

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER QUALITY
FEBRUARY 6, 2018**

ITEM 10

SUBJECT

CONSIDERATION OF A PROPOSED RESOLUTION ESTABLISHING PART 3 TO 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 THE AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR OCEAN WATERS OF CALIFORNIA—BACTERIA PROVISIONS AND A WATER QUALITY STANDARDS VARIANCE POLICY

DISCUSSION

State Water Resources Control Board (State Water Board) staff is proposing 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 (Part 3 of the ISWEBE) and an Amendment to the Water Quality Control Plan for Ocean Waters of California —Bacteria Provisions and a Water Quality Standards Variance Policy (Ocean Plan Amendment) (Part 3 of the ISWEBE and the Ocean Plan Amendment are hereafter collectively referred to as the Bacteria Provisions). The Bacteria Provisions are intended to protect human health by updating water quality objectives associated with recreational exposure to water containing fecal bacteria. The Bacteria Provisions are based on more recent epidemiological studies and research, conducted locally and nationally, on the most appropriate bacterial indicators. In 2012, pursuant to Clean Water Act section 304(a), the United States Environmental Protection Agency issued new recreational water quality criteria recommendations for protecting human health in all coastal and non-coastal waters with the primary contact recreation beneficial use (REC-1).

The Bacteria Provisions, if adopted, would apply to fresh, estuarine, and ocean waters and establish: bacteria water quality objectives for the protection of REC-1, *Escherichia coli* (*E. coli*) as the indicator of pathogens in freshwater and Enterococci as the indicator for estuarine waters and ocean waters; and a risk protection level of 32 illnesses per 1,000 recreators. The Bacteria Provisions also include implementation approaches for bacteria control including reference beach and natural source exclusion approaches that may only be applied within the context of a total maximum daily load. Part 3 of the ISWEBE (and not the Ocean Plan Amendment) contains implementation approaches appropriate to reflect the attainability of REC-1 beneficial use designations, including a temporary high-flow suspension and a seasonal suspension of the REC-1 beneficial use, a definition for the limited water contact recreation (LREC-1) beneficial use, and the designation of the LREC-1 beneficial use. In addition, the Bacteria Provisions identify an existing mechanism under 40 Code of Federal Regulations section 131.14 for adopting water quality standards variances for any pollutant, not just bacteria. The Bacteria Provisions will supersede numeric water quality objectives for the REC-1 beneficial use in the water quality control plans established by the Regional Water Quality Control Boards prior to the effective date of the Bacteria Provisions.

From April through July of 2014, State Water Board staff held focused stakeholder group meetings with representatives from environmental organizations, southern and northern California stormwater agencies, county departments of public health, publicly owned treatment works, and water reuse agencies to receive early input on the scope of the project. State Water Board staff held scoping meetings on January 28, 2015, in Sacramento and on February 10, 2015, in Costa Mesa. A final scoping meeting was held on January 23, 2017, in Sacramento. Comments submitted during and after the scoping meetings were received and considered during the development of the Bacteria Provisions.

A Draft Staff Report, Including Substitute Environmental Documentation (hereafter Staff Report) was prepared to accompany the Bacteria Provisions. A staff workshop was held on July 10, 2017, to receive input and comments on the Bacteria Provisions and Staff Report. The State Water Board held a public hearing on August 1, 2017, to receive oral comments on the Bacteria Provisions and Staff Report. The written public comment period was from June 30, 2017, to 12:00 p.m. on August 16, 2017. Thirty-three timely comment letters were received. Written responses to comments along with revisions to the Bacteria Provisions and Staff Report were distributed to the public and posted to the program webpage at: <http://www.waterboards.ca.gov/bacterialobjectives/>.

POLICY ISSUE

Should the State Water Board adopt the Bacteria Provisions and approve the Staff Report?

FISCAL IMPACT

State Water Board and Regional Water Boards staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL BOARD IMPACT

Upon adoption, the Bacteria Provisions are not expected to significantly impact the Regional Water Board workload. If the Bacteria Provisions are not adopted, the Regional Water Boards may need to individually amend their water quality control plans which would require significant resources and potential statewide inconsistency.

STAFF RECOMMENDATION

Staff recommends that the State Water Board adopt the Bacteria Provisions and approve the Staff Report.

<p>State Water Board action on this item will assist the Water Boards in reaching Goals 1 and 6 of the Strategic Plan Update: 2008-2012 to implement strategies to fully support the beneficial uses of listed water bodies by 2030 and to enhance consistency across the Water Boards.</p>

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STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 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 AND AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR OCEAN WATERS OF CALIFORNIA—BACTERIA PROVISIONS AND A WATER QUALITY STANDARDS VARIANCE POLICY

WHEREAS:

1. The Clean Water Act requires the United States Environmental Protection Agency (U.S. EPA) to develop and publish water quality criteria that accurately reflect the latest scientific knowledge on all identifiable effects on health and welfare that could be expected from pollutants existing in any body of water. (Clean Water Act, § 304(a)(1).) The Clean Water Act also directs U.S. EPA to publish new or revised water quality criteria for pathogens and pathogen indicators for the purpose of protecting human health in coastal recreation waters. (*Id.*, § 304(a)(9).)
2. 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 ([U.S. EPA's 2012 Recreational Water Quality Criteria](#)). The U.S. EPA 2012 Recreational Water Quality 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, U.S. EPA recommends 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 U.S. EPA 2012 Recreational Water Quality 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.
3. The Clean Water Act's implementing regulations provide that when states establish water quality criteria (referred to as water quality objectives in California), states should establish numerical values based on the Clean Water Act section 304(a) guidance, that guidance modified to reflect site-specific conditions, or other scientifically defensible methods. (40 C.F.R. § 131.11(b)(1).)
4. The State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (Regional Water Boards) (collectively referred to as the Water Boards) administer the Porter-Cologne Water Quality Control Act (Wat. Code, Div. 7, § 13000 et seq.) to achieve an effective water quality control program for the state.
5. The Water Boards are authorized to adopt water quality control plans in accordance with the provisions of Water Code sections 13240 through 13244, insofar as they are applicable, which may include water quality standards and programs of implementation to achieve the standards.

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6. Bacteria water quality objectives established by the Regional Water Boards in water quality control plans (basin plans) vary by region. Although several of the basin plans contain updated bacteria indicators, none contain updated water quality objectives for bacteria based on the U.S. EPA 2012 Recreational Water Quality Criteria.
7. State and federal laws mandate the periodic review, and if necessary, update of water quality control plans. Specifically, Clean Water Act section 303(c)(1) requires that a state's water quality standards be reviewed at least once every three years—a process known as a triennial review. A primary purpose of conducting triennial review is to ensure water quality standards are based on current science, methodologies, and U.S. EPA mandates, recommendations and guidance.
8. Existing regulations require local health officers to test waters adjacent to public beaches and ocean water-contact sports areas for three organisms that indicate the presence of fecal contamination: total coliform, fecal coliform, and enterococci (bacteriological standards). (Cal. Code Regs., tit. 17, §§ 7958, 7959, subd. (b).) If the waterbodies subject to the bacteriological standards are not met, a local health officer or the California Department of Public Health (Department) may close, post with warning signs, or otherwise restrict use of the area until the bacteriological standards are met. (*Id.*, § 7960.) The regulations impose more frequent monitoring and more stringent posting and closure requirements on certain high-use public beaches located adjacent to a storm drain that flows during the summer. (*Id.*, § 7961.)
9. The State Water Board's Water Quality Control Plan for Ocean Waters in California (the Ocean Plan) identifies the Department's bacteriological standards and the related corrective action measures. The Ocean Plan also contains bacteria water quality objectives for waters designated with the REC-1 beneficial use that are consistent with the bacteriological standards. The bacteriological standards are not consistent with U.S. EPA's 2012 Recreational Water Quality Criteria.
10. U.S. EPA's 2012 Recreational Water Quality Criteria 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.
11. The primary goal of "[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](#)" (Part 3 of the ISWEBE) and the "[Amendment to the Water Quality Control Plan for Ocean Waters of California—Bacteria Provisions and a Water Quality Standards Variance Policy](#)" (Amendment to the Ocean Plan) (Part 3 of the ISWEBE and the Amendment to the Ocean Plan are collectively referred to as the Bacteria Provisions) is to protect REC-1 waters through the establishment of statewide numeric water quality objectives for bacteria (Bacteria Water Quality Objective(s)) based on the U.S. EPA 2012 Recreational Water Quality Criteria.
12. The Bacteria Water Quality Objectives are based on the use of *E. coli* as the indicator of pathogens in freshwaters and enterococci as the indicator for estuarine waters and ocean waters. The Bacteria Water Quality Objectives are based on a risk protection level of 32 illnesses per 1,000 recreators for the corresponding waters.

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13. The Bacteria Water Quality Objective established for ocean waters contained in the Amendment to the Ocean Plan does not supersede the Department's bacteriological standards and the associated monitoring and corrective action requirements. The Amendment to the Ocean Plan refers to the Department's bacteriological standards and the associated corrective action requirements as "beach notification levels."
14. The Amendment to the Ocean Plan provides direction on the manner to apply the enterococci objective when evaluating the listing and delisting factors contained in the Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (Listing Policy). However, pursuant to sections 3.11 and 4.11 of the Listing Policy, the situation-specific weight of evidence factors may include evidence to support a listing or delisting, such as compliance with the Department's bacteriological standards, beach use, and beach closures.
15. The Bacteria Provisions' Bacteria Water Quality Objectives supersede any numeric water quality objective (and not any narrative water quality objective) for bacteria for the REC-1 beneficial use contained in a water quality control plan before the effective date of the Bacteria Provisions. Narrative water quality objectives and numeric site-specific objectives established before or after the effective date of the Bacteria Provisions would remain in effect.
16. The Lahontan Regional Water Board's Water Quality Control Plan contains a numeric fecal coliform bacteria water quality objective expressed as not to exceed a log mean of 20 colony forming units per 100 milliliters during any 30-day period nor exceed 40 colony forming units per 100 milliliters more than 10 percent of all samples collected during any 30 days. The fecal coliform objective is generally applicable to all surface waters within the region and is not expressly established for the protection of the REC-1 beneficial use. Part 3 of the ISWEBE would establish numeric Bacteria Water Quality Objectives for REC-1 waters and would not supersede the fecal coliform objective established generally for all surface waters in the region. Therefore, the existing fecal coliform objective and the applicable Bacteria Water Quality Objective would apply to all REC-1 surface waters within the Lahontan region. The Lahontan Regional Water Board has the opportunity to prioritize evaluating the fecal coliform objective during the upcoming triennial review process, which the region anticipates will occur during the fall of 2018.
17. The Bacteria Provisions provide that where a permit, waste discharge requirement (WDR), or waiver of WDR includes an effluent limitation or discharge requirement that is derived from a water quality objective or other guidance to control bacteria (for any beneficial use) that is more stringent than an applicable Bacteria Water Quality Objective, the Bacteria Water Quality Objective would not be implemented in the permit, WDR, or waiver of WDR.
18. The Bacteria Provisions do not contain a specific program of implementation to achieve the Bacteria Water Quality Objectives because total maximum daily loads (TMDLs) for bacteria have been established for many waterbodies throughout the state prior to the effective date of the Bacteria Provisions. While the Bacteria Water Quality Objectives supersede applicable numeric water quality objectives contained in a basin plan prior to the effective date of the Bacteria Provisions, any TMDL associated with a superseded bacteria water quality objective would remain in effect.

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19. The Bacteria Provisions also include several approaches the Water Boards may utilize to implement the Bacteria Water Quality Objectives or to reflect whether the REC-1 beneficial use is appropriately designated:
 - a. The Bacteria Provisions provide that when the Water Boards develop a TMDL to achieve the Bacteria Water Quality Objectives, a reference system/antidegradation approach or a natural source exclusion approach may be utilized to account for natural sources of bacteria that may contribute to the exceedances of the objective.
 - b. Part 3 of the ISWEBE (and not the Amendment to the Ocean Plan) contains the following approaches the Water Boards may utilize to remove a REC-1 beneficial use designation where the use is not an existing use as defined by 40 Code of Federal Regulations section 131.3(e): a temporary high-flow suspension, a seasonal suspension, and a limited water contact recreation (LREC-1) designation. The Water Boards are required to conduct a use attainability analysis to remove a designated REC-1 beneficial use or to adopt subcategories of the REC-1 use that require less stringent water quality objectives.
 - c. Part 3 of the ISWEBE (and not the Amendment to the Ocean Plan) contains a definition for LREC-1 beneficial use. Part 3 of the ISWEBE does not designate any waterbodies with the LREC-1 beneficial use. Generally, the Regional Water Boards designate specific waterbodies within their respective region through the basin planning process.
20. The Bacteria Provisions identify the water quality standards variance regulatory framework established by U.S. EPA (40 C.F.R. § 131.14) and explains the requirements the Water Boards must utilize to establish water quality standards variances consistent with the federal rule for any pollutant.
21. The Bacteria Provisions' corresponding staff report, titled, "[Staff Report, Including Substitute Environmental Documentation, 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 Provisions and a Water Quality Standards Variance Policy](#)" (hereafter [Staff Report](#)), is a technical document that describes the necessity and scope of the Bacteria Provisions and contains the environmental documentation required by the State Water Board's certified regulatory program regulations (Cal. Code Regs., tit. 23, § 3720 et seq.) to comply with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Staff Report is an integral part of this State Water Board action and was considered and accepted by the State Water Board before taking action on the Bacteria Provisions.
22. In developing, considering, and adopting the Bacteria Provisions, the State Water Board complied with the applicable procedural requirements and provided additional public participation opportunities to afford the public with a reasonable opportunity to participate in the review of the Bacteria Provisions:
 - a. In 2014, staff held six focused group meetings with interested stakeholders to receive early input on the project.

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- b. Staff held two CEQA scoping meetings in 2015 and one scoping meeting in 2017 to solicit input from public agencies and members of the public.
 - c. On May 31, 2017, a public notice was distributed to identify the dates for the staff workshop, board hearing, and the applicable written comment period. On June 15, 2017, a revised notice was distributed to identify the date the draft Bacteria Provisions and draft Staff Report would be available on the board's website, the extended written comment period, and the changed hearing date.
 - d. The written comment period was from June 30, 2017 to August 16, 2017.
 - e. A public workshop was held on July 10, 2017.
 - f. A board hearing was held on August 1, 2017, after notice was given of such hearing by email list distribution and by publication in newspapers within the affected counties pursuant to Water Code section 13244 and Government Code section 6061.
 - g. The State Water Board received 33 timely written comment letters and oral comments were made at the hearing. The State Water Board has carefully considered those comments received on the Bacteria Provisions and [responded to the comments](#).
 - h. Based on the oral and written comments, the State Water Board revised the draft Bacteria Provisions and the draft Staff Report. On January 18, 2018, the State Water Board distributed and posted the proposed final Bacteria Provisions, the proposed final Staff Report, and written responses to comments. On January 26, 2018, the State Water Board distributed and posted the revised proposed final Bacteria Provisions.
23. In establishing the Bacteria Water Quality Objectives contained in the Bacteria Provisions, the State Water Board considered the factors contained in Water Code section 13241. The Staff Report (at chapters 5, 6, and 10) addresses those factors, which includes a summary and a reference to a report titled, "[Economic Analysis of Proposed Water Quality Objective for Pathogens in the State of California](#)," prepared in June 2017, to inform the board's consideration of the economic factors.
24. The Staff Report contains a description of the project; a completed environmental checklist; an identification of any significant or potentially significant adverse impacts of the project; an analysis of reasonable alternatives to the project and mitigation measures; and an environmental analysis of the reasonably foreseeable methods of compliance, including a reasonable range of environmental, economic, and technical factors over a range of population and geographic areas. (Cal. Code Regs., tit. 23, § 3777, subds. (a)-(c).)
25. The State Water Board is the lead agency with respect to the adoption of the Bacteria Provisions. In preparing the environmental analysis pertaining to the reasonably foreseeable methods of compliance, the State Water Board is "not required to conduct a site-specific project level analysis of the methods of compliance, which CEQA may otherwise require of those agencies who are responsible for complying with the plan or policy when they determine the manner in which they will comply." (*Id.*, § 3777, subd.

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(c.) The Bacteria Provisions do not contain any specific requirements to implement the bacteria water quality objectives; generally TMDLs to achieve bacteria objectives existing prior to the effective date of the Bacteria Provisions will remain in effect and may operate to achieve the Bacteria Water Quality Objectives, where applicable, and the Bacteria Water Quality Objectives are not anticipated to require a significant change in implementation methods required by existing bacteria objectives. Additionally, dischargers that have the Bacteria Water Quality Objectives incorporated into their respective permits select the specific method or methods to employ to achieve compliance. Project-level analysis is expected to be conducted by the appropriate public agency prior to implementation of project-specific methods if any additional methods are required to comply with the Bacteria Provisions. The environmental analysis assumes that the project-specific methods of compliance, if any, would be designed, installed, and maintained following all applicable state and local laws, regulations, and ordinances.

26. The Final Substitute Environmental Documentation consists of the Staff Report (including documents referenced therein), the comments and responses to comments on the Staff Report and the Bacteria Provisions, the environmental checklist, and this resolution.
27. The State Water Board complied with the tribal consultation requirements established by Governor's Executive Order No. B-10-11 (September 19, 2011) and Assembly Bill 52 (Gatto) (Stats. 2014, ch. 532) which ensure tribal governments have the opportunity to provide meaningful input in the development of regulations, rules, policies, or projects that may affect Native American Tribes.
28. The scientific portions of the Bacteria Provisions underwent external scientific peer review as required by Health and Safety Code section 57004, as discussed in Chapter 11 of the Staff Report.
29. Adoption of the Bacteria Provisions 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 and ensures beneficial uses are fully protected.
30. The Bacteria Provisions would become effective state law upon approval by the Office of Administrative Law (OAL). The Bacteria Provisions' water quality standards and policies that generally affect the application and implementation of water quality standards would not become effective for Clean Water Act purposes until approved by U.S. EPA.

THEREFORE, BE IT RESOLVED THAT:

1. The State Water Board hereby approves and adopts the Substitute Environmental Documentation, which was prepared in accordance with the provisions applicable to the State Water Board's certified exempt regulatory programs, California Code of Regulations, title 23, sections 3777 through 3779.

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2. The State Water Board, after considering the entire administrative record, including all oral testimony and written comments received, adopts the Bacteria Provisions, which are specifically titled “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 Provisions and a Water Quality Standards Variance Policy.”
3. The State Water Board encourages the Lahontan Regional Water Board to evaluate with input from relevant stakeholders the region’s fecal coliform water quality objective (described in recital 16), and to prioritize that effort during the region’s upcoming triennial review process, which the region anticipates will occur during the fall of 2018.
4. The State Water Board authorizes the Executive Director or designee to submit the Bacteria Provisions and the administrative record to OAL and the U.S. EPA for review and approval.
5. The State Water Board authorizes the Executive Director or designee to make minor, non-substantive modifications to the language of the Bacteria Provisions and the supporting documentation if State Water Board staff or OAL determines that such changes are needed for clarity or consistency, and inform the State Water Board of any such changes.
6. The State Water Board directs staff, upon approval by OAL, to file a Notice of Decision with the Secretary for Natural Resources and transmit payment of the applicable fee as may be required to the Department of Fish and Wildlife pursuant to Fish and Game Code section 711.4.

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 February 6, 2018.

Jeanine Townsend
Clerk to the Board