

August 12, 2016

Ms. Xueyuan Yu  
California Regional Water Quality Control Board, San Diego Region  
2375 Northside Drive Suite 100  
San Diego, CA 92108

RE: Clean Water Act Sections 305(b) and 303(d) Integrated Report for the San Diego Region  
Draft Final Staff Report July 2016

Dear Ms. Yu:

OC Public Works, on behalf of City of Laguna Niguel, City of Dana Point, City of Mission Viejo, City of Laguna Beach and City of Lake Forest, appreciates the opportunity to comment on the draft Clean Water Act Sections 305(b) and 303(d) Integrated Report for the San Diego Region Draft Final Staff Report July 2016. After review of the report and associated fact sheets and data provided on your website, the following comments are provided.

1. As stated in the Draft Report, a "significant amount of available data collected between August 2010 and July 2016" was not included in the analysis. Rather, only the data submitted as part of the 2010 solicitation was evaluated as part of this listing cycle. It is significant that the timing of the 2014 draft report results in a report that does not represent current water quality conditions. Therefore, Regional Board's suggestion on an off-cycle review is appropriate.
2. With respect to using the California Stream Condition Index (CSCI) to establish Benthic Community Effects listings: 1) CSCI needs to be validated in reference streams with naturally high total dissolved solids (TDS) because a naturally high TDS site will likely have a poorer CSCI score; 2) selection of the 10<sup>th</sup> percentile of the reference dataset to indicate impairment is arbitrary and may not indicate impairment. It is important to recognize that the bottom 10% of sites in the reference dataset are still reference sites with limited human impact. Therefore, the CSCI should be used with caution and those associated listings should be deferred until a more rigorous and scientific method is developed that definitively links CSCI scores to other metrics with known adverse impacts on benthic biological communities.
3. Multiple listings for Pacific Ocean Shoreline sites are based on lines of evidence (LOEs) and use data collected from sampling stations that are not associated with these sites. These data should not be used to evaluate these sites, and associated LOEs should be deleted. The affected listing decisions. (See also **Appendix A and B**)

Decision ID	Pollutant	Water Body (correct station)	Comment	LOEs (those LOEs should be deleted)	Corrected Listing Decision
43047	FIB	Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth (ACM1d, ACM1u)	ACM1/C1 are estuary sites. The analysis for those sites should be moved to water body "Aliso Creek (mouth)".	30625, 61093, 29740, 29741, 29742	Delist
49665	Toxicity			74533	List
43790	FIB	Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek (DSB5d, ODB02)	Multiple LOEs used data from DSB5/BW622, which is an estuary site.	29488, 29353, 29371, 7499, 43790, 77796, 77640, 74933	List
43665	FIB	Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground (DSB4u, DSB4d)	Sampling locations outside of the Doheny State Beach area were included in the evaluation.	74957, 74958, 74981, 74982, 74986, 74010, 77641, 74983	List but remove LOEs
49808	FIB	Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek (OLB00)	Data were collected from pooled creek water (CLBBC) that does not drain to the ocean during dry weather. Station OLB00 has been updated and combined with station MAINBC as part of the 2014 Unified Monitoring Program. It is redundant to list this water body given the fact that Laguna Beach at Main Beach is already listed and being addressed by a TMDL.	All LOEs	Do not list
49742	Copper	Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach (SCM1d)	Site SCM1 is a creek site. Data only from the ocean site (SCM1d) should have been used.	74526	Do not list
49749	Malathion			75133	Do not list
49751	Mercury			75134	Do not list
49753	Nickel			75135	Do not list
49848	Copper	Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek (SJC1d)	Site SJC1 is a creek site. Data only from the ocean site (SJC1d) should have been used.	75013	Do not list
49852	Nickel			75067	Do not list
49468	Mercury	Segunda Deshecha Creek (SDCM02, SD-AP)	Trabuco Creek sites (TC-AP, TC-DO, TCOL02, REF-TCAS and SMC00206) were incorrectly used to list Segunda Deshecha Creek.	76719	Do not list
43129	Selenium	Aliso Creek (ACJ01, AC-CCR, AC-PPD)	Station 901SJALC6 is at the Aliso Creek mouth, which is a tidal influenced area. It is inappropriate to apply freshwater standards to brackish water samples.	9076	List
46397	Toxicity			21397	

4. Only data from 2006-10 should be evaluated for listing decisions in the 2014 listing cycle. A large number of Best Management Practices (BMPs), including multiple sewer diversions, were implemented after 2005. Therefore, it is inappropriate to evaluate data from prior to

August 12, 2016  
Ms. Xueyuan Yu

2006 to represent water quality for the 2014 303(d) list. After review of OC Public Works data from 2006-2010, the listing decisions for the following sites should be corrected to "Delist."

Decision ID	Water Body	Pollutant	Recommendation
43047	Pacific Ocean Shoreline, Aliso HAS, at Aliso Creek mouth	FIB	Delist
43112	Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle	FIB	Delist
44695	Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach	FIB	Delist
43763	Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	FIB	Delist
43328	Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	FIB	Delist
42259	Arroyo Trabuco Creek	Diazinon	Delist
48964	San Juan Creek	Malathion	Do not list

- Several new proposed listings for indicator bacteria are within coastal segments that are already included in the Bacteria Impaired Waters TMDLs Project I for Beaches and Creeks. These include listings for Pacific Ocean Shoreline, Lower San Juan HSA at surfzone outfall at Doheny State Beach (49877) and Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek (49808). Creating additional listings in an area already covered by a TMDL is unnecessary.
- A number of indicator bacteria listings are based on California Department of Public Health draft guidance for freshwater beaches. This guidance was first drafted in 1997 and has not been finalized. Total coliform LOEs also contradict USEPA recommendations for water contact recreation, which recommend *Escherichia coli* as the preferred bacterial indicator in freshwater. Finally, there are no total coliform water quality objectives in the San Diego Region Basin Plan (Basin Plan). For these reasons, the following LOEs using total coliforms in fresh water should not be considered.

Decision ID	Water Body	LOE
48801	Laguna Canyon Channel	74121, 74122
48376	Cristianitos Creek	73463
51713	Segunda Deshecha Creek	76734, 76735
48514	Prima Deshecha Creek	75510, 75511
41422	San Juan Creek	75978, 75979, 75980
47816	Arroyo Trabuco Creek	73021, 73022
46398	Aliso Creek	72952, 72953

- Multiple new listings for mercury refer to data sets where mercury was either not detected or not analyzed. Samples where mercury was detected were well below the Ocean Plan marine water quality objective of 0.04 ug/L. OC Public Works mass emissions and

August 12, 2016  
Ms. Xueyuan Yu

bioassessment data from 2006-16 do not show a single exceedance for mercury for any of these sites.

Listings for Arroyo Trabuco Creek (47807), Bell Canyon Creek (47986), San Juan Creek (49000), Dana Point at Niguel Marine Life Refuge (49724), Salt Creek outlet at Monarch Beach (49751), Salt Creek (48631), Segunda Deshecha Creek (49468) and Prima Deshecha Creek (48508) and associated LOEs (73009, 73052, 74496, 75134, 75494, 75512, 75557, 75948 and 76719) are therefore erroneous and should not be considered.

8. The listing decisions for cadmium, nickel, and copper in Cristianitos Creek, Segunda Deshecha and Prima Deshecha Creek use data that do not appear to be hardness adjusted as required under the California Toxics Rule, despite the fact that hardness data were provided in the referenced dataset. Targets should be adjusted by hardness and the dataset should be re-evaluated accordingly. The affected listing decisions are 48375, 48374, 49444, 49449, 49454, 36180, and 43494.
9. The listing decision for Aliso Creek (mouth) for arsenic is based on exceedances of water quality objectives associated with the MUN beneficial use. MUN is not an existing or potential beneficial use of Aliso Creek. Therefore, listing decision 47590 should be removed.
10. The data citation in LOE 9096 for the proposed San Juan Creek selenium listing (Decision ID 43131) is incorrect. The citation link should go to SWAMP monitoring data "Ref 2618." In addition, there are 2 San Juan Creek stations in the reference dataset but only one station is included in the evaluation. After re-evaluating this listing using both stations, the exceedance rate for this LOE should be 2/8 instead of 2/4.
11. For the list decisions for metals and pesticides in Dana Point Harbor, Prima Deshecha Creek and Segunda Deshecha Creek, toxicity LOEs are being used in support of a metal or pesticide listing. There is no evidence to show that they are directly linked. Total sample exceedance numbers are inflated due to the inclusion of exceedances from toxicity samples, which adversely affected the listing decision. Moreover, historical toxicity data can have credibility issues: A preliminary lab intercalibration study results for toxicity conducted by Southern California Coastal Water Research Project (SCCWRP) shows the results among labs have poor comparability for two fresh water species (*Ceriodaphnia dubia* and *Hyalella Azteca*). Therefore, the following listings should be re-evaluated: 42746 for Zinc, 43226 and 49449 for copper, 36180 and 49444 for cadmium, 43494 and 49454 for nickel, 48508 for mercury, 49459 for selenium and 48507 for malathion.
12. OC Public Works data has been utilized in an inconsistent manner in the 2014 listing process. In many cases all NPDES bioassessment data or its data from certain stations (e.g. OC Public Works bioassessment data for total nitrogen for English Canyon, bioassessment data for phosphorus, turbidity and nitrogen for Segunda Deshecha Creek) were not used while it was used for other pollutant analyses in the same water body. All of the OC Public Works data should be considered consistently in the listing process. After the OC Public Works samples at station EC-MD were taken into account for the total nitrogen analysis at English Canyon (Decision ID 42811), the actual exceedance rate should be 2/9 instead of 2/4

August 12, 2016  
Ms. Xueyuan Yu

as indicated in the factsheet resulting in a "Do not list" decision. Therefore, listing 42811 should be removed and the following listing IDs should be re-evaluated by applying a consistent approach when including OC Public Works data: 34545, 42917, 47816, 42285, 34172, and 41422.

13. There is an inconsistency in using water quality objectives among the LOEs under listing 49033 for dissolved oxygen (DO) at San Juan Creek. The total number of samples and exceedance counts derived from different water quality objectives were added together as evidence for the listing. An evaluation using OC Public Works data from 2006-10 by comparing against the more stringent target used in this listing (no less than 6 mg/L) indicates that the exceedance rate is 7/141. Thus this water body should not be listed for DO.
14. The report did not evaluate all readily available data as required by the listing policy, including data readily available in CEDEN and within the cut-off dates as stated in the draft report. These records include: Aliso Creek (mouth)(34761), Aliso Creek(42917, 34545), San Juan Creek(43657, 32893), San Juan Creek Mouth(34549), Dana Point Harbor(34003, 43763, 49696, 49699), Poche Beach(44202), North Beach(43328), Segunda Deshecha(49566), and San Clemente City Beach at Pier(42681). An evaluation for those listings has been completed as shown in **Appendix B** attached to this comment letter.
15. There are editorial errors requiring correction as shown below:

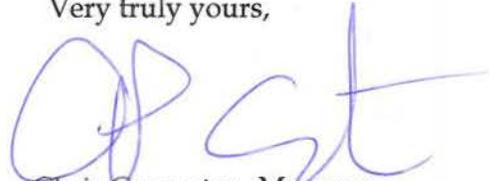
Water Body	Decision ID	Comment
Aliso Creek	42917	The waterbody was listed during last cycle, the current final listing decision should be "Do Not Delist" instead of "List on 303(d)List"
Aliso Creek	34545	Previous listing decision should not be blank as it was listed in the previous listing cycle.
English Canyon	33516	The last cycle decision was "List on 303(d) list". This year's decision should be "Do not delist from 303(d) List".
English Canyon	33023	The last cycle decision was "List on 303(d) list". This year's decision should be "Do not delist from 303(d) List".
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	49751	Regional Board staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list due to insufficient data and information. The final listing decision should be "Do Not List on the 303(d) List".
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	43328	Regional Board Staff concludes that the waterbody-pollutant combination should be removed from the 303(d) list because applicable water quality standards for the pollutant are not being exceeded. The final listing decision should be "Delist from 303(d) List".

August 12, 2016  
Ms. Xueyuan Yu

**Appendix A** provides detailed information regarding all the listing decisions that need to be corrected. **Appendix B** provides detailed information regarding all the listings that do not need to be corrected, but need to be re-evaluated by deleting certain LOEs or re-calculating the number of exceedances.

Thank you for the opportunity to provide comments on the 2014 proposed revisions to the California Clean Water Act Section 303(d) List. Please contact Stella Shao at 714-955-0651 if you have any questions regarding these comments.

Very truly yours,



Chris Crompton, Manager  
Water Quality Compliance

Attachment: Comments Matrix/Data Analysis Summary (Appendix A and B)

cc: South Orange County NPDES Permittees

# Appendix A

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Aliso Creek (mouth)	Arsenic	ACM-1	47590	SDR ACRW data 2007-2010	2	0	Do not list	<p>LOE 72979 is not valid because Aliso Creek mouth has no designated beneficial use for MUN (Municipal &amp; Domestic Supply). Therefore, Aliso creek (mouth) should not be listed for Arsenic.</p> <p>LOE 47590 inaccurately includes ACM1-d data. ACM-1d is an ocean station downstream Aliso Creek mouth, thus it should be included in water body "Pacific Ocean Shoreline, Aliso HAS, at Aliso Creek mouth" instead of "Aliso Creek (mouth)"</p> <p>Evaluation in OC Public Works data from 2007-2010 indicates the exceedance rate for Arsenic is 0.</p>
Arroyo Trabuco Creek	Diazinon	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	42259	SDR USB data 2006-2009 SDR ME data 2006-2009	41	0	Delist	<p>Historic data prior to 2005 should not be utilized. In 2003 diazinon was banned by EPA for turf, lawn and outdoor application. The pesticide is no longer commercially available to the public. The proposed listing (42259) of Arroyo Trabuco is based on 6 exceedances of the diazinon criterion which occurred during the period from March 25, 1999 to February 23, 2000. This period included collection of 20 total samples on 9 separate days. Of these 20 samples, all four collected on April 6, 1999 exceeded the diazinon criterion. The fact sheet (LOE21274) contains a link to the Department of Pesticide Regulation (DPR) study which contains the data for the assessment. This study includes data beyond the assessment period cited in the fact sheet. There were 14 additional samples collected during 10 days of sampling from March 27, 2000 to January 17, 2001. Of 14 samples, no exceedances of the criterion were observed.</p> <p>LOE 73034 has also included sufficient and up-to-date data indicating this water body should be delisted for diazinon.</p>

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Arroyo Trabuco Creek	Mercury	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	47807	SDR USB data 2006-2009 SDR ME data 2006-2009	2	0	Do not list	5 exceedances was erroneously counted in LOE73009. There is no mercury exceedance in the reference dataset.  An evaluation using OC Public Works NPDES data also indicates that no mercury sample has exceeded the target.(all data are lower than detection limit).  Therefore, this water body should not be listed for mercury.
Bell Canyon	Mercury	REF-BC	47986	SDR USB data 2005-2016	2	0	Delist	3 exceedances was erroneously counted in LOE 73052. There is no mercury data for sample REF-BC on 6/6/07, 5/20/08 and 4/28/09 listed in the detail data reference under this LOE.  An evaluation using OC Public Works data indicates that no mercury sample has exceeded the target.
Cristianitos Creek	Cadmium	CR1 -upper cristianitos creek CR2-cristianitos creek	48375	Inland Empire Canyons Baseline Monitoring Project--San Mateo,San Juan and Cristianitos, 2008-2009	7	1	Do not list	LOE48375 did not adjust Cadmium criteria using hardness data. After recalculating the exceedance rate by using the dissolved data provided in the reference and applying the hardness level, the actual exceedance rate is only 1/7 instead of 7/13.
Cristianitos Creek	Nickel		48374		7	0	Do not list	LOE73457 did not adjust Nickel criteria using hardness data. After recalculating the exceedance rate by using the same dataset provided in the reference and applying the hardness level, the actual exceedance rate is 0. Thus , the water body should not be listed as Nickel.
Dana Point Harbor	Indicator Bacteria	BDP 08, BDP 16, BDP 07, MDP 18, BDP 17, PIER, PILGRIM, FUEL DOCK, YOUTH DOCK	34003	Beach Watch data 2005-2013	1336	470	Do not list	No shellfish harvesting is allowed in this area. Also, the state recognized some serious flaws with the shellfish standard and began to address them back in 2007 with a scoping meeting. However the project has not been completed and the latest work to our knowledge is the draft white paper indicating "inherent difficulties in achieving the existing water quality standards at all locations where shellfish habitat exists."
English Canyon	Total Nitrogen as N	EC-MD	42811	SDR USB data 2006-2010	9	2	Do not list	There is an inconsistency in treating OC Public Works NPDES SDR Bioassessment data. In this case, the data was not included in the evaluation. An evaluation using OC Public Works data for 2006-2010 indicates that the water body should not be listed.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Aliso HSA, at Aliso Beach - middle	Indicator Bacteria	S9	43112	OCHCA Beach Monitoring 2007-2010	824	TC: 1 FC: 4 ENT: 76 TC(shellfish): 114	Delist	All data used in this decision are from 1999-2007 which does not reflect water quality status during current listing cycle. A re-evaluation using data from 2007-2010 indicates that the water body should be delisted.  Search in the CEDEN system indicates that the 2007-2010 data, that was used in above analysis, is readily available in the system.
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	Indicator Bacteria	ACM1d/u	43047	SDR CSDO data 2007-2010	SSM-187 GM-145	ENT: SSM-15 GM-6	Delist	ACM1/C1 are estuary sites. Multiple LOEs (30625, 61093, 29740, 29741 and 29742) incorrectly use data from those sites. Those data should be included in Decision 34761 (Aliso Creek Mouth) instead of this decision.  It is inappropriate to combine old estuary data, as mentioned in previous paragraph, with new ocean data (LOE 74509, 74518) in assessing the listing decision.  Both LOE 74509 and 74518, which use the correct calculation at correct location indicate this water body has met delisting criteria.  An evaluation using OC Public Works NPDES data (2007-2010) also indicates that enterococcus concentration meets de-listing criteria.
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	Indicator Bacteria	BDP 12, BDP 13, BDP14, BDP15	43763	Beach Watch data 2006-2010	ENT SSM-678	ENT-82	Delist	LOE 81133 states that the data used is from 2008-2010 but per the reference file, the data goes back to 2005. Results of LOE 30911(data from 2002-2006) and LOE 81133 were considered to come up with decision. Taking into account that a diversion BMP was put into place in 2005, it would be more appropriate to use data from 2006 to 2010.  No shellfish harvesting allowed in this area.
				Beach Watch data 2008-2010 (from LOE81133)	SSM-247	SSM-23	Delist	
		WEST END, BUOY LINE, EAST END, SWIM AREA		Beach Watch data 2010-2013 (from CEDEN)	SSM-465	SSM-65	Delist	
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at guest dock	Indicator Bacteria	Guest Dock	49696	Beach Watch data 2006-2010	GM=99	GM=11	Do not list	This location is in current TMDL. There is no need to list again.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge	Mercury	NI1d	49724	SDR ACRW data Sep 07 to Apr 09	3	0	Do not List	Only 3 of the 5 samples referenced in LOE 74496 had actual/verified mercury results. No exceedances were observed for all samples.
				SDR ACRW data Nov 09 to Jun 10	4	0	Do not List	Data from OC Public Works database
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	Copper	SCM1d	49742	SDR ACRW SCM1d samples Oct 07 - June 10	9	0	Do not List	LOE 74526 uses site SCM1, which is a pipe outfall/creek sample and not an ocean sample. If only SCM1d copper data is used. The result would be to not list.
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	Malathion	SCM1, SCM1d	49749	SDR ACRW samples Oct 07 - Apr 09	5	0	Do not List	LOE 74526 uses site SCM1, which is a pipe outfall/creek sample and not an ocean sample. If only SCM1d data is used. The result would be to not list.
		SCM1d		SDR ACRW SCM1d samples Oct 07 - June 10	9	0	Do not List	
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	Mercury	SCM1,SCM1d	49751	SDR ACRW SCM1d samples 2008	2	1	Do not List	The recommendation states that it should not be placed on the section 303(d) list, however the final listing decision was to List on 303(d). LOE 75134 lists samples that do not exist: no samples for Hg were collected at SCM1 for all the dates listed and only SCM1d has mercury data (5/14/2008 and 10/1/2008).
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	Nickel	SCM1, SCM1d	49753	SDR ACRW samples Oct 07 - Apr 09	5	0	Do not List	LOE 74526 uses site SCM1, which is a pipe outfall/creek sample and not an ocean sample. If only SCM1d copper data is used. The result would be to not list.
		SCM1d		SDR ACRW SCM1d samples Oct 07 - June 10	9	0	Do not List	
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek	Indicator Bacteria	OLB00	49808	OCHCA Beach Monitoring 2006-2010	SSM-209 GM-154	TC: SSM-0 GM-0 FC: SSM-0 GM-0 ENT: SSM-2 GM-0 TC(shellfish): SSM-5 GM-8	Do not list	Data used in this analysis is not from ocean samples. It was collected from pooled water from the creek (station:CLBBC ), which never reaches the ocean during dry weather. Station OLB00 has been updated and combined with station MAINBC as part of the 2014 NPDES Unified Monitoring Program. Station MAINBC is taken at the surf at Laguna Main Beach adjacent to the Broadway Creek outlet.  A re-evaluation at OLB00 shows that the ocean segment should not be listed.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Laguna Beach HSA, at Main Beach	Indicator Bacteria	OLB00	44695	OCHCA Beach Monitoring 2006-2010	SSM-209 GM-154	TC: SSM-0 GM-0 FC: SSM-0 GM-0 ENT: SSM-2 GM-0 TC(shellfish): SSM-5 GM-8	Delist	It is inappropriate to combine old data from 1999-2000 with data from 2006-2009. Latest data in LOE 75066 has included sufficient data to delist this waterbody.  A re-evaluation using OC HCA data from 2006-10 also shows the water body has met delisting criteria.
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	Copper	SJC1d	49848	SDR ACRW data 2006-2009	1	0	Do not list	In LOE 75013, SJC1 is creek station. SJC1d is ocean station. It is inappropriate to include creek station data.  The copper criteria is not hardness adjusted. A hardness sample was collected in 2008 at SJC-1 with a result of 3200 mg/L indicating that the criteria of 3 ug/L may not be appropriate in this case.
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	Nickel	SJC1d	49852	SDR ACRW data 2006-2009	1	0	Do not list	In LOE 75067, SJC1 is a creek station. SJC1d is ocean station. It is inappropriate to include creek station.  The Nickel criteria is not hardness adjusted. A hardness sample was collected in 2008 at SJC-1 with a result of 3200 mg/L indicating that the criteria of 3 ug/L may not be appropriate in this case.
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach at Pier	Indicator Bacteria	PIERu, PIERd	42681	CSDO Data July 2009-Aug 2010	GM=35; SSM=54	GM=2; SSM=4	Delist	GM and SSM exceedances within acceptable frequencies
Prima Deshecha Creek	Cadmium	PDCM01	36180	SDR ME and USB Data 2006-2009	27	0	Delist	The data was recalculated using hardness corrected values and no exceedance is observed. Toxicity data should not be used as LOE.
Prima Deshecha Creek	Nickel	PDCM01	43494	SDR ME and USB Data 2006-2009	27	0	Delist	Recalculated using hardness corrected values and no exceedance observed. Toxicity data should not be used as LOE.
Prima Deshecha Creek	Malathion	PDCM01	48507	SDR ME Data 2010-2016	44	3	Do not List	The data does not exceed allowable frequency limits in Table 3.1; Toxicity data should not be used as LOE.
				SDR ME Data 2010-2013	32	2	Do not List	Does not exceed allowable frequency limits in Table 3.1
Prima Deshecha Creek	Mercury	PDCM01, PD-CGV	48508	SDR ME Data 2007-2009	1	0	Do not List	LOE 75494 references 27 samples for Hg, but only 1 sample for PDCM01 had Hg results and it was non-detect. Toxicity data should not be used as LOE.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Salt Creek (Orange County)	Mercury	SC-MB	48631	SDR USB Data 2006-2009	0	0	Do not List	The samples referenced on LOE 75557 were not analyzed for Mercury - no such samples exist.
San Juan Creek	Malathion	SJNL01,REF-CS,SJC-74, SJC-CC	48964	SDR ME data2006-2010 SDR USB Program 2006-2010	50	3	Do not list	Data post 2009 is not included. A review using OC Public Works NPDES's data from 2006-10 shows that the exceedance rate is 3/50.
San Juan Creek	Mercury	REF-CS, SJNL01,SJC-CC,SJC-74	49000	SDR ME data2006-2015 SDR USB Program 2006-2015	4	0	Do not list	LOE 75948 erroneously counted 6 exceedances while there is no mercury data for stations SJNL01,REF-CS,SJC-74 and SJC-CC as mentioned in this LOE.  An evaluation using OC Public Works NPDES data indicates that no mercury sample has exceeded the target(all data are lower than detection limit). In addition, the LOE75947 under this decision also indicates no exceedance.  Therefore, this water body should not be listed for mercury.
San Juan Creek	Oxygen, Dissolved	SJNL01,REF-CS,SJC-74, SJC-CC	49033	SDR ME data2006-2010 SDR USB Program 2006-2010	141	7	Do not list	There is an inconsistency in the water quality objective among the LOEs under this listing. Data counts derived from multiple standards should not be lumped together to be used as the reason for the listing.  An evaluation using OC Public Works NPDES data from 2006-10 by comparing against the more stringent target used in this listing (no less than 6 mg/L), indicates that the exceedance rate is 7/141. Thus this water body should not be listed as DO.
Segunda Deshecha Creek	Cadmium	SDCM02, SD-AP	49444	SDR ME and USB Data 2006-2009	29	0	Do not list	The data was recalculated using hardness corrected values and no exceedance observed. Toxicity data should not be used as LOE.
Segunda Deshecha Creek	Copper	SDCM02, SD-AP	49449	SDR ME and USB Data 2006-2009	29	0	Do not list	The data was recalculated using hardness corrected values and no exceedance observed. Toxicity data should not be used as LOE.
Segunda Deshecha Creek	Malathion	SDCM02, SD-AP	49566	SDR ME and USB Data 2009-2010	18	0	Do not List	No exceedance
Segunda Deshecha Creek	Mercury	SDCM02, SD-AP	49468	NA	NA	NA	Do not List	LOE 76719 incorrectly uses Trabuco Creek sites to list Segunda Deshecha for mercury
		SDCM02, SD-AP		SDR ME and USB Data 2009-2010	1	0	Do not List	There was only one sample and it was ND

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Segunda Deshecha Creek	Nickel	SDCM02, SD-AP	49454	SDR ME and USB Data 2006-2009	29	0	Do not list	The data was recalculated using hardness corrected values and no exceedance observed. Toxicity data should not be used as LOE.

# Appendix B

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Aliso Creek	Indicator Bacteria	ACJ01	46398	SDR USB data 2007-2010 Aliso Creek 13225 Directive Monitoring Program 2007-2010	ENT: GM-66, SSM-99 FC: GM-66, SSM-99	ENT: GM-66, SSM-89 FC: GM-31, SSM-30	Remove LOEs 72952, 72953 for TC listing	Total Coliform should not be listed as LOE 72952 and 72953 are based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.). There is no basin plan water quality objective for Total Coliform for recreational use in fresh water.
Aliso Creek	Phosphorus	ACJ01,AC-CCR, AC-PPD	34545	SDR USB data 2007-2010 SDR ME data 2007-2010	ACJ01: 37 AC-CCR:6 AC-PPD:6	ACJ01: 37 AC-CCR:6 AC-PPD:5	NA	<p>Previous listing decision should not be blank as it was listed in the previous listing cycle.</p> <p>There is an inconsistency in using OC Public Works NPDES data: Decision 43129 considered sites at ACJ01, AC-CCR and ACPPD while this decision only considered ACJ01 data.</p> <p>No recent data is evaluated. After re-evaluate the data using OC Public Works NPDES 07-10 data, the actual exceedance rate is 48/49</p>
Aliso Creek	Selenium	ACJ01,AC-CCR, AC-PPD	43129	SDR USB data 2007-2010 SDR ME data 2007-2010	ACJ01: 33 AC-CCR:5 AC-PPD:5	ACJ01: 9 AC-CCR:4 AC-PPD:1	NA	<p>In LOE 9076,station 901SJALC6 is at the ALiso Creek mouth, which is a tidal influenced area. It is not appropriate to apply freshwater selenium target to brakish/salt water samples.</p> <p>In LOE 72948, although all USB and MLS should both be included in calculating exceedances, only dry weather data were actually included. Instead of 8/10 exceedance rate, according to provided data reference, the actual exceedance rate is 9/24.</p> <p>In addition,the CTR standard is for total recoverable selenium. To be consistent with CTR, total recoverable selenium is evaluated using OC Public Works NPDES data from 2007-2010 suggesting that the actual exceedance rate is 14/43</p>

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Aliso Creek	Toxicity	ACJ01,AC-CCR, AC-PPD	46397	SDR USB data 2006-2010 SDR ME data 2006-2010	36	15	NA	In LOE 21397,station 901SJALC6 is at the ALiso Creek mouth, which is a tidal influenced area. It is not appropriate to apply brakish water samples to freshwater habitat analysis.
Aliso Creek	Benthic Community Effects	ACJ01,AC-CCR, AC-PPD,901S01811	44339	Region CSCI scores	NA	NA	NA	In LOE 9076,station 901SJALC6 is at the ALiso Creek mouth, which is a tidal influenced area. It is not appropriate to apply freshwater selenium target on brakish/salt water samples.
Aliso Creek	Malathion	ACJ01,AC-CCR, AC-PPD	47640	SDR USB data 2007-2010 SDR ME data 2007-2010	ACJ01: 41 AC-CCR:7 AC-PPD:7	ACJ01: 8 AC-CCR:0 AC-PPD:0	NA	NA
Aliso Creek	Nitrogen	ACJ01,AC-CCR, AC-PPD	42917	SDR USB data 2007-2010 SDR ME data 2007-2010	ACJ01: 37 AC-CCR:6 AC-PPD:8	ACJ01: 37 AC-CCR:6 AC-PPD:8	NA	It was listed during last cycle, the current final listing decision should be "Do Not Delist" instead of "List on 303(d)List"  There is an inconsistency in using OC Public Works NPDES data: Decision 43129 were using sites at ACJ01, AC-CCR and ACPPD while this decision only considered ACJ01 data.  There are no recent data is evaluated. After re-evaluate the data using OC Public Works NPDES 07-10 data, the actual exceedance rate is 51/51
Aliso Creek (mouth)	Indicator Bacteria	ACM-1	34761	SDR ACRW data 2007-2010	SSM-182 GM-138	ENT: GM-129, SSM-54 TC: GM-0 SSM-0 FC: GM-3, SSM-9	NA	No new data was evaluated for this waterbody.  A evaluation using OC Public Works NPDES data is completed as shown in the left columns.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Arroyo Trabuco Creek	Toxicity	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	42387	SDR USB data 2006-2010 SDR ME data 2006-2010	33	6	NA	NA
Arroyo Trabuco Creek	Benthic Community Effects	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	45845	Region CSCI scores	NA	NA	NA	NA
Arroyo Trabuco Creek	Indicator Bacteria	TCOL02	47816	SDR USB data 2006-2010 SDR ME data 2006-2010	SSM-15	TC-11 FC-13 ENT-15	Remove LOEs 73021 and 73022 for TC listing	There is an inconsistency in using OC Public Works NPDES data. REF-TCAS,TC-DO,TC-AP,SMC00206 were not included in evaluating FIB while those sites were included in other decision IDs for other pollutants. Total Coliform should not be listed as LOE 73021 and 73022 are based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California
Arroyo Trabuco Creek	Lead	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	47805	SDR USB data 2006-2009 SDR ME data 2006-2009	25	7	NA	NA
Arroyo Trabuco Creek	Malathion	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	47806	SDR USB data 2006-2009 SDR ME data 2006-2009	70	8	NA	A review of OC Public Works NPDES data post 2010 indicates that there is no exceedance anymore at station TCOL02 which had 8/45 exceedances before 2010.
Arroyo Trabuco Creek	Nitrogen	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	42285	SDR USB data 2006-2010 SDR ME data 2006-2010	TCOL02-46 Other sites-25	TCOL02-38 Other sites-1	NA	There is an inconsistency in treating OC Public Works NPDES SDR Bioassessment data. In this case, the data from REF-TCAS,TC-DO,TC-AP and SMC00206 were not included in the evaluation.
Arroyo Trabuco Creek	Phosphorus	REF-TCAS,TC-DO,TCOL02,TC-AP,SMC00206	34172	SDR USB data 2006-2010 SDR ME data 2006-2010	TCOL02-46 Other sites-46	TCOL02-41 Other sites-1	NA	There is an inconsistency in treating OC Public Works NPDES SDR Bioassessment data. In this case, the data from REF-TCAS,TC-DO,TC-AP and SMC00206 were not included in the evaluation.
Bell Canyon Creek	Toxicity	REF-BC	53411	SDR USB data 2006-2010 SDR ME data 2006-2010	5	2	NA	LOE 73052 is invalid as mentioned in comments for decision 47986
Cristianitos Creek	Indicator Bacteria	CR1 -upper cristianitos creek CR2-cristianitos creek	48376	Inland Empire Canyons Baseline Monitoring Project--San Mateo,San Juan and Cristianitos, 2008-2009	17	9	Remove LOE 73463 for TC listing	Total Coliform should not be listed as LOE 73463 is based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.). There is no basin plan water quality objective for Total Coliform for recreational use in fresh water.
Cristianitos Creek	Selenium		48379		13	7	NA	NA

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Dana Point Harbor	Copper	6328, 6320, 6327, 6325	43226	RHMP 2008	4	Sediment = 4; Water = 3	NA	SED: 4/4 exceedance of ERL, 2/4 exceedance of ERM; Toxicity data should not be used as LOE. There is a separate listing for Toxicity and the LOE's referenced were used there already.
Dana Point Harbor	Toxicity	6328, 6320, 6327, 6325	42684	RHMP 2008	8	1	NA	Sed toxicity
Dana Point Harbor	Zinc	6328, 6320, 6327, 6325	42746	RHMP 2008	4	Sediment = 2; Water = 0	NA	Toxicity data should not be used as LOE.
Dana Point Harbor	Oxygen, Dissolved	DAPTDC, DABTEB, DAPTLB, DAPTLR	48410	SDR ACRW data 2006-2008	133	24	NA	recalculated using OC Public Works NPDES data
English Canyon	Selenium	EC-MD	43273	SDR USB data 2006-2010	5	5	NA	NA
English Canyon	Toxicity	EC-MD	33502	SDR USB data 2006-2010 SDR ME data 2006-2010	10	2	NA	NA
English Canyon	Benthic Community Effects	EC-MD	51688	Region CSCI scores	NA	NA	NA	NA
English Canyon	Benzo[b]fluoranthene	NA	33516	NA	NA	NA	NA	The last cycle decision was "List on 303(d) list". This year's decision should be "Do not delist from 303(d) List" .
English Canyon	Dieldrin	EC-MD	33023	SDR USB data 2006-2010	NA	NA	NA	The last cycle decision was "List on 303(d) list". This year's decision should be "Do not delist from 303(d) List" .
English Canyon	Phosphorus	EC-MD	42810	SDR USB data 2006-2010	9	9	NA	NA
Laguna Canyon Channel	Toxicity	LCWI02,LC-133	43324	SDR USB data 2006-2010 SDR ME data 2006-2010	18	5	NA	LOE 74109 is invalid. There are no Mercury data at LCWI02 and LC-133 during 2006-2009 as claimed in the LOE.
Laguna Canyon Channel	Benthic Community Effects	LCWI02,LC-133	48645	Region CSCI scores	NA	NA	NA	NA
Laguna Canyon Channel	Indicator Bacteria	LCWI02	48801	SDR ME data2006-2009	16	ENT SSM-16 FC: SSM-10 TC SSM-5	Remove LOE 74121 and 74122 for TC listing	Total Coliform should not be listed as LOE 74121 and 74122 are based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft:
Laguna Canyon Channel	Phosphorus	LCWI02	43194	SDR ME data2006-2010	38	37	NA	NA

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Laguna Canyon Channel	Total Nitrogen as N	LCWI02	43329	SDR ME data2006-2010	38	23	NA	NA
Moro Canyon Creek	Nitrogen	NA	43125	NA	NA	NA	NA	Data from swamp. A re-check is done
Moro Canyon Creek	Phosphorus	NA	42334	NA	NA	NA	NA	Data from swamp. A re-check is done
Moro Canyon Creek	Selenium	NA	42852	NA	NA	NA	NA	Data from swamp. A re-check is done
Moro Canyon Creek	Toxicity	NA	43527	NA	NA	NA	NA	Data from swamp. A re-check is done
Oso Creek (at Mission Viejo Golf Course)	Chloride	SMC03523	34925	SDR USB data 2013	1	1	NA	No new data is assessed during this cycle. Data is not provided in the factsheet.  A sample collected through OC Public Works NPDES program in 2013 is evaluated.
Oso Creek (at Mission Viejo Golf Course)	Sulfates		33700		1	1	NA	
Oso Creek (at Mission Viejo Golf Course)	Total Dissolved Solids		34850		1	1	NA	
Oso Creek (lower)	Nitrogen	NA	43534	SWAMP data	4	3	NA	No station in OC Public Works NPDES. SWAMP data checked
Oso Creek (lower)	Phosphorus	NA	43302	SWAMP data	4	3	NA	
Oso Creek (lower)	Selenium	NA	44429	SWAMP data	4	3	NA	
Oso Creek (lower)	Toxicity	NA	42685	SWAMP data	4	4	NA	
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	Toxicity	ACM1d	49665	SDR ACRW data 2007-2010	11	5	NA	ACM1 is estuary site, its result should be included in decision 34761 (Aliso Creek Mouth).
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at patrol dock	Indicator Bacteria	HARBOR PATROL DOCK	49699	Beach Watch data 2006-2010	GM=101	GM=55	NA	LOE 77600 had incorrect sample number and exceedances based on the reference data provided. 2006-2010 data from reference was used to recalculate.
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	Indicator Bacteria	SCMd, SCMu	43463	SDR ACRW data Jul 09 to Aug 10	26	26	NA	Shellfish harvesting
			43463	SDR ACRW data Jul 09 to Aug 10	GM=26, SSM=50	0	Delist for TC	No exceedance for both geomean and SSM for TC
			43463	SDR ACRW data Jul 09 to Aug 10	GM=26, SSM=50	GM=8, SSM=10	NA	NA
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch Beach	Copper	SCM1d	49742	SDR ACRW SCM1d samples Oct 07 - June 10	9	0	Do not List	LOE 74526 uses site SCM1, which is a pipe outfall/creek sample and not an ocean sample. If only SCM1d copper data is used. The result would be to not list.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall	Indicator Bacteria	S-1	49833	OCHCA Beach Monitoring 2006-2010	SSM-369 GM-364	TC: SSM-0 GM-0 FC: SSM-1 GM-3 ENT: SSM-87 GM-139 TC(shellfish): SSM-52 GM-90	NA	NA
Pacific Ocean Shoreline, Lower San Juan HSA, 10000 feet south of outfall	Indicator Bacteria	S-13	49834	OCHCA Beach Monitoring 2006-2010	SSM-371 GM-366	TC: SSM-0 GM-0 FC: SSM-4 GM-0 ENT: SSM-46 GM-77 TC(shellfish): SSM-27 GM-50	NA	NA
Pacific Ocean Shoreline, Lower San Juan HSA, 2000 feet south of outfall	Indicator Bacteria	S-3	49835	OCHCA Beach Monitoring 2006-2010	SSM-420 GM-408	TC: SSM-0 GM-0 FC: SSM-18 GM-8 ENT: SSM-133 GM-193 TC(shellfish): SSM-67 GM-87	NA	NA

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Lower San Juan HSA, 3000 feet south of outfall	Indicator Bacteria	S-5	49836	OCHCA Beach Monitoring 2006-2010	SSM-421 GM-409	TC: SSM-0 GM-0 FC: SSM-15 GM-2 ENT: SSM-117 GM-166 TC(shellfish): SSM-66 GM-68	NA	NA
Pacific Ocean Shoreline, Lower San Juan HSA, 4000 feet south of outfall	Indicator Bacteria	S-7	49837	OCHCA Beach Monitoring 2006-2010	SSM-406 GM-394	TC: SSM-0 GM-0 FC: SSM-7 GM-0 ENT: SSM-89 GM-88 TC(shellfish): SSM-50 GM-54	NA	A review using County's data within the same time frame shows that shell fish should not be listed.
Pacific Ocean Shoreline, Lower San Juan HSA, 5000 feet south of outfall	Indicator Bacteria	S-9	49838	OCHCA Beach Monitoring 2006-2010	SSM-408 GM-397	TC: SSM-0 GM-0 FC: SSM-8 GM-1 ENT: SSM-93 GM-116 TC(shellfish): SSM-57 GM-63	NA	A review using County's data within the same time frame shows that shell fish should not be listed.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Lower San Juan HSA, 7500 feet south of outfall	Indicator Bacteria	S-11	49839	OCHCA Beach Monitoring 2006-2010	SSM-408 GM-396	TC: SSM-0 GM-0 FC: SSM-6 GM-0 ENT: SSM-81 GM-80 TC(shellfish): SSM-39 GM-39	NA	A review using County's data within the same time frame shows that shell fish should not be listed.
Pacific Ocean Shoreline, Lower San Juan HSA, at North Beach Creek	Indicator Bacteria	DSB5d , ODB02	43790	OCHCA Beach Monitoring 2006-2010 SDR CSDO 2006-2010	SSM-603 GM-597	TC: SSM-8 GM-18 FC: SSM-71 GM-65 ENT: SSM-223 GM-334 TC(shellfish): SSM-199 GM-330	NA	Many LOEs in this record inappropriately include creek sample results (DSB5, BW622) in the evaluation. Those LOEs include but not limit to: 29488,29353,29371,7499,43790,77796,77640,74933.  An evaluation using OC Public Works NPDES data is shown on the left columns. Station used in the analysis include HCA site (ODB02) and OC Public Works NPDES site (DSB5d). Those two sites has been combined as one site in 2014 unified monitoring program.  Instead of table 3.2, table 4.2(de-listing table) should be used in this decision.
Pacific Ocean Shoreline, Lower San Juan HSA, at North Doheny State Park Campground	Indicator Bacteria	DSB4u/d	43665	SDR CSDO 2006 July-2010 June	SSM-147 GM-124	TC: SSM-1 GM-0 FC: SSM-9 GM-0 ENT: SSM-46 GM-67 TC(shellfish): SSM-31 GM-39	NA	Wrong location(those sites are not in Doheny Beach): LOE74957,74958,74981,74982,74986,74010,77641,74983  An evaluation using OC Public Works NPDES data is shown on the left columns. Station used in the analysis is DSB-4 up/down coast which ever is bigger. This method align to the method used in LOE74956

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	Indicator Bacteria	SJC1 u/d	44645	SDR CSDO 2006-2010	SSM-247 GM-204	TC: SSM-11 GM-33 FC: SSM-61 GM-66 ENT: SSM-138 GM-144 TC(shellfish): SSM-126 GM-129	NA	A evaluation using OC Public Works NPDES data at location SJC1 up/downcoast whichever is larger is completed as shown on the left columns. This method aligns with the method used in LOE75039.
Pacific Ocean Shoreline, Lower San Juan HSA, at South Doheny State Park Campground	Indicator Bacteria	DSB1u/d	44451	SDR CSDO 2006-2010	SSM-224 GM-176	TC: SSM-0 GM-0 FC: SSM-12 GM-5 ENT: SSM-68 GM-80 TC(shellfish): SSM-27 GM-55	NA	NA
Pacific Ocean Shoreline, Lower San Juan HSA, at surfzone outfall at Doheny State Beach	Indicator Bacteria	S-0	49877	OCHCA Beach Monitoring 2006-2010	SSM-371 GM-359	TC: SSM-3 GM-9 FC: SSM-28 GM-15 ENT: SSM-138 GM-181 TC(shellfish): SSM-105 GM-141	NA	This location is about only 25 yards adjacent to a water body that has been addressed in 2010 Beaches and Creeks TMDL
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	Indicator Bacteria	S-15	44202	OCHCA Data 2008-2010	GM=238; SSM=252	GM=211; SSM=121	NA	ENT
					GM=235; SSM=250	GM=7; SSM=55	NA	FC-SSM Exceedance

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
					250	96	NA	TC SHELL -median is 120, 38% above 230
Pacific Ocean Shoreline, San Clemente HA, at San Clemente City Beach, North Beach	Indicator Bacteria	S-17	43328	CSDO Data Jan 2002 - Dec 2007			Delist for TC, FC for REC-1	Conflicting information: On decision ID 43328, RB staff decision recommendation section states that "the water pollutant combination should be removed from the section 303d list" but the Final Listing Decision is "List on 303d". On RB Staff Conclusion Section, LOEs 28347,28372,28368 and 28362 were cited as exceeding the allowable frequency listed in Table 3.2, they actually do not exceed the limits.
				CSDO Data Jan 2006 - Aug 2010	GM= 400; SSM=411	TC - GM=0, SSM=1; FC - GM=1, SSM=12; ENT - GM=133, SSM=94	Delist for TC, FC for REC-1	Recalculated with 2006-2010 data; Exceedance for ENT (REC-1 GM)
				CSDO Data Jan 2006 - Aug 2010	411	65	NA	NA
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano Beach at Beach Road	Indicator Bacteria	CSBBR1d, CSBBR1u	43737	CSDO Data July 2009-Dec 2013	GM=136; SSM=200	GM=26; SSM=31	NA	NA
Pacific Ocean Shoreline, San Clemente HA, at South Capistrano County Beach	Indicator Bacteria	CSBMP1d, CSBMP1u	43951	CSDO Data July 2009-Dec 2013	GM=137; SSM=201	GM=56; SSM=51	NA	NA
Prima Deshecha Creek	Phosphorus	PDCM01	33809	SDR ME Data 2007-2013	58	37	NA	RB did not assess any new data this cycle; used data from OC Public Works NPDES for assessment
Prima Deshecha Creek	Turbidity	PDCM01	44624	SDR ME Data 2006-2016	68	31	NA	RB did not assess any new data this cycle; used data from OC Public Works NPDES for assessment
Prima Deshecha Creek	Indicator Bacteria	PDCM01	48514	SDR ME Data 2010-2016	SSM=28	TC,ENT=28; FC=26	Remove LOEs 75510 and 75511 for TC listing	Total Coliform should not be listed as LOE 75510 and 75511 are based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.). There is no basin plan water quality objective for Total Coliform for recreational use in fresh water.

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Prima Deshecha Creek	Nitrogen	PDCM01	43927	SDR ME Data 2007-2013	58	58	NA	RB did not assess any new data this cycle; used data from OC Public Works NPDES for assessment
Salt Creek (Orange County)	Benthic Community Effects	SC-MB	48640	Region CSCI scores	NA	NA	NA	NA
Salt Creek (Orange County)	Malathion	SC-MB	48639	SDR USB Data 2006-2010	8	2	NA	NA
Salt Creek (Orange County)	Toxicity	SC-MB	48633	SDR USB Data 2006-2010	9	3	NA	NA
San Juan Creek	DDE (Dichlorodiphenyl dichloroethylene)	no data	33513	NA	NA	NA	NA	NA
San Juan Creek	Indicator Bacteria	SJNL01	41422	SDR ME data2007-2009	SSM-10 GM-NA	TC: SSM-4 FC: SSM-5 ENT: SSM-10	Remove LOEs 75978, 75979, and 75980 for TC listing	<p>six out of the 10 samples at SJNL01 are wet weather samples. Data were not compared against REC-1 standard. An evaluation using the same dataset (SJNL01) is shown on left columns.</p> <p>There is an inconsistency in treating OC Public Works NPDES SDR Bioassessment data. In this case, the data from REF-CS,SJC-74 and SJC-cc were not included in the evaluation while in case 43131, data were from above sites were included in evaluation. Total Coliform should not be listed as LOE 75978, 75979 and 75980 are based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.). There is no basin plan water quality objective for Total Coliform for recreational use in fresh water.</p>
San Juan Creek	Selenium	REF-CS, SJNL01,SJC-CC,SJC-74	43131	SDR ME data2006-2010 SDR USB Program 2006-2010	36	12	NA	Data source in LOE 9096 is incorrect, it should link to Ref 2618. In addition, in Ref 2618, there are 2 San Juan Creek stations (901SJSJC9 and 901SJSJC5), but only one station is included in this evaluation. The actual exceedance rate for this LOE should be 2/8.
San Juan Creek	Toxicity	REF-CS, SJNL01,SJC-CC,SJC-74	37571	SDR USB data 2006-2010 SDR ME data 2006-2010	28	8	NA	NA

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
San Juan Creek	Benthic Community Effects	SJNL01,REF-CS,SJC-74, SJC-CC	43761	Region CSCI scores	NA	NA	NA	LOE 75948 errorly counted 6 exceedances while there is no mercury data for stations SJNL01,REF-CS,SJC-74 and SJC-CC as mentioned in this LOE.
San Juan Creek	Nitrogen	SJNL01	43657	SDR ME data2006-2010	39	28	NA	No new data was evaluated for this waterbody. A evaluation using OC Public Works NPDES data(2006-2010) is completed as shown in the columns to the left.
San Juan Creek	Phosphorus	SJNL01	32893	SDR ME data2006-2010	39	35	NA	No new data was evaluated for this waterbody. A evaluation using OC Public Works NPDES data(2006-2010) is completed as shown in the columns to the left.
San Juan Creek (mouth)	Indicator Bacteria	C-1	34549	OCHCA Monitoring 2006-2010	SSM-394 GM-381	ENT: GM-381, SSM-367 TC: GM-309 SSM-144 FC: GM-348, SSM-305	NA	No new data was evaluated for this waterbody. A evaluation using OC Public Works NPDES data is completed as shown in the left columns.
Segunda Deshecha Creek	Phosphorus	SDCM02, SD-AP	34533	SDR ME and USB Data 2009-2010	20	18	NA	RB did not assess any new data this cycle and used only SDCM02 data; used data from OC Public Works NPDES for assessment
Segunda Deshecha Creek	Toxicity	SDCM02, SD-AP	44886	SDR USB and ME Data 2010	4	4	NA	NA
Segunda Deshecha Creek	Turbidity	SDCM02, SD-AP	34534	SDR ME and USB Data 2009-2010	20	9	NA	RB did not assess any new data this cycle and used only SDCM02 data; used data from OC Public Works NPDES for assessment
Segunda Deshecha Creek	Benthic Community Effects	901S00997, SDCM02, SD-AP	51745	Region CSCI scores	NA	NA	NA	LOE 76719 incorrectly used Trabuco Creek sites to list Segunda Deshecha for Mercury
Segunda Deshecha Creek	Indicator Bacteria	SDCM02, PICOu, PICOd	51713	SDR ME and CSDO Data 06-2010	NA	NA	NA	Total Coliform should not be listed as LOE 76734 and 76735 are based on a draft guidance for beach water (Draft Guidance for Fresh Water Beaches. Last Update: May 8, 2006. Initial Draft: November 1997. California Department of Public Health.). There is no basin plan water quality objective for Total Coliform for recreational use in fresh water.
Segunda Deshecha Creek	Nitrogen	SDCM02, SD-AP	43140	SDR ME and USB Data 2009-2010	20	20	NA	RB did not assess any new data this cycle and used only SDCM02 data; used data from OC Public Works NPDES for assessment

Water Body	Parameter	Site Name	Decision ID	Data Source	Total number of samples	number of exceedances	Recommended action (if different from RB Factsheet)	Comment(if any)
Segunda Deshecha Creek	Selenium	SDCM02, SD-AP	49459	SDR ME and USB Data 2009-2010	18	11	NA	Toxicity data should not be used as LOE. On LOE used dissolved fraction to evaluate against the CTR
Wood Canyon (Orange County)	Benthic Community Effects	WC-WCT	43928	Region CSCI scores	NA	NA	NA	NA