

State of California
California Regional Water Quality Control Board
Santa Ana Region

December 16, 2016

SUPPLEMENTAL STAFF REPORT

ITEM: 10

SUBJECT: Public Hearing: Amendments to the Water Quality Control Plan for the Santa Ana River Basin Region (Basin Plan) to: Update the List of Waters in Tables 3-1 and 4-1 and Designate Beneficial Uses; Remove REC1 Fecal Coliform Water Quality Objectives for Enclosed Bays and Estuaries; Remove Fecal Coliform TMDL for Water Contact Recreation (REC1) for Newport Bay; Revise the Shellfish Harvesting (SHEL) Beneficial Use Definition; Add Antidegradation Targets for REC2 Only Waters; Add New Chapter 6 Total Maximum Daily Loads

DISCUSSION:

On October 14, 2016, documentation pertaining to these proposed Basin Plan amendments was posted on the Regional Board's website and made available for public and agency review and comment. This includes the Staff Report, Substitute Environmental Document (SED), and draft Basin Plan amendments.

Since October 14, 2016, Board staff has considered the proposed amendments based on additional information provided by, including the USEPA, the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). and comments from a number of parties. Based on that consideration, Board staff now proposes the following modifications to the recommended amendments. These changes are also reflected in Attachments 1 and 2 to Tentative Resolution No. R8-2016-0072.

As of the end of the formal written comment period (November 30, 2016), six (6) commenters submitted comments to Regional Board staff. The comments are attached to this staff report as Exhibit 1. A response to comment document will be prepared and posted on the Board website prior to the December 16, 2016 Regional Board meeting.

1.0 UPDATE LIST OF WATERS IN TABLES 3-1 AND 4-1; DESIGNATE BENEFICIAL USES – ADDITIONAL MODIFICATIONS

CHANGES to TABLE 3-1 BENEFICIAL USES and TABLE 4-1 WATER QUALITY OBJECTIVES

Three additional waters Goldenstar/Hole Lake Creek, Morning Canyon Creek, and Warm Creek are proposed to be added to the Basin Plan, which brings the total number of waters proposed to be added to fourteen (14). These three waters have been monitored through the years by County flood control and environmental health agencies, Regional Board staff, and environmental groups. Listing these waters in Tables 3-1 and 4-1 will assist in highlighting these waters for future restoration efforts, and aid in protecting these resources.

- **Goldenstar/Hole Lake Creek**

Goldenstar Creek is a drainage that originates in the Woodcrest area of the City of Riverside as an earthen channel. The creek flows south of Van Buren Boulevard and flows through the Arlington Area of the City of Riverside towards the Santa Ana River. The creek flows off the plateau area of Woodcrest, down a canyon, and through an agricultural area to the State Route (SR) 91 freeway. This perennial stream supports riparian areas and pools with native fish in the canyon area. From SR 91, the creek has been highly modified for flood control purposes and often flows underground through residential and commercial areas until it connects with Hole Lake Creek.

Hole Lake Creek flows just to the west of Van Buren Boulevard, and empties into the Santa Ana River adjacent to the Van Buren Bridge. Hole Lake Creek provides perennial flows, which support well established riparian areas. Historically, the creek was dammed to form a lake until the 1930's when the dam was removed. Conversion of the Hole Lake Creek riparian area into a city park with a lake has been recently proposed.

Recommendations regarding beneficial use designations are as follows:

- MUN (Municipal and Domestic Supply) – X (existing or potential): Goldenstar/Hole Lake Creek does not meet any of the exceptions identified in the State's Sources of Drinking Water Policy. Therefore, the MUN use designation is recommended.
- REC1 (Primary Contact Recreation) - X: REC 1 is a presumptive use unless and until an UAA is completed and approved that documents otherwise.
- REC2 (Secondary Contract Recreation) - X: The Creek provides opportunities for non-contact water recreation, such as hiking and bird watching.
- WARM (Warm Freshwater Habitat) - X: A "fishable use" is presumptive unless and until an UAA is completed and approved that demonstrates otherwise.
- WILD (Wildlife Habitat) - X: The Creek supports habitat for a variety of wildlife species, including birds and mammals.

- RARE (Rare, Threatened, or Endangered) – X: The Creek provides habitat for the federal listed as endangered Least Bell's Vireo (*Vireo Bellii pusillus*) and the CDFW Species of Special Concern arroyo chub (*Gila orcutti*).
- SPWN (Spawning, reproduction, and development – X: A population of arroyo chub (*Gila Orcutti*), a CDFW Species of Special Concern, has been observed in Golden Star Creek in the Canyon Area. It is assumed that these fish are a self-sustaining (i.e., wild) population of arroyo chub.

- **Warm Creek**

Warm Creek originates at the location where Sand Creek changes direction to flow southwest near Base Line Road in the City of San Bernardino where it then becomes Warm Creek. The Creek is a concrete-lined waterbody as it flows through the residential and commercial areas of the City of San Bernardino, and then into the Santa Ana River just west of the Interstate-215/Interstate-10 freeway intersection. Just upstream of the confluence with the Santa Ana River, Lytle Creek connects with Warm Creek.

Many of the recommended beneficial designations would be intermittent (I), given the nature of flow in the Creek. Other beneficial uses (REC2 and WILD) occur or may occur in the Creek irrespective of flows such that these uses would be designated as Existing or Potential (X).

- MUN (Municipal and Domestic Supply) - I: Warm Creek does not meet any of the exceptions of the State's Sources of Drinking Water Policy therefore the MUN use designation is recommended.
- REC1 (Primary Contact Recreation) - I: REC 1 is a presumptive use unless and until an UAA is completed that documents otherwise.
- REC2 (Secondary Contract Recreation) - X: The Creek provides opportunities for non-contact water recreation, such as hiking or bird watching.
- WARM (Warm Freshwater Habitat) - I: A "fishable use" is presumptive unless and until an UAA is completed that demonstrates otherwise.
- WILD (Wildlife Habitat) - X: The Creek supports habitat for a variety of wildlife species, including birds and mammals.

- **Morning Canyon Creek**

Morning Canyon Creek is located on the Newport Coast. The Morning Canyon Creek watershed extends from midway up the San Joaquin Hills, making it the smallest of the four Newport Coast watersheds. The Creek flows through the Pelican Hill Golf Course under the Pacific Coast Highway, and through residential areas of Corona Del Mar to the Pacific Ocean. The Creek has formed a narrow distinctive canyon near the ocean.

Its perennial flows are monitored for water quality concerns by the Orange County Health Care Agency.



Morning Canyon Creek Watershed

Recommendations regarding beneficial use designations are as follows:

- MUN (Municipal and Domestic Supply) – X: Morning Canyon Creek does not meet any of the exceptions of the State’s Sources of Drinking Water Policy therefore the MUN use designation is recommended.
- REC1 (Primary Contact Recreation) - X: REC 1 is a presumptive use unless and until an UAA is completed that documents otherwise.
- REC2 (Secondary Contract Recreation) - X: The Creek provides opportunities for non-contact water recreation, such as hiking or bird watching.
- WARM (Warm Freshwater Habitat) - X: A “fishable use” is presumptive unless and until an UAA is completed that demonstrates otherwise.

- WILD (Wildlife Habitat) - X: The Creek supports habitat for a variety of wildlife species, including birds and mammals.

Table 1 below contains the full list of waters proposed to be included in Tables 3-1 and 4-1, along with their proposed designated beneficial uses. The waterbodies not described in this supplemental staff report are discussed in the October 14, 2016 staff report for the proposed Basin Plan amendments.

Table 1: WATERBODIES and DESIGNATED USES PROPOSED TO BE ADDED TO TABLE 3-1

WATERBODY	BENEFICIAL USES
Muddy Canyon Creek	I MUN, I REC1, REC2, I WARM, WILD, RARE
Los Trancos Creek	I MUN, I REC1, REC2, I WARM, WILD
Morning Canyon Creek*	MUN, REC1, REC2, WARM, WILD
Buck Gully Creek	MUN, REC1, REC2, WARM, WILD
Big Canyon Creek	MUN, REC1, REC2, WARM, WILD, RARE
Carbon Creek	I MUN, GWR, I REC1, REC2, I WARM, WILD
Fullerton Creek	+ MUN, I REC1, REC2, I WARM, WILD
Brea Creek	I MUN, I REC1, REC2, I WARM, WILD
Prado Park Lake	+ MUN, REC1, REC2, COMM, WARM, WILD
Mill Creek Wetlands	+ MUN, REC1, REC2, WARM, WILD
Goldenstar/Hole Lake Creek*	MUN, REC1, REC2, WARM, WILD, SPWN, RARE
Warm Creek*	I MUN, I REC1, REC2, I WARM, WILD
Gunnerson Pond Wetlands	+ MUN, REC1, REC2, WARM, WILD, RARE
Perris Valley Channel	+ MUN, I REC1, REC2, I WARM, WILD, RARE

* Waterbody described in this Supplemental Staff Report
 I - Intermittent Beneficial Use; others are X- existing or potential
 + Excepted from MUN

ADD BENEFICIAL USE DESIGNATIONS TO CERTAIN WATERS IN TABLE 3-1

Beneficial uses are proposed to be added to specific surface waters that are already listed in the Basin Plan. These waters are listed below with a brief explanation of the reason(s) for adding the beneficial use(s).

1) Brea Creek: *add RARE beneficial use*

The Western Pond Turtle (*Emys marmorata*) a California Species of Special Concern, inhabits the Creek.

2) Mill Creek, Reach 2: *add RARE beneficial use*

The Mountain Yellow-legged Frog (*Rana muscosa*), a federally listed endangered species, and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*), a federally listed endangered species, inhabit Reach 2 of Mill Creek.

3) Bear Creek: *add RARE beneficial use*

The Southwestern Willow Flycatcher (*Empidonax traillii extimus*), a federally listed endangered species, is found along Bear Creek.

4) Metcalf Creek: *add RARE beneficial use*

The Southwestern Willow Flycatcher (*Empidonax traillii extimus*), a federally listed endangered species, is found along Metcalf Creek.

5) Metcalf, Meadow, Summit, Minnelusa, Red Ant Creeks, Shay Meadows: *add RARE beneficial use*

The San Bernardino (Bear Valley) Blue-grass (*Poa atropurpurea*), a federally listed endangered species; California Dandelion (*Taraxacum californicum*), a federally listed endangered species; and Bird-foot Checkerbloom (*Sidalcea pedata*), a federally listed endangered species, are found throughout these waters.

6) Salt Creek, Lake Elsinore, Mill Creek Wetlands: *add RARE beneficial use*

The Least Bell's Vireo (*Least bellis pusillus*) a federally listed endangered species, inhabits portions of these waterbodies.

7) Lake Elsinore: *add RARE beneficial use*

The Riverside Fairy Shrimp (*Streptocephalus woottoni*), a federally listed endangered species, is found in some parts of Lake Elsinore.

8) Mill Creek Wetlands: *add RARE beneficial use*

The Western Yellow Billed Cuckoo (*Coccyzus americanus*), a federally listed as threatened species, inhabits the Wetlands.

Table 2 below shows the full list of beneficial uses that are proposed to be added to certain surface waters already listed in the Basin Plan. The added designations not described in this supplemental staff report are discussed in the October 14, 2016 staff report for the proposed Basin Plan amendments..

Table 2: WATERS PROPOSED TO HAVE ADDED DESIGNATIONS OF RARE, COMM, EST, AND SPWN BENEFICIAL USES

WATERBODY (RARE proposed to be added)	RARE Species (Rare, Threatened or Endangered)
Lytle Creek, Valley Reach	San Bernardino Kangaroo Rat, Santa Ana Woolly Star
Santa Ana River, Reach 6	Santa Ana Woolly Star, Santa Ana Sucker
Tequesquite Arroyo	Santa Ana Sucker
San Jacinto River, Reaches 3, 4, and 5	San Jacinto Crownscale, Spreading Navarretia, San Bernardino Kangaroo Rat
Strawberry Creek and San Jacinto River, North Fork	Mountain Yellow-Legged Frog
Fuller Mill Creek	Mountain Yellow-Legged Frog
Indian Creek	Santa Ana Speckled Dace, San Bernardino Kangaroo Rat
Lake Hemet and Lake Perris	Bald Eagle
Shay Meadows (Wetlands)	Unarmored Threespine Stickleback
Bautista Creek	San Bernardino Kangaroo Rat, Arroyo Toad
Silverado Creek and Santiago Creek, Reach 3	Arroyo Toad
Poppet Creek	San Bernardino Kangaroo Rat
Yucaipa Creek, Temescal Creek Reach 2, San Timoteo Creek Reaches 1b, 2, 3, San Diego Creek Reaches 1 and 2, Potrero Creek, Peter's Canyon Wash, Rattlesnake Canyon Wash, Little Sand Canyon, Laguna Canyon Wash, Devil Canyon Valley and Mountain Reaches, West Fork Cable Canyon, Borrego Canyon Wash, Bailey Canyon Creek, Bonita Creek, Black Star Creek, Bee Canyon Creek, Bedford Canyon Wash, Badger Creek, Salt Creek	Least Bell's Vireo
Brea Creek	Western Pond Turtle
Mill Creek, Reach 2	Mountain Yellow-legged Frog, Southwestern Willow Flycatcher, Santa Ana Sucker
Bear Creek	Southwestern Willow Flycatcher
Metcalf Creek	Southwestern Willow Flycatcher
Metcalf, Meadow, Summit, Minnelusa, Red Ant Creeks, Shay Meadows	San Bernardino (Bear Valley) Blue-grass, California Dandelion, Bird-foot Checkerbloom
Lake Elsinore	Riverside Fairy Shrimp, Least Bell's Vireo

Table 2 (continued)

WATERBODY (RARE proposed to be added)	RARE Species (Rare, Threatened or Endangered)
Mill Creek Wetlands	Western Yellow Billed Cuckoo, Least Bell's Vireo
WATERBODY (SPWN proposed to be added)	SPWN (Spawning, Reproduction and Development) Species
Coldwater Canyon Creek	Southern California Steelhead/Rainbow Trout
Santa Ana River, Reach 2	Santa Ana Sucker
Shay Creek	Unarmored Threespine Stickleback
Lytle Creek (South, Middle, and North Forks)	Rainbow Trout, Santa Ana Speckled Dace, San Bernardino Kangaroo Rat (sediment transport)
San Jacinto River, Reach 7	Rainbow and Brown Trout
Strawberry Creek and San Jacinto River, North Fork	Rainbow Trout
Indian Creek	Santa Ana Speckled Dace
Shay Meadows Wetlands	Unarmored Threespine Stickleback
WATERBODY(COMM proposed to be added)	COMM DESIGNATION
Irvine Lake, Lake Elsinore, Big Bear Lake, Lee Lake, Lake Perris, Anaheim Lake, Canyon Lake, Jenks Lake	COMM (Commercial and Sportfishing)
WATERBODY(EST proposed to be added)	EST DESIGNATION
Los Cerritos Wetlands, Huntington Beach Wetlands, Greenville-Banning Channel Tidal Prism Reach, San Diego Creek (below Jeffrey Road), Santa Ana-Delhi Channel Tidal Prism, Santa Ana River Tidal Prism, Tidal Prisms of Flood Control Channels	EST (Estuarine Habitat)

2.0 Establish Averaging Period for Enterococcus Objectives for Coastal Waters Promulgated by USEPA

As described in the Staff Report that was made available for public review and comment on October 14, 2016, USEPA promulgated numeric Enterococcus objectives for coastal recreation waters, including bays and estuaries in the Santa Ana Region, in 2004. These promulgated objectives were based on USEPA's 1986 recommended recreation

water quality criteria for bacteria. No averaging period for the Enterococcus objectives was specified, leaving that determination to the states.

Regional Board staff initially proposed that the amendments include the following expression of the averaging period for the Enterococcus objectives:

“Enterococcus: geometric mean less than or equal to 35 organisms/100mL, based on at least 5 samples in a discrete 30-day (monthly) period.”

Relying on more recent (2012) guidance by USEPA on recreation water quality criteria for bacteria, USEPA recommended that the reference to an explicit number of samples to be collected and used to determine the geometric mean be eliminated. USEPA guidance now recommends that the geometric mean be calculated based on the sample(s) collected during the selected averaging period.

Accordingly, the proposed amendments now recommend the following expression of the Enterococcus objectives for bays and estuaries in the Region:

“Enterococcus: monthly geometric mean less than or equal to 35 organisms/100mL based on samples collected in each calendar month.”

3.0 RECOMMENDATION

Regional Board staff recommends that the Regional Board adopt Resolution No. R8-2016-0072 to: Certify the Substitute Environmental Document; and, Adopt the Basin Plan amendments delineated in Attachments 1 (“clean” version) and 2 (redline version) to the resolution.