

Discussion of Source Water Tributary to Long Beach WRP

Native water is that which under natural conditions would contribute to a given stream or other body of water. When the source of return flow to a stream is native water, the return flow is considered part of the natural stream flow to which riparian and appropriative water rights may attach. When the source of return flow is foreign water, or that which would not be present in a body of water under natural conditions (for example, water imported from outside the watershed), return flow is not considered part of the natural stream flow and rights do not attach. The source of the recycled water proposed for removal is primarily foreign water, as discussed below and referenced in the attached figure.

LBWRP receives wastewater from a tributary area to the north that includes the cities of Long Beach, Hawaiian Gardens, Lakewood, Cerritos, Artesia and Norwalk. Based on the makeup of purveyor source water (groundwater and imported) the Districts estimated the percentage of both groundwater and imported water in the LBWRP effluent by first separating source groundwater into native and foreign components using a WRD groundwater budget (http://www.wrd.org/engineering/reports/tech_bulletin_fall_2004.pdf) that was based on groundwater basin modeling performed by the U.S. Geological Survey. The native and foreign components were then area-weighted for each purveyor, assuming supply is directly proportional to the percentage of the LBWRP tributary area that the purveyor serves. The most conservative estimate of 65% foreign water and 35% native water in LBWRP's effluent assumes that stormwater captured and recharged to groundwater is native, although most of this water is captured upstream from the San Gabriel River, which is not tributary to Coyote Creek. The components could be as high as 86% foreign and 14% native pending a more thorough analysis of whether the groundwater is tributary or not. This wastewater change petition requests a reduction in discharge of 5 MGD from the LBWRP to meet the new demand at LVLWTF. Since the 12 MGD of average treated effluent from LBWRP is not less than 65% foreign water, the average flow of foreign water is not less than 7.8 MGD ($12 \text{ MGD} \times 0.65$), which exceeds the proposed reduction in flow of 5.0 MGD to meet the new demand at LVLWTF. Thus, all of the flow can be considered foreign water.

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LBWRP OPERATIONS DATA

(Source: Monitoring reports prepared for RWQCB)

TABLE 4-2
 OPERATIONAL DATA - NPDES AND REUSE
 LONG BEACH WATER RECLAMATION PLANT

2005 MONITORING REPORT
 OPERATIONS SUMMARY - MONTHLY AVERAGES
 WQCB ORDER NO. R4-2002-0123 (NPDES NO. CA0054119)
 WQCB ORDER NO. 8747 (REUSE)
 MONITORING AND REPORTING PROGRAMS NOS. 5662 & 6184

MONTH	PLANT FLOWS (MGD)				
	ESTIMATED PLANT INFLUENT	TOTAL PLANT EFFLUENT	PEAK DAILY EFFLUENT	NPDES ORDER 2002-0123	REUSE ORDER 87-47
	JAN	21.35	19.76	30.7	19.22
FEB	23.25	21.53	32.1	20.55	1.113
MAR	21.25	19.68	29.2	17.23	2.434
APR	19.48	18.04	28.3	14.33	3.712
MAY	14.80	13.71	22.2	8.50	5.213
JUN	15.14	14.02	23.1	8.26	5.755
JUL	18.22	16.87	25.9	10.93	6.132
AUG	16.59	15.36	21.3	7.59	7.780
SEP	18.20	16.85	25.8	10.79	6.037
OCT	20.59	19.06	27.6	14.37	4.715
NOV	18.14	16.80	26.7	13.12	3.722
DEC	17.88	16.55	24.7	11.56	5.024
MEAN	18.74	17.35	26.5	13.04	4.348
MAX	23.25	21.53	32.1	20.55	7.780
MIN	14.80	13.71	21.3	7.59	0.541
TOTAL	224.90	208.23	317.5	156.46	52.178
DESIGN CAPACITY	25.0				

Note: "Reused Total" column is for reclaimed water delivered for reuse through the City of Long Beach Water Department's Reclaimed Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site contained in table 1 4 (5.187 MGD).

TABLE 4-2
 OPERATIONAL DATA - NPDES AND REUSE
 LONG BEACH WATER RECLAMATION PLANT

2006 MONITORING REPORT
 OPERATIONS SUMMARY - MONTHLY AVERAGES
 WQCB ORDER NO. R4-2002-0123 (NPDES NO. CA0054119)
 WQCB ORDER NO. 87-47 (REUSE)
 MONITORING AND REPORTING PROGRAMS NOS. 5662 & 6184

MONTH	PLANT FLOWS (MGD)				
	ESTIMATED	TOTAL	PEAK	NPDES	REUSE
	PLANT INFLUENT	PLANT EFFLUENT	DAILY EFFLUENT	ORDER 2002-0123	ORDER 87-47
JAN	18.13	16.79	26.6	12.43	4.360
FEB	18.09	16.75	25.0	10.58	6.165
MAR	18.54	17.17	27.3	11.75	5.412
APR	17.36	16.07	21.8	11.06	5.013
MAY	18.34	16.98	25.5	12.11	4.865
JUN	18.98	17.57	23.2	11.22	6.346
JUL	11.12	10.30	18.0	3.58	6.737
AUG	13.46	12.46	15.9	5.77	6.690
SEP	14.40	13.33	17.2	8.05	5.410
OCT	14.35	13.29	15.5	9.38	3.889
NOV	18.73	17.34	24.2	14.58	2.623
DEC	18.62	17.24	22.9	14.93	2.306
MEAN	16.68	15.44	21.9	10.45	4.985
MAX	18.98	17.57	27.3	14.93	6.737
MIN	11.12	10.30	15.5	3.58	2.306
TOTAL	200.11	185.29	263.3	125.45	59.817
DESIGN CAPACITY		25.0			

Note: "Reused Total" column is for reclaimed water delivered for reuse through the City of Long Beach Water Department's Reclaimed Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site contained in table 1-4 (5.187 MGD).

TABLE 4-2
 OPERATIONAL DATA - NPDES AND REUSE
 LONG BEACH WATER RECLAMATION PLANT

2007 MONITORING REPORT
 OPERATIONS SUMMARY - MONTHLY AVERAGES
 WQCB ORDER NO. R4-2002-0123 & R4-2007-0047 (NPDES NO. CA0054119)
 WQCB ORDER NO. 87-47 (REUSE)
 MONITORING AND REPORTING PROGRAMS NOS. 5662 & 6184

MONTH	PLANT FLOWS (MGD)					
	ESTIMATED PLANT INFLUENT	PEAK DAILY INFLUENT	TOTAL PLANT EFFLUENT	NPDES ORDER 2002-0123/2007-0047	NPDES PEAK DAILY EFFLUENT	REUSE ORDER 87-47
	JAN	16.54	23.2	17.87	14.81	23.2
FEB	16.76	24.1	17.99	13.47	24.1	4.48
MAR	16.32	23.4	16.61	12.42	23.4	4.19
APR	10.70	15.1	10.20	4.61	15.1	5.76
MAY	11.72	16.2	10.31	3.41	16.2	6.90
JUN	11.05	15.1	9.90	2.56	12.3	7.32
JUL	10.85	14.4	9.60	1.98	4.4	7.70
AUG	14.00	19.2	14.21	7.35	9.7	6.84
SEP	16.11	22.7	15.86	9.36	11.8	6.46
OCT	16.43	23.0	16.21	10.32	17.1	5.89
NOV	16.52	23.1	15.48	8.60	16.9	6.88
DEC	16.68	23.2	15.98	11.77	19.7	4.23
MEAN	14.47	20.2	14.19	8.39	16.1	5.81
MAX	16.76	24.1	17.99	14.81	24.1	7.70
MIN	10.70	14.4	9.60	1.98	4.4	3.06
DESIGN CAPACITY	25.0					

Note: "Reused Total" column is for reclaimed water delivered for reuse through the City of Long Beach Water Department's Reclaimed Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site contained in table 1-4 (5.187 MGD).

TABLE 4-2
 OPERATIONAL DATA - NPDES AND REUSE
 LONG BEACH WATER RECLAMATION PLANT

2008 MONITORING REPORT
 OPERATIONS SUMMARY - MONTHLY AVERAGES
 WQCB ORDER NO. R4-2007-0047 (NPDES NO. CA0054119)
 WQCB ORDER NO. 87-47 & 97-072 (REUSE)
 MONITORING AND REPORTING PROGRAMS NOS. 5662 & 6184

MONTH	PLANT FLOWS (MGD)					
	AVERAGE DAILY INFLUENT	PEAK DAILY INFLUENT	TOTAL PLANT EFFLUENT	NPDES ORDER R4-2007-0047	NPDES PEAK DAILY EFFLUENT	REUSE ORDER 87-47 & 97-072
JAN	17.12	24.0	16.79	13.39	20.9	3.37
FEB	16.48	23.1	17.07	14.14	20.7	2.96
MAR	16.79	23.7	17.21	11.17	18.2	6.04
APR	16.35	23.1	17.09	10.25	15.8	6.84
MAY	17.89	25.2	19.54	10.68	15.5	8.82
JUN	20.09	28.0	19.24	10.99	17.6	8.26
JUL	17.99	24.7	16.89	8.23	10.5	8.67
AUG	18.35	25.2	17.84	8.55	10.1	9.29
SEP	18.88	26.5	18.40	11.72	19.8	6.68
OCT	17.86	25.2	17.06	9.10	13.6	7.96
NOV	16.80	24.0	15.95	11.48	19.7	4.47
DEC	19.38	27.6	18.58	17.26	28.2	1.29
MEAN	17.83	25.0	17.64	11.41	17.5	6.22
MAX	20.09	28.0	19.54	17.26	28.2	9.29
MIN	16.35	23.1	15.95	8.23	10.1	1.29
TOTAL	213.98		211.65	136.94		74.66
DESIGN CAPACITY	25.0					

Note: "Reused Order 87-47 & 97-072" column is for reclaimed water delivered for reuse through the City of Long Beach Water Department's Reclaimed Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site.

Table 4-2
Long Beach Water Reclamation Plant

2009 Monitoring Report
Monthly Averages

MONTH	PLANT FLOWS (MGD)					
	AVERAGE	PEAK	TOTAL	NPDES	PEAK DAILY	REUSE
	DAILY INFLUENT	DAILY INFLUENT	PLANT EFFLUENT	ORDER R4-2007-0047	EFFLUENT	ORDER 87-47 & 97-072
JAN	17.95	25.6	17.18	15.25	29.1	1.93
FEB	19.85	28.3	19.55	18.79	35.1	0.76
MAR	19.48	27.4	19.69	15.30	27.3	4.38
APR	16.56	24.0	17.57	9.47	23.4	8.09
MAY	18.92	26.6	19.21	10.36	22.1	8.86
JUN	18.67	25.8	18.63	10.60	26.0	8.05
JUL	17.77	24.6	18.19	10.27	25.9	7.95
AUG	17.67	24.6	18.05	8.88	22.4	9.16
SEP	18.18	25.6	18.62	10.03	22.7	9.11
OCT	17.71	25.0	18.62	12.28	25.8	6.34
NOV	17.89	25.6	17.79	11.31	25.4	6.48
DEC	17.98	25.8	17.85	13.90	29.6	3.95
MEAN	18.22	25.7	18.41	12.20	26.2	6.26
MAX	19.85	28.3	19.69	18.79	35.1	9.16
MIN	16.56	24.0	17.18	8.88	22.1	0.76
TOTAL	218.63		220.95	146.44		75.06
DESIGN CAPACITY			25.0			

Note: "Reused Order 87-47 & 97-072" column is for reclaimed water delivered for reuse through the City of Long Beach Water Department's Reclaimed Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site.

Table 4-1
 Long Beach Water Reclamation Plant
 2010 Monitoring Report
 Flow Data, NPDES and Reuse
 Monthly Averages

Month	Plant Flows (MGD)					Reuse
	Total Flow			Peak Flow		
	Influent	Effluent	NPDES	Influent	Effluent	
Jan	19.09	18.41	13.39	27.9	31.3	4.92
Feb	19.09	18.68	14.93	26.9	31.9	3.71
Mar	19.55	18.78	14.03	27.2	29.4	4.75
Apr	16.45	16.13	11.07	23.5	24.9	5.04
May	17.63	18.11	11.77	24.6	22.6	6.63
Jun	18.25	20.37	12.43	25.1	21.6	8.07
Jul	17.95	19.69	11.55	24.7	22.9	8.14
Aug	17.65	19.80	10.71	24.4	23.6	9.10
Sept	18.01	20.18	12.08	25.2	24.1	8.10
Oct	17.79	19.50	12.74	25.3	25.2	6.76
Nov	18.23	18.67	14.43	25.7	27.6	4.53
Dec	20.53	19.78	15.36	28.4	31.8	4.33
Mean	18.35	19.01	12.87	25.7	26.4	6.17
Max	20.53	20.37	15.36	28.4	31.9	9.10
Min	16.45	16.13	10.71	23.5	21.6	3.71

Note: Reuse column is for recycled water delivered for reuse through the City of Long Beach Water Department's Recycled Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site.

Table 4-1
 Long Beach Water Reclamation Plant
 2011 Monitoring Report
 Flow Data, NPDES and Reuse
 Monthly Averages

Month	Plant Flows (MGD)					Reuse
	Total Flow			Peak Flow		
	Influent	Effluent	NPDES	Influent	Effluent	
Jan	20.16	19.44	15.94	27.7	31.7	3.47
Feb	19.71	18.74	13.49	27.8	29.6	5.18
Mar	19.82	18.19	16.11	28.6	31.4	2.60
Apr	18.65	16.38	11.31	26.0	27.8	6.00
May	18.54	17.67	10.07	26.2	26.0	7.60
Jun	18.25	17.31	9.58	25.1	25.7	7.70
Jul	18.75	17.82	9.03	25.9	26.5	8.86
Aug	17.87	18.20	9.59	25.2	27.4	8.66
Sept	17.58	17.69	10.21	24.3	25.9	7.49
Oct	16.16	17.11	11.66	22.9	26.7	5.45
Nov	18.26	19.13	14.12	26.1	30.4	5.01
Dec	17.01	18.46	15.43	24.4	23.9	3.03
Mean	18.40	18.01	12.21	25.9	27.8	5.92
Max	20.16	19.44	16.11	28.6	31.7	8.86
Min	16.16	16.38	9.03	22.9	23.9	2.60

Note: Reuse column is for recycled water delivered for reuse through the City of Long Beach Water Department's Recycled Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site.

Table 4.1
 Long Beach Water Reclamation Plant
 2012 Monitoring Report
 Flow Data, NPDES and Reuse
 Monthly Averages

Month	Plant Flows (MGD)					Reuse
	Total Flow			Peak Flow		
	Influent	Effluent	NPDES	Influent	Effluent	
Jan	19.01	18.62	12.39	27.2	21.7	6.70
Feb	18.15	18.69	13.77	26.4	22.6	4.79
Mar	18.90	18.41	11.71	27.0	21.6	6.80
Apr	19.18	18.31	12.69	27.3	21.6	5.60
May	17.69	17.69	10.27	25.6	19.4	7.42
Jun	18.33	18.56	9.77	24.9	18.6	8.80
Jul	17.35	16.97	7.84	24.6	17.2	9.13
Aug	17.79	18.13	10.53	24.7	18.1	7.59
Sept	17.77	18.47	11.67	24.7	20.5	6.80
Oct	17.47	17.84	11.38	24.0	19.5	6.48
Nov	18.30	19.16	14.10	25.9	23.0	5.06
Dec	18.75	19.50	17.50	25.4	22.9	2.03
Mean	18.22	18.36	11.97	25.6	20.6	6.43
Max	19.18	19.50	17.50	27.3	23.0	9.13
Min	17.35	16.97	7.84	24.0	17.2	2.03

Note: Reuse column is for recycled water delivered for reuse through the City of Long Beach Water Department's Recycled Water Pump Station. The official amount of water reused is the sum of usage measured at each individual reuse site.

Biological Resources Impacts

Riparian and freshwater aquatic habitat is nonexistent in Coyote Creek for several miles upstream and immediately downstream of the LBWRP outfall to Coyote Creek. Coyote Creek is completely concrete-lined from just upstream of the point of discharge all the way downstream until it reaches the San Gabriel River Estuary (see Attachment 4 for map and related photographs of outfall, channel and estuary). Moreover, surrounding land uses are dominated by urban and industrial development. Attachment 5 includes all citations and references that were used in this impact evaluation.

Routine monitoring by the Los Angeles County Department of Public Works (see Attachment 5, Citation No. 1), the Sanitation Districts (see Attachment 5, Citation No. 2), and a regional watershed monitoring program (see Attachment 5, Citation No. 3) has consistently indicated extremely poor assemblages of aquatic invertebrates. Furthermore, decades of weekly and monthly biological observations conducted by the Sanitation Districts have identified only rare occurrences of non-native fish, such as invasive tilapia and common carp, and no occurrences of native fish. Considering the insignificant riparian and aquatic habitat conditions in lower Coyote Creek and that perennial flows upstream of LBWRP are by themselves sufficient to support its extremely limited aquatic community, any decrease in recycled water discharges from LBWRP will have no negative biological effects. The downstream San Gabriel River Estuary supports a fairly diverse marine and wildlife population. However, estuary conditions are dominated by tidal influences and discharges from two power plants that originate from the adjacent enclosed Alamitos Bay with little to no impact from dry weather freshwater contributions (see Attachment 5, Citation No. 4). Maximum dry weather flow from LBWRP is less than 1.5% of the plant cooling water discharges, which average 853 and 761 MGD respectively (see Attachment 5, Citation No. 5). Even relatively large fluctuations in freshwater flows result in minimal change in measured salinity throughout the estuary, indicating that any decreases associated with reduced recycled water flows from the LBWRP would most likely produce little to no measurable impacts on the biological condition of the estuary.

LBWRP discharges and the increased use of recycled water were evaluated as part of the District's Clearwater Program, a comprehensive facilities planning effort. The Clearwater Program Final Master Facilities Plan and Final EIR/EIS were certified November 2012 (ref. SCH# 2008101074). Relevant highlighted excerpts from these documents that address LBWRP are included as Attachment 6. The WRD's Negative Declaration for the expansion of LVLWTF and the complete District's Clearwater Program Final MFP/EIR/EIS are on enclosed disks.



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

March 11, 2014

Mr. Robb Whitaker
Water Replenishment District of Southern
California
4040 Paramount Blvd
Lakewood, CA 90712

Dear Mr. Whitaker,

ADOPTED AMENDMENT TO WASTE DISCHARGE REQUIREMENTS (WDRs) AND WATER RECYCLED REQUIREMENTS (WRRs) FOR LEO J. VANDER LANS WATER TREATMENT FACILITY AND ALAMITOS BARRIER RECYCLED WATER PROJECT, LONG BEACH (WDR ORDER NO. R4-2005-0061, CI-8956, SWRCB ORDER WQ 2006-0001)

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on March 6, 2014, reviewed the tentative amendment, considered all the factors in the case, and adopted Order No. R4-2005-0061-A01. Order No. R4-2005-0061-A01 serves an amendment to your existing permit and expires on August 31, 2014. Section 13376 of the California Water Code requires that an application and Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date. A copy of the adopted order is enclosed.

The complete adopted Order will be sent only to the Discharger. However, these documents are available on the Regional Water Board's website for your review. The Regional Water Board's web address is www.waterboards.ca.gov/losangeles/.

If you have any questions, please contact Elizabeth Erickson at (213) 576-6665 or the undersigned at (213) 576-6616.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Hung".

David Hung, Chief
Watershed Regulatory Section

Enclosures

cc: See Mailing List

Mailing List

Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Nicole Kuenzi, State Water Resources Control Board, Office of Chief Counsel
Ann Heil, County Sanitation Districts of Los Angeles County
Peter Shellenbarger, Heal the Bay
Kirsten James, Heal the Bay
Kurt Souza, California Department of Public Health
Jeff O'Keefe, California Department of Public Health
Brian Bernados, California Department of Public Health

**State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

ORDER NO. R4-2005-0061-A01

**AMENDMENT TO WASTE DISCHARGE AND WATER RECYCLING
REQUIREMENTS FOR THE
ALAMITOS BARRIER RECYCLED WATER PROJECT**

IN ORDER NO. R4-2005-0061 (as amended by WQ-2006-0001)

ISSUED TO

**Water Replenishment District of Southern California and
Los Angeles County Department of Public Works**

(File No. 93-076)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board), finds:

1. The Alamitos Gap Seawater Intrusion Barrier (Barrier) is designed to protect the Central Groundwater Basin and portions of the Orange County Groundwater Basin from seawater intrusion through the creation of a pressure ridge by injection of fresh water into the Barrier.
2. The Water Replenishment District of Southern California (WRD) owns and manages the Vander Lans Water Treatment Facility (Vander Lans WTF or Facility) in the City of Long Beach, and is the purveyor of recycled water produced by the Facility. Since 2005, the Facility has produced up to 3 million gallons per day (mgd) of high quality advanced-treated recycled water that is injected into the Barrier in combination with potable water pursuant to Regional Water Board Order No. R4-2005-0061, as amended by WQ-2006-0001, issued by the State Water Quality Control Board.
3. WRD and Los Angeles County DPW (collectively referred to as Project Sponsors) propose to produce up to 8 mgd of advanced treated recycled water for injection into the Barrier to replace the potable water currently used. The expansion of the Facility will include an advanced oxidation process (AOP), which augments the existing ultraviolet irradiation system with the addition of hydrogen peroxide for removal of organics and enhanced disinfection. Chemical stabilization will be optimized following AOP to prevent corrosion of the barrier distribution and injection facilities. Construction of the Vander Lans WTF expansion is underway and is scheduled for completion in August 2014.
4. On October 23, 2012, the Project Sponsors submitted a Report of Waste Discharge requesting amendment of the Waste Discharge Requirements and Water Recycling Requirements (WDRs/WRRs) to reflect the proposal to expand the Facility and increase

the volume of recycled water injected into the Barrier. The Regional Water Board found the Report of Waste Discharge to be complete on November 6, 2012.

5. On October 23, 2012, the Project Sponsors submitted an amended Title 22 Engineering Report for the expansion of the Facility to the Regional Water Board and CDPH. The Engineering Report was later revised in response to comments received from CDPH. A final version was submitted on March 29, 2013, for review by CDPH and the Regional Water Board, and was approved by CDPH on April 4, 2013. On June 26, 2013, CDPH held a public hearing to consider findings of fact regarding the planned Facility expansion and conditions to be imposed on the Project to ensure protection of public health. There were no objections voiced concerning the Project at the public hearing. CDPH submitted to the Regional Water Board the Findings of Fact and Conditions for the Project adopted by CDPH on July 12, 2013. The CDPH found that the Project will not degrade the quality of the water in the receiving aquifers as a source of domestic water supply provided that all of the conditions are met.
6. One of the CDPH conditions for the expansion is for WRD to conduct a test of the Facility's AOP system prior to startup of full-scale operations to demonstrate that it achieves specific performance requirements under full-scale operating conditions (e.g., 8 mgd). The schedule for the testing is expected to occur from April to August 2014. To ensure compliance with existing Order No. R4-2005-0061 and the associated Monitoring and Reporting Program (MRP) while conducting the required testing, the following modifications to the existing Order are needed:
 - a. increase the permitted flow to 8 mgd during the period of testing;
 - b. modify the recycled water pH limits during the testing period in response to chemical stabilization assessments; and
 - c. evaluate the new equipment and electrical and mechanical systems.

The quality of recycled water during testing is expected to meet all other water quality requirements set forth in the Order.

7. The source water for the test of the Facility's AOP system will be disinfected tertiary recycled water from the Long Beach WRP. The production of tertiary recycled water at the Long Beach WRP is regulated by WRR Order No. 97-07206 and WDR Order R4-2007-0047.
8. By letter dated February 20, 2014, CDPH informed the Regional Water Board that it reviewed this amendment to Order No. R4-2005-0061 and had no comments.
9. The Project Sponsors prepared an Initial Study for the proposed project to inject 100 percent recycled wastewater into the Alamitos Barrier, with WRD serving as the lead agency. Based on the Initial Study, WRD determined that the proposed project would not have a significant impact on the environment. On March 9, 2012, WRD issued a revised Notice of Intent to adopt a Negative Declaration for the proposed project. The Notice of Intent was posted on the WRD website and in the Long Beach Press Telegram, with mailings to interested parties, and circulation through the State Clearinghouse (#20120205) and the Los Angeles County Clerk's Office. The 30 day public review process ended on April 9, 2012. WRD received and responded to four comments, none of which necessitated changes in the Negative Declaration. The Negative Declaration was adopted by the WRD Board of Directors on April 20, 2012,

and the project was approved by the WRD Board of Directors on May 4, 2012. The Negative Declaration was filed with the State Clearinghouse on May 7, 2012. No further comments or objections were received during the subsequent 30 days. An addendum to the Negative Declaration was approved by the WRD Board of Directors on May 14, 2013. The Project has completed the notification and review process required by CEQA. The Regional Water Board is a responsible agency for purposes of CEQA. The Regional Water Board has considered the Initial Study, which did not identify significant environmental effects with respect to water quality due to expansion of the Facility, including the testing phase.

10. Any person aggrieved by this action may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at:
http://waterboards.ca.gov/public_notices/petitions/water_quality
Or will be provided upon request.
11. The Regional Water Board has notified the Project Sponsors and interested agencies and persons of its intent to amend these water recycling requirements and waste discharge requirements, and has provided them with an opportunity to submit their written comments.
12. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the tentative Order amending the water recycling requirements and waste discharge requirements.

IT IS HEREBY ORDERED that Order No. R4-2005-0061, as amended by WQ-2006-0001, is hereby amended as follows:

1. On page 23 of Order No. R4-2005-0061, section III.7 is amended to read:

The pH of the product water for injection or recharge water shall be, at all times, within the range of 6.5 to 8.5 pH units, except during the AWTF expansion startup testing (per Section IV.6 of the accompanying Monitoring and Reporting Program) during which the pH of the product water shall be within the range of 6 to 9 pH units.
2. On page 25 of Order No. R4-2005-0061, section IV.1 is amended to read:

The total volume of recycled water recharged by injection shall not exceed 3.0 mgd based upon a monthly average (up to 3,360 acre-feet per year), except during the AWTF expansion startup testing period (per Section IV.6 of the accompanying Monitoring and Reporting Program) during which the total volume of recycled water recharged by injection shall not exceed 8 mgd based upon a monthly average.
3. On page T-17 of the Monitoring and Reporting Program for Order No. R4-2005-0061, subsection IV.6 is added to the Program, as follows:

6. Future AWTF Expansion Startup Testing

The AWTF was designed to accommodate future expansion to produce up to 8 mgd of advanced treated recycled water. Prior to the commissioning of the future expanded facility, WRD will conduct a series of startup tests from April to August 2014. The duration of the individual tests will vary from days to weeks, and the AWTF will operate between 3 to 8 mgd intermittently during the startup testing. The treatment level provided during the startup testing will consist of the treatment train required by this Order with the addition of hydrogen peroxide immediately upstream of UV to implement the advanced oxidation process as required by the California Department of Public Health (CDPH, formerly known as DHS)'s draft Groundwater Replenishment with Recycled Water Regulations (version dated June 26, 2013).

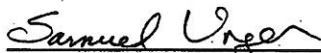
During the startup testing, the AWTF expansion team shall:

- A. Test all equipment signals, alarms, output devices, and communication devices to be certain that they are operating correctly; and
- B. Test all mechanical systems to verify that the facility can accept and satisfactorily treat recycled water at the new design capacity of 8 mgd.

Over the course of the startup testing, monitoring and reporting shall continue to be performed pursuant to the requirements of this MRP. The results of the startup testing shall be made available upon request of the Regional Water Board or CDPH.

4. All other requirements, limitations, and provisions of Order No. R4-2005-0061 not affected by the foregoing amendments remains in full force and effect.
5. These amendments to Order No. R4-2005-0061 take effect upon adoption of this Order to allow startup testing of the expanded facility. These amendments expire on August 31, 2014, but the expiration date may be extended by the Executive Officer up to 90 days if necessary to complete startup testing and for good cause shown. Expiration of these amendments will not terminate Order No. R4-2005-0061 as adopted by the Regional Water Board on September 1, 2005, and as amended by the State Water Board on April 5, 2006.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the Regional Water Board, Los Angeles Region, on March 6, 2014.



Samuel Unger, P.E.
Executive Officer

Environmental Information
Citations/References

1. 2002/2003 and 2003/2004 Storm Water Monitoring Report.
http://ladpw.org/wmd/NPDES/report_directory.cfm
2. Summary of Biologic Condition in Coyote Creek (from NPDES Annual Reports)

YEAR	COYOTE CREEK BENTHIC MACROINVERTEBRATE SOUTHERN CALIFORNIA INDEX OF BIOTIC INTEGRITY SCORE (0 to 100 scale)	
	Above LBWRP outfall (RA-1)	Below LBWRP outfall (RA)
2005	10.0	1.4
2006	0	0
2007	0	1.4
2008	0	0
2009	0	1.4
2010	5.7	1.4
2011	1.4	5.7
2012	1.4	1.4

3. Council for Watershed Health 2007 through 2011 Annual reports and the State of the Watershed Report on Surface Water Quality: San Gabriel River Watershed.
<http://www.watershedhealth.org/dataandreference/Document.aspx>
4. Rosenberger, K.J., J. Xu, E.D. Stein, M.A. Noble, and A.L. Gartner. 2007. Circulation and Physical Processes within the San Gabriel River Estuary during Summer 2005. U.S. Geological Survey. Open File Report 2007-1011
<http://pubs.usgs.gov/of/2007/1011/>
5. Total Maximum Daily Loads for Metals and Selenium in the San Gabriel River. USEPA Region IX. 03/26/07. Page 30
http://www.swrcb.ca.gov/rwgcb4/water_issues/programs/tmdl/Established/San%20Gabriel%20River%20Metals%20TMDL/final_sangabriel_metalstmdl_3-27-07.pdf