



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

APR 08 2015

Mr. Kurt V. Berchtold
Executive Officer
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, California 92501-3348

Dear Mr. Berchtold:

The Environmental Protection Agency (EPA) Region 9 has reviewed the California State Water Resources Control Board Resolution Number 2014-0005 (R8-2012-0001), the Basin Plan Amendment to the Water Quality Control Plan for the Santa Ana Region (Amendment): *Amendments to the Water Quality Control Plan for the Santa Ana River Basin to Revise Recreational Standards for Inland Fresh Surface Waters in the Santa Ana Region*. By this letter and enclosure, I am approving some portions of the Amendment and disapproving other portions of the Amendment.

The Amendment was adopted by the Santa Ana Regional Water Quality Control Board (SARWQCB, Regional Board) on June 15, 2012 under Resolution No. R8-2012-0001, and adopted by the State Water Resources Control Board (SWRCB, State Board) on January 21, 2014 under Resolution No. 2014-0005. The Amendment was certified by the California Office of Administrative Law on July 2, 2014, in accordance with 40 C.F.R. § 131.6(e) that the standards were duly adopted pursuant to California law. EPA received the main package for review on July 7, 2014, and received updated information in subsequent submittals on October 14, 15, and 16, 2014 and on February 9 and 12, 2015.

Section 303(c) of the Clean Water Act (CWA) and 40 C.F.R. § 131 require EPA to approve or disapprove new or revised state-adopted water quality standards. The State regulatory provisions which are subject to EPA's approval authority include antidegradation, beneficial uses, and water quality criteria; as such, certain sections of the Basin Plan Amendment are subject to EPA's section 303(c) approval authority.

The Amendment makes various revisions to the Basin Plan in Chapters 3 (Beneficial Uses), 4 (Water Quality Objectives), and 5 (Implementation). The revisions are primarily with respect to recreational (REC) use standards, though there are other modifications such as additions and deletions of water bodies. Additionally, the Amendment contains changes to definitions, clarifying language, and other editorial changes. EPA Region 9 is not acting on such language revisions, unless otherwise noted, as they are not new or revised water quality standards under Section 303(c) of the Clean Water Act.

APPROVALS

EPA Region 9 finds these portions of the amendment to be consistent with the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131, and hereby approves these portions of the amendment:

Revisions to CHAPTER 3 (Beneficial Uses) of the Basin Plan

Additions of water bodies and associated beneficial uses to the Basin Plan:

- Tidal Prism of the Santa Ana Delhi Channel: Exempt from MUN and REC1 (UAA); Existing REC2, WILD, RARE and MAR.
- Tidal Prism of Greenville-Banning Channel: Exempt from MUN and REC1 (UAA); Existing REC2, WILD, RARE, and MAR.
- Santa Ana-Delhi Channel Reach 1: Exempt from MUN and REC1 (UAA); Existing WARM, WILD, and RARE.
- Santa Ana-Delhi Channel Reach 2: Exempt from MUN and REC1 (UAA); Existing REC2, WARM, and WILD.
- Greenville-Banning Channel Reach 1: Exempt from MUN, REC1 (UAA), and REC2 (UAA); Existing WARM and WILD.
- Los Cerritos Wetlands: Exempt from MUN; Existing REC1, REC2, BIOL, WILD, RARE, SPWN, and MAR.
- Huntington Beach Wetlands: Exempt from MUN; Existing REC1, REC2, BIOL, WILD, RARE, SPWN, and MAR
- Goodhart Canyon Creek: Intermittent MUN, AGR, REC1, REC2, and WARM; Existing WILD.
- St. John's Canyon Creek: Intermittent MUN, AGR, REC1, REC2, and WARM; Existing WILD.
- Cactus Valley Creek: Intermittent MUN, AGR, REC1, REC2, and WARM; Existing WILD.
- Mystic Lake: Intermittent MUN, REC1, REC2, and WARM; Existing BIOL, WILD, and RARE.

Removal of water bodies from the Basin Plan:

- Laguna and Lambert Reservoirs.

Revisions to water body reaches and associated beneficial uses:

- Cucamonga Creek Reach 1: Removal of the existing beneficial use of REC1.
- Temescal Creek: Division of Reach 1 into Reach 1a and 1b, and adjusted downstream boundary of Reach 2. For Reaches 2 and 4 of the Creek, the beneficial use designations modified from intermittent to existing or potential.

- Temescal Creek Reach 1a: Exempt from MUN, exempt from REC1 (UAA); existing REC2, WARM, WILD.
- Temescal Creek Reach 1b: Exempt from MUN, exempt from REC1 (UAA); existing WARM, WILD.
- Knickerbocker Creek division into two reaches:
 - Knickerbocker Creek Reach 1: Intermittent MUN, GWR, REC1, REC2, COLD, and WILD.
 - Knickerbocker Creek Reach 2: Intermittent MUN, GWR, REC1, REC2, COLD, and WILD.

Revisions to CHAPTER 4 (Water Quality Objectives) of the Basin Plan

- Table 4-PIO: Pathogen Indicator Bacteria Objectives for Fresh Waters (except footnote 3).

Revisions to CHAPTER 5 (Implementation) of the Basin Plan

- Tiering based on frequency of use partial approval – all values less than or equal to 410 cfu/100 mL.
- Antidegradation targets for REC2 only freshwaters.
- High flow suspension of recreational use standards.

DISAPPROVALS

EPA Region 9 finds these portions of the amendment to be inconsistent with the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131 and disapproves these portions of the amendment:

Revisions to CHAPTER 3 (Beneficial Uses) of the Basin Plan

- Santa Ana-Delhi Channel Reach 1: Exempt from REC2.
- Cucamonga Creek Reach 1: Removal of REC2.
- Temescal Creek Reach 1b: Removal of REC2.

Revisions to CHAPTER 5 (Implementation) of the Basin Plan

- Tiering based on frequency of use Table 5-REC1-ssv and calculations – all values greater than 410 cfu/100 mL.

Details on EPA's basis for this action and suggested changes, that should be made so that the disapproved portions of the Amendment will comply with the Clean Water Act, are provided in the Enclosure.

Public Participation

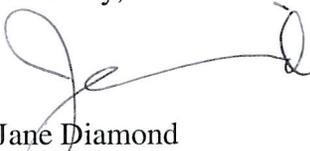
Public involvement is an integral component of a successful water quality program and EPA Region 9 notes the effort made by the State and Regional Boards to include the public in the development of the Amendment. Based upon our review of the administrative record for the Amendment, the public review procedures followed by the State in the development of the Amendment were consistent with the procedural requirements for public participation in triennial reviews, adoption, and revision of state water quality standards.

Endangered Species Act Consultation

Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species (listed species) or result in the destruction or adverse modification of critical habitat. In order for ESA Section 7 to apply, EPA must be taking an action in which it has sufficient discretionary federal involvement or control to protect listed species. EPA Region 9 initiated informal consultation on January 27, 2015 with U.S. Fish and Wildlife Service (USFWS) and on January 28, 2015 with the National Marine Fisheries Service (NMFS) for those portions of the Amendment requiring consultation. On January 27, 2015, EPA received correspondence from the USFWS, and on February 9, 2015 from the NMFS California Coastal Office indicating that no federally listed species would be affected.

I commend the Santa Ana Regional Water Quality Control Board staff for working with EPA Region 9 over the past several years to resolve some of the issues with this Amendment to the Basin Plan. If there are any questions regarding this action, please contact Janet Hashimoto at 415-972-3452 or Suesan Saucerman at 415-972-3522. As always, we look forward to continued cooperation with the State in achieving our mutual environmental goals.

Sincerely,



Jane Diamond
Director, Water Division

Enclosure

cc: Joanne Schneider (SARWQCB)
David Woelful (SARWRCB)
Rik Rasmussen (SWRCB)
Noah VanGilder (USEPA, OST)

Bases for EPA's Decision Regarding Water Quality Standards in the Basin Plan Amendment to the Water Quality Control Plan for the Santa Ana Region (Basin Plan): Amendments to the Water Quality Control Plan for the Santa Ana River Basin to Revise Recreational Standards for Inland Fresh Surface Waters in the Santa Ana Region (Resolution Number 2014-0005 (R8-2012-0001))

BASES FOR APPROVALS

1. Revisions to CHAPTER 3 (Beneficial Uses) of the Basin Plan

Additions of water bodies and associated Beneficial Uses to the Basin Plan under "Inland Surface Streams":

- a. Additions of water bodies and associated Beneficial Uses to the Basin Plan under "Inland Surface Streams" and "Lakes and Reservoirs":

The following water bodies and associated beneficial uses were added to the Basin Plan. The EPA Region 9 finds that they are consistent with 303(c) of the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131.

Santa Ana-Delhi Channel Reach 1: Exempt from MUN and REC1 (Use Attainability Analysis [UAA]); Existing WARM, WILD, and RARE. Added to the Basin Plan for the first time.

Santa Ana-Delhi Channel Reach 2: Exempt from MUN and REC1 (UAA); Existing REC2, WARM, and WILD. Added to the Basin Plan for the first time.

Greenville-Banning Channel Reach 1: Exempt from MUN and REC1 (UAA), and REC2 (UAA); Existing WARM and WILD. Added to the Basin Plan for the first time.

Goodhart Canyon Creek: Intermittent MUN, AGR, REC1, REC2, and WARM; Existing WILD. Added to the Basin Plan for the first time, formerly within the San Diego Region, now drains into the Santa Ana Region.

St. John's Canyon Creek: Intermittent MUN, AGR, REC1, REC2, and WARM; Existing WILD. Added to the Basin Plan for the first time.

Cactus Valley Creek: Intermittent MUN, AGR, REC1, REC2, and WARM; Existing WILD. Added to the Basin Plan for the first time.

Mystic Lake: Intermittent MUN, REC1, REC2, and WARM; Existing BIOL, WILD, and RARE. Added to the Basin Plan for the first time, it is an intermittent lake, located north of the community of Lakeview in Riverside County, and was added because it has significant beneficial uses.

- b. Addition of water bodies and associated beneficial uses to the Basin Plan under "Bays, Estuaries, and Tidal Prisms":

The following water bodies and associated beneficial uses were added to the Basin Plan. The EPA Region 9 finds that they are consistent with 303(c) of the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131.

Tidal Prism of the Santa Ana Delhi Channel – Bicycle Bridge at University Dr. at upper Newport Bay to 1036 ft. upstream: Exempt from MUN and REC1 (UAA); Existing REC2, WILD, RARE, and MAR. Added to the Basin Plan for the first time.

Tidal Prism of Greenville-Banning Channel – Santa Ana River Confluence to Inflatable Diversion Dam: Exempt from MUN, REC1 (UAA); Existing REC2, WILD, RARE, and MAR. Added to the Basin Plan for the first time.

Los Cerritos Wetlands: Exempt from MUN; Existing REC1, REC2, BIOL, WILD, RARE, SPWN, and MAR. Added to the Basin Plan for the first time.

Huntington Beach Wetlands: Exempt from MUN; Existing REC1, REC2, BIOL, WILD, RARE, SPWN, and MAR. Added to the Basin Plan for the first time.

For water bodies identified in both 1.a. and 1.b. above, other objectives that apply to these newly added water bodies are those water quality standards that apply to water bodies upstream (based on the Tributary Rule), and the California Toxics Rule, which established water quality criteria for priority toxic pollutants for California inland surface waters, enclosed bays, and estuaries.

c. Removal of two water bodies from the Basin Plan:

The following water bodies were removed from the Basin Plan as they have been drained and no longer exist. The EPA Region 9 finds that these removals are consistent with 303(c) of the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131.

Laguna Reservoir: The dam impounding the Laguna Reservoir was removed and the Reservoir was drained in 2005.

Lambert Reservoir: The dam was removed and the reservoir drained in the early 2000s.

d. Revisions to water body reaches and associated beneficial uses:

The EPA Region 9 finds that the following revisions are consistent with 303(c) of the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131.

Cucamonga Creek Reach 1: Removal of the existing beneficial use of REC1.

Temescal Creek: Division of Reach 1 into Reaches 1a and 1b, and adjusted downstream boundary of Reach 2 to better accommodate associated beneficial uses with stream configuration. For Reaches 2 and 4 of the Creek, the beneficial use designations modified from “I” (intermittent) to “X” (existing or potential), as the flows are perennial.

Temescal Creek Reach 1a: Exempt from MUN, REC1 (UAA); Existing REC2, WARM, and WILD.

Temescal Creek Reach 1b: Exempt from MUN, REC1 (UAA); Existing WARM, and WILD.

Knickerbocker Creek division into two reaches: Originally listed as a tributary to Big Bear Lake. Because of its importance as a tributary to the lake, it has been listed separately. It has two distinct channel morphologies, so it was divided into two reaches.

Knickerbocker Creek Reach 1: Intermittent – MUN, GWR, REC1, REC2, COLD, and WILD.

Knickerbocker Creek Reach 2: Intermittent – MUN, GWR, REC1, REC2, COLD, and WILD.

2. Revisions to CHAPTER 4 (Water Quality Objectives) of the Basin Plan

Table 4-PIO: Pathogen Indicator Bacteria Objectives for Fresh Waters (except footnote 3). The *E. coli* objective for REC1 in Table 4-PIO, a geometric mean of <126 *E. coli* organisms per 100 mL, is as stringent and protective as the USEPA December 2012 Recommendation 1 objective of culturable *E. coli* at a GM of 126 cfu per 100 mL, and is consistent with CWA section 303(c) and the implementing federal regulations at 40 CFR 131.

3. Revisions to CHAPTER 5 (Implementation) of the Basin Plan

- a. Tiering based on frequency of use partial approval – all *E. coli* single sample values (SSV) less than or equal to 410 cfu/100 mL are approvable because those SSV values are as stringent as or more stringent than the USEPA 2012, Recommendation 1 statistical threshold value (STV) of 410 cfu/100mL.
- b. Antidegradation targets for REC2 only freshwaters – The REC2 antidegradation targets for REC2 water bodies are consistent with CWA section 303(c) and the implementing federal regulations at 40 CFR 131.
- c. High flow suspension of recreational use standards – The suspension of the REC uses during and immediately after defined storm events still maintains protection of recreational uses and is consistent with CWA section 303(c) and the implementing federal regulations at 40 CFR 131.

BASES FOR APPROVAL OF MUN EXEMPTIONS AND USE ATTAINABILITY ANALYSES

Section 101(a)(2) of the Clean Water Act (CWA) states 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.” All surface waters are presumed to have the beneficial use of primary contact recreation (REC1) which fully conforms with the requirement in section 131.6 of the Water Quality Standards Regulation to designate uses consistent with the provisions of sections 101(a)(2) and 303(c)(2) of the Clean Water Act (CWA). To overcome this presumption, a use attainability analysis (UAA) must be conducted and it must be demonstrated that attaining the uses is not feasible based on one or more of the six factors identified in federal regulations (40 CFR 131.10(g)).

The Regional Board made changes to REC1 and REC2 designations to 4 water bodies (8 reaches), based on Use Attainability Analyses (UAAs) conducted for the 4 water bodies: The Santa Ana Delhi Channel (newly added to the Basin Plan), Greenville-Banning Channel (newly added to the Basin Plan), Temescal Creek, and Cucamonga Creek. The four water bodies for which UAAs were conducted are discussed below.

In 40 CFR Part 131, Water Quality Standards Regulation (Federal Register / Vol. 63, No. 129 / Tuesday, July 7, 1998 / Proposed Rules), EPA’s suggested approach to the recreational use question has been for States and Tribes to look at a suite of factors such as: the actual use, existing water quality, water quality improvement potential, access, recreational facilities,

location, safety considerations, and physical conditions of the water body in making any use attainability decision. In all of the Use Attainability Analyses, the Regional Board described a suite of factors including the 131.10(g) factors, such as actual expected use, existing water quality, access, recreational facilities, location, and safety considerations.

1. Tidal Prism of the Santa Ana Delhi Channel – Bicycle Bridge at University Dr. at upper Newport Bay to 1036 ft. upstream

The Tidal Prism of the Santa Ana Delhi Channel is exempted from MUN because “Total dissolved solids (TDS) levels exceed 3,000 mg/L” (SB 88-63). Data were provided on February 9, 2015, showing that the Tidal Prism of the Santa Ana Delhi Channel has TDS well above 3,000 mg/L.

The Tidal Prism of the Santa Ana Delhi Channel is exempted from REC1 based on the results of an Use Attainability Analysis (UAA). The UAA shows that the high degree of modification due to partial concrete lining, and steep erosion due to straightening of the tidal prism renders the REC1 use unattainable. Under 40 CFR 131.10(g)(4); “Hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use”; Additionally, the Regional Board proposes that 40 CFR 131.10(g)(2) – “Natural, ephemeral intermittent or low flow conditions or water levels prevent the attainment of the use” – as a factor because outside of the tidal influence, water levels are too low to support the REC1 use.

EPA finds that 40 CFR 131.10(g)(4) and 131.10(g)(2) have been satisfied.

2. Tidal Prism of Greenville-Banning Channel – Santa Ana River Confluence to Inflatable Diversion Dam

The Tidal Prism of the Greenville-Banning Channel is exempted from MUN because “Total dissolved solids (TDS) levels exceed 3,000 mg/L.” Data were provided on February 9, 2015, showing that the Tidal Prism of the Greenville-Banning Channel has TDS well above 3,000 mg/L.

The Tidal Prism of the Greenville-Banning Channel is exempted from REC1 based on the results of an UAA. The UAA shows that the high degree of modification due to full concrete lining of the tidal prism renders the REC1 use unattainable. Under 40 CFR 131.10(g)(4); “Hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use.”

EPA finds that 40 CFR 131.10(g)(4) has been satisfied.

3. Santa Ana-Delhi Channel Reach 1 – upper boundary of Tidal Prism to intersection of Sunflower Ave./Flower St.

The MUN designation was exempt based on “... the channel has been heavily modified to convey storm water runoff from the urbanized watershed. An exception from the MUN designation is appropriate pursuant to the Sources of Drinking Water Policy (SB 88-63).”

Criteria were provided in SB 88-63 which could be used by the Regional Boards to exempt water bodies from MUN through the Basin Plan amendment process, including: “*The water is in systems designed or modified to collect or treat municipal or industrial wastewaters, process waters, mining wastewaters, or storm water runoff, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards.*” The Regional Board provided a monitoring plan for Reach 1 of the Santa Ana Delhi Channel on February 12, 2015.

Reach 1 of the Santa Ana-Delhi Channel is exempted from REC1 based on the results of a UAA. The UAA shows that the high degree of modification due to full concrete lining renders the REC1 use unattainable. Under 40 CFR 131.10(g)(4), “Hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use”; also, the UAA shows that flows are low enough to preclude the REC1 use. Under 40 CFR 131.10(g)(2), “natural, ephemeral, intermittent, or low-flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met.”

EPA finds that 40 CFR 131.10(g)(2) and 40 CFR 131.10(g)(4) have been satisfied.

4. Santa Ana-Delhi Channel Reach 2 - Sunflower Ave./Flower St. intersection to Warner Ave

The MUN designation was exempt based on “... the channel has been heavily modified to convey storm water runoff from the urbanized watershed. An exception from the MUN designation is appropriate pursuant to the Sources of Drinking Water Policy (SB 88-63).”

The Regional Board provided information regarding their recommendations for monitoring for Reach 2 of the Santa Ana Delhi Channel on February 12, 2015.

Reach 2 of the Santa Ana-Delhi Channel is exempted from REC1 based on the results of an UAA. The UAA shows that the high degree of modification due to full concrete lining renders the REC1 use unattainable. Under 40 CFR 131.10(g)(4); “Hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use”; also, the UAA shows that flows are low enough to preclude the REC1 use. Under 40 CFR 131.10(g)(2); “natural, ephemeral, intermittent, or low- flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met”.

EPA finds that 40 CFR 131.10(g)(2) and 40 CFR 131.10(g)(4) have been satisfied.

5. Greenville-Banning Channel Reach 1 – Inflatable Diversion Dam to California St.

The MUN designation was exempt based on “... the channel has been heavily modified to convey storm water runoff from the urbanized watershed. An exception from the MUN designation is appropriate pursuant to the Sources of Drinking Water Policy (SB 88-63)”.

The Regional Board provided information regarding its recommendation for monitoring for Greenville-Banning Channel on February 12, 2015.

Reach 1 of the Greenville-Banning Channel is exempted from REC1 based on the results of an UAA. The UAA shows that the high degree of modification due to full concrete lining renders the REC1 use unattainable. Under 40 CFR 131.10(g)(4); “Hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use”; also, the UAA shows that flows are low enough to preclude the REC1 use. Under 40 CFR 131.10(g)(2); “natural, ephemeral, intermittent, or low-flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met”.

EPA finds that 40 CFR 131.10(g)(2) and 40 CFR 131.10(g)(4) have been satisfied.

BASES FOR DISAPPROVALS

EPA Region 9 finds the portions of the Amendment listed below to be inconsistent with the Clean Water Act and implementing federal regulations at 40 C.F.R. § 131, and disapproves these portions of the Amendment.

1. Revisions to CHAPTER 3 (Beneficial Uses) of the Basin Plan

EPA is disapproving the following revisions to the Basin Plan pursuant to 40 C.F.R. §131.5(a)(1) because no adequate rationale has been provided as required by 40 C.F.R. §§ 131.6(a) and (b).

a. Santa Ana-Delhi Channel Reach 1: Exempt from REC2.

Reach 1 of the Santa Ana-Delhi Channel is tributary to the Tidal Prism, which the Regional Board has designated REC2, pursuant to the findings of an UAA (approved above). The Tidal Prism flows into Upper Newport Bay, which is designated REC1.

For protection of downstream beneficial uses, the Regional Board discusses a diversion facility that is being designed to capture and divert low flow from the Santa Ana-Delhi Channel, at the lower end of Reach 1. The diversion, sponsored by the cities of Newport Beach, Costa Mesa, and Santa Ana, will address surface water quality in accordance with the Orange County Areawide Urban Storm Water Runoff Management Program NPDES permit (Order No. R8-2009-0033, ND PES CA 8618030, as amended) and the current TMDLs for Upper Newport Bay, including

those for fecal coliform, nutrients and selenium. The diversion would be constructed just upstream of the Tidal Prism reach and just downstream of the Mesa Drive road crossing and culvert. The diversion would remove low flow and be pumped into a nearby Orange County Sanitation District (OCWD) sanitary sewer system outlet and/or be used for golf course irrigation. It is anticipated that the diversion will improve the water quality of the downstream tidal prism and Upper Newport Bay by removing inflow waters that contain pathogens and nutrients. However, as of this review, the diversion facility has not been put into place.

Because the diversion is not yet in place, EPA Region 9 believes that at least the REC2 beneficial use should remain to protect downstream REC1 use in Upper Newport Bay. The REC2 designation and implementation of the antidegradation targets proposed in the amendment will ensure that monitoring and controls are in place to protect those downstream uses.

b. Cucamonga Creek Reach 1: Removal of REC2

Reach 1 of Cucamonga Creek is presently on California's 303(d) list of impaired waters due to elevated fecal coliform levels. The Regional Board adopted Total Maximum Daily Loads (TMDLs) for the Middle Santa Ana River (MSAR) Watershed, including Cucamonga Creek, for both fecal coliform and *E. coli* bacteria in 2005 (EPA approval 2007). Cucamonga Creek is tributary to Mill Creek, Santa Ana River Reach 3, and Prado Park Lake, all of which are designated as REC1 and REC2.

The Regional Board surmises that because urban run-off contributes only 10% of bacteria in the creek, and the POTW discharges Title-22 recycled water (<2 mpn/100 mL fecal coliform, which is safe for recreational activities), 90% of the bacteria load found in Cucamonga Creek is arising within the creek itself. Eliminating upstream urban sources is expected to have little effect on the instream pathogen loads. Consequently, effort has shifted to protecting downstream uses by intercepting and diverting the dry weather flows from Cucamonga Creek before these flows converge with Reach 3 of the Santa Ana River. However, the project described in the Use Attainability Analysis (UAA) for Cucamonga Creek does not appear to be feasible, as described below.

The City of Ontario constructed a series of off-channel artificial wetlands ponds near the end of Cucamonga Creek - Reach 1. According to the UAA, “[a]s of the fall of 2013, approximately half of the dry weather flow (≈15 of 35 cfs) is already being diverted out of Cucamonga Creek just downstream of Hellman Ave. More¹ will be diverted when the project is completed in the spring of 2014.” Figure 3.2.2 from the UAA states: “The average dry weather flow in Cucamonga Creek is approximately 31 cfs at the USGS gauging location. And, 87% of this baseflow (27 cfs) is comprised of high quality recycled water discharged by Inland Empire Utilities Agencies (IEUA's) treatment plants a few miles upstream.” However, under a Streambed Alteration Agreement with the California Department of Fish and Game [NOTIFICATION No. 1600-2012-0036-R6 (REVISION 3)] the amount removed from the creek

¹ The Project document states “The project will remove **up to 15 cfs** [...] during dry weather (typical creek discharge = 40 cfs) [...]”

<http://www.sawpa.net/apps/Prop84Stat/Prop84Stat/Reports/Project1250.pdf>

is limited: when flows in Cucamonga Creek are between 30 and 60 cfs, the diversion shall not exceed 15 cfs, and when flows are 30 cfs or lower, the diversion shall not exceed 5 cfs. In other words, given that the flows are normally 40 cfs, the agreement is that the diversion shall not exceed 15 cfs.

The UAA for Cucamonga Creek shows that 100% of the geometric means for *E. coli* from 2007 to 2012 exceed the Basin Plan criteria of 126 cfu/100mL and the waste load allocation for the TMDL of 113 cfu/100 mL. The Regional Board states that BMPs are being considered and put in place, but those BMPs are not named, nor is there any evidence given that the BMPs along with the diversions will protect downstream uses.

The EPA Region 9 believes that at least the REC2 beneficial use should remain to protect downstream REC1 uses in Mill Creek, Santa Ana River Reach 3, and Prado Park Lake. The REC2 designation and implementation of the antidegradation targets proposed in the amendment will ensure that monitoring and controls are in place to protect downstream uses.

c. Temescal Creek Reach 1b: Removal of REC2

Reaches 1a and 1b of Temescal Creek are tributary to the Prado Basin Management Zone and to the Santa Ana River, which are designated REC1 and REC2. To address potential impacts to downstream waters, the Flood Control District has proposed a diversion project. The proposed Temescal Channel Cota Street Recharge Pond Diversion Project would divert base flows from Temescal Creek just downstream of Cota Street (Reach 1a). Three existing ponds located adjacent to Temescal Creek and to the west of Cota Street have excess capacity to allow recharge of base flow, additional reclaimed water and/or imported water.

The UAA states that “[d]epending on downstream water rights and habitat issues, a certain amount of base flow could be diverted from the channel into the recharge ponds. It is anticipated that up to half of the base flow of the creek below Cota Street could be diverted into the ponds.” Further, the UAA states : “[i]mplementation of the diversion is expected to result in significant reduction of indicator bacteria loading to downstream waters. The project has been budgeted and the Flood Control District is working on necessary agreements with the City of Corona to be able to begin the project. It is important to point out that the implementation of this project rests on the assumption that recreational use designations for Reach 1a and 1b are modified in accordance with the recommendations of this UAA, making it unnecessary to achieve REC1 objectives in the two reaches themselves. To require compliance with these objectives in the two reaches would be inappropriate, based on the findings of this UAA, and would defeat the intended purpose of the diversion project.”

The diversion project has not been put into operation at the time of this review. From the UAA, it appears that the diversion will not be implemented for a while.

The EPA Region 9 believes that at least REC2 beneficial use should remain to protect downstream REC1 uses in Prado Basin Management Zone and the Santa Ana River. The REC2 designation and implementation of the antidegradation targets proposed in the amendment will ensure that monitoring and controls are in place to protect those downstream uses.

2. Revisions to CHAPTER 5 (Implementation) of the Basin Plan

Pursuant to 40 C.F.R. § 131.5 (a)(1), EPA Region 9 is disapproving portions of the Amendment which involve tiering based on frequency of use Table 5-REC1-ssv and calculations resulting in single sample maximum values (SSVs) greater than 410 cfu/100 mL. (This includes footnote 3 on Table 4-pio.). EPA Region 9 notes that many of the values in Table 5-REC1-ssv are not as protective as the US EPA December 12, 2012 recommendation of the statistical threshold value (STV) of 410 cfu/100 mL (Office of Water 820-F-12-058 Recreational Water Quality Criteria).

For REC1:

The Regional Board differentiated (tiered) all inland waters based on “frequency of use” in order to assign single sample maximum values (SSVs) to water bodies. The expected “principal use” of these SSVs is to implement public notification programs and to trigger additional monitoring to determine whether there are controllable sources of contamination. The Regional Board used the 1986 US EPA recommended formula for calculating the maximum expected single sample value.

EPA Region 9 notes that the US EPA no longer condones tiering of uses for protection of human health, as explained in the December 12, 2012 recommended criteria for recreational waters.

A number of the calculated SSV values proposed are as stringent as or more stringent than the US EPA recommended STV of 410 cfu/100mL and are approved (above). Any values higher than 410 cfu/100 mL are not protective of the REC1 beneficial use, and therefore are disapproved pursuant to CWA section 303(c) and the implementing federal regulations at 40 C.F.R. § 131.

ENDANGERED SPECIES ACT

During informal consultation, the US Fish and Wildlife Service (USFWS) noted that the beneficial uses for the Tidal Prisms for Santa Ana Delhi Channel, Greenville-Banning Channel, Los Cerritos Wetlands, and Huntington Beach Wetlands should include Estuarine (EST) use protection. The tidally influenced section of each of these areas is appropriately considered estuarine habitat, as the salinity fluctuates with the tide and freshwaters flowing from upstream. Habitat and species located in the four areas are supported by brackish waters formed at the junction of freshwater flows and tidal influence. The Regional Board should add EST to these four areas in the near future.