk was unacceptable, and so proposed a density of 200 fecal coliforms per 100 ml as the criterion. The NTAC further proposed that not more than 10 percent of samples should exceed 400 fecal coliforms per 100 ml. This multi-part criterion was recommended by U.S. EPA in 1976 and was reflected in the Los Angeles Region's Basin Plan prior to 2001.

Subsequently, in the early 1980s, U.S. EPA conducted another series of epidemiological studies in both fresh water and marine water to: (1) confirm that swimming in sewage-contaminated water carries a health risk for bathers and (2) determine which indicator(s) best correlated with swimming-associated health effects and, specifically, gastroenteritis. These studies found that there was a health risk associated with swimming in sewage-contaminated water. Enterococcus and *E. coli* (a subset of the fecal coliform group) were the indicators most strongly correlated with the incidence of gastroenteritis. These studies found that total coliform and fecal coliform densities were only weakly correlated with gastroenteritis. As a result of these national epidemiological studies, in 1986 the U.S. EPA published revised criteria guidelines for bacteria - recommending that states use enterococcus and *E. coli* criteria recommended by U.S. EPA were calculated based on what was determined to be "acceptable" illness rates of 8 illnesses per 1,000 swimmers at fresh water beaches, and 19 illnesses per 1,000 swimmers at marine beaches, which are the illness rates that were associated with the previous fecal coliform criterion.

In 2001, the Los Angeles Regional Board updated its bacteria objectives for both fresh and marine waters designated for water contact recreation to reflect EPA's 1986 recommendations as provided in their document titled "Ambient Water Quality Criteria for Bacteria – 1986" (U.S. EPA, 1986), as well as the minimum bacteriological standards contained in the California Code of Regulations, title 17, section 7958 "Bacteriological Standards" (Assembly Bill 411, Statutes of 1997). During this update, the Regional Board added *E. coli* as a water quality objective for freshwater water contact recreation. The fecal coliform objective for this beneficial use was not removed at this time. Rather, the Board allowed a transition period for incorporation of *E. coli* objectives into permits and water quality monitoring programs, and for collection of data on the new objective to establish an adequate monitoring database. The fecal coliform objective for water contact recreation in freshwater was removed from the Basin Plan in 2010.

III. Statewide Bacteria Provisions

In August 2018, the State Water Board adopted Statewide Bacteria Provisions for the protection of water contact recreation in fresh, estuarine, and marine waters as (i) Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California (ISWEBE Plan), and (ii) an amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan). These documents can be found, along with the accompanying Staff Report (which includes substitute environmental documentation), on the State Water Board's website at: https://www.waterboards.ca.gov/bacterialobjectives. Part 3 of the Water Quality Control Plan for Iswebs and the amendment to the Ocean Plan are provided as Appendix I and II, respectively, of this Staff Memo.

A. The statewide bacteria provisions contain bacteria water quality objectives that are based on U.S. EPA's 2012 recreational water quality criteria recommendations for protecting human health in all coastal and non-coastal waters designated for primary contact recreation use. U.S. EPA 2012 Recreational Water Quality Criteria recommends bacteria indicators for inland surface waters and ocean waters at two different risk levels that U.S. EPA indicated as equally protective for recreational activities – 32 illnesses/1000 recreators and 36 illnesses/1000 recreators ¹. The statewide bacteria water quality objectives are based on a risk protection level of 32 illnesses per 1000 recreators. Table 1 shows the REC-1 bacteria water quality objectives for fresh and estuarine waters (i.e. inland surface waters, enclosed bays and estuaries). The bacteria water quality objectives for marine (ocean) waters are shown in Table 2 and Table 3².

¹ In 2012, U.S. EPA issued a report to determine the National Epidemiological and Environmental Assessment of Recreational Water - Gastrointestinal Illness rate (NGI). There was a fundamental change in the methodology for calculating the estimated illness rate in the NGI from the previous 1986 report. The estimated illness rate in the 1986 report termed gastrointestinal illnesses as highly credible gastrointestinal illness (HCGI), defined as "anyone of the following unmistakable or combinations of symptoms [within eight to ten days of swimming]: (1) vomiting (2) diarrhea with fever or a disabling condition (remained home, remained in bed or sought medical advice because of symptoms), (3) stomachache or nausea accompanied by a fever". The 2012 NGI NEEAR report termed counted all gastrointestinal illness as "any of the following [within ten to 12 days after swimming]: (a) diarrhea (three or more loose stools in a 24-hour period), (b) vomiting, (c) nausea and stomachache, or (d) nausea or stomachache and impact on daily activity," thus relaxing the definition of gastrointestinal illness by omitting the requirement of fever. Data from previous and current epidemiological studies were assessed in the U.S. EPA 2012 Recreational Water Quality Criteria report to redefine the acceptable illness rate based on the new definition. During these studies U.S. EPA determined that the previous estimated illness rate of 8 illnesses (gastrointestinal illness and fever) per 1,000 recreators is equivalent to 36 NGI (all gastrointestinal illness regardless of a fever) per 1,000 recreators for freshwaters. For marine waters the previous illness rate of 19 illnesses (gastrointestinal illness and fever) is equivalent to 36 NGI (all gastrointestinal illness regardless of a fever) per 1,000 recreators. After receiving comments that the new NGI illness rate was not protective of swimmers, the U.S. EPA conducted a cut point analysis of the data. In the cut point analysis, the U.S. EPA developed two possible recommended illness rates determined to be protective of public health. The U.S. EPA's recommended illness rates are 36 NGI per 1,000 recreators and 32 NGI per 1,000 recreators, U.S. EPA considers both illness rates to be protective of public health

² The fecal coliform objectives are not based on U.S. EPA's 2012 criteria. The State Water Board retained them from the previous Ocean Plan objectives. The fecal coliform indicator was retained as an objective for marine waters, despite not being included in EPA's recommended criteria, since epidemiological studies conducted at southern California beaches between 2012 and 2017 provide data that suggest fecal coliform may be a better indicator of gastrointestinal illness than enterococci during certain types of exposures and environmental conditions.

B. The bacteria provisions also contain implementation provisions, including (i) the identification of approaches for characterizing natural sources of bacteria within the context of a TMDL or other Basin Plan amendment – a natural source exclusion and a reference system/antidegradation approach, and (ii) the temporary suspension of the REC-1 beneficial use, in inland surface waters, enclosed bays and estuaries, during specific conditions such as conditions of high flows, freezing, and low flows. These implementations provisions are not specific requirements to implement the bacteria water quality objectives. Rather, they are implementation options the Water Boards may utilize to effectively implement the bacteria water quality objectives or to reflect whether the REC-1 beneficial use is appropriately designated.

Table 1: Bacteria Water Quality Objectives for Water Contact Recreation (REC-1) in Fresh and Estuarine Waters

A 10 11 14 /	Objective Elements	Estimated Illness Rate (NGI): 32 per 1000 water contact recreators			
Applicable Waters		Magnitude			
	Indicator	GM (cfu/100 mL)	STV (cfu/100 mL)		
All waters where salinity is equal to or less than 1 ppth 95 percent or more of the time	E. coli	100	320		
All waters where salinity is greater than 1 ppth more than 5 percent of the time	Enterococci	30	110		
The water body GM shall not be greater than the applicable GM magnitude in any six-week interval, calculated weekly. The applicable STV shall not be exceeded by more than 10 percent of the samples collected in a calendar month ³ , calculated in a static manner. NGI = National Epidemiological and Environmental Assessment of Recreational Water gastrointestinal illness rate GM = geometric mean STV = statistical threshold value cfu = colony forming units mL= milliliters ppth = parts per thousand					

Table 2: Enterococci Bacteria Water Quality Objectives for Water Contact Recreation (REC-1) in Marine Waters

Indicator	Estimated Illness Rate (NGI): 32 per 1000 water contact recreators		
	Мад	nitude	
	GM (cfu/100 mL)	STV (cfu/100 mL)	
Enterococci	30	110	
The waterbody GM shall not be greater than the GM magnitude in any six-week interval, calculated weekly. The STV shall not be exceeded by more than 10 percent of the samples collected in a calendar month.			

³ Calendar month is a period of time from a day of one month to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g. from January 1 to January 31, from June 15 to July 14, or from January 31 to February 28).

NGI = National Epidemiological and Environmental Assessment of Recreational Water gastrointestinal illness rate GM = geometric mean cfu = colony forming units STV = statistical threshold value mL = milliliters

Table 3: Fecal Coliform Bacteria Water Quality Objectives for Water Contact Recreation (REC-1) in Marine Waters

Indicator		Magnitude		
		30-day GM		SSM
Fecal coliform density		200 per 100 mL		400 per 100 mL
GM = geometric mean	SSM	= single sample maximum	mL	= milliliters

C. In addition, the statewide provisions contain a definition for a Limited Water Contact Recreation (LREC-1) beneficial use to be applied where such activities are defined in a water quality control plan (Basin Plan) after the effective date of the provisions:

<u>Limited Water Contact Recreation (LREC-1)</u>: Uses of water that support limited recreational activities involving body contact with water, where the activities are predominantly limited by physical conditions and, as a result, body contact with water and ingestion of water is infrequent or insignificant.</u>

Designation of the limited water contact recreation (LREC-1) use beneficial use could be allowed if a use attainability analysis is performed and finds that body contact is limited in a water body due to physical conditions, such as restricted access and very low water depths. The designation of the LREC-1 beneficial use could include the development of site-specific bacteria objectives.

D. Finally, the bacteria provisions refer to the federal regulatory mechanism for adopting a Water Quality Standards (WQS) Variance to provide clear information on the application of a WQS Variance to all pollutants and water segments consistent with 40 Code of Federal Regulations section 131.14. A WQS Variance would be permitted for all pollutants or water body segments consistent with federal and state regulations. Any WQS Variance must adhere to applicable state and federal regulations and be approved by U.S. EPA.

IV. Proposed Changes to the Los Angeles Region's Bacteria Water Quality Objectives for Water Contact Recreation

The proposed changes to the Los Angeles Region's Basin Plan are based on the bacteria water quality objectives for water contact recreation (REC-1) contained in the statewide bacteria provisions. The other elements of the provisions such as LREC and variances do not warrant changes to the Basin Plan and are discussed in the next section.

Bacteria Water Quality Objectives

Table 4 shows the current Basin Plan bacteria water quality objectives alongside the newly applicable statewide objectives, and the specific changes. The changes to the Basin Plan objectives are as follows:

Removal of Total Coliform Objectives for Marine Waters

The bacteria water quality objectives to protect water contact recreation in marine waters in the Los Angeles Region's Basin Plan includes limits for total coliform bacteria. This is consistent with the requirements of Title 17 for fecal indicator bacteria for water contact recreation in ocean beaches. (Cal. Code Regs. tit. 17 § 7958.) The Title 17 bacteriological standards use enterococci, total coliform and fecal coliform to protect water contact recreation in coastal (marine) waters. The statewide Bacteria Provisions remove the total coliform objectives for marine waters because total coliform is not well linked to illness while recreating in ocean waters (according to U.S. EPA studies and more recent science, including California-specific epidemiology studies). The proposed amendment reflects this change.

Distinct Estuarine Bacteria Objectives

The Los Angeles Region does not specifically provide bacteria water quality objectives for estuarine waters in its Basin Plan but applies the same water quality indicators as those for marine water. The statewide Bacteria Provisions provides specific water quality objectives for estuarine waters based on salinity - requiring enterococci for the bacteria objective indicator for estuarine waters where the salinity is greater than 1 part per thousand (ppth) more than 5 percent of the time, and E. coli. for estuarine waters where the salinity is equal to or less than 1 ppth 95 percent or more of time. The salinity levels used to determine these indicators are based on the salinity levels established by 40 Code of Federal Regulations section 131.38 (b)(3), which applies freshwater criteria to waters with salinity equal to or less than 1 ppth, applies saltwater criteria to waters with salinity equal to or greater than 10 ppth, and applies the more stringent criteria to those waters with salinity between 1 and 10 ppth. The proposed amendment reflects this change.

Change from Single Sample Limits (SSL) or Maximums to Statistical Threshold Values (STV)

The Los Angeles Region's Basin Plan currently contains bacteria water quality objectives expressed as Single Sample Limits, consistent with EPA's 1986 recommended water quality criteria for bacteria. The statewide Bacteria Provisions require a change from these SSLs to Statistical Threshold Values (STVs) - for E. coli and enterococci, consistent with EPA's 2012 recommended recreational water quality criteria. The change from single sample maximum to statistical threshold value occurred because treating the single sample maximum as a never-to-be-exceeded value imparts a level of protection more stringent than intended by EPA's 1986 recommended criteria⁴.

⁴ For example, a marine beach that is in compliance with the 1986 Geomean GM criteria for enterococci (GM = 35 cfu per 100 mL) would be expected to have 25% of the sample values above 104 cfu per 100

The statistical threshold value in the U.S. EPA 2012 Recreational Water Quality Criteria, on which the Bacteria Provisions are based, is set at a 90th percentile value of the geometric mean, which can be exceeded just 10 percent of the time. The statistical threshold value replaces the single sample maximum because it has been determined to be statistically consistent with the geometric mean of the new recommended recreational water quality criteria. The STVs have their own numeric limits. The proposed amendment reflects this change.

Change in Calculation of the Geomean

The Los Angeles Region's Basin Plan requires geometric mean values to be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period). However, for the purpose of determining compliance with bacteria Total Maximum Daily Load waste load allocations, a six-week rolling geometric mean, (i.e. calculating a geometric mean weekly using 5 or more samples for rolling six-week periods) is recommended. The statewide Bacteria Provisions require use of a 6-week rolling GM calculated weekly for use in all instances (i.e. not limited to TMDL compliance). The proposed amendment reflects this change.

Change in Geomean Numeric Limits for Enterococci and E. coli

The numeric values of the enterococci and *E. coli* bacteria water quality objectives for REC-1 in the Los Angeles Region's Basin Plan will change to reflect those required by the statewide Bacteria Provisions. The geomean values for both indicators in the statewide provisions reflect the use of the illness rate of 32 per 1000 recreators as opposed to the 36 per 1000 recreators⁵. The corresponding STV numeric values are also based on the lower illness rate. The proposed amendment reflects this change.

Bacteria Implementation Provisions

The Los Angeles Region's Basin Plan contains an implementation provision that allows the single sample bacteria objective to be implemented using a "reference system/antidegradation approach, only in the context of a "Total Maximum Daily Load" (TMDL). The Statewide Bacteria Provisions expand this provision to include all bacteria objectives – geometric means, statistical threshold values, and single sample maximums – and to apply to Basin Plan amendments other that TMDLs. The proposed Basin Plan amendment reflects this change.

The Basin Plan also contains an implementation provision requiring repeat sampling when more than 10 percent of samples exceed the single sample bacteriological objectives in a calendar month. The Statewide Bacteria Provisions do not contain this requirement, therefore, it is not included the proposed Basin Plan language.

Finally, the proposed Basin Plan amendment references the other implementation provisions (High Flow and Seasonal Suspensions of the water contact recreation beneficial use) contained in the Statewide Bacteria Provisions.

mL (the 75th percentile of the expected water quality sample distribution) because of expected variability in individual water quality measurements. Expecting that beach to never exceed 104 cfu per 100 mL would require an actual GM much lower, associated with a lower illness rate, than the recommended GM criterion value."

⁵ EPA has indicated, in its 2012 recommended criteria for recreational water quality, that both risk levels are protective of public health

WATERBODY TYPE	CURRENT BASIN PLAN OBJECTIVE	APPLICABLE STATEWIDE OBJECTIVE	PROPOSED REVISIONS
Marine (Ocean) Waters	 Geometric Mean Limits Total coliform density shall not exceed 1,000/100 ml. Fecal coliform density shall not exceed 200/100 ml. Enterococcus density shall not exceed 35/100 ml. 	 <u>Geometric Mean Limits*</u> Fecal Coliform density shall not exceed 200/100mL. Enterococci density shall not exceed 30cfu/100 mL. 	 Total coliform objective removed Fecal coliform objective retained Numeric limit of enterococcus density changed
	 Single Sample Limits Total coliform density shall not exceed 10,000/100 ml. Fecal coliform density shall not exceed 400/100 ml. Enterococcus density shall not exceed 104/100 ml. Total coliform density shall not exceed 1,000/100 ml. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1. 	 2. <u>Single Sample Limit</u> a. Fecal coliform density shall not exceed 400/100mL. 3. <u>Statistical Threshold Value**</u> a. Enterococci density shall not exceed 110cfu/100m.L 	 Total coliform objective removed Fecal coliform objective retained Statistical Threshold Value replaces the Single Sample Limit for Enterococcus Fecal-to-total coliform ratio removed
Estuarine Waters (where salinity is greater than 1 ppt more than 5% of the time)	Same as Marine	1. <u>Geometric Mean Limits*</u> a. Enterococci density shall not exceed 30 cfu/100 mL.	 Total and fecal coliform objectives removed Numeric limit of enterococcus density changed
		2. <u>Statistical Threshold Value**</u> a. Enterococci density shall not exceed 110 cfu/100mL.	 Total coliform and fecal objectives removed Statistical Threshold Value replaces the Single Sample Limit for Enterococcus

Table 4: Summary of Current and Revised REC-1 Bacteria Water Quality Objectives

WATERBODY TYPE	CURRENT BASIN PLAN OBJECTIVE	APPLICABLE STATEWIDE OBJECTIVE	PROPOSED REVISIONS
Estuarine Waters (where salinity is equal to or less than 1 ppt 95% of the time)	Same as Marine	1. <u>Geometric Mean Limits*</u> a. E. coli density shall not exceed 100cfu/100 mL.	 Total and fecal coliform objectives removed Enterococcus indicator replaced with E. coli
		2. <u>Statistical Threshold Value**</u> a. E. coli density shall not exceed 320 cfu/100mL.	 Total and fecal coliform objectives removed Enterococcus indicator replaced with E. coli Statistical Threshold Value replaces the Single Sample Limit for Enterococcus
Fresh Waters	 Geometric Mean Limits E. coli density shall not exceed 126/100 ml. 	1. <u>Geometric Mean Limits*</u> a. E. coli density shall not exceed 100cfu/100 mL.	 Numeric limit of E. coli density changed
	 2. <u>Single Sample Limits</u> a. E. coli density shall not exceed 235/100 ml. 	2. <u>Statistical Threshold Value**</u> a. E. coli density shall not exceed 320 cfu/100mL.	 Statistical Threshold Value replaces the Single Sample Limit for E. coli

*The geomean limits are to be calculated as a six-week rolling average for *E. coli* and Enterococci indicators. The geometric mean for the fecal coliform indicator will continue to be calculated as a 30-day average.

** The STV shall not be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

V. Elements of the Statewide Bacteria Provisions not Requiring Changes to the Los Angeles Regions Basin Plan

Bacteria Implementation Provisions

The implementation provisions contained in the statewide Bacteria Provisions are not specific requirements to implement the bacteria water quality objectives. Rather, they are implementation options that Regional Water Boards may utilize to effectively implement the bacteria water quality objectives or to reflect whether the REC-1 beneficial use is appropriately designated. That is, they may be applied at the discretion of a Regional Board.

The Basin Plan for the Los Angeles Region contains a temporary suspension of the REC-1 beneficial use, in specific surface waterbodies, under conditions of high flows. This implementation provision parallels that contained in the statewide Bacteria Provisions and therefore, does not require any revisions, at this time.

Limited REC-1 Definition

The Basin Plan for the Los Angeles Region contains a beneficial use for limited water contact recreation (LREC-1) along with associated bacteria water quality objectives. The LREC-1 definition predates that contained in the statewide Bacteria Provisions, while also being consistent with it. Therefore, the LREC-1 definition currently in the Los Angeles Region's Basin Plan does not require any revisions.

Water Quality Standards Variance

The statewide provisions refer to the federal regulatory mechanism for adopting a Water Quality Standards (WQS) Variance. Further regulatory action by the Regional Water Board is not necessary to establish a WQS variance consistent with this mechanism. Therefore, no changes related to the WQS variance are proposed to the Los Angeles Region's Basin Plan.

VI. Waste Load Allocations in Existing Bacteria TMDLs

The Staff report for the statewide Bacteria Provision state that "Bacteria TMDLs may need to be updated to be consistent with the Bacteria Provisions as time and workload allow." The Bacteria Provisions state that "A Regional Board may convene a public meeting to evaluate the effectiveness of the TMDL in attaining the bacteria water quality objective." Any changes to TMDL waste load allocations is outside the scope of this proposed amendment, and no revisions are proposed at this time. However, such revisions may be addressed on a case-by-case basis during reconsiderations of bacteria TMDLs.

VII. California Environmental Quality Act (CEQA) Considerations

The Los Angeles Water Board's discretionary decisions are typically subject to the requirements of the California Environmental Quality Act (CEQA). The Secretary for Natural Resources has certified the basin planning process as an exempt regulatory program, and therefore the water boards are exempt from the specific CEQA requirement to prepare an environmental impact report or mitigated or negative declaration when the water board is complying with the procedures identified in the certified regulatory program (Cal. Code Regs., tit. 23, §§ 3720-3781; Pub. Res. Code § 21080.5; Cal. Code Regs., tit. 14, § 15251(g)).

The State Water Board prepared a Substitute Environmental Document (SED) for the statewide Bacteria Provisions in accordance with the water board's certified regulatory program. The State Water Board approved the Bacteria Provisions and the accompanying SED on August 7, 2018. The proposed amendments incorporate the bacteria water quality objectives for water contact recreation (REC-1) contained within the Bacteria Provisions and revise the current Basin Plan REC-1 bacteria water quality objectives provisions that are no longer applicable as a result of the statewide provisions. No substantive changes or modifications to the previously approved Bacteria Provisions are proposed, no substantial changes with respect to circumstances under which the project will be undertaken have occurred, and no new information triggers the need for supplemental or subsequent CEQA analysis. These amendments are wholly within the scope of the statewide Bacteria Provisions as analyzed by the State Water Board in the existing SED. As such, the recommended actions do not require further environmental review pursuant to the certified regulatory program or CEQA. A finding to this effect is included in the resolution as Finding No. 12. Consistent with the water board's certified regulatory program, a Notice of Decision will be filed with the Secretary for Natural Resources after the State Office of Administrative Law approves the basin plan amendment (Cal. Code Regs., tit. 23 § 3781).

VIII. References

California Code of Regulations. Title 17, section 7958 "Bacteriological Standards."

Committee of Water Quality Criteria. 1972. National Academy of Sciences – National Academy of Engineering. "Water Quality Criteria." EPA-R3-73-003.

National Technical Advisory Committee, Federal Water Pollution Control Administration. 1968. "Water Quality Criteria."

Stevenson, Albert H. 1953. "Studies of Bathing Water Quality and Health." *American Journal of Public Health* 43(5):529-38.

State Water Resources Control Board. August 7, 2018. "Staff Report Including Substitute Environmental Document for Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy and Amendment to the Water Quality Control Plan for Ocean Waters of California – Bacteria Standards and a Water Quality Standards Variance Policy".

State Water Resources Control Board. August 7, 2018. "Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy".

State Water Resources Control Board. August 7, 2018. "Amendment to the Water Quality Control Plan for Ocean Waters of California – Bacteria Standards and a Water Quality Standards Variance Policy".

United States Environmental Protection Agency. 1976. "Quality Criteria for Water."

United States Environmental Protection Agency. 1986. "Ambient Water Quality Criteria for Bacteria – 1986." EPA440/5-84-002.

United States Environmental Protection Agency. 2012. "Recreational Water Quality Criteria". Office of Water 820-F-12-058.