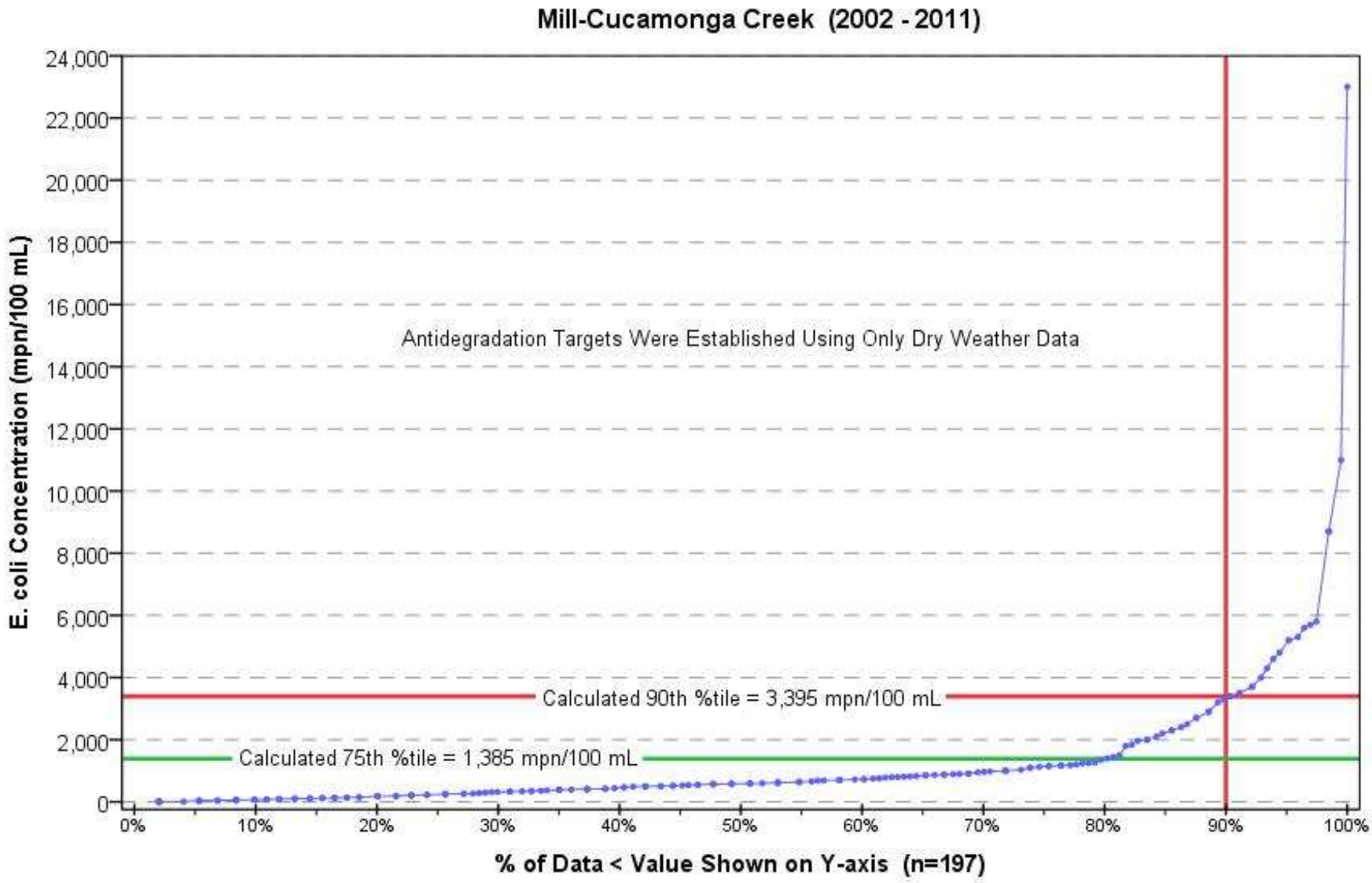
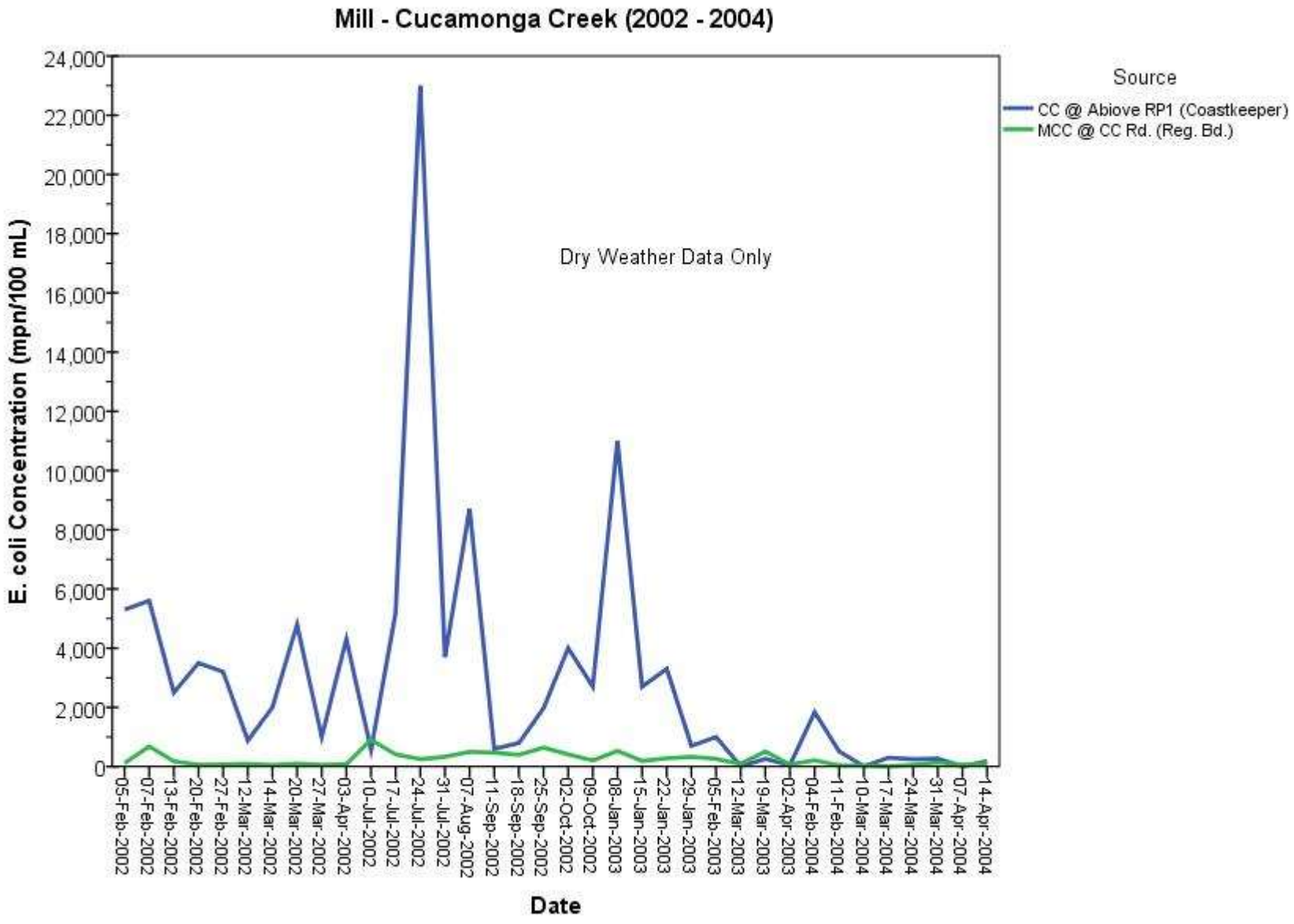

Mill-Cucamonga Creek (2002 - 2011)
E. coli Concentration (mpn/100 mL)
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Antidegradation Targets Were Established Using Only Dry Weather Data
Calculated 90th %tile = 3,395 mpn/100 mL
Calculated 75th %tile = 1,385 mpn/100 mL
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
% of Data < Value Shown on Y-axis (n=197)


Mill - Cucamonga Creek (2002 - 2004)
E. coli Concentration (mpn/100 mL)
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Dry Weather Data Only
Source
CC @ Abiove RP1 (Coastkeeper)
MCC @ CC Rd. (Reg. Bd.)
05-Feb-2002
07-Feb-2002
13-Feb-2002
20-Feb-2002
27-Feb-2002
12-Mar-2002
14-Mar-2002
20-Mar-2002
27-Mar-2002
03-Apr-2002
10-Jul-2002
17-Jul-2002
24-Jul-2002
31-Jul-2002
07-Aug-2002
11-Sep-2002
18-Sep-2002
25-Sep-2002
02-Oct-2002
09-Oct-2002
08-Jan-2003
15-Jan-2003
22-Jan-2003
29-Jan-2003
05-Feb-2003
12-Mar-2003
19-Mar-2003
02-Apr-2003
04-Feb-2004
11-Feb-2004
10-Mar-2004
17-Mar-2004
24-Mar-2004
31-Mar-2004
07-Apr-2004
14-Apr-2004
Date

Public Comment
303(d) List of 2014 & 2016 CA Integrated Report
Deadline: 7/10/17 by 12 noon

RECEIVED
7-10-17
SWRCB Clerk

July 10, 2017

submitted via email

Comment #12

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I St., 24th Floor
Sacramento, CA 95814

RE: Comment Letter - 303(d) portion of the 2014 and 2016 California Integrated Report

Dear Ms. Townsend:

The following comments are submitted on behalf of the Middle Santa Ana River TMDL Task Force ("Task Force") administered by the Santa Ana Watershed Project Authority (SAWPA).[1] The Task Force is responsible for implementing the Regional Bacteria Monitoring Program approved by the Santa Ana Regional Water Quality Control Board ("Regional Board") in March of 2016.[2] Data from this program is used to evaluate compliance with water quality objectives and to assess water quality trends in accordance with the state's antidegradation policy.[3]

At a public hearing held in April of 2017, the Regional Board determined that two waterbodies previously included on the 303(d) list due to elevated bacteria concentrations should now be removed from that list. The two waterbodies are the Santa Ana Delhi Channel (Decision ID #44427) and Cucamonga Creek-Reach 1 (Decision ID #34154). In the draft Integrated Report, State Board staff rejected the Regional Board's findings and, instead, recommended that neither waterbody be de-listed at this time.[4]

12.01 We have reviewed the rationale provided in the draft Integrated Report and concluded that the State Board staff has misunderstood and misapplied the Antidegradation Targets adopted by the Regional Board in 2012.[5] Below, we set forth the reasons why the State Board should support the Regional Board's recommendation to de-list both waterbodies.

[1] http://www.sawpa.org/collaboration/projects/tmdl-taskforce/
[2] Res. No. R8-2016-0022
[3] Res. No. 68-16
[4] All comments refer to the draft document posted to the SWRCB website on June 9, 2017.
[5] Res. No. R8-2012-0001 (subsequently approved by the SWRCB in Res. No. 2014-0005, by the OAL in Reg. Action #2014-0520-02S, and by U.S. EPA on April 8, 2015).

1) The draft Integrated Report states that "several waterbodies were required to maintain the REC-2 beneficial use which has a bacteria objective of 409 cfu/100ml." This is not true. The Basin Plan clearly states that there are no water quality objectives for waterbodies designated REC-2 Only.[6] The 409 cfu/100mL objective cited in the draft Integrated Report is the Single Sample Maximum (SSM) which applies only to waterbodies designated REC-1 and assigned to Tier C or Tier D (as described in Chapter 5 of the Santa Ana Region's Basin Plan). It does not apply to waterbodies where the REC-1 use has been properly removed through a Use Attainability Analysis that has been approved by USEPA - such as the Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek.

12.02

12.03

2) Waterbodies designated REC-2, but not REC-1, must continue to comply with the state Antidegradation Policy (Res. 68-16). To this end, the Regional Board has developed and approved Antidegradation Targets to implement this policy. However, the Antidegradation Targets are not water quality objectives and exceedances of these targets are not evidence that the beneficial uses are impaired. EPA acknowledges that antidegradation policies "may not lend themselves to attainment determinations" like those made in conjunction with developing the 303(d) list.[7]

12.04

3) The Antidegradation Targets were never designed or intended to be used as Not-to-Exceed values in the same way that water quality objectives are implemented. Rather, as explained in the Basin Plan:

12.05

> *"The baseline condition (antidegradation target) for each REC2 only water will be established through a comprehensive statistical analysis of ambient bacteria quality data that is conducted as part of the UAA used to justify the REC2 only designation. The statistical analysis must be designed to characterize the entire distribution of the dataset. This includes determination of the geometric mean, median, standard deviation, coefficient-of-variation, maximum value, 75th percentile value and sample size for the dataset. The 75th percentile density will serve as the antidegradation target, that is the trigger threshold for <u>further investigation and possible corrective action</u>."*[8] *(emphasis added)*

Because the Antidegradation Targets were set equal to the 75th percentile of the historical data, 25 percent of the data will exceed the target threshold. This is as expected and properly characterizes the "entire distribution of the dataset." It is not, by itself, proof that water quality degradation has occurred.

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[6] Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 4-18 and pg. 5-107).

[7] U.S. EPA. Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act. Memorandum from Diane Regas, Director of Office of Wetlands, Oceans and Watersheds to Water Division Directors, Regions 1-10. July 29, 2005 (see FN16 @ pg. 47)

[8] Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 5-107).

4) The Antidegradation Targets were intended to evaluate new water quality data that was collected after the Basin Plan amendment was adopted and a regional bacteria monitoring program was implemented:

12.06

> *"…as new data become available pursuant to requisite monitoring, they will be compared to this antidegradation target to determine whether future investigation or action is needed. The additional monitoring results must be sufficiently robust to assess whether a lowering of water quality has occurred...Where 75% of the new data is less than or equal to the antidegradation target, no degradation will be inferred. However, if more than 25% of the samples exceed the target, additional samples must be collected and analyzed to determine whether the elevated values are anomalous (verified by outlier analysis) or if there is a true trend toward water quality degradation."*[9] *(emphasis added)*

The Basin Plan amendment required local stakeholders to develop and submit a Regional Bacteria Monitoring Program to the Regional Board no more than six months after EPA issued final approval of the amendment. A draft plan was submitted on time and the final, revised plan was approved by the Regional Board in March of 2016.[10]

12.07

The approved Regional Bacteria Monitoring Program describes the specific procedures that will be used to implement the Antidegradation Targets. It states that water quality samples will be collected and evaluated annually at each of the waterbodies designated REC-2 only.

> *"If an exceedance of the antidegradation target is observed, additional bacterial indicator samples will be collected once/month for the three following months. If any of the follow-up samples exceed the antidegradation target, then sampling will continue on a monthly basis until source(s) of the increased bacterial indicators is identified and mitigated and bacteria levels return to below the antidegradation target in three of the four samples collected over three consecutive months."*[11]

At the time the Antidegradation Targets were established, it was the Regional Board's understanding that data from "future monitoring" would be used to determine if the triggers were being exceeded. [12]

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[9] Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 5-107 and 5-108).
[10] Res. No. R8-2016-0022 (March 11, 2016).
[11] Santa Ana River Watershed Bacteria Monitoring Program-Monitoring Plan. Feb., 2016 (see §3.3.4.3 @ pg. 3-16).
[12] California Regional Water Quality Control Board-Santa Ana Region. Staff Report: Basin Plan Amendments - Revisions to Recreational Standards for Inland Fresh Surface Water in the Santa Ana Region. Jan. 12, 2012 (see pg. 45 of 126).

"The proposed Basin Plan amendments require stakeholders in the watershed to collect and analyze new samples in accordance with a Regional Board-approved monitoring plan to assess water quality trends in waterbodies designated REC-2 only. As new data become available, the data will be compared to the baseline data developed during the UAA."[13] *(emphasis added)*

12.08 It should be noted that the Regional Board's approved Monitoring Program also states that water quality degradation will be evaluated by comparing a "*newly acquired dataset"* to the *"historical dataset."*[14]

12.09 The statistical analysis done by the State Board staff compares the historical dataset to itself and does so in a manner that does not comport with the methods described in the Basin Plan or the Regional Board's approved Monitoring Plan. Only new data collected after the Basin Plan amendment became effective on April 8th, 2015, and gathered in accordance with the approved Monitoring Plan/QAPP, can be used to determine whether water quality degradation has occurred.

5) 12.10 In order to minimize statistical variability, the Antidegradation Targets were intentionally developed using only water quality data from samples collected under dry weather conditions. According to the Basin Plan, these targets "do not apply to samples collected during wet weather conditions."[15] It is not clear whether State Board staff properly excluded all wet weather results before undertaking their own retrospective analysis of the historical data. The exact data that the State Board staff used to support its conclusion was not detailed or cited in the Integrated Report.

6) 12.11 In the event that the State Board elects to over-ride the Regional Board's determination and keep these stream segments on the 303(d) list, both should be re-assigned from Category 5 (TMDL required) to Category 2 because there is "insufficient information to determine beneficial use support." The Regional Bacteria Monitoring Program approved by the Regional Board in March of 2016 is expected to provide the necessary water quality data and this data can be considered in the next 303(d) listing cycle. 12.12 There is no need to develop a TMDL because the Basin Plan, related Monitoring Program, MS4 permits, and Comprehensive Bacteria Reduction Plans (CBRP) previously approved by the Regional Board, already require stakeholders to identify and mitigate bacteria sources that are causing or contributing to water quality degradation when there is "credible evidence" that such degradation is occurring.[16]

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[13] California Regional Water Quality Control Board-Santa Ana Region. Staff Report: Basin Plan Amendments - Revisions to Recreational Standards for Inland Fresh Surface Water in the Santa Ana Region. Jan. 12, 2012 (see pg. 46 of 126).

[14] Santa Ana River Watershed Bacteria Monitoring Program-Monitoring Plan. Feb., 2016 (see §3.3.4.1 @ pg. 3-14).

[15] Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 5-108)..

[16] CBRPs were approved as Regional Board Res. No. R8-2012-0015 and Res. No. R8-2012-0016.

12.13 For the reasons given above, the Task Force advises that the State Board staff reconsider its recommendation that Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek should remain on the 303(d) list. These waterbodies were originally added to the 303(d) list based on elevated fecal coliform concentrations. Fecal coliform is no longer considered an accurate or reliable indicator of human health risk and these water quality objectives have since been deleted from the Basin Plan. Thus, the prior listing should be considered obsolete and invalid.

12.14 The current 303(d) assessment is constrained to consider only data submitted prior to August 30, 2010.[17] However, the Basin Plan amendment requires that "new data" be used to determine if water quality has degraded compared to the historical baseline condition.

12.15 Moreover, the new data must be collected in accordance with the Monitoring Program and QAPP approved by the Regional Board in March of 2016. Any data used to develop the Antidegradation Target is not "new." All genuinely "new" data, by definition, must have been collected long after the 2010 submission deadline had passed.

12.16 The Regional Board looked at all of the same water quality data that was evaluated by State Board staff and concluded that Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek no longer belong on the 303(d) list. Deference should be given to the Regional Board's ability to implement its own Antidegradation Targets properly. State Board staff's interpretation of these targets and analysis of the historical data is inconsistent with the plain language of the approved Basin Plan amendment and the related Monitoring Program. Therefore, the State Board should affirm the Regional Board's determination and de-list both streams.

Respectfully submitted,

Risk Sciences
125 New Dawn Rd.
Rockvale, TN 37153

O: 615-274-2745
E: tmoore@risk-sciences.com

Timothy F. Moore
(on behalf of the MSAR TMDL Task Force)

Cc: Hope Smythe, Executive Officer, Santa Ana Regional Water Quality Control Board
Rick Whetsel, Task Force Administrator, Santa Ana Watershed Project Authority

[17] State Water Resources Control Board. Extended Deadline: Notice of Public Solicitation of Water Quality Data and Information for 2012 California Integrated Report - Surface Water Quality Assessment and List of Impaired Waters [Clean Water Act Sections 303(d) and 305(b)]. May 24, 2010.

Commenter	No.	Comment	Response	Revision[1]
		developed TMDL, the Category be changed to the Category 4B for the Clean Water Act as "Being Addressed by Action Other Than a TMDL." The pollutants will be addressed through the long-term implementation of the Enhanced Watershed Management Program (EWMP). The Regional Water Board response that, "EWMPs are likely to make a significant improvement in water quality in the affected watersheds but, MS4 discharges may not be the only source of pollutants causing the impairment of these waterbodies" did not consider major facts in this watershed.	the attainment of the water quality standard within a reasonable, specified timeframe consistent with Section 2.2 of the Listing Policy, assumes that discharges from the Municipal Separate Storm Sewer System (MS4) are the primary source of pollutants causing an impairment and that addressing that source will achieve compliance with applicable standards. Unless is has been determined that the MS4 is the primary source of impairment and compliance with the EWMP with result in attainment of applicable standards, a EWMP cannot be used to place a waterbody into 4b. This determination should be made by the Regional Water Board in close coordination with U.S. EPA.	
	11.03	If, though the extensive ongoing analysis required of the EWMP and the Santa Clara River, the above elements are insufficient, the State Water Board could reassess in the next 303(d) and revert back to Category 5 at that time. Given the age of the data and the current advanced work being done, "Being Addressed by Action Other Than a TMDL" seems the most prudent and protective course of action for the Santa Clara River. This is also consistent with the State Water Board and EPA policy on watershed planning.	See response to comment 11.02. A waterbody can only be placed into 4b if there is an existing regulatory program that is reasonably expected to result in the attainment of the water quality standard within a reasonable, specified timeframe consistent with Section 2.2 of the Listing Policy. U.S. EPA will disapprove a state's failure to include the water body on the 303(d) list/Category 5 if U.S. EPA determines the controls are not requirements or that they will not result in standards attainment within a reasonable time.	No
Middle Santa Ana River TMDL Task Force **Representative**: Timothy Moore	12.01	We have reviewed the rationale provided in the draft Integrated Report and concluded that the State Water Board staff has misunderstood and misapplied the Antidegradation Targets adopted by the Regional Water Board in 2012. Below, we set forth the reasons why the State Water Board should support the Regional Water Board's recommendation to de-list both	The following changes have been made: Antidegradation water quality target changed from 409 cfu/100mL to 1104 cfu/100mL. The final listing decision for the Cucamonga Creek-Reach 1 was changed from Do not Delist to Delist. The Revised Draft Staff Report has also been revised to reflect these changes.	Yes

Commenter	No.	Comment	Response	Revision[1]
		waterbodies.		
	12.02	The draft Integrated Report states that "several waterbodies were required to maintain the REC-2 beneficial use which has a bacteria objective of 409 cfu/100ml." This is not true.	The evaluation guideline of 409 cfu/100mL was incorrectly stated in the two fact sheets. The correct value is 1104 cfu/100mL based on Chapter 5 of the Santa Ana Regional Basin Plan. The fact sheets and Revised Draft Staff Report have been revised accordingly.	Yes
	12.03	The Basin Plan clearly states that there are no water quality objectives for waterbodies designated REC-2 Only. The 409 cfu/100mL objective cited in the draft Integrated Report is the Single Sample Maximum (SSM) which applies only to waterbodies designated REC-1 and assigned to Tier C or Tier D (as described in Chapter 5 of the Santa Ana Region's Basin Plan). It does not apply to waterbodies where the REC-1 use has been properly removed through a Use Attainability Analysis that has been approved by U.S. EPA - such as the Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek.	See response to comment 12.01, 12.02, and 12.04. The evaluation guideline of 409 cfu/100mL has been changed to 1104 cfu/mL, and Decisions 34154 (Cucamonga Creek Reach 1) and 44427 (Santa Ana Delhi Channel) have been changed from Do No Delist from the 303(d) list (TMDL required list) to Delist from the 303(d) list (TMDL required list). Chapter 5 of the Santa Ana Basin Plan outlines the derivation procedure which was carried out on Santa Ana Delhi Channel and Cucamonga Creek Reach 1 as part of the Use Attainability Analysis (UAA) that was conducted to de-designate the REC-1 beneficial use from those waterbodies. Antidegradation targets for Cucamonga have been calculated, and are undergoing the approval process. This waterbody-pollutant combination is being proposed for removal from the 303(d) List. See also response to comment 12.10.	Yes
	12.04	Waterbodies designated REC-2, but not REC-1, must continue to comply with the state Antidegradation Policy (Res. 68-16). To this end, the Regional Water Board has developed and approved Antidegradation Targets to implement this policy. However, the Antidegradation Targets are not water quality objectives and exceedances of these targets are not evidence that the beneficial uses are impaired. EPA acknowledges that antidegradation policies "may not lend themselves to attainment determinations" like those made in conjunction with developing the 303(d) list.	The selected quote from the U.S. EPA guidance (p. 47, fn.16) appears in the following broader context: Water quality standards include designated use(s), criteria, and the antidegradation policy. Water quality criteria are important elements of water quality standards and attainment of criteria should also be evaluated in making listing decisions (See 40 CFR 130.7 (b)(3)). Failure to meet WQC warrant listing of waters under section 303(d). EPA has not developed guidance at this time on determining attainment status for antidegradation policies. EPA recognizes that such policies, while an important part of WQS, may not lend themselves to "attainment" determinations on a segment specific basis.	No

Commenter	No.	Comment	Response	Revision[1]
			The Antidegradation Targets are not policies, but are designed to implement the policy. Additionally, U.S. EPA's guidance concerning appropriate placement in the Integrated Report categories are recommendations to the States and not requirements. The Antidegradation Targets provided in Chapter 5 of the Santa Ana Regional Basin Plan are intended to ensure that the REC-2 beneficial uses are maintained and not degraded as a result of removing the REC-1 beneficial use. The Antidegradation Targets are also calculated to protect downstream beneficial uses. As such it is appropriate for the State Water Board to apply the antidegradation targets for assessment of the REC-2 beneficial use.	
	12.05	The Antidegradation Targets were never designed or intended to be used as Not-to-Exceed values in the same way that water quality objectives are implemented. [...] Because the Antidegradation Targets were set equal to the 75th percentile of the historical data, 25 percent of the data will exceed the target threshold. This is as expected and properly characterizes the "entire distribution of the dataset." It is not, by itself, proof that water quality degradation has occurred.	See response to comment 12.04. Section 3.3 of Listing Policy allows for an exceedance frequency of 10 percent for bacteria where recreational uses apply. The application of the antidegradation targets to the REC-2 beneficial use is consistent with the Listing Policy. The statistical requirements for calculating the baseline antidegradation targets have no bearing on the application of the Listing Policy.	No
	12.06	The Antidegradation Targets were intended to evaluate new water quality data that was collected after the Basin Plan amendment was adopted and a regional bacteria monitoring program was implemented:	See response to comment 12.05. The antidegradation targets calculate the expected baseline condition of the waterbody at which REC-2 uses are expected to be supported. Once the baseline condition has been calculated that value can be applied to any data including data collected prior and during the calculation of the antidegradation target for determining Rec-2 beneficial use support.	No
	12.07	The approved Regional Bacteria Monitoring Program describes the specific procedures that will be used to implement the Antidegradation Targets. It states that water quality samples will	The regional monitoring program is outside the scope of the assessment process and provides the regulatory actions that will be utilized by the Santa Ana Water Board when exceedances of the antidegradation targets are observed.	No

Commenter	No.	Comment	Response	Revision[1]
		be collected and evaluated annually at each of the waterbodies designated REC-2 only		
	12.08	It should be noted that the Regional Water Board's approved Monitoring Program also states that water quality degradation will be evaluated by comparing a "newly acquired dataset" to the "historical dataset."	See responses to comments 12.06 and 12.07.	No
	12.09	The statistical analysis done by the State Water Board staff compares the historical dataset to itself and does so in a manner that does not comport with the methods described in the Basin Plan or the Regional Water Board's approved Monitoring Plan. Only new data collected after the Basin Plan amendment became effective on April 8th, 2015, and gathered in accordance with the approved Monitoring Plan/QAPP, can be used to determine whether water quality degradation has occurred.	See responses to comments 12.04, 12.05, 12.06 and 12.10 As stated in Footnote 3 of Chapter 5 of the Santa Ana Basin Plan, antidegradation targets should only apply to samples collected during dry weather months. As a result, LOE 96208 has been revised to show the correct exceedance frequency of 4 exceedances out of 21 samples. The fact sheet for indicator bacteria in Santa Ana Delhi Channel was changed as a result of the revised LOE from Do not Delist from 303(d) List to Delist from 303(d) List. The Staff Report has been revised to reflect this change in listing status.	Yes
	12.10	In order to minimize statistical variability, the Antidegradation Targets were intentionally developed using only water quality data from samples collected under dry weather conditions. According to the Basin Plan, these targets "do not apply to samples collected during wet weather conditions." It is not clear whether State Water Board staff properly excluded all wet weather results before undertaking their own retrospective analysis of the historical data. The exact data that the State Water Board staff used to support its conclusion was not detailed or cited in the Integrated Report.	As stated in Footnote 3 of Chapter 5 of the Santa Ana Basin Plan, antidegradation targets should only apply to samples collected during dry weather months. As a result, LOE 96208 has been revised to show the correct exceedance frequency of 4 exceedances out of 21 samples. The indicator bacteria fact sheet for Santa Ana Delhi Channel was changed as a result of the revised LOE from Do not Delist from 303(d) List to Delist from 303(d) List. The Staff Report has been revised to reflect this change in listing status.	Yes

Commenter	No.	Comment	Response	Revision[1]
	12.11	In the event that the State Water Board elects to over-ride the Regional Water Board's determination and keep these stream segments on the 303(d) list, both should be re-assigned from Category 5 (TMDL required) to Category 2 because there is "insufficient information to determine beneficial use support."	See response to comments 12.04 and 12.09. In California, waterbody-pollutant combinations are assessed consistent with the Listing Policy to determine the overall beneficial use support rating. That overall beneficial use support rating is used by the California Water Quality Assessment Database (CalWQA) to determine the overall Integrated Report Category for the waterbody as a whole. This methodology is described on page 22 and 23 of the Staff Report. Santa Ana Delhi Channel has been revised and is now identified as a Category 1 waterbody. Although the listing associated with bacteria in Cucamonga Creek Reach 1 (Valley Reach) has been revised to be a proposed Delisting, the waterbody will remain in Integrated Report Category 5 due to other pollutant impairments.	Yes
	12.12	There is no need to develop a TMDL because the Basin Plan, related Monitoring Program, MS4 permits, and Comprehensive Bacteria Reduction Plans (CBRP) previously approved by the Regional Water Board, already require stakeholders to identify and mitigate bacteria sources that are causing or contributing to water quality degradation when there is"credible evidence" that such degradation is occurring.	See response to comment 12.11.	No
	12.13	For the reasons given above, the Task Force advises that the State Water Board staff reconsider its recommendation that Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek should remain on the 303(d) list. These waterbodies were originally added to the 303(d)	See responses to comments 12.03 and 12.11.	No

Commenter	No.	Comment	Response	Revision[1]
		list based on elevated fecal coliform concentrations. Fecal coliform is no longer considered an accurate or reliable indicator of human health risk and these water quality objectives have since been deleted from the Basin Plan. Thus, the prior listing should be considered obsolete and invalid.		
	12.14	The current 303(d) assessment is constrained to consider only data submitted prior to August 30, 2010.17 However, the Basin Plan amendment requires that "new data" be used to determine if water quality has degraded compared to the historical baseline condition.	See response to comment 12.06.	No
	12.15	Moreover, the new data must be collected in accordance with the Monitoring Program and QAPP approved by the Regional Water Board in March of 2016. Any data used to develop the Antidegradation Target is not "new." All genuinely "new" data, by definition, must have been collected long after the 2010 submission deadline had passed.	See response to comment 12.06.	No
	12.16	The Regional Water Board looked at all of the same water quality data that was evaluated by State Water Board staff and concluded that Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek no longer belong on the 303(d) list. Deference should be given to the Regional Water Board's ability to implement its own Antidegradation Targets properly. State Water Board staff's interpretation of these targets and analysis of the historical data is inconsistent with the plain language of the approved Basin Plan amendment and the	Section 6.3 of the Listing Policy gives the State Water Board authority to review and change recommendations approved by the Regional Water Boards prior to submitting the 303d list to U.S. EPA in accordance with the Listing Policy and applicable law.	No

CLEAN-UP & SANITATION PROCEDURES FOR COUNTY-MAINTAINED DRAINAGE CULVERTS/CHANNELS & SOFT SCAPE AREAS WITHIN UNINCORPORATED COMMUNITIES OF SAN DIEGO COUNTY

SEPTEMBER 29, 2017

OBJECTIVE

The purpose of this document is to provide guidance on procedures for the clean-up and sanitation of County-maintained lined (e.g. concrete, corrugated metal pipe, etc.) drainage culverts/channels and soft scape areas (e.g. riverbeds, ravines, open space, etc.) in areas where significant numbers of homeless persons are living in unsanitary conditions within unincorporated communities.

PUBLIC NOTIFICATION

Public notification must adhere to applicable regulations prior to the cleanup, removal, and storage of personal property found in County-maintained drainage culverts, channels, and soft scape areas within unincorporated communities.

When applying a disinfectant/sanitizer, notice of application in accordance with Title 3 California Code of Regulations (3CCR) 6618 must be provided to the operator of the property and persons who are in the property to be treated or who may enter during the application or the period of time that any restrictions on entry are in effect.

HAZARD ASSESSMENT

For the safety of everyone working in the area to be cleaned up and/or sanitized, a hazard assessment must be conducted by an appropriately trained individual to identify any hazardous or otherwise unsafe items or conditions prior to conducting any clean up and/or sanitation activities. These items can include, but are not limited to, confined spaces, environmental hazards (e.g. snakes, insects, poison oak, etc.), hazardous chemicals, medical waste (including syringes, feces, blood, or personal property that is visually contaminated by feces and/or blood), drug paraphernalia, firearms, live ammunition, explosives, or weapons. All employees or contractors should be properly trained prior to conducting a hazard assessment or any activities included in this clean-up and sanitation procedure. Training should include, but is not limited to:

- 40 hour HazWoper training with current refresher training.
- Occupational Safety and Health Administration (OSHA) Universal and Standard Precautions for Bloodborne pathogens and other Potentially Infectious Materials.
- OSHA regulations for confined space entry (Chapter 4 - Division of Industrial Safety - Subchapter 7, General Industry Safety Orders) dependent upon site conditions.
- Employers must assure employees that handle disinfectants comply with employee safety requirements in 3CCR Division 6, Chapter 3, Subchapter 3 Pesticide Worker Safety or the applicable requirements of Title 8 California Code of Regulations (*see 3CCR 6720(c) for corresponding provisions*).

Other training may be required for the safe handling of hazardous and biohazardous wastes.

CLEAN-UP PROCEDURES AND ENVIRONMENTAL RULES/BEST PRACTICES

There are four options for completing clean-up work in drainage culverts, channels, and soft scape areas. As described below, County environmental staff may need to be consulted prior to undertaking any clean-up or sanitation activities in

natural soft scape areas within or around lined culverts/channels or natural drainage features. Additional consultation with state and/or federal agencies may also be required based on site-specific characteristics.

1. **RGP53 Permit Facilities (both lined and unlined channels):**
   There are 1,056 drainage facilities within unincorporated communities detailed in the County's RGP53 401 Permit. If the area to be cleaned is an existing RGP53 permitted facility, clearing debris, removing sediment, and some vegetation removal are already permitted. Either hand tools or mechanical means can be used to clear the channel. The Permit defines the limits of footprint for the permitted area. Activities are only allowed under the Permit outside bird breeding season (September 15th to March 15th).

2. **Permits not required by Staying in Compliance (non-RGP53 Permit Facilities):**
   For facilities not covered under Option 1 above, removal of debris and non-native vegetation is allowed within federal and state jurisdictional wetlands if native habitat and stream channel is left undisturbed. Criteria includes:

   a. Define limit of work. Determine if a biological monitor is needed to stay in compliance.
   b. Have biologist determine if site in either a biologically sensitive area or within a federal or state jurisdictional area. In addition, make determination whether biological monitor is needed for the site.
   c. Clean-up must occur between September 15th and March 15th.
   d. Document before and after conditions.
   e. If required, biologist should notify resource agencies of activity proposed to ensure they are aware of situation and purpose of clean-up.
   f. Hand tools can be used to remove debris, non-native vegetation, and waste. No mechanized equipment is allowed within the channel.
   g. No soil disturbance should occur other than to remove waste.
   h. Site must be cleared and cleaned at the end of each day when clean-up or sanitation activities take place, with no stockpiling of material within the wetlands.

3. **Emergency cleaning of Lined, Unlined Drainages or within banks of Natural Channels – <u>REQUIRES PRIOR APPROVAL FROM COUNTY ENVIRONMENTAL STAFF</u>**
   If an imminent threat to life or property exists, the County can request a Regional General Permit (RGP63) during an emergency. Although similar protocol would be followed, the RGP63 would allow more activities than Option 2, as ground disturbance or mechanical equipment may be needed to alleviate the emergency condition. According to US Army Corps of Engineers code, an emergency situation is defined as:

   An "emergency situation" is present where there is a clear, sudden, unexpected, and imminent threat to life or property demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property or essential public services (i.e., a situation that could potentially result in an unacceptable hazard to life or a significant loss of property if corrective action requiring a permit is not undertaken immediately).

   Standard protocols would be followed for emergency work without permits.

   a. Define limit of work. Determine what work needs to be done to address the emergency.
   b. Have biologist determine if located in either a biologically sensitive area or within a federal or state jurisdictional area. In addition, make determination whether biological monitor is needed for the site.
   c. No limitation on time of year to do work during an emergency situation.
   d. Document before and after conditions.
   e. Send notice to US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) of the location, extent, and purpose of the emergency work including all measures that will be taken to protect the environmentally sensitive area.

f. If possible, use hand tools to remove debris from the area. Do not remove any native vegetation and limit sediment disturbance beyond what is needed for removal of waste. If mechanized equipment is needed, document why and limit disturbance as much as possible using laydown mats and other means.
g. Site must be cleared and cleaned at the end of each day when clean-up or sanitation activities take place with no stockpiling of material within the wetlands.
h. Document work completed and follow-up with agencies to close out.

4. **Obtain permits from Resource Agencies – <u>REQUIRES PRIOR APPROVAL FROM COUNTY ENVIRONMENTAL STAFF</u>**
If the situation does not fall within Options 1-3, an individual permit may be needed. Working with the resource agencies from USACE, RWQCB, and CDFW to determine appropriate Nationwide or Regional Permits that apply to intended activities. Permits would likely require several months to obtain and costs could vary depending on the size of the site and activities proposed. The County does have contracts in place with USACE and RWQCB to expedite permitting for County projects through Water Resource Development Act (WRDA) agreements.

SANITATION PROCEDURES

In times of elevated risk to public health, (example: Declared Public Health Emergency for Hepatitis A outbreak), implementation of sanitation procedures are necessary. Disinfectants used must be registered with the United States Environmental Protection Agency (EPA) and the California Department of Pesticide Regulation (CDPR). Only registered disinfectant products approved for controlling the contagion outbreak are to be used. Application of the disinfectant must be in accordance with label specifications. Product names can be searched in the CDPR registered product data base at: http://cdpr.ca.gov/docs/label/labelque.htm. Additionally, specific product label interpretation questions can be directed to County of San Diego Department of Agriculture, Weights and Measures Pesticide Regulation Program at (858) 694-8980.

One example of a disinfectant that could be used is high concentration CDPR Registered bleach (sodium hypochlorite) solutions approved for Hepatitis A which are effective and universally available products for the disinfection of various types of surfaces. Other registered pesticides with different active ingredients effective against Hepatitis A are also available. Consistent with the 2012 City of Los Angeles Department of Public Works Bureau of Sanitation Operation Healthy Streets Protocol, for the purposes of disinfecting County-maintained culverts, channels, and soft scape areas within unincorporated communities the following procedures will be followed after conducting a hazard assessment:

I. **<u>Sanitation Procedures for Lined Drainage Culverts & Channels (e.g., concrete, corrugated metal pipe, etc.)</u>**

1. Avoid conducting sanitation operations within 48 hours of any predicted rain event.
2. While wearing appropriate personal protective equipment (PPE), prepare a 5,000 ppm solution of bleach and water (Solution A). Use 5.25% sodium hypochlorite bleach and mix a 1:10 dilution (1 part sodium hypochlorite, 9 parts water).

   <u>NOTE:</u> Use of sodium hypochlorite bleach that is not 5.25% requires appropriate adjustment of the dilution ratio as allowed by the product label to reach the desired concentration of 5,000 ppm.
3. Use a chlorine test strip to ensure you have reached the desired concentration (5,000 ppm). There are several test strips that are commercially available.
4. Fill Hudson sprayers or similar application equipment.
5. Use appropriate containment at culvert/channel inlets and outlets prior to application of bleach solution to capture and prevent discharge of any contaminants.
6. Carefully spray all feces, blood, bodily fluids or contaminated surfaces with Solution A and wait for a minimum of 10 minutes.

   <u>NOTE:</u> Bleach solution <u>should not be applied directly to natural soft scape areas</u> within or around lined culverts/channels. Refer to Section II below (Sanitation Procedures for Soft Scape Areas) for the appropriate process in these areas.

7. After 10 or more minutes, carefully remove and containerize feces or other contaminated solid materials for proper disposal.

   NOTE: Medical waste including syringes, feces, blood, or personal property that is visually contaminated by feces and/or blood, should be managed and disposed of as biohazardous waste.

8. Respray any newly exposed surfaces with Solution A. Limit application to only area where removal occurred.

   NOTE: No mechanized equipment is allowed in natural soft scape areas within or around lined culverts/channels unless permitted under appropriate environmental option(s) described above.

9. Use a test strip on treated surfaces to determine if the chlorine has adequately degraded and verify all product label requirements have been met prior to leaving the site.
10. PPE and/or tools that have become contaminated must be disinfected or disposed of appropriately.

II. Sanitation Procedures for Soft Scape Areas (e.g. riverbeds, ravines, open space, etc.)

1. While wearing appropriate personal protective equipment (PPE), carefully remove all feces, blood, bodily fluids or contaminated surfaces utilizing hand tools and containerize feces or other contaminated solid materials for proper disposal.

   NOTE: Medical waste including syringes, feces, blood, or personal property that is visually contaminated by feces and/or blood, should be managed and disposed of as biohazardous waste.

   NOTE: No mechanized equipment is allowed in natural soft scape areas within drainage channels unless permitted under appropriate environmental option(s) described above.

2. After completing Step 1, move away from the soft scape area/natural drainage channel and prepare a 5,000 ppm solution of bleach and water. Use 5.25% sodium hypochlorite bleach and mix a 1:10 dilution (1 part bleach, 9 parts water).

   NOTE: Use of sodium hypochlorite bleach that is not 5.25% requires appropriate adjustment of the dilution ratio as allowed by the product label to reach the desired concentration of 5,000 ppm.

   NOTE: Bleach solution should not be applied directly to natural soft scape areas.

3. Use a chlorine test strip to ensure you have reached the desired concentration (5,000 ppm). There are several test strips that are commercially available.
4. Fill Hudson sprayers or similar application equipment.
5. Carefully spray all containerized feces, blood, bodily fluids or contaminated surfaces collected during step 1 above with Solution A and wait for a minimum of 10 minutes prior to disposal. Use caution to avoid spraying the solution on to soft scape areas.

   NOTE: Bleach solution should not be applied directly to natural soft scape areas.

   NOTE: Medical waste including syringes, feces, blood, or personal property that is visually contaminated by feces and/or blood, should be managed and disposed of as biohazardous waste.

6. PPE and/or tools that have become contaminated must be disinfected or disposed of appropriately.

It is important to note that higher concentrations and elevated temperatures can cause chlorine to degrade quickly over time. It is recommended that a fresh solution be made each day that sanitization is necessary to ensure the most effective solution is used.

RECOMMENDED FREQUENCY

During times of elevated risk to public health, (example: Declared Public Health Emergency for Hepatitis A outbreak) weekly monitoring should occur in areas where significant numbers of homeless persons are living in unsanitary conditions within unincorporated communities, with spot maintenance or additional rounds of the complete sanitation process as needed based on site conditions.

REFERENCES

1. City of Los Angeles. *Operation Healthy Streets Protocol.* 2012.
2. U.S. Occupational Safety & health Administration. *Healthcare Wide Hazards.* 2017. Retrieved from: https://www.osha.gov/SLTC/etools/hospital/hazards/univprec/univ.html
3. Center for Disease Control and Prevention. *Chemical Disinfectants - Guideline for Disinfection and Sterilization in Healthcare Facilities.* 2008. Retrieved from: https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html
4. U.S. Army Public Health Command. *Preparing and Measuring High Chlorine Concentration Solution for Disinfection.* 2014. Retrieved from: https://phc.amedd.army.mil/PHC%20Resource%20Library/TIP_No_13-034-1114_Prepare_Measure_High_Chlorine_Solutions.pdf
5. U.S. Army Corps of Engineers Regional General Permit Number 53 for County of San Diego Routine Flood Control Maintenance Activities (SPL-2015-00131-MG). 2016. Retrieved from: http://www.spl.usace.army.mil/Portals/17/docs/regulatory/RGP/RGP532016.pdf
6. U.S. Army Corps of Engineers Regional General Permit Number 63 for Repair and Protection Activities in Emergency Situations (File No. SPL-2013-00609-BAH). 2013. Retrieved from: http://www.spl.usace.army.mil/Portals/17/docs/regulatory/Permit_Process/Technical/RGP63_Permit_29Nov2013_2.pdf
7. CDPR Product/Label Database: http://cdpr.ca.gov/docs/label/labelque.htm

SANITATION PROCEDURES FOR PUBLIC RIGHT-OF-WAYS

UPDATED OCTOBER 6, 2017

OBJECTIVE

The purpose of this document is to provide operating procedures and recommendations for the sanitation of public right-of-ways (e.g., sidewalks, streets, and gutters) in times of elevated risk to public health, (example: Declared Public Health Emergency for Hepatitis A outbreak).

PUBLIC NOTIFICATION

Public notification must adhere to the respective jurisdiction regulations and/or constitutional protections prior to the cleanup, removal, and storage of personal property found on public right-of-ways. Each jurisdiction should consult with its legal counsel concerning these or related requirements.

When applying a disinfectant/sanitizer, notice of application must be in accordance with Title 3 California Code of Regulations (3CCR) 6618.

HAZARD ASSESSMENT

For the safety of everyone working in the area to be sanitized, it is recommended that a hazard assessment be conducted to identify any hazardous or otherwise unsafe items prior to conducting any sanitation activities. These items can include, but are not limited to hazardous chemicals, infectious waste (e.g., hypodermic needles/sharps), drug paraphernalia, firearms, live ammunition, explosives, or weapons. All employees or contractors should be properly trained prior to conducting a hazard assessment or any activities included in this sanitation procedure. Training should include, but is not limited to:

- 40 hour HazWoper training with current refresher training
- Occupational Safety and Health Administration (OSHA) Universal and Standard Precautions for Bloodborne Pathogens and other Potentially Infectious Materials
- Employers must assure employees that handle disinfectants comply with employee safety requirements in 3CCR Division 6, Chapter 3, Subchapter 3 or the applicable requirements of 8CCR (*see 3CCR 6720(c) for corresponding provisions*)

Other training may be required for the safe handling of hazardous and biohazardous wastes.

SANITATION PROCEDURE

Disinfectants used must be registered with the United States Environmental Protection Agency (EPA) and the California Department of Pesticide Regulation (CDPR). Only registered disinfectant products approved for Hepatitis A are recommended for use. Application of the disinfectant must be in accordance with label specifications.

Product names can be searched in the CDPR registered product data base at: http://cdpr.ca.gov/docs/label/labelque.htm. Additionally, questions on product labels can be directed to County of San Diego Department of Agriculture, Weights and Measures Pesticide Regulation Program at (858) 694-8980.

High concentration chlorine (sodium hypochlorite) solutions are effective and universally available products for the disinfection of a wide range of surfaces. For the purposes of sanitizing public right-of-ways, it is recommended, and consistent with the 2012 City of Los Angeles Department of Public Works Bureau of Sanitation Operation Healthy Streets Protocol, that the following procedures be followed after conducting a hazard assessment:

1. While wearing appropriate personal protective equipment (PPE), prepare a 5,000 ppm solution of bleach and water (Solution A). Use 5.25% chlorine (sodium hypochlorite) and mix a 1:10 dilution (1 part bleach, 9 parts water).
2. Use a chlorine test strip to ensure you have reached the desired concentration (5,000 ppm). There are several test strips that are commercially available.
3. Fill Hudson sprayers or similar distribution equipment.
4. Cover all storm drains to prevent run off.
5. Carefully spray all feces, blood, bodily fluids or contaminated surfaces with Solution A and wait for a minimum of 10 minutes.
6. After 10 or more minutes, carefully containerize feces or any other contaminated solid materials for disposal to landfill.
7. Respray any newly exposed surfaces with Solution A and wait for a minimum of 10 minutes.
8. Pressure-wash the sidewalks, streets, gutters, and inlet of storm drain catch basins with water.
9. Recover the generated waste water with a Vactor Truck for disposal to the sanitary sewer.
10. Mix 1 part of Solution A with 9 parts water to make Solution B (500 ppm) for final disinfection.
11. Use a chlorine test strip to ensure you have reached the desired concentration (500 ppm).
12. Carefully spray all washed areas with Solution B and wait for a minimum of 30 minutes to allow for adequate disinfection and degradation of residual chlorine.
13. Use a test strip on treated surfaces to determine the chlorine has adequately degraded prior to reoccupation.
14. PPE and/or tools that have become contaminated should be disinfected or disposed of appropriately.

It is important to note that higher concentrations and elevated temperatures can cause chlorine to degrade quickly over time. It is recommended that a fresh solution be made each day to ensure the most effective solution is used.

RECOMMENDED FREQUENCY

In concentrated areas of homeless and drug using individuals, after the complete sanitation process (above), weekly spot maintenance should occur with additional rounds of the complete sanitation process at least every two weeks.

REFERENCES

1. City of Los Angeles. *Operation Healthy Streets Protocol*. 2012.
2. U.S. Occupational Safety & health Administration. *Healthcare Wide Hazards*. 2017. Retrieved from: https://www.osha.gov/SLTC/etools/hospital/hazards/univprec/univ.html
3. Center for Disease Control and Prevention. *Chemical Disinfectants - Guideline for Disinfection and Sterilization in Healthcare Facilities*. 2008. Retrieved from: https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html
4. U.S. Army Public Health Command. *Preparing and Measuring High Chlorine Concentration Solution for Disinfection*. 2014. Retrieved from: https://phc.amedd.army.mil/PHC%20Resource%20Library/TIP_No_13-034-1114_Prepare_Measure_High_Chlorine_Solutions.pdf
5. Occupational Safety and Health Administration: https://www.osha.gov/
6. California Code of Regulations, Title 3 and Title 8: https://govt.westlaw.com/calregs/
7. CDPR Product/Label Database: http://cdpr.ca.gov/docs/label/labelque.htm