CALIFORNIA COASTKEEPER ALLIANCE

Public Comment
Bacteria Provisions
Deadline: 8/16/17 by 12 noon

August 16, 2017

Chair Felicia Marcus and Board Members
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via electronic mail to: commentletters.@waterboards.ca.gov

RE: Comment Letter – Bacteria Provisions

Dear Chair Marcus and Board Members:

On behalf of California Coastkeeper Alliance, which unites locally-based Waterkeeper organizations to fight for swimmable, fishable, drinkable waters for California communities and ecosystems, we appreciate the opportunity to provide comments on the State Water Resources Control Board's ("State Water Board") draft Bacteria Provisions and a Water Quality Standards Variance Policy. The State Water Board has a duty to ensure that Californians are protected against illnesses from polluted water. However, under the draft Bacteria Provisions, more water recreationalists could be getting sick than otherwise should.

The California coastline attracts 150 million visitors annually, with beach visitors spending over $10 billion each year in California. This results in a coastal economy valued at more than $1 trillion dollars. California's coastal economy alone is valued at more than $1 trillion dollars and provides half a million important jobs. Commercial fisheries in the state are valued at more than $7 billion annually. Recreational (coastal) fishing is valued at over $2 billion annually. Ocean-based recreation and tourism is valued at over $10 billion annually. Our coastal economy is vital to state's overall economy, and as such, the State Water Board should be adopting water quality standards that are more protective than the U.S. EPA's bare minimum standards.

In 1972, Congress enacted the Clean Water Act (CWA) to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters,"[1] with the "interim goal" that wherever attainable, "water quality which provides for the protection of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983."[2] California has developed a recreational beneficial use (REC-1) for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, and use of natural hot springs.

Under the federal Beaches Environmental Assessment and Coastal Health (BEACH) Act, states regularly test their beach water for bacteria found in human and animal waste. These bacteria often indicate the presence of various pathogens. When beach managers determine that water contamination failed relevant health standards – or in some cases when a state suspects levels would be high, such as after heavy rain – they notify the public through beach closures or advisories.

California beaches violate public health standards thousands of times a year, mostly because of bacteria carried in raw sewage, animal waste, and stormwater runoff that can make people sick. A 2006 study concluded that contamination from polluted runoff at Southern California beaches sickens approximately one million swimmers every year, resulting in public health costs of $21 million to $51 million annually. Of 28 Southern California

[1] 33 U.S.C. § 1251(a) (2012).
[2] 33 U.S.C. § 1251(a)(2).

beaches, between 627,000-1.5 million cases of beach-related gastroenteritis occur annually in Los Angeles and Orange Counties, resulting in a regional loss of $21-$414 million a year due to missed work and medical costs. Often, victims do not attribute their condition to exposure to contaminated water, since they may not realize that their rashes, stomach flu, hepatitis, or other illnesses were caused by swimming in polluted water. Newport and Huntington Beach alone were estimated to generate an average of 36,778 gastrointestinal illness episodes and approximately 38,000 other illness episodes (including respiratory, eye, and ear infection) per year resulting in a cumulative public health burden of $3.3 million per year just for two beaches.

The Draft Bacteria Provisions fail to protect against exposures to viruses, bacteria, and parasites on any given day. The prior criteria adopted in 1986 included a "single sample maximum," which was not to be exceeded. The State Water Board now proposes to allow water quality to exceed the criteria up to 10 percent of the time without triggering a violation. This approach could mask a serious pollution problem and expose families to an unnecessary risk of illness. The draft Provisions also are based on what the U.S. EPA has determined is an acceptable gastrointestinal illness risk of 3.2 percent. That is, the State Water Board believes it is acceptable for 32 in 1,000 swimmers—that's 1 in 31 swimmers—to become ill with gastroenteritis sicknesses such as diarrhea, nausea and vomiting, from swimming in water that just meets EPA's water quality criteria. This risk is unacceptably high and is not protective of human health.

In order to comply with the Clean Water Act and protect public health, the State Water Board should:

(1) Prevent backsliding by exempting Region 1 and other Regions with more stringent existing water quality objectives;
(2) Protect against single day exposures by requiring a single sample maximum to not to be exceeded;
(3) Adopt a risk rate that is more protective of public health than 32 people per 1,000 recreationalists;
(4) Prohibit the use of variances;
(5) Only allow a variance consistent with the substantive and procedural requirements for permanently downgrading a designated use;
(6) Limit the scope of a variance to water quality standards for specific dischargers rather than an entire waterbody;
(7) Make variances as short as possible and reevaluate them every three years during triennial reviews;
(8) Perform a Use Attainability Analysis that considers and maintains downstream water quality before allowing waterways to be downgraded to Limited Rec – 1; and
(9) Consider the impacts to watersheds and public access by allowing a Limited Rec – 1 Beneficial Use as California strives to restore its urban waterways.

A. THE STATE WATER BOARD SHOULD PREVENT BACKSLIDING BY EXEMPTING REGION 1 AND OTHER REGIONS WITH MORE STRINGENT EXISTING WATER QUALITY OBJECTIVES.

The Bacteria Provisions include updated water quality objectives for bacteria to supposedly protect human health for the beneficial use of REC-1 in fresh, estuarine, and marine waters. As the State Water Board states, "the water quality objectives will *supersede all existing numeric bacteria objectives* to the extent a conflict exists, unless the Bacteria Provisions expressively provide that those conflicting objectives shall remain in effect."[3]

The State Water Board's Draft Provisions violate the anti-backsliding provisions. The CWA contains "anti-backsliding" provisions that prohibit relaxation of permit terms upon renewal. The CWA requires that, for effluent limitations based on a state water quality standard, "a permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit," unless certain exceptions apply.[4] It also states that "[i]n no event may such a permit to discharge into waters be renewed, reissued, or modified to contain a less stringent effluent limitation if the implementation of

[3] Fact Sheet pg. 6. [Emphasis added.]
[4] 33 U.S.C. § 1342(o)(1), (2).

such limitation would result in a violation of [water quality standards]."[5] Similarly, EPA regulations require that "when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit . . . ."[6]

The Draft Provisions necessarily create a scenario that will lead to anti-backsliding throughout Region 1 and potentially other regions throughout the state. The State Water Board's Draft Provisions set an illness rate at 32 illnesses per 1,000 swimmers for E. coli criteria. However, Region 1 has an illness rate set at only 8 illnesses per 1,000 swimmers. Appendix C page D-178 of the Bacteria Provisions' Staff Report uses the equation from U.S. EPA's 1986 criteria document. If the median Fecal Coliform concentration is currently set at 50/100ml (R1 Basin Plan) then it converts to an equivalent for E. Coli which equates to an estimated illness rate in Region 1 Freshwaters at 8 per 1,000 people. Adopting the State Water Board's recommended Freshwater Water Quality Objective of 100 cfu/100 ml GM and 320 cfu/100 ml STV equates to illness rates of 32 per 1,000 recreationalists (this is 4 times as many illnesses). More to the point, Appendix C page D-178 specifically states "Region 1's illness rate is 2 times more stringent then the proposed illness rate". How can the State Water Board justify requiring the Bacteria Provisions' water quality objective when it admits Region 1 has an existing standard that is already twice as stringent?

Requiring Region 1, and any other region with similarly stringent standards, to adopt the Bacteria Provisions' water quality objective constitutes illegal backsliding. If the Draft Provisions are adopted as currently proposed, Region 1 would be required to adopt the new standard of 32 illnesses per 1,000 swimmers into their Basin Plan, which will lead to such a standard being incorporated into Permits. That would be a direct violation of the anti-backsliding provisions because a standard of 32 illnesses compared to 8 is clearly less stringent. Similar to Tahoe, Region 1, and any other region with similarly more restrictive effluent standards, should not be required to weaken their effluent limitations to the Bacteria Provisions' water quality objective. Doing so would constitute illegal backsliding.

B. THE STATE WATER BOARD SHOULD PROTECT AGAINST SINGLE DAY EXPOSURES BY REQUIRING A SINGLE SAMPLE MAXIMUM TO NOT TO BE EXCEEDED.

The State Water Board's Draft Provisions use two calculations to measure bacterial contamination, a geometric mean (GM) and a statistical threshold value (STV). The STV approximates the 95th percentile of a waterway's water quality sample distribution and is intended to be a value that may be exceeded by up to 10 percent of water quality samples.[7] Accordingly, a waterway is not considered in violation of the criteria for bacteria until more than 10 percent of samples taken over the course of 30 days contain bacterial levels over the State Water Board's limits.[8] The STV allows bacterial levels to repeatedly exceed pathogen exposure limits that the U.S. EPA and the State Water Board has determined to be unsafe. As a result, the STV fails to protect the public from acute and single-day exposures to harmful pathogens. Swimmers using beaches vulnerable to dangerous but short-lived fluctuations in water quality-caused by sewer overflows after rainstorms, for example-are especially at risk. These swimmers do not swim on an "average" day measured over a 30-day period, nor are they aware that they may be swimming on a day where a periodic exceedance is allowed; they swim on the single day they choose and, on that day, risk exposure to a variety of illnesses. The State Water Board has impermissibly interpreted its mandate to protect human health as permitting the agency to ignore the health risks faced by swimmers from daily exposures to pathogens.

Similar to the U.S. EPA, the State Water Board's decision to not protect the public from acute pathogen exposure is contrary to the language and intent of the BEACH Act. Congress intended revised bacteria criteria to "protect[]

[5] *Id.* § 1342(o)(3).
[6] 40 C.F.R.§ 122.44(*l*)(1).
[7] Fact Sheet, pg. 7.
[8] See Fact Sheet, pg. 8.

human health" and improve, not degrade, the "inadequate" protections offered by the 1986 Criteria.[9] The BEACH Act's legislative history demonstrates Congress's specific concern with the risks posed by single instances of pathogen exposure:

> This bill is addressing something that we have overlooked, and that is the fact that our children and our families can enter coastal waters on one day, for one moment, and contract diseases such as hepatitis, encephalitis, and different related illnesses related to pathogens. I have had surfers in my district actually get inner brain infections and almost die from one exposure. These are things that we need to address.[10]

The State Water board must protect against acute health risks from one-time exposures so that people are safe every time they swim. By declining to adopt day-of-use protections, the State Water Board has violated its nondiscretionary duty to establish criteria for the purpose of protecting human health.

C. THE STATE WATER BOARD'S ACCEPTANCE OF 32 ILLNESSES PER 1,000 RECREATIONALISTS IS NOT PROTECTIVE OF HUMAN HEALTH.

The State Water Board's proposed Bacteria Provisions include a set of values corresponding to a risk rate for gastrointestinal illness of 32 illnesses per 1,000 primary contact recreationalists in marine and fresh waters.[11] The State Water Board has deemed it acceptable for 32 of every 1,000 recreationalists to become ill with gastroenteritis-including vomiting, nausea, or stomach ache--from swimming in waters that just meet the State Water Board's criteria values. The State Water Board's 32/1000 risk rate for illness is contrary to the record and not protective of human health. The State Water Board's reliance on the U.S. EPA is misplaced. The U.S. EPA's own epidemiological studies show that the likelihood of contracting swimming-associated gastrointestinal illnesses is statistically significant at the rate of 32 per 1,000 primary contact recreationalists.[12]

The State Water Board's Draft Provisions relies on the EPA's conclusions that failed to comply with the requirements of the APA. The State Water Board is required to "articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made."[13] The Draft Provisions, however, are arbitrarily devoid of a rational explanation of what constitutes health protective levels and specifically lacks a discussion of how a 32/1000 illness rate protects human health. The State Water Board does not explain how the criteria are protective, if and how the agency arrived at a determination that they are in fact protective, why non-gastrointestinal illnesses can be protected by a proxy for gastrointestinal illnesses, or what standards were used to assess whether a given level of bacterial contamination is protective of human health. The State Water Board relies upon the EPA's explanation that the 2012 criteria levels are health protective because, according to the EPA, they are comparable to those in the 1986 Criteria which have a "history of acceptance by the public."[14] EPA contends that the 2012 Criteria offer the same level of protection as its 1986 values because the revised criteria include a broader definition of gastrointestinal illness.[15] However, in 1986, EPA concluded that a GM of 35 cfu/100ml would result in a risk of 19 cases of highly credibly gastrointestinal illness (HCGI) per 1,000 recreationalists (19/1000) in marine waters, and eight cases per 1,000 recreationalists (8/1,000) in freshwater.[16] HCGI was defined to include vomiting, diarrhea with fever or a disabling condition, or stomachache or nausea

[9] 33 U.S.C. § 1314(a)(9)(A); H.R. Rep. No. 106-98, at 6.
[10] *See* 145 Cong. Rec. H2282-0l (daily ed. Apr. 22, 1999) (statement of Rep. Bilbray
[11] Fact Sheet, pg. 8.
[12] 2012 EPA Criteria at 27-28.
[13] *Motor Vehicle Mfrs. Ass'n of the U.S., Inc.* v. *State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 43 (1983).
[14] 8 *Id*
[15] *Id.* at 14.
[16] 1986 Criteria at 9, tbl. 4.

accompanied by a fever.[17] EPA's 2012 Criteria, as discussed above, endorse a risk rate of 32/1000 recreationalists, substantially higher than either the 19/1000 or 8/1000 rates required by the 1986 Criteria, based on a definition of gastrointestinal illness that includes diarrhea, stomachache, or nausea without the occurrence of fever.[18]

The U.S. EPA's reliance on a supposed public familiarity with a high risk of illness-and its failure to explain how the proposed 36/1000 and 32/1000 illness rates protect human health-is not rational. EPA has itself acknowledged that the selection of its 1986 risk rate was arbitrary: "[W]hile this level was based on the historically accepted risk, it is still arbitrary insofar as the historical risk was itself arbitrary.").[19] By relying on a translation of the 1986 criteria values into 2012 terms, EPA's revised criteria simply compounded this arbitrariness. The State Water Board is required to independently determine contamination levels that protect human health and articulate a rational explanation for its selection of those levels. It has failed to do so here.

D. THE STATE WATER BOARD SHOULD NOT PROCEED WITH A VARIANCE POLICY, AND IF IT DOES, IT SHOULD BE EXTREMELY LIMITED IN SCOPE AND FULLY COMPLY WITH THE CLEAN WATER ACT.

The Bacteria Provisions refer to the federal regulatory mechanism for adopting a Water Quality Standard Variance to allow for additional implementation actions applicable to all pollutants and water segments consistent with 40 Code of Federal Regulations section 131.14. To strictly comply with the Clean Water Act's (CWA) requirement to protect all beneficial uses, California should not allow for water quality standard (WQS) variances. WQS variances cause pollution hotspots and will delay reasonably available actions necessary to clean up waterbodies. If the State Water Board proceeds with variances, we advise they be extremely limited in scope and fully comply with the CWA, federal regulations, the Porter-Cologne Act, and State Policy.

Sound interpretation and implementation of the CWA through State rulemaking is essential to restoring and maintaining the chemical, physical and biological integrity of the Nation's waters. Water quality standards are the core regulations under the CWA that the public depends on to ensure our nation's waters are swimmable, drinkable and fishable. Any modification to WQSs must be undertaken with extreme care to ensure that there will be no weakening of CWA protections for human health and the environment. Implementation of the comprehensive scheme of the CWA is the best means for achieving fishable, swimmable, and drinkable waters in California during our lifetimes, and creation of programs for variances from that scheme may delay achievement of those goals indefinitely.

Since 1977, EPA has officially allowed variances as long as they are "adopted consistent with the substantive and procedural requirements for permanently downgrading a designated use," i.e. based on the factors in 40 C.F.R. §131.10(g).[20] EPA defined a variance as "the practice of temporarily downgrading the WQS as it applies to a specific discharger rather than permanently downgrading an entire water body or waterbody segment(s)."[21] Under existing variance guidance, a "discharger who is given a variance for one particular constituent is required to meet the applicable criteria for all other constituents. The variance is given for a limited time period and the discharger must either meet the WQS upon the expiration of this time period or the state or tribe must adopt a new variance or re-justify the current variance subject to EPA review and approval."[22]

The State Water Board should prohibit variances because they will not assist in the nation's goal of restoring the chemical, physical and biological integrity of our waterways by July 1st, 1983. If the State Water Board does proceed with its Variance Policy, the Board should allow a variance only if it is consistent with the substantive

[17] 2012 Criteria at 14.
[18] *Id.* at 14, 43.
[19] 1986 Criteria at 10.
[20] 78 Federal Register 54,531.
[21] 78 Federal Register 54,531.
[22] 78 Federal Register 54,531.

and procedural requirements of permanently downgrading a designated use – including compliance with the Antidegredation and Antibacksliding Policies. The State Water Board should limit the scope of the variance for specific dischargers rather than an entire waterbody; and any variance should be for as short a time as possible with reevaluation every three years. Finally, a discharger under a variance should be required to demonstrate that it is meeting the WQS at the end of the variance period.

1. *The State Water Board should not provide water quality variances because they will not assist in restoring the chemical, physical and biological integrity of California's waters.*

There is no support for the proposition that the adoption of less protective water quality standards assists in restoring the chemical, physical and biological integrity of the state's waters. According to 40 C.F.R. §131.2:

> A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (the Act). ''Serve the purposes of the Act'' (as defined in sections 101(a)(2) and 303(c) of the Act) means that water quality standards should, *wherever attainable*, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration their use and value of public water supplies, propagation of fish, shellfish, and wildlife, recreation in and on the water, and agricultural, industrial, and other purposes including navigation. [Emphasis added]

The CWA, EPA's implementing regulations, and EPA's Water Quality Standards Handbook have long required protection of both 101(a)(2) uses (protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water) and 303(c)(2) uses (public water supplies, propagation of fish and wildlife, recreation, agriculture and industrial purposes, and navigation). CWA Section 101(a)(2) provides that "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983." CWA Section 303(c)(2) establishes a longer-term requirement that water quality "standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation." States are required to adopt "[u]se designations consistent with the provisions of sections 101(a)(2) and 303(c)(2) of the Act."[23] Further, 40 C.F.R. §131.10(a) similarly requires that "[e]ach State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation."

The CWA provides extensive mechanisms for the state to utilize in addressing impaired waters, and these provisions, when fully implemented, actually move states forward in addressing waterbodies that are not meeting water quality standards. Variances, on the other hand, simply reduce water quality protection for a set time period, and do not assist states in meeting water quality standards. The use of variances by states will tend to delay actions necessary to clean up waterbodies, such as Total Maximum Daily Load ("TMDL") development and implementation. Development and implementation of TMDLs is already delayed across California, and the State Water Board should not adopt any regulation that will interfere with efforts to address impaired waters. The TMDL and permitting process are the proper methods for dealing with waters that are not meeting WQSs. Permittees that cannot comply with these requirements may obtain compliance schedules that include reasonable timelines and an enforceable sequence of actions that will bring them into compliance as described below. Given

[23] 40 C.F.R. §131.6 (a).

this approach to addressing impaired waters, which was developed and approved by Congress in the CWA, it is unclear why variances are necessary at all.

As a national leader in environmental protection, California should choose not to allow for WQS variances. First, variances essentially allow for "sacrifice zones" in our waters, where the State condones turning a blind eye to exceedances of WQS. Unfortunately, in practice, we know that pollution hot spots, which a variance would result in, often occur in environmental justice communities that are already over-burdened with pollution. There is nothing in the federal regulations or the State Water Board's proposal that would prohibit variances in environmental justice communities. Second, variances should not be permitted, as doing so would lead to an uneven playing field and economic advantages for some dischargers as compared to others and an; every discharger should have to comply with the WQS. Third, granting a WQS variance for a waterbody or a segment of a waterbody is unnecessary and contrary to specific requirements in the CWA. CWA section 303(d) already provides a mechanism to get water bodies that do not attain WQS back in compliance.[24] Granting a variance to a waterbody undermines this specific statutory process.

There is no support for the proposition that the adoption of less protective water quality standards assists in restoring the chemical, physical and biological integrity of the Nation's waters. We believe the State Water Board should prohibit the use of variances.

2. *The State Water Board should only allow a variance that is consistent with the substantive and procedural requirements for permanently downgrading a designated use.*

Variances from WQS do not comply with the CWA's strict requirement to adopt and enforce WQS to protect all beneficial uses.[25] However, federal regulations currently allow states to adopt WQS variances if they comply with or are more stringent than the requirements in 40 C.F.R. §131.13. This section currently provides that "[s]tates may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval."[26]

If the State Water Board proceeds with variances, they should only be allowed in limited circumstances and the WQS must meet the requirements for permanently downgrading a designated use. According to the Water Quality Standard Handbook, EPA allows variances as long as:

- Each individual variance is included as part of the water quality standard;
- The State demonstrates that meeting the standard is unattainable based on one or more of the grounds outlined in 40 CFR 131.10(g) for removing a designated use;
- The justification submitted by the State includes documentation that treatment more advanced than that required by sections 303(c)(2)(A) and (B) has been carefully considered, and that alternative effluent control strategies have been evaluated;
- The more stringent State criterion is maintained and is binding upon all other dischargers on the stream or stream segment;
- The discharger who is given a variance for one particular constituent is required to meet the applicable criteria for other constituents;
- The variance is granted for a specific period of time and must be justified upon expiration but at least every 3 years (Note: the 3-year limit is derived from the triennial review requirements of section 303(c) of the Act.);
- The discharger either must meet the standard upon the expiration of this time period or must make a new demonstration of "unattainability";

[24] 33 U.S.C. § 1313(d); *see infra* section 2.
[25] 33 U.S.C. §§ 1251(a), 1252(a), 1312(a), 1313(c), 1342(a).
[26] 40 C.F.R. §131.13.

- Reasonable progress is being made toward meeting the standards; and
- The variance was subjected to public notice, opportunity for comment, and public hearing. (See section 303(c)(l) and 40 CFR 131.20.) The public notice should contain a clear description of the impact of the variance upon achieving water quality standards in the affected stream segment.

Any variance must meet all of those specific requirements.

EPA's longstanding interpretation is that variances should only be allowed if they are "adopted consistent with the substantive and procedural requirements for permanently downgrading a designated use," i.e. based on the factors in 40 C.F.R. §131.10(g).[27] This section requires the State to prepare a "use attainability analysis" showing that a waterbody cannot attain a use because of one of six factors listed.[28] Until very recently, EPA has applied this requirement for a variance of any WQS; however, EPA has recently changed this policy to only require a use attainability analysis for variances to a use specified in CWA section 101(a)(2), i.e., "protection and propagation of fish shellfish, and wildlife" and "recreation in and on the water."[29] For all other uses, including public drinking water supplies, the State need only demonstrate that the use and value was considered.[30]

The State Water Board should require that all variances be adopted consistent with the substantive and procedural requirements for permanently downgrading a designated use," i.e. based on the factors in 40 C.F.R. §131.10(g).

3. *The State Water Board should limit the scope of the Variance Policy to allow only for variances to WQS for specific dischargers rather than an entire waterbody.*

Under Section 303(c), water quality standards "shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation." A Water Board should not allow for a downgrading of water quality standards for all permittees, for an entire waterbody or for specific pollutants without regard to the impact public health or designated uses.

The proposed Variance Policy will increase the use of variances to avoid taking actions that are reasonably available to address water quality impairments. The CWA provides extensive mechanisms for the State to utilize in addressing impaired waters, and these provisions, when fully implemented, actually move us forward in addressing waterbodies that are not meeting water quality standards.[31] Variances, on the other hand, simply reduce water quality protection for a set time period, and do not assist the State in meeting water quality standards.

If Water Boards do adopt variances, it should only allow for variances for specific dischargers, rather than variances for water bodes or segments thereof. A variance for a waterbody contradicts the specific requirements in CWA section 303(d) and undermines the TMDL process. It is unclear how the two process would, in fact, work together. A variance does not excuse a WQS for purposes of a State's compliance with 303(d).[32] Therefore, if the State did approve a WQS variance for a particular waterbody, the State would still need to list that waterbody as impaired and begin the TMDL process. These processes clearly contradict one another. Moreover, a variance for a

[27] 78 Federal Register 54,531. This interpretation is repeated in the Water Quality Standards Handbook which states that variances will only be allowed if "the State demonstrates that meeting the standard is unattainable based on one or more of the grounds outlined in 40 CFR 131.10(g) for removing a designated use."
[28] 40 C.F.R. § 131.10(g).
[29] 40 C.F.R. § 131.14(2)(i).
[30] 40 C.F.R. § 131.14(2)(ii).
[31] *See* 33 U.S.C. § 1313(d).
[32] 40 C.F.R. § 131.14(a)(2).

waterbody, unlike the TMDL, excuses compliance with the WQS but does not provide a plan to come into attainment. In all likelihood, the waterbody will still be out of attainment at the end of the variance period.[33]

Historically, EPA allowed variances only for discharges, defining a variance as "the practice of temporarily downgrading the WQS as it applies to a specific discharger rather than permanently downgrading an entire waterbody or waterbody segment(s)."[34] Under existing variance guidance, a "discharger who is given a variance for one particular constituent is required to meet the applicable criteria for all other constituents. The variance is given for a limited time period and the discharger must either meet the WQS upon the expiration of this time period or the state or tribe must adopt a new variance or re-justify the current variance subject to EPA review and approval."[35] While we do not fully agree with a discharger-specific variance, it does not create the same conflicts with specific processes in the CWA.

The State Water Board should limit the scope of variances to the practice of temporarily downgrading the WQS as it applies to a specific discharger rather than downgrading an entire waterbody or waterbody segment(s).

4. *The State Water Board should make variances as short as possible and reevaluate them every three years during triennial reviews.*

WQS variances must only be as long as necessary, and the EPA requires that any term greater than five years needs to be revaluated. However, the State Water Board should review any variance at least every three years as mandated by Section 303(c) for all water quality standards.

The State Water Board should not excuse a WQS seasonally. It is our understanding that the proposed Variance Policy is to accommodate cities that want a variance for Rec-1 standards during the rainy months due to bacteria runoff from stormwater. It is important to note that the federal variance regulations do not allow excusing a WQS for a certain period of the year every year or seasonally. The regulations require compliance with the WQS at the end of the variance period.

When approving variances the State Water Board should require a mechanism by which dischargers or waterbodies will meet the WQS by the end of the variance period. Additionally, the discharger or the waterbody must meet the highest attainable condition during the variance period; at the end of the variance period, the discharger or waterbody must meet the WQS. [36]

5. *The State Water Board must comply with the Antidegredation and Antibacksliding Policies when adopting a variance.*

According to the State Water Board's Administrative Procedures Update 90, the Regional Boards must consider the need to include a finding that specifies that water quality degradation is permissible when balanced against benefit to the public of the activity in question. The determination as to whether a finding is needed must be made when issuing, reissuing, amending, or revising an NPDES permit. When adopting any variance, the Water Boards must make findings that specifically state that the Regional Board has considered antidegredation pursuant

[33] 40 C.F.R. section 131.14(2)(iii) requires documentation showing how the waterbody will be brought back into compliance with the WQS and designated use. It is unclear how the State will do this without going through the TMDL process.
[34] 78 Federal Register 54,531.
[35] 78 Federal Register 54,531.
[36] We recognize that 40 C.F.R. section 131.14(2)(ii) requires "documentation demonstrating that the term of the WQS variance is only as long as necessary to achieve the highest attainable condition." However, the highest attainable condition must be achieved during the variance period. (*See id.*; *see also id.* at § 131.14(1)(b)(ii).) WQS must be achieved at the end of the variance period.

to 40 CFR 131.12 and State Board Resolution No. 68-16 and finds that the permitted discharge is consistent with those provisions.

If the Regional Board finds that a variance is consistent with the conditions established in the State policy and the federal regulation, the findings should indicate:

(1) The pollutants that will lower water quality;
(2) The socioeconomic and public benefits that result from lowered water quality; and
(3) The beneficial uses that will be acted.

Moreover, the CWA contains "anti-backsliding" provisions that prohibit relaxation of permit terms upon renewal. The CWA requires that, for effluent limitations based on a state water quality standard, "a permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit," unless certain exceptions apply.[37] It also states that "[i]n no event may such a permit to discharge into waters be renewed, reissued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of [water quality standards]."[38]

In order to comply with the CWA, federal regulations, and State policy, the State Water Board shall evaluate any proposed variance in compliance with the Antidegredation and Antibacksliding Policies.

E. THE STATE WATER BOARD CANNOT DESIGNATE A WATERBODY AS LIMITED RECREATION WITHOUT PERFORMING A USE ATTAINABILITY ANALYSIS THAT INCLUDES CONSIDERATION OF DOWNSTREAM WATER QUALITY.

The Bacteria Provisions would establish a definition for a beneficial use where recreational uses of a waterbody are limited (LREC-1). The LREC-1 definition allows a beneficial use designation that recognizes that body contact is limited in the waterbody due to physical conditions, such as restricted access and very shallow depths. The state has waterbodies that have been channelized, and/or lined with concrete or other materials that protect the channel from erosion and provide flood protection.

The CWA, EPA's implementing regulations, and EPA's Water Quality Standards Handbook have long required protection of both 101(a)(2) uses (protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water) and 303(c)(2) uses (public water supplies, propagation of fish and wildlife, recreation, agriculture and industrial purposes, and navigation). There is no sound legal or policy basis for providing less stringent protections for existing beneficial uses.

Allowing a Regional Board to remove an existing designation in the circumstances permitted by the Draft Bacteria Provisions is inconsistent with Section 101 (restore and maintain the chemical, physical, and biological integrity of the Nation's waters) and Section 303 of the CWA (adopt WQS to protect public health or welfare, enhance the quality of water, taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes). It is also inconsistent with historic interpretations and other existing EPA regulations, such as 40 C.F.R. §131.6 (a)(States are required to adopt "[u]se designations consistent with the provisions of sections 101(a)(2) and 303(c)(2) of the Act." and 40 C.F.R. §131.12 (a)(1) (Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected).

[37] 33 U.S.C. § 1342(o)(1), (2).
[38] *Id.* § 1342(o)(3).

1. *The State Water Board must perform a Use Attainability Analysis before allowing waterways to be downgraded to Limited Rec – 1*.

Once a use of a waterbody has been designated, states develop criteria to protect those uses, which then serve as the fundamental basis for protecting, maintaining and improving state water quality under the CWA. These designated uses cannot be removed from the states' water quality standards except in limited circumstances set forth in the existing EPA water quality regulations, including the requirements for UAAs. For example, states may not remove any designated use without conducting the analysis described in 40 C.F.R. § 131.10(g).

The CWA is a "comprehensive water quality statute designed to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'"[39] Pursuant to CWA Section 303, California must adopt and implement water quality standards to protect navigable waters within its borders, subject to oversight and approval by the EPA.[40] According to EPA:

> A water quality standard defines the water quality goals of a waterbody, or portion thereof, by *designating the use or uses to be made of the water*, by *setting criteria* necessary to protect the uses, *and* by *preventing degradation* of water quality through antidegradation provisions. States adopt water quality standards to protect public health or welfare, *enhance the quality of water*, and serve the purposes of the Clean Water Act.[41]

The CWA requires that WQSs be "established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation."[42] Water quality standards are the core regulations under the CWA that the public depends on to ensure our nation's waters are swimmable, drinkable and fishable. Any modification to water quality standards must be undertaken with extreme care to ensure that there will be no weakening of CWA protections for human health and the environment.

Once a use has been designated, the use cannot be removed if it is an existing use unless a use requiring more stringent criteria is added, and other designated uses cannot be removed unless the use is demonstrated not be to attainable and the requirements in 40 C.F.R. §131.10(g) are satisfied. Section 101(a)(2) uses are presumed attainable unless a state or tribe affirmatively demonstrates through a UAA that 101(a)(2) uses are not attainable as provided by one of six regulatory factors at Section 131.10(g). All uses are deemed to be "attainable, at a minimum, if the uses can be achieved (1) when effluent limitations under section 301(b)(1)(A) and (B) and Section 306 are imposed on point source dischargers, and (2) when cost-effective and reasonable best management practices are imposed on nonpoint source dischargers."[43]

Under the existing 40 C.F.R. §131.10(j), states "must conduct a use attainability analysis ["UAA"]. . .whenever: (1) the State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act; *or* (2) the State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or adopt subcategories of uses specified in section 101(a)(2) that require less stringent criteria." [emphasis added]. A UAA is "a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g)."[44] The only existing exception to the UAA requirement is for *designation* of 101(a)(2) uses.[45]

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[39] *PUD No. 1 of Jefferson County v. Wash. Dept. of Ecology*, 511 U.S. 700, 704 (1994) (quoting 33 U.S.C. § 1251(a)).
[40] 33 U.S.C. §1313.
[41] EPA, Water Quality Standards Handbook: Second Edition Int-8 (1993) (emphasis added).
[42] 33 U.S.C. §1313(c)(2)(A).
[43] 40 C.F.R. § 131.10(d).
[44] 40 C.F.R.§131.3(g).
[45] 40 C.F.R. §131.10(k).

The CWA requires the State Water Board to perform a use attainability analysis when removing a designated use. 40 CFR 131.10(j) requires California to conduct a "use attainability analysis…whenever:

> (2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act, to remove a sub-category of such a use, or to designate a sub-category of such a use that requires criteria less stringent than previously applicable.

By allowing Regional Boards to de-list a waterbody for Rec-1 and replace it with Limited Rec-1, the State Water Board is removing a designated use[46] that is specified in section 101(a)(2) of the CWA. Therefore the State Water Board is required to conduct a Use Attainability Analysis before allowing waterbodies to be de-listed and replaced with LREC-1.

2. *The State Water Board must perform a Use Attainability Analysis that includes consideration of downstream water quality.*

The State Water Board needs to perform a UAA that considers downstream water quality. In justifying the use of LREC-1, the State Water Board states that:

> In some cases these waterbodies have been fenced to limit contact with the waterbodies during storm events to protect the public from drowning, while in dry weather the water flow is non-existent or very low. Due to these restrictions, contact with the water is minimal and incidental ingestion is infrequent or unlikely. Under these conditions the REC-1 beneficial use is not an accurate description of the beneficial use of the waterbody.

Regardless of whether a particular segment of a waterbody might not be used for recreation, the State Water Board needs to consider the impact on downstream water quality. 40 CFR 131.10(b) requires water quality standards of downstream waters must be considered and maintained. 40 CFR 131.10(b) states:

> In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters.

The record is void of any analysis of whether downstream water quality standards will be attained if upstream segments are de-listed to LREC-1. Before allowing Regional Boards to de-list REC-1 beneficial uses, the State Water Board must do a UAA that considers the ability for downstream waterways to attain and/or maintain their water quality standards.

3. *The State Water Board should consider the unanticipated consequences of allowing a Limited Rec – 1 Beneficial Use while California is striving to restore their urban watersheds.*

Allowing a Limited Recreational beneficial use will only encourage communities to channelize and concrete their waterways. This would be antithetical to California's drive to restore our urban waterways. The State Water Board should consider the unanticipated consequences of lowering a water quality standard for waterways that are channelized.

[46] 40 CFR 131.3 (f) "Designated uses are those uses specified in water quality standards for each water body or segment whether or not they are being attained." Thus, even in scenarios where concretized channels are currently inaccessible, designated uses must be protected.

The past decades brought a remarkable increase in river and watershed restoration in California, including urban river conservation in urban Los Angeles. Increasing attention to integrating natural resources protection and public recreation and use has spurred important changes in many different governmental and nongovernmental contributions. California has been fertile ground for river and watershed restoration for over the past three decades, and efforts in the state are among the most numerous and most advanced in the United States.[47] California is home to multiple state-funded restoration programs evolved from diverse legislative mandates, ballot initiatives, and citizen-sponsored programs.

Restoring urban waterways provides multiple benefits that address wetlands, streams, water quality, ecosystems, and habitat. In coastal Southern California, including the Los Angeles basin, there are many different efforts at river and watershed planning and implementation under way (SCWRP 2012). These efforts are long term, in some cases going back three decades, focused on the restoration and revitalization of the Los Angeles River and its tributaries, the adjacent San Gabriel River and its tributaries—both draining to San Pedro Bay, and watersheds, creeks and streams draining into Santa Monica Bay.

Numerous cities across the United States have implemented highly successful riverfront projects that have revitalized adjacent communities. Success stories include, for example, the San Antonio Riverwalk which has been the catalyst of over $2.8 billion in tourism for the City of San Antonio and the Brush Creek Cultural Corridor in Kansas City which has generated more than $750 million in new development.

The movement to restore our urban waterways is critical. Yet the Draft Provisions will only incentivize communities to further fence off, and channelize their urban creeks and streams so they can receive the LREC-1 designation. Before allowing communities to further degrade their urban waterways, the State Water Board should consider the unanticipated consequences of allowing a LREC-1 beneficial use.

Furthermore, the State Board should consider the indirect impacts on access resulting from having a new LREC-1 use. The Bacteria Provisions' Staff Report nor any other supporting CEQA documentation does not address this potential for negative impacts on access. Therefore, the SED is inadequate and needs revision and development of feasible alternatives and mitigation. The State Water Board should look in particular at partially or fully concretized waterways, and evaluate how to keep access expanding in the face of a standard that seems designed to limit access.

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The State Water Board believes it is acceptable for 32 in 1,000 swimmers—that's 1 in 31 swimmers—to become ill with gastroenteritis sicknesses such as diarrhea, nausea and vomiting, from swimming in water that just meets EPA's water quality criteria. This risk is unacceptably high and is not protective of human health. Our organization looks forward to working with you to ensure the Bacteria Provisions are amended in compliance with the Clean Water Act.

Sincerely,

Sean Bothwell
Policy Director
California Coastkeeper Alliance

[47] Kondolf, G. M., S. Anderson, R. Lave, L. Pagano, A. Merenlender, and E. S. Bernhardt. 2007. "Two Decades of River Restoration in California: What Can We Learn?" Restoration Ecology15 (3):516–23.