*Presented below are water quality standards that are in effect for Clean Water Act purposes.*

*EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.*

**STATE WATER RESOURCES CONTROL BOARD**
**RESOLUTION NO. 2022-0053**

CONSIDERATION OF A PROPOSED RESOLUTION TO APPROVE AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION (BASIN PLAN) TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD (TMDL) FOR INDICATOR BACTERIA IN LOS CERRITOS CHANNEL AND ESTUARY, ALAMITOS BAY, AND COLORADO LAGOON, AND TO SUSPEND THE RECREATIONAL USES IN LOS CERRITOS CHANNEL DURING UNSAFE WET WEATHER CONDITIONS

WHEREAS:

1. On March 10, 2022, the Regional Water Quality Control Board for the Los Angeles Region (Los Angeles Water Board) adopted Resolution No. R22-002, amendments to the Water Quality Control Plan for the Los Angeles Region (Basin Plan amendments) to incorporate a Total Maximum Daily Load (TMDL) for indicator bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon (Attachment A to Resolution No. R22-002) and to suspend the recreational uses in Los Cerritos Channel during unsafe wet weather conditions (Attachment B to Resolution No. R22-002).

2. The Los Angeles Water Board found that the analysis contained in the California Environmental Quality Act (CEQA) "Substitute Environmental Documents" for the proposed Basin Plan amendment, including the CEQA Checklist, the final staff report entitled "Total Maximum Daily Load for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon", and the responses to comments, complies with the State Water Board's regulations for the implementation of CEQA, as set forth in the California Code of Regulations, Title 23, sections 3775 through 3781. The State Water Board has reviewed the Substitute Environmental Documents for the Basin Plan amendments and concurs with the Los Angeles Water Board's findings and determinations, including the Statement of Overriding Considerations.

3. The Los Angeles Water Board also adopted the Basin Plan amendments pursuant to the "Necessity" standard of the Administrative Procedures Act, Government Code section 11353, subdivision (b).

4. The Los Angeles Water Board found that the Basin Plan amendments are consistent with the Statement of Policy with Respect to Maintaining High Quality of Waters in California (State Water Board Resolution No. 68-16) and the federal Antidegradation Policy (40 C.F.R. §131.12), in that they do not allow degradation of water quality but require restoration of water quality and attainment of water quality standards.

5. The State Water Board finds that the Basin Plan amendments are in conformance with California Water Code section 13240, which specifies that regional water quality control boards may revise Basin Plans, and section 13242, which requires a program of implementation for achieving water quality objectives. The State Water Board also finds that the TMDL as reflected in the Basin Plan amendment is consistent with the requirements of section 303(d) of the federal Clean Water Act.

6. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL). The TMDL and suspension of the recreational uses in Los Cerritos Channel during unsafe wet weather conditions must also receive approval from the U.S. Environmental Protection Agency (U.S. EPA).

7. In adopting this TMDL, the Los Angeles Water Board exercised its discretion to not utilize the reference system approach with the geometric mean and statistical threshold value, in part over concerns about the geometric mean and statistical threshold value not being adequately protective of human health when used in conjunction with the Los Angeles Water Board's reference system approach. The State Water Board's bacteria objectives afford this discretion. The State Water Board's consideration of the TMDL and approval of the TMDL by this resolution is simply the approval of the TMDL and does not create binding precedent in future regulatory proceedings. Nothing in the State Water Board's approval of this TMDL prevents further actions by the regional water boards to harmonize the reference system approach with the statistical threshold value, and the State Water Board encourages further efforts to harmonize these approaches.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the Basin Plan amendments adopted under Los Angeles Water Board Resolution No. R22-002.

2. Authorizes and directs the Executive Director or designee to submit the Basin Plan amendments adopted under Los Angeles Water Board Resolution No. R22-002 to OAL for approval of the regulatory provisions and to U.S. EPA for approval of the TMDL and suspension of the recreational uses in Los Cerritos Channel during unsafe wet weather conditions.

## CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 6, 2022.

| | |
|---|---|
| AYE: | Chair E. Joaquin Esquivel<br>Vice Chair Dorene D'Adamo<br>Board Member Sean Maguire<br>Board Member Laurel Firestone<br>Board Member Nichole Morgan |
| NAY: | None |
| ABSENT: | None |
| ABSTAIN: | None |

Courtney Tyler for
Jeanine Townsend
Clerk to the Board

**State of California**
**California Regional Water Quality Control Board, Los Angeles Region**

**Resolution No. R22-002**
**March 10, 2022**

# Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon, and to Suspend the Recreational Uses in Los Cerritos Channel during Unsafe Wet Weather Conditions

**WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:**

1. The federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) to establish water quality standards for each waterbody within its region. Water quality standards include beneficial uses, water quality objectives (WQOs) that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. Waterbodies that do not meet water quality standards are considered impaired.
2. CWA section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Those waters are placed on the state's "303(d) List" or "Impaired Waters List". For each listed water, the state is required to establish the Total Maximum Daily Load (TMDL) of each pollutant impairing the water quality standards in that waterbody. Both the identification of impaired waters and TMDLs established for those waters must be submitted to the United States Environmental Protection Agency (U.S. EPA) for approval pursuant to CWA section 303(d)(2).
3. During the 2014/2016 Water Quality Assessment, the Los Angeles Water Board evaluated total coliform, fecal coliform, and *enterococcus* monitoring data for Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon. As a result, Los Cerritos Channel, Alamitos Bay, and Colorado Lagoon were listed as impaired for indicator bacteria. Although the Los Cerritos Channel Estuary was not listed as impaired for indicator bacteria, recent data show that it exceeds applicable water quality objectives in the majority of samples. In addition, it is located between waterbodies that were listed as impaired for indicator bacteria: Los Cerritos Channel and Alamitos Bay. Therefore, the Los Cerritos Channel Estuary was included in the TMDL.
4. Chapter 3 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan) contains bacteria WQOs to protect beneficial uses for primary contact recreation including both Water Contact Recreation (REC-1) and Non-contact Water Recreation (REC-2).
5. In 2001, the Los Angeles Water Board adopted Resolution No. R01-018 to update the bacteria WQOs for waters designated as REC-1 to be consistent with U.S. EPA's recommended criteria (published in "Ambient Water Quality Criteria for Bacteria – 1986"), which recommends the use of *E. coli* and fecal coliform criteria for freshwaters and total coliform, fecal coliform and *Enterococcus* criteria for marine waters. These objectives are

based the California Code of Regulations, title 17, section 7958 “Bacteriological Standards” (Assembly Bill 411, Statutes of 1997) and U.S. EPA’s recommended criteria pursuant to Federal Clean Water Act section 304(a), published in “Ambient Water Quality Criteria for Bacteria – 1986” (U.S. EPA, 1986).

6. In 2010, the Los Angeles Water Board updated the bacteria objectives for freshwaters designated as REC-1 to remove redundancy and maintain consistency with U.S. EPA’s recommendation that *E. coli* replace fecal coliform as an indicator of the presence of pathogens in fresh waters. The update of bacteria objectives removes the fecal coliform objectives and uses *E. coli* objectives as the sole objectives for freshwaters designated with the REC-1 beneficial use.

7. In 2012, U.S. EPA established new recreational water quality criteria recommendations based on updated national epidemiological studies and a broader definition of illness designed to protect the public from exposure to harmful levels of pathogens while participating in water-contact recreational activities. The U.S. EPA 2012 Recreational Criteria is intended as guidance to states and tribes in developing criteria to protect swimmers from exposure to water that contains organisms indicating the presence of fecal contamination and includes beach action values that can be used by local health officials, regional water boards, and authorized tribes as a tool for beach management actions in freshwaters, estuarine waters, and ocean waters. The U.S. EPA 2012 Recreational Criteria recommends the use of either enterococci or Escherichia coli (*E. coli*) as indicators of fecal or pathogen contamination in fresh waters and recommends the use of only enterococci as an indicator in marine waters. Additionally, the recommendations include two estimated illness rates (36 illnesses per 1,000 recreators or 32 illnesses per 1,000 recreators), stating that either rate is protective of the primary contact recreation (REC-1) beneficial use. The recommended criteria are comprised of a magnitude, duration and frequency of excursion for both the geometric mean and a statistical threshold value (STV).

8. On August 7, 2018, the State Water Resources Control Board (State Water Board) adopted Resolution No. 2018-0038, adopting bacteria provisions and a water quality variance policy as (1) Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Part 3 of the ISWEBE); and (2) an amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan Amendment). The bacteria provisions established new statewide numeric water quality objectives for bacteria to protect water contact recreation, based on U.S. EPA’s 2012 Recreational Criteria.

9. The statewide bacteria objectives use (i) *E. coli* as the indicator of pathogens in freshwaters, (ii) Enterococci as the indicator of pathogens in estuarine waters, and (iii) both Enterococci and fecal coliform as indicators of pathogens in ocean waters. The numeric limits for the statewide bacteria objectives correspond with the risk protection level of 32 illnesses per 1,000 recreators.

10. The Office of Administrative Law and U.S. EPA approved the Statewide Bacteria Provisions on February 4, 2019 and March 22, 2019, respectively. The Statewide Bacteria Provisions became effective on March 22, 2019.

11. The statewide bacteria water quality objectives supersede any numeric water quality objective for bacteria for the water contact recreation beneficial use contained in Regional Water Boards’ water quality control plans before the effective date of the Statewide Bacteria

Provisions (i.e., March 22, 2019). Narrative water quality objectives and numeric site-specific objectives for bacteria established before the effective date of the Statewide Bacteria Provisions remain in effect. Also, all TMDLs using the superseded bacteria water quality objectives remain in effect.

12. On February 13, 2020 the Los Angeles Water Board adopted Resolution R20-001, amending Chapter 3 of Basin Plan to reflect WQOs in the State Water Board's Bacteria Provisions. The amendment incorporated the revised bacteria objectives for water contact recreation and removes numeric existing 2010 Bacteria Objectives that are no longer applicable as a result of the statewide provisions.

13. The State Water Board and the Office of Administrative Law approved Resolution R20-001 on May 19, 2020 and June 22, 2021, respectively.

14. The Los Angeles Water Board has not yet developed any bacteria TMDLs based on the Statewide Bacteria Provisions. However, bacteria TMDLs in other regions have been established based on the Statewide Bacteria Provisions, including the Russian River Watershed Bacteria TMDL (R1-2019-0038) in the North Coast Region and the Petaluma River Bacteria TMDL (R2-2019-0030) and Pillar Point Harbor and Venice Beach Bacteria TMDL (R2-2021-0002) in the San Francisco Bay Region. This Bacteria TMDL for Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon is the first TMDL in the Los Angeles Region to directly apply the Statewide Bacteria Provisions.

15. The elements of a TMDL are described in 40 Code of Federal Regulations (C.F.R.) sections 130.2 and 130.7 and section 303(d)(1)(C) and (1)(D) of the CWA, as well as in the U.S. EPA guidance document (Report No. EPA 440/4-91-001). A TMDL is defined as the sum of the individual waste load allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources, and natural background (40 C.F.R. § 130.2). TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 C.F.R. § 130.7(c)(1)). 40 Code of Federal Regulations section 130.7 also dictates that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. TMDLs typically include one or more numeric "targets" (i.e., numerical translations of the existing water quality standards), which represent attainment of those standards, contemplating the TMDL elements described above. Since a TMDL must represent the "total" load, TMDLs must account for all sources of the relevant pollutants, irrespective of whether the pollutant is discharged to impaired or unimpaired upstream reaches.

16. Neither TMDLs nor their targets or other components are water quality objectives, and thus their establishment does not implicate California Water Code section 13241. Rather, under California Law, TMDLs are programs to implement existing standards (including objectives) and are thus established pursuant to California Water Code section 13242. Moreover, they do not create new bases for direct enforcement against dischargers apart from the existing water quality standards they translate. Like most other parts of the Basin Plan, TMDLs are not generally self-implementing. The targets merely establish the bases through which LAs and WLAs are calculated. The LAs and WLAs may be implemented in any manner consistent with the Water Quality Control Policy for Addressing Impaired Waters:

Regulatory Structure and Options, adopted by the State Water Board on June 16, 2005 (Resolution No. 2005-0050). Federal regulations also require that National Pollutant Discharge Elimination System (NPDES) permits contain requirements necessary to achieve water quality standards and that permit effluent limitations are consistent with the assumptions and requirements of available WLAs (40 C.F.R. § 122.44(d)(1)).

17. As envisioned by California Water Code section 13242, the TMDL contains a "description of surveillance to be undertaken to determine compliance with objectives." The Compliance Monitoring element of the TMDL recognizes that monitoring will be necessary to assess the progress of pollutant load reductions and improvements in water quality in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon. The Los Angeles Water Board's Executive Officer will ensure that appropriate entities develop and submit monitoring programs and technical reports necessary to achieve the purposes of the TMDL. The Executive Officer will determine the scope of these programs and reports, considering any legal requirements, including this TMDL, and if necessary, issue appropriate orders to appropriate entities.

18. Upon establishment of TMDLs by the State or U.S. EPA, the State is required to incorporate, or reference, TMDLs into the State Water Quality Management Plan (40 C.F.R. § 130.6(c)(1)). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Los Angeles Water Board. Attachment A to this resolution contains the language to be incorporated into the Basin Plan for this TMDL.

19. Los Cerritos Channel is a concrete-lined freshwater stream until Atherton Street, where it continues for approximately 0.5 miles as a soft bottom channel to Anaheim Road. The soft bottom segment of Los Cerritos Channel is where the tidal prism begins and connects to the Los Cerritos Channel Estuary at Anaheim Road. The predominant land uses in the Los Cerritos Channel subwatershed include residential, commercial & services, transportation, communication & utilities, industrial, golf course, open space & recreation, and agriculture. Responsible entities within the Los Cerritos Channel subwatershed include, but are not limited to the County of Los Angeles, Los Angeles County Flood Control District, the cities of Bellflower, Cerritos, Downey, Lakewood, Long Beach, Paramount, and Signal Hill, and Caltrans.

20. The Los Cerritos Channel Estuary subwatershed includes the Los Cerritos Channel wetlands, which are part of the historic Los Cerritos wetlands complex that exist today in both the Cities of Long Beach and Seal Beach. The predominant land uses in the Los Cerritos Channel Estuary subwatershed include residential, commercial & services, and transportation, communication & utilities. Responsible entities within the Los Cerritos Channel Estuary subwatershed include, but are not limited to the Los Angeles County Flood Control District, City of Long Beach, and Caltrans, and any permittees that are enrolled under the Phase II MS4 permit.

21. The Alamitos Bay subwatershed is located on the east side of San Gabriel River at the intersection of Pacific Coast Highway and Second Street, near Belmont Shore and includes Naples Island in the center of Alamitos Bay. The predominant land uses in the Alamitos Bay subwatershed include residential, commercial & services, and open space & recreation.

Responsible entities within the Alamitos Bay subwatershed include, but are not limited to the Los Angeles County Flood Control District, the City of Long Beach, and Caltrans.

22. The Colorado Lagoon subwatershed is located near the border between Los Angeles County and Orange County. Colorado Lagoon was naturally subject to tidal influence but is now hydraulically connected to Alamitos Bay's Marine Stadium via a 900-foot box culvert that runs under Marina Vista Park. It has three main functions: (1) serving as an estuarine habitat for sensitive species; (2) providing public recreational space; and (3) retaining and conveying storm water. The lagoon is abundant in wildlife and acts as an important stop for thousands of migratory birds, including endangered species every year. The predominant land uses in the Colorado Lagoon subwatershed include residential, golf courses, commercial & services, and open space & recreation. Colorado Lagoon has been undergoing restoration since 2008. Phase 2A, the construction of an open, earthen hydraulic water channel to reconnect the Lagoon to Marine Stadium, is currently in the engineering design phase, and construction is expected to be completed in 2021. Responsible entities within the Colorado Lagoon subwatershed include, but are not limited to the Los Angeles County Flood Control District, the City of Long Beach, and Caltrans.

23. The Los Angeles Water Board's goal in establishing the TMDL for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon is to protect the water contact recreation (REC-1) and non-contact water recreation (REC-2) beneficial uses in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon. Local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects, such as gastroenteritis, and recreational water quality, as measured by bacteria indicator densities.

24. The Los Angeles Water Board has prepared a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this TMDL. The technical document entitled "Total Maximum Daily Load for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon" is an integral part of this Los Angeles Water Board action and was reviewed, considered, and accepted by the Los Angeles Water Board before acting. Further, the technical document provides the detailed factual basis and analysis supporting the problem statement, numeric targets (interpretation of the narrative and numeric water quality objectives used to calculate the waste load and load allocations), source analysis, linkage analysis, waste load allocations (for point sources), load allocations (for nonpoint sources), margin of safety, and seasonal variations and critical conditions of this TMDL.

25. A High Flow Suspension (HFS) is the suspension of indicator bacteria REC-1 objectives during certain flow conditions that physically prevent the use of a waterbody for recreation. In 2003, the Los Angeles Water Board adopted an HFS for certain waterbodies in the region. The HFS was based on a categorical Use Attainability Analysis (UAA) for all engineered flood control channels with restricted or prohibited access during storm events corresponding to physically unsafe conditions. Specifically, waterbodies subject to the HFS meet all of the following criteria: (a) inland water bodies, (b) flowing water bodies, (c) engineered channels, and (d) water bodies where access can be restricted or prohibited (through fencing/signs). Los Cerritos Channel is not currently included as a waterbody subject to the HFS in Chapter 2 of the Basin Plan. However, Los Cerritos Channel (above Atherton Street) is an engineered channel that meets the criteria for suspension of the REC

use(s). As a result, the REC-1 and REC-2 uses are not fully attainable during and immediately following high-flow storm events in Los Cerritos Channel (above Atherton St.) Therefore, in addition to amending the Basin Plan to establish a TMDL for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon, this resolution amends the Basin Plan to revise Table 2-1a to include Los Cerritos Channel (above Atherton St.) based on the criteria of the UAA adopted in 2003.

26. Nothing in this resolution, or the accompanying Basin Plan amendment alters or interferes with the dischargers' responsibilities and commitments under the Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL. The suspension of portions of the REC-1 and REC-2 uses during swift-water conditions reflects the existing conditions in Los Cerritos Channel above Atherton St. and does not relieve or diminish obligations to reduce bacteria loading at the downstream waterbodies.

27. The temporary suspension of portions of the recreational uses (REC-1 and REC-2) in certain engineered channels during swift-water conditions reflects the Los Angeles Water Board's determination that the REC-1 and REC-2 uses are not fully attainable during these conditions at present. However, the Los Angeles Water Board remains committed to (1) re-evaluating the attainability of the REC-1 and REC-2 uses in the future; (2) supporting efforts to reclaim engineered channels to natural watercourses; and (3) supporting the beneficial re-use of storm water.

28. The public has had a reasonable opportunity to participate in the review of the amendment to the Basin Plan. A notice of a California Environmental Quality Act (CEQA) Scoping meeting and stakeholder meeting was sent to interested persons on November 19, 2019. On December 17, 2019, Los Angeles Water Board staff held a stakeholder meeting to solicit comments on the development of (1) a TMDL for indicator bacteria in the Los Cerritos Channel and Estuary and (2) a TMDL for indicator bacteria in Alamitos Bay and Colorado Lagoon. At the time of this stakeholder meeting, staff was anticipating developing two separate sets of Staff Reports and Basin Plan Amendments. However, for efficiency, for both the Los Angeles Water Board and for stakeholders, these TMDLs are now all addressed in one Staff Report and a recommended tentative Basin Plan Amendment. At this meeting, Los Angeles Water Board staff presented background on the TMDLs, reviewed recent data, and solicited stakeholder engagement. At the meeting, the CEQA checklist of significant environmental issues and mitigation measures was also discussed. This meeting fulfilled the requirements under CEQA (Public Res. Code, § 21083.9). A draft of the TMDL documents was released for public comment on December 2, 2021; a Notice of Hearing and Notice of Filing were published and circulated 45 days preceding Board action; Los Angeles Water Board staff responded to oral and written comments received from the public; and the Los Angeles Water Board held a public hearing on March 10, 2022 to consider adoption of the TMDL.

29. Pursuant to Public Resources Code sections 21080.3.1 and 21084.3, subdivision (c), CEQA lead agencies are required to consult with California Native American tribes that have requested notice from such agencies of projects in the geographic area that are traditionally and culturally affiliated with the tribes. On November 27, 2019, the Los Angeles Water Board staff sent formal letters to the Kizh Nation - Gabrieleño Band of Mission Indians, the San Manuel Band of Mission Indians, and the Gabrieleño / Tongva San Gabriel Band of Mission Indians, to formally notify the tribes of the TMDL, the regulatory

background, and the project location. On December 4, 2019, Pursuant to Public Resources Code section 21080.3.1, subdivision (b), the Native American Heritage Commission notified the Los Angeles Water Board of three other tribes that are traditionally and culturally affiliated with the geographic area of the TMDL, but have not requested notification of projects in the tribe's areas of traditional and cultural affiliation. On December 23, 2019, the Los Angeles Water Board sent formal letters to these three tribes notifying them about the TMDLs, regulatory background, and the project location. Staff received one consultation request from Kizh Nation and had a conference call with Kizh Nation's representatives on May 7, 2020. Staff addressed Kizh Nation's concerns with water quality in project areas where tribe people access water for ceremonial, gathering, and recreational purposes and will notify of Kizh Nation of any future projects involving ground disturbance and demolition per Kizh Nation's request.

30. On March 10, 2022, prior to the Board's action on this resolution, a public hearing was conducted on this TMDL. Notice of the hearing was published in accordance with the requirements of California Water Code section 13244. This notice was published in the Los Angeles Times and the Long Beach Press Telegram.

31. In amending the Basin Plan to establish this TMDL, the Los Angeles Water Board considered the requirements set forth in sections 13240 and 13242 of the California Water Code.

32. The TMDL implements existing narrative and numeric water quality objectives (i.e., water quality objectives in the Basin Plan), the Los Angeles Water Board (along with the State Water Board) has determined that adopting a TMDL does not require the Los Angeles Water Board to consider the factors of California Water Code section 13241. The consideration of the Water Code section 13241 factors, by the express terms of section 13241, only applies "in establishing water quality objectives." Here the Los Angeles Water Board is not establishing water quality objectives, but as required by section 303(d)(1)(C) of the Clean Water Act is adopting a TMDL that will implement the previously established objectives that have not been achieved. In making this determination, the Los Angeles Water Board has considered and relied upon a legal memorandum from the Office of Chief Counsel to the State Water Board's basin planning staff detailing why TMDLs cannot be considered water quality objectives. (See Memorandum from Staff Counsel Michael J. Levy, Office of Chief Counsel, to Ken Harris and Paul Lillebo, Division of Water Quality, "The Distinction Between a TMDL's Numeric Targets and Water Quality Standards," dated June 12, 2002.)

33. While the Los Angeles Water Board is not required to consider the factors of California Water Code section 13241, it nonetheless has developed and received significant information pertaining to the California Water Code section 13241 factors and has considered that information in developing and adopting this TMDL. Section 13241 at a minimum requires that water quality objectives ensure reasonable protection of beneficial uses. The past, present and probable future beneficial uses of water have been considered in that Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon are designated for a number of beneficial uses including REC-1 and REC-2 in the Basin Plan. The environmental characteristics of Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon are set forth in detail in the Basin Plan and in the technical documents supporting this Basin Plan amendment and have been considered in developing this TMDL.

Water quality conditions that reasonably could be achieved through the coordinated control of all factors which affect water quality in the area have been considered. This TMDL anticipates myriad implementation options, including structural methods such as various swale and infiltration systems, as well as non-structural alternatives such as outreach, education and enforcement of local ordinances. These options provide flexibility for responsible entities to reduce loading of indicator bacteria to Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon through implementation of many different actions, which can be tailored according to the characteristics of the responsible entity's jurisdictional area. The implementation of the compliance options will ensure that Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon attain and continue to maintain bacteriological water quality standards. Attainment of the water quality standards through the range of implementation options presented is a reasonably achievable water quality condition for the Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon subwatersheds. However, to the extent that there would be any conflict between the consideration of the factor in Water Code section 13241, subdivision (c), if the consideration were required, and the Clean Water Act, the Clean Water Act would prevail. Economic considerations were considered throughout the development of the TMDL. Some of these economic considerations arise in the context of Public Resources Code section 21159 and are equally applicable here. The implementation program for this TMDL recognizes the economic limitations on achieving immediate compliance and allows a flexible implementation schedule of 15 years for Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon subwatersheds. The need for housing within the region has been considered, but this TMDL is unlikely to affect housing needs. Whatever housing impacts could materialize is ameliorated by the flexible nature of this TMDL and implementation schedule.

34. The Basin Plan amendment is consistent with the State Antidegradation Policy (State Water Board Resolution No. 68-16) and the federal Antidegradation Policy (40 C.F.R. § 131.12) in that it does not allow degradation of water quality, but requires restoration of water quality and attainment of water quality standards to fully protect beneficial uses.

35. Considering the record as a whole, this Basin Plan amendment is expected to result in an effect, either individually or cumulatively, on wildlife resources.

36. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Los Angeles Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the CEQA (Public Res. Code, § 21000 et seq.) requirements for preparing environmental documents (Cal. Code Regs., tit. 14, § 15251, subd. (g); Cal. Code Regs., tit. 23, § 3782). The Los Angeles Water Board staff has prepared "substitute environmental documents (SED)" for this project that contain the required environmental documentation under the State Water Board's CEQA regulations (Cal. Code Regs., tit. 23, § 3777.) The SED include the TMDL staff report entitled "Total Maximum Daily Load for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon", the environmental checklist, the comments and responses to comments, the Basin Plan amendment language, and this resolution. The project itself is the establishment of a TMDL for indicator bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon. While the Los Angeles Water Board has no discretion to not establish a TMDL (the TMDL is required by federal law), the Board does exercise discretion in

assigning waste load allocations and load allocations, determining the program of implementation, and setting various milestones in achieving the water quality standards. The CEQA checklist and other portions of the SED contain significant analysis and numerous findings related to impacts and mitigation measures.

37. In preparing the SED, the Los Angeles Water Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends those documents to serve as a tier 1 environmental review. This analysis is not intended to be an exhaustive analysis of every conceivable impact, but an analysis of the reasonably foreseeable consequences of the adoption of this regulation, from a programmatic perspective. The "Lead" agencies for tier 2 projects will assure compliance with project-level CEQA analysis of this programmatic project. Project level impacts will need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2.

38. The foreseeable methods of compliance for this TMDL entail sub-regional structural best management practices (BMPs), such as local capture systems, vegetated treatment systems, local infiltration systems, media filtration, marine pump-out facilities, and circulation increase, as well as regional structural BMPs, such as diversion to stormwater treatment facilities, regional infiltration systems, and regional detention facilities. Foreseeable methods of compliance also include non-structural BMPs, such as administrative controls, including enforcement of local ordinances, outreach and education, street cleaning, and storm drain cleaning.

39. Consistent with the Los Angeles Water Board's substantive obligations under CEQA, the SED do not engage in speculation or conjecture, and only consider the reasonably foreseeable environmental impacts, including those relating to the methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and the reasonably foreseeable alternative means of compliance, which would avoid or reduce the identified impacts.

40. The Basin Plan amendment could have a potentially significant adverse effect on the environment. However, there are feasible alternatives, feasible mitigation measures, or both, that if employed, would substantially lessen the potentially significant adverse impacts identified in the SED; however, such alternatives or mitigation measures are within the responsibility and jurisdiction of other public agencies, and not the Los Angeles Water Board. California Water Code section 13360 precludes the Regional Water Board from dictating the manner in which responsible parties comply with any of the Regional Water Board's regulations or orders. When the entities responsible for implementing this TMDL determine how they will proceed, the entities responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. These feasible alternatives and mitigation measures are described in more detail elsewhere in the SED. (Cal. Code Regs., tit. 14, § 15091, subd. (a)(2).)

41. The SED for this TMDL and staff's responses to comments, identify broad mitigation approaches that should be considered at the project level.

42. To the extent significant adverse environmental effects could occur, the Los Angeles Water Board has balanced the economic, legal, social, technological, and other benefits of the TMDL against the unavoidable environmental risks and finds that specific economic, legal,

social, technological, and other benefits of the TMDL outweigh the unavoidable adverse environmental effects, such that those effects are considered acceptable. The basis for this finding is set forth in the SED. (Cal. Code Regs., tit. 14, § 15093.)

43. Health and Safety Code section 57004 requires external scientific peer review for certain water quality control policies. Scientific portions of this TMDL are drawn from the previously adopted bacteria TMDLs in the Los Angeles Region, including the Santa Monica Bay Beaches Bacteria TMDL, which underwent scientific peer review. The scientific basis of the *E. coli* and *Enterococcus* water quality objectives have been peer reviewed as part of the adoption of U.S. EPA 2012 Recreational Water Quality Criteria and the 2018 State Water Board statewide bacteria provisions. As a result, the scientific portions of this TMDL have already undergone external, scientific peer review. Remaining portions of the TMDL, such as the implementation strategy, are not scientifically based, and therefore, not subject to the peer review requirements of section 57004. As a result, the Los Angeles Water Board has fulfilled the requirements of Health and Safety Code section 57004, and the amendment does not require further peer review.

44. The regulatory action meets the “Necessity” standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b). As specified above, federal law and regulations require that TMDLs be incorporated, or referenced, in the state’s water quality management plan. The Los Angeles Water Board’s Basin Plan is the Los Angeles Water Board’s component of the water quality management plan, and the Basin Plan is how the Los Angeles Water Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of the Basin Plan under Water Code section 13242. The necessity of developing a TMDL is established in the TMDL staff report, the section 303(d) list, and the data contained in the administrative record documenting the indicator bacteria impairments in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon.

45. The Basin Plan amendment incorporating a TMDL for indicator bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon must be submitted for review and approval by the State Water Board, the State Office of Administrative Law (OAL), and the U.S. EPA. The Basin Plan amendment will become effective upon approval by the State Water Board, OAL and U.S. EPA. A Notice of Decision will be filed with the Resources Agency.

46. If during the approval process Los Angeles Water Board staff, the State Water Board or State Water Board staff, or OAL determine that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer should make such changes consistent with the Los Angeles Water Board’s intent in adopting this TMDL, and should inform the Board of any such changes.

**THEREFORE, be it resolved that pursuant to sections 13240 and 13242 of the California Water Code, the Los Angeles Water Board hereby amends the Basin Plan and directs staff as follows:**

1. The Los Angeles Water Board hereby approves and adopts the CEQA substitute environmental documentation, which was prepared in accordance with Public Resources

Code section 21159 and California Code of Regulations, title 14, section 15187, and directs the Executive Officer to sign the environmental checklist.

2. Pursuant to sections 13240 and 13242 of the California Water Code, the Los Angeles Water Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements and implementation schedule of the TMDL for indicator bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon.
3. Pursuant to sections 13240 and 13242 of the California Water Code, the Los Angeles Water Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to Chapter 2 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment B hereto, to identify Los Cerritos Channel (above Atherton Street) as subject to High Flow Suspension.
4. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Water Board in accordance with the requirements of section 13245 of the California Water Code.
5. The Los Angeles Water Board requests that the State Water Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to the OAL and the U.S. EPA.
6. If during the approval process, the Los Angeles Water Board staff, State Water Board or State Water Board staff, or OAL determine that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
7. The Executive Officer is authorized to request a "No Effect Determination" from the Department of Fish and Wildlife or transmit payment of the applicable fee as may be required to the Department of Fish and Wildlife.
8. The Executive Officer is directed to hold a public workshop within six months following the adoption of this TMDL to solicit additional input on the approach for implementing the statewide Bacteria Provisions through TMDLs in the region. Based on additional information, including the input received at the workshop, the Los Angeles Water Board directs the Executive Officer to consider whether revisions to the TMDL approach are appropriate. If so, the Los Angeles Water Board directs the Executive Officer to develop and present such recommendations.

I, Renee Purdy, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on March 10, 2022.

R Purdy Digitally signed by R Purdy Date: 2022.09.07 12:57:23 -07'00'

Water Boards

Renee Purdy
Executive Officer

September 7, 2022
(Date)

# Attachment A to Resolution No. R22-002

**Amendment to the Water Quality Control Plan - Los Angeles Region to Incorporate the TMDL for Indicator Bacteria in Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon**

Adopted by the California Regional Water Quality Control Board, Los Angeles Region on March 10, 2022.

**Amendments:**
**Table of Contents**
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries



**List of Figures, Tables, and Inserts**
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) Tables



**Chapter 7. Total Maximum Daily Loads (TMDLs)**
**Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL**

This TMDL was adopted by:

The Regional Water Quality Control Board on March 10, 2022.

This TMDL was approved by:

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

This TMDL is effective on [Insert Date].

The elements of the TMDL are presented in Section 7-44.1 and the Implementation Plan in Table 7-44.2.

# Attachment A to Resolution No. R22-002

## Section 7-44.1. Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria TMDL: Elements

### Problem Statement

Elevated indicator bacteria densities are exceeding water quality objectives causing impairment and affecting the water contact recreation (REC-1) and non-contact water recreation (REC-2) beneficial uses in Los Cerritos Channel, Alamitos Bay, and Colorado Lagoon. Although Los Cerritos Channel Estuary is not listed on the 2018 303(d) list as an impaired waterbody for indicator bacteria, at the time of TMDL development data showed that it exceeds applicable water quality objectives in the majority of samples. In addition, it is located between the 303(d)-listed Los Cerritos Channel and Alamitos Bay. Therefore, Los Cerritos Channel Estuary is also addressed in this TMDL.

Recreating in waters with elevated indicator bacteria densities has been associated with adverse human health effects. Specifically, local and national epidemiological studies have demonstrated a causal relationship between adverse health effects and recreational water quality as measured by indicator bacteria densities.

### Numeric Target

The TMDL has a multi-part numeric target based on the geometric mean and statistical threshold value bacteria water quality objectives (WQOs). The WQOs are based on an estimated illness rate of 32 per 1000 water contract recreators for fresh, estuarine, and marine waters to protect the REC-1 beneficial use. These targets are the appropriate indicators of public health risk in recreational waters. Protecting the REC-1 beneficial use will result in the protection of the REC-2 beneficial use.

Los Cerritos Channel (above Atherton Street) and its tributaries are freshwater waterbodies. Los Cerritos Channel (Atherton Street to Anaheim Street), Los Cerritos Channel Estuary, Alamitos Bay, and Colorado Lagoon are saline water waterbodies. Freshwater is defined as waters with salinity equal to or less than 1 part per thousand (ppth) 95 percent or more of the time during the calendar year. Saline water is defined as waters with salinity greater than 1 ppth more than 5 percent of the time during the calendar year. *E. coli* is the indicator bacteria of fecal or pathogen contamination for freshwaters, and *Enterococcus* is the indicator bacteria for fecal or pathogen contamination for saline waters.

The numeric targets are comprised of three elements: magnitude, duration, and frequency.

The freshwater numeric targets (magnitude) for Los Cerritos Channel (above Atherton Street) and its tributaries are:

1. Geometric Mean: *E. coli* density shall not exceed 100 cfu/100 mL.
2. Statistical Threshold Value (STV): *E. coli* density shall not exceed 320 cfu/100 mL in more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

The saline water numeric targets (magnitude) for Los Cerritos Channel (Atherton Street to Anaheim Street), Los Cerritos Channel Estuary, Alamitos Bay and Colorado Lagoon are:

1. Geometric Mean: *Enterococcus* density shall not exceed 30 cfu/100 mL.
2. Statistical Threshold Value (STV): *Enterococcus* density shall not exceed 110 cfu/100 mL in more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

Duration and Frequency for freshwater and saline water: The waterbody's calculated geometric mean shall not be greater than the applicable geometric mean magnitude in any six-week interval, calculated weekly. The applicable STV shall not be exceeded in more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

The acronym cfu stands for colony forming units. MPN (Most Probable Number) is equivalent for practical data interpretation and regulatory purposes to cfu. For data interpretation and regulatory purposes, MPN and cfu can be considered equivalent when used as units of measurement.

To determine attainment, the rolling six-week geometric mean shall be applied based on a statistically sufficient number of samples, generally not less than five samples spaced over a six-week time period starting all calculations on Sunday. However, if it is not possible to calculate a geometric mean due to lack of sufficient data, then attainment of the numeric target shall be determined based on the STV.

Both freshwater and saline water numeric targets apply during summer and winter and in both dry and wet weather since there is water contact recreation throughout the calendar year, including during wet weather. Wet weather is defined as rainfall of 0.1 inch or more plus the three days following the rain event. Geometric means are assessed over a six-week period which may contain days of both dry and wet weather.

**Source Analysis**

The Los Cerritos Channel watershed is divided into 5 subwatersheds: Los Cerritos Channel subwatershed, Los Cerritos Channel Estuary subwatershed, Alamitos Bay subwatershed, Colorado Lagoon subwatershed, and Los Cerritos Channel Coastal subwatershed. The Los Cerritos Channel Coastal subwatershed is outside the scope of this TMDL. For the purpose of this TMDL, the Los Cerritos Channel subwatershed, Los Cerritos Channel Estuary subwatershed, Alamitos Bay subwatershed, and Colorado Lagoon subwatershed are collectively referred to as Upper Los Cerritos Channel watershed.

Point sources in the Upper Los Cerritos Channel watershed include discharges from municipal separate storm sewer systems (MS4) regulated under the Regional MS4 Permit, the California Department of Transportation (Caltrans) MS4 Permit, the Phase II MS4 general permit, individual NPDES permittees, general NPDES permittees, general industrial stormwater permittees, and general construction stormwater permittees.

Nonpoint sources in the Upper Los Cerritos Channel watershed include onsite wastewater treatment systems (OWTS), sanitary sewer overflows (SSO), irrigated agriculture lands, and golf courses. Nonpoint sources in Los Cerritos Channel Estuary and Alamitos Bay subwatersheds also include marina activities, such as boat sanitary waste systems, pump-out stations, boat deck and slip washing, fishing waste disposal, swimmer "wash-off", and restaurant washouts.

Surface runoff (stormwater and non-stormwater discharges) from urbanized areas conveyed via the MS4 is a significant source of bacteria to the Los Cerritos Channel and Estuary, which then discharges to the downstream Alamitos Bay. Monitoring data collected under the MS4 Permits show elevated levels of bacteria in Los Cerritos Channel and Estuary. Data from throughout the Los Angeles Region further demonstrate that bacteria concentrations are significantly greater in developed areas.

**Linkage Analysis**

The linkage between the numeric targets, the impairments, and the allocations is supported by the following findings:

1. In Southern California, in dry weather, non-stormwater discharges from urban areas are significant sources of bacteria that principally drive exceedances.

2. In Southern California, in wet weather, stormwater runoff from watershed sources conveyed through MS4s causes bacteria exceedances.

3. Studies show that bacterial degradation and dilution during transport from the watershed to the receiving water do not significantly affect bacterial indicator densities.

For this TMDL, the fecal indicator bacteria load and waste load allocations protect the water contact recreation beneficial use because they are based on the WQOs adopted by the State Water Board and the Los Angeles Water Board. Because numeric targets to attain the bacteria WQOs apply within the receiving water, any potential bacteria source must meet numeric targets at the point of entrance to the receiving water in order to ensure that the quality of water entering the impaired waterbody meets the numeric targets for bacteria. One exception to this requirement is for bacteria sources entering Los Cerritos Channel above Atherton Street during high-flow conditions when the REC-1 use is suspended.

**Waste Load Allocations (for point sources)**

Waste load allocations (WLAs) are assigned to point sources in the Upper Los Cerritos Channel watershed throughout the calendar year and equal to the numeric targets and calculated in the same manner as the numeric targets. Specific WLAs are as follows:

For the Los Cerritos Channel (above Atherton Street) and its tributaries (freshwaters), the WLAs are a geometric mean and an STV:

1. Geometric Mean: *E. coli* density shall not exceed 100 cfu/100 mL.
2. Statistical Threshold Value (STV): *E. coli* density shall not exceed 320 cfu/100 mL in more than 10 percent of the samples in a calendar month, calculated in a static manner.

However, if it is not possible to calculate a geometric mean due to lack of sufficient data, then attainment of the WLAs shall be determined based on the STV.

A high flow suspension, as described in Chapter 2, applies to Los Cerritos Channel above Atherton Street, but not to the waterbodies below. The WLAs for discharges to Los Cerritos Channel (above Atherton Street) may be suspended during days with rainfall greater than or equal to 0.5 inch and the following 24 hours, if it can be demonstrated that, for the same time period, discharges to Los Cerritos Channel below Atherton Street from Los Cerritos Channel above Atherton Street, attain the WLAs for Los Cerritos Channel below Atherton Street.

For Los Cerritos Channel (Atherton Street to Anaheim Street), Los Cerritos Channel Estuary, Alamitos Bay and Colorado Lagoon (saline waters), the WLAs are a geometric mean and an STV:

1. Geometric Mean: *Enterococcus* density shall not exceed 30 cfu/100 mL.
2. Statistical Threshold Value (STV): *Enterococcus* density shall not exceed 110 cfu/100 mL in more than 10 percent of the of the samples in a calendar month, calculated in a static manner.

However, if it is not possible to calculate a geometric mean due to lack of sufficient data, then attainment of the WLAs shall be determined based on the STV.

WLAs in the Los Cerritos Channel subwatershed (including the portion of the watershed draining to the transition to the Los Cerritos Channel Estuary) are assigned to Phase I MS4 permittees (the County of Los Angeles, Los Angeles County Flood Control District, the City of Bellflower, the City of Cerritos, the City of Downey, the City of Lakewood, the City of Paramount, the City of Long Beach, and the City of Signal Hill), and Caltrans, as well as any permittees that are enrolled under the Phase II MS4 permit. WLAs are also assigned to non-MS4 permittees, including individual NPDES permittees, general NPDES permittees, general industrial stormwater permittees, and general construction stormwater permittees.

WLAs in the Los Cerritos Channel Estuary, Alamitos Bay, and Colorado Lagoon subwatersheds are assigned to Phase I MS4 permittees, including Los Angeles County Flood Control District, the City of Long Beach and Caltrans, as well as any permittees that are enrolled under the Phase II MS4 permit. WLAs are also assigned to non-MS4 permittees, including individual NPDES permittees, general NPDES permittees, general industrial stormwater permittees, and general construction stormwater permittees.

Any future enrollees under the Phase II MS4 permit, an individual NPDES permit, a general NPDES permit, the general industrial stormwater permit, or the general construction stormwater permit within the Upper Los Cerritos Channel watershed management area will also be subject to these WLAs.

**Load Allocations (for nonpoint sources)**

Load allocations (LAs) are assigned to nonpoint sources, including OWTS, golf courses, irrigated agriculture lands, SSOs, and marine sanitation devices. The LAs for OWTS, golf courses and irrigated agriculture lands are equal to the numeric targets and calculated in the same manner:

For the Los Cerritos Channel (above Atherton Street) and its tributaries (freshwaters), the LAs are a geometric mean and an STV:

1. Geometric Mean: *E. coli* density shall not exceed 100 cfu/100 mL.
2. Statistical Threshold Value (STV): *E. coli* density shall not exceed 320 cfu/100 mL in more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

However, if it is not possible to calculate a geometric mean due to lack of sufficient data, then attainment of the LAs shall be determined based on the STV.

A high flow suspension, as described in Chapter 2, applies to Los Cerritos Channel above Atherton Street, but not to the waterbodies below. The LAs for discharges to Los Cerritos Channel (above Atherton Street) may be suspended during days with rainfall greater than or equal to 0.5 inch and the following 24 hours, if it can be demonstrated that, for the same time period, discharges to Los Cerritos Channel below Atherton Street from Los Cerritos Channel above Atherton Street, attain the LAs for Los Cerritos Channel below Atherton Street.

For the Los Cerritos Channel (Atherton Street to Anaheim Street), Los Cerritos Channel Estuary, Alamitos Bay, and Colorado Lagoon (saline waters), the LAs are a geometric mean and an STV:

1. Geometric Mean: *Enterococcus* density shall not exceed 30 cfu/100 mL.
2. Statistical Threshold Value (STV): *Enterococcus* density shall not exceed 110 cfu/100 mL in more than 10 percent of the of the samples in a calendar month, calculated in a static manner.

However, if it is not possible to calculate a geometric mean due to lack of sufficient data, then attainment of the LAs shall be determined based on the STV.

The LAs for bacterial loading from SSOs are set as zero discharge of fecal indicator bacteria (FIB). The Statewide Sanitary Sewer WDRs, Order No. 2006-003-DWQ, prohibits any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance.

The LAs for bacterial loading from marine sanitation devices is set as zero discharge of FIB. According to the Navigation Code section 780 and section 117515 of the California Health and Safety Code the dumping of sewage into marinas is prohibited.

**Critical Conditions**

For these waterbodies, the critical condition is winter when assessing data using the geometric mean numeric targets and wet weather when assessing data using the STV numeric targets. While indicator bacteria densities can be greater during the winter wet season due to factors such as stormwater runoff, they can be high at any time of year. Given that exceedances of the objectives are frequent during all seasons and conditions and given that recreational uses of the Los Cerritos Channel Estuary, Alamitos Bay, and Colorado Lagoon take place during all seasons and conditions, the TMDL allocations are applied equally during all time periods and conditions.

**Margin of Safety**

An implicit margin of safety is incorporated in the allocations under the assumption that no bacterial decay occurs in discharges from storm drains to the receiving water when determining compliance with allocations. In addition, the pollutant allocations in this TMDL are based on U.S. EPA's 2012 Recreational Water Quality Criteria and the Statewide Bacteria Provisions. By directly applying the numeric water quality objectives and implementation procedures as WLAs and LAs, there is little uncertainty about whether meeting the TMDL will result in meeting the water quality standards. Therefore, no additional or explicit margin of safety is needed for this TMDL.

**Implementation**

The regulatory mechanisms used to implement the TMDL will include the Regional MS4 permit (Order No. R4-2021-0105), the Caltrans stormwater permit (State Water Board Order No. 2012-0011-DWQ), the statewide Phase II MS4 permit (State Water Board Order 2013-0001-DWQ) and any regional Phase II MS4 permits, one major individual NPDES permits (Alamitos Generating Station, Order No. R4-2015-0173), two minor individual NPDES permits (Tesoro Logistics Operations LLC, Order No. R4-2016-0219; Paramount Petroleum Refinery, Order No. R4-2016-0359), general NPDES permits (NPDES No. CAG994004; NPDES No. CAG674001; NPDES No. CAG914001), general industrial stormwater permits (State Water Board Order No. 2015-0122-DWQ), general construction stormwater permits (State Water Board Order No. 2012-0006-DWQ ), any orders which supersede these orders and the authority contained in Sections 13263, 13267, 13269, and 13383 of the California Water Code, and other appropriate regulatory mechanisms.

The MS4 WLAs will be implemented through the Regional MS4 permit and the Caltrans statewide stormwater permit. The WLAs shall be incorporated into the MS4 permit as water quality-based effluent limitations (WQBELs) at the time of permit issuance, modification, or renewal. MS4 permittees may demonstrate compliance with the WQBELs if any of the following requirements is demonstrated:

1. There are no exceedances of the WQBELs at the Permittee's applicable MS4 outfall(s); or
2. There are no exceedances of the numeric targets, in the receiving water downstream of the Permittee's outfalls; or
3. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the WQBEL.

The WLAs for discharges to Los Cerritos Channel above Atherton Street may be suspended during days with rainfall greater than or equal to 0.5 inch and the following 24 hours, if it can be demonstrated that, for the same time period, discharges to Los Cerritos Channel below Atherton Street from Los Cerritos Channel above Atherton Street, attain the WLAs for Los Cerritos Channel below Atherton Street. In other words, MS4 permittees may pursue a downstream compliance approach. This will require two points of compliance: (1) at the outfall discharging to Los Cerritos Channel above Atherton Street and (2) in Los Cerritos Channel below Atherton Street. For practical purposes, MS4 permittees may use the existing mass emission station LCC1, located at Stearns Street,

about 3000 feet upstream of Atherton Street, to demonstrate compliance with WLAs in Los Cerritos Channel below Atherton Street.

MS4 permittees may jointly or individually decide how to achieve the necessary bacteria reductions. MS4 Permittees shall provide an Implementation Plan to the Los Angeles Water Board outlining how each plan leads to individually or cooperatively achieving the WLAs. The report shall include implementation methods, an implementation schedule, proposed milestones, and proposed outfall and/or receiving water monitoring to determine compliance. A Watershed Management Program (WMP) developed by the responsible entities in accordance with their MS4 permit(s), which has been approved by the Los Angeles Water Board, satisfies the requirements for an Implementation Plan, where the WMP addresses the applicable waterbody-pollutant combinations of this TMDL consistent with the implementation schedule.

WLAs for individual NPDES permittees, general NPDES permittees, general industrial stormwater permittees, and general construction stormwater permittees will be incorporated as WQBELs in their NPDES permits at the time of permit issuance, modification, or renewal.

LAs for irrigated agricultural lands will be implemented through requirements in the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Agricultural Lands or other appropriate order consistent with the LAs and the State Water Board's Nonpoint Source Implementation and Enforcement Policy. The LAs for OWTS will be regulated by WDRs or waivers of WDRs consistent with the State Water Board's OWTS Policy. LAs for golf courses will be implemented through WDRs or waivers of WDRs consistent with the State Water Board's Nonpoint Source Implementation and Enforcement Policy. The Nonpoint Source Implementation and Enforcement Policy specifies that the regional water boards have the authority to regulate nonpoint source discharges through WDRs, waivers, and prohibitions.

**Monitoring**

The TMDL monitoring programs consist of two components: (1) Receiving water monitoring to assess implementation progress and attainment of numeric targets, and (2) compliance monitoring of discharges to determine compliance with the WLAs. Monitoring requirements may be included in subsequent permits or other orders and are subject to Los Angeles Water Board approval. Responsible entities may build upon existing monitoring programs, such as an Executive Officer approved Integrated Monitoring Program (IMP) or Coordinated Integrated Monitoring Program (CIMP), when developing the TMDL effectiveness and compliance monitoring plans.

**Receiving Water Monitoring**

Responsible entities identified by subwatershed, below, are required to develop and implement a comprehensive Receiving Water Monitoring Plan within one year of the effective date of this TMDL to assess numeric target attainment and to determine the effectiveness of implementation actions on receiving water quality. An IMP or CIMP developed by the responsible entities in accordance with their MS4 permit(s), which has been approved by the Los Angeles Water Board, satisfies the requirements for a Receiving Water Monitoring Plan, where the IMP/CIMP addresses the applicable

waterbody-pollutant combinations of this TMDL consistent with the implementation schedule.

Monitoring shall commence within six months of approval of the Receiving Water Monitoring Plan. Monitoring requirements shall be incorporated into the regulatory mechanisms for each responsible entity upon issuance, renewal, or modification or through separate investigatory orders. Monitoring procedures, analysis, and quality assurance shall be developed in accordance with the California Surface Water Ambient Monitoring Program (SWAMP) Inland Water Sample Collection for Microbial Samples and continue beyond the final implementation date of the TMDL unless the Executive Officer approves a reduction or elimination of such monitoring.

In the Los Cerritos Channel subwatershed, the responsible entities include Los Angeles County, Los Angeles County Flood Control District, the City of Bellflower, the City of Cerritos, the City of Downey, the City of Lakewood, the City of Paramount, the City of Long Beach, the City of Signal Hill, and Caltrans. Responsible entities shall outline a bacteria monitoring program for *E. coli* for areas above Atherton Street and Enterococcus for Atherton Street to Anaheim Street and flow rate.

In the Los Cerritos Channel Estuary subwatershed, the responsible entities include Los Angeles County Flood Control District, the City of Long Beach, and Caltrans. Responsible entities shall outline a bacteria monitoring program for *Enterococcus* and flow rate.

In the Alamitos Bay and Colorado Lagoon subwatersheds, the responsible entities include Los Angeles County Flood Control District, the City of Long Beach, and Caltrans. Responsible entities shall outline a bacteria monitoring program for *Enterococcus*.

The sampling frequency and locations must be adequate to assess attainment of numeric targets in the receiving water. Responsible entities shall conduct monthly receiving water sampling for the first 10 years of the implementation schedule in Los Cerritos Channel and Estuary. After 10 years, the receiving water monitoring frequency must be weekly at a minimum to support calculation of the geometric mean and assessment of compliance with the STV. In Colorado Lagoon and Alamitos Bay, for the entire implementation period, responsible entities shall conduct weekly sampling at a minimum to support calculation of the geometric mean and assessment of compliance with the STV.

At a minimum, one sampling station shall be located in the Los Cerritos Channel, one in the Los Cerritos Channel Estuary, one in Colorado Lagoon (before the confluence to Marine Stadium), and four in Alamitos Bay (one at Mothers Beach, one at B-14 sampling location or nearby, one at B-31 sampling location or nearby, and one in Marine Stadium). All sampling locations shall be spatially independent, which means more than 200 meters apart.

If the sampling results are greater than the allowable STV or geometric mean targets, the water body segment shall be considered not attaining the TMDL.

Other responsible entities with WLAs or LAs may be required to conduct receiving water monitoring through NPDES permits or other orders, if appropriate.

**Compliance Monitoring**

To assess attainment of the WLAs, compliance monitoring shall include monitoring for *E. coli* and *Enterococcus* in the Los Cerritos Channel subwatershed, and *Enterococcus* in the Los Cerritos Channel Estuary subwatershed, Alamitos Bay subwatershed, and Colorado Lagoon subwatershed.

TMDL compliance monitoring requirements shall be incorporated into the regulatory mechanisms for each responsible entity upon issuance, renewal, or modification, or through separate investigatory orders. Monitoring procedures, analysis, and quality assurance shall be comparable to SWAMP Inland Water Sample Collection for Microbial Samples and continue beyond the final implementation date of the TMDL unless the Executive Officer approves a reduction or elimination of such monitoring.

**MS4 Compliance Monitoring**

Responsible entities for the MS4 WLAs shall submit an outfall monitoring plan to be approved by the Executive Officer. The outfall monitoring plan shall include an adequate number of representative outfalls to be sampled and a sampling frequency. An IMP or CIMP developed by the responsible entities in accordance with their MS4 permit(s), which has been approved by the Los Angeles Water Board, satisfies the requirements for an outfall monitoring plan, where the IMP/CIMP addresses the applicable waterbody-pollutant combinations of this TMDL consistent with the implementation schedule. The IMP or CIMP may be modified with Executive Officer approval.

In the Los Cerritos Channel subwatershed, the responsible entities include Los Angeles County, Los Angeles County Flood Control District, the City of Bellflower, the City of Cerritos, the City of Downey, the City of Lakewood, the City of Paramount, the City of Long Beach, the City of Signal Hill, Caltrans, and any current and future permittees enrolled under the Phase II MS4 permit. Responsible entities shall outline a bacteria monitoring program for E. coli in the Los Cerritos Channel subwatershed to demonstrate compliance with the freshwater MS4 WLAs. Responsible entities shall also outline a monitoring program for *Enterococcus* at the compliance point assigned to comply with the WLA assigned to the transition between the Los Cerritos Channel and the Los Cerritos Channel Estuary.

In the Los Cerritos Channel Estuary subwatershed, Alamitos Bay subwatershed, and Colorado Lagoon subwatershed, the responsible entities include Los Angeles County Flood Control District, the City of Long Beach, Caltrans, and any current and future permittees enrolled under the Phase II MS4 permit. Responsible entities shall outline a bacteria monitoring program for *Enterococcus*.

MS4 responsible entities shall monitor representative outfalls either on a weekly basis and be subject to the geometric mean and STV WLAs or monitor the representative outfalls at a minimum of three wet weather events and four dry weather events during the calendar year and be subject to the STV. Wet weather is defined as rainfall of 0.1 inch or more plus the 3 days following the rain event. Wet weather sampling shall target the first significant rain event of the calendar year. Dry weather samples shall be collected two times in the summer season (April 1-October 31), and two times in the winter season (November 1-March 31). Dry weather sampling shall occur at a minimum of 72 hours after a storm event.

If MS4 permittees pursue a downstream compliance approach, wherein the WLAs for discharges to Los Cerritos Channel above Atherton Street are suspended during days with rainfall greater than or equal to 0.5 inch and the following 24 hours, compliance monitoring shall occur at both the outfall discharging to Los Cerritos Channel above Atherton Street and in the Channel below Atherton Street. For practical purposes, MS4 permittees may use the existing mass emission station LCC1, located at Stearns Street, about 3000 feet upstream of Atherton Street, for the in-channel portion of compliance determination.

**Compliance Monitoring for Other Point Sources**

Individual NPDES permittees, general NPDES permittees, general industrial stormwater permittees, and general construction stormwater permittees shall conduct monitoring as part of their permit requirements for all applicable bacteria water quality objectives to ensure that they are attaining WLAs and that they are not causing or contributing to exceedances of the water quality objectives.

**Compliance Monitoring for Nonpoint Sources**

The Conditional Waiver for irrigated agriculture lands or other regulatory mechanism shall require bacteria monitoring for discharges from irrigated agricultural lands. Monitoring shall be implemented as part of WDRs or waiver requirements, and through implementation of the Nonpoint Source Implementation and Enforcement Policy, for other nonpoint sources.

**7-44.2. Los Cerritos Channel and Estuary, Alamitos Bay, and Colorado Lagoon Indicator Bacteria: Implementation Schedule**

| Task | Date |
|---|---|
| Owners and/or operators of marine sanitation devices and sanitary sewer collection systems and OWTS shall attain LAs | Effective date of the TMDL |
| Individual NPDES permittees, general NPDES permittees, general industrial stormwater permittees, and general construction stormwater permittees shall attain WLAs. | Effective date of the TMDL |
| MS4 permittees shall submit a comprehensive monitoring plan, including in-stream and outfall monitoring, to the Los Angeles Regional Board for Executive Officer approval.<br>In lieu of a separate monitoring plan, MS4 permittees may provide documentation that the current, or a revised, Coordinated Integrated Monitoring Plan (CIMP) or Integrated Monitoring Plan (IMP) by an individual MS4 permittee will be sufficient to demonstrate compliance with this TMDL. | 1 year from the effective date of the TMDL |
| MS4 permittees shall begin monitoring as outlined in the approved monitoring plan (or the CIMP or IMP sufficient to demonstrate compliance with this TMDL). | No later than 6 months after the monitoring plan is approved by the Executive Officer |
| MS4 permittees shall submit an implementation plan to the Los Angeles Regional Board for Executive Officer approval. In lieu of a separate implementation plan, MS4 permittees may provide documentation that the current, or a revised, WMP will be sufficient to implement this TMDL. | 2 years from the effective date of the TMDL |
| Owners and/or operators of irrigated agricultural land, golf courses and any other nonpoint sources shall achieve LAs | 3 years from the effective date of the TMDL |
| MS4 permittees shall achieve WLAs | 15 years from the effective date of the TMDL |

# Attachment B to Resolution No. R22-002

**Amendment to the Water Quality Control Plan – Los Angeles Region to Suspend the Recreational Beneficial Uses in Los Cerritos Channel during Unsafe Wet Weather Conditions**

Adopted by the California Regional Water Quality Control Board, Los Angeles Region on March 10, 2022.

**Amendments:**
Add:

**In Chapter 2, revise Table 2-1a "Recreational Beneficial Uses of Inland Surface Waters" on page 2-21 (See attached for the revised Table 2-1a.)**

- Change "Los Cerritos Channel" to "Los Cerritos Channel (above Atherton St.) under LOS CERRITOS CHANNEL WATERSHED.
- Add a "Yav" to the High Flow Suspension column for Los Cerritos Channel (above Atherton St.).
- Add "Los Cerritos Channel (Anaheim Rd. to Atherton St.)" under LOS CERRITOS CHANNEL WATERSHED, "180701060702" in WBD No. Column, "p" in REC1 Column, and "I" in REC2 Column.