



MARK PESTRELLA, Director

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

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ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 1460  
ALHAMBRA, CALIFORNIA 91802-1460  
IN REPLY PLEASE  
REFER TO FILE: **SWM-0**

July 26, 2022

Ms. Celine Gallon  
401 Water Quality Certification Section  
California Regional Water Quality Control Board  
320 West 4th Street, Suite 200  
Los Angeles, CA 90013

Dear Ms. Gallon:

**2019-20 ANNUAL MAINTENANCE AND MONITORING REPORT FOR SOFT-BOTTOM CHANNEL MAINTENANCE CLEARING FOR REACHES 1-110 WASTE DISCHARGE REQUIREMENTS AND CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION ORDER NO. R4-2018-0099, FILE NO. 99-011**

The Los Angeles County Flood Control District (LACFCD) is pleased to submit the enclosed 2019-20 Annual Maintenance and Monitoring Report for the soft-bottom channel (SBC) maintenance clearing for reaches 1-110, per the Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certifications, Order No. R4-2018-0099, File No. 99-011.

The following are enclosed for your review and approval:

- The Annual Maintenance Report documentation (PDF files) can be accessed in this FTP server: [https://ftp.pw.lacounty.gov:8443/pub/fmd/2019-20\\_SBC\\_Annual\\_Maintenance\\_and\\_Monitoring\\_Report/RWQCB\\_Submittal/](https://ftp.pw.lacounty.gov:8443/pub/fmd/2019-20_SBC_Annual_Maintenance_and_Monitoring_Report/RWQCB_Submittal/)
- 1. Attachment No. 1 – Final 2019-20 SBC Maintenance Schedule
- 2. Attachment No. 2 – Pre- and Post-Clearing Mitigation Forms
- 3. Attachment No. 3 – Pre- and Post-Clearing Biological Resources Monitoring Form
- 4. Attachment No. 4 – Pre-Clearing Surveys and Reports
- 5. Attachment No. 5 – 2019-20 SBC Pre- and Post-Maintenance Photos
- 6. Attachment No. 6 – Water Quality Monitoring Summary Reports
- 7. Attachment No. 7 – Current Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certifications, Order No. R4-2018-0099, File No. 99-011
- 8. Attachment No. 8 – 2019 Maintenance Methodology Pilot Projects



Ms. Celine Gallon  
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## **SUMMARY OF 2019-20 MAINTENANCE ACTIVITIES**

LACFCD was responsible for maintenance of 109 SBC reaches during the 2019-20 SBC maintenance year. Of these 109 SBC reaches, LACFCD maintained a total of 88 reaches during the 2019-20 maintenance clearing period.

Per the attached Biological Resources Monitoring Forms, our biological consultant monitored our SBC maintenance activities and confirmed that maintenance activities were performed in full compliance with the conditions of our maintenance permits.

A pilot study was conducted upon the WDR requirements on Reaches 24, 25, 7, 19, 20, and 21. Detailed reports containing the results are enclosed.

LACFCD conducted additional hydraulic analyses on Reaches 28, 67, 69, 70, 75, 90, 100, and 110. Based on the results, LACFCD will make no changes to the approved maintenance plan for these reaches at this time.

This letter also serves as certification that no net loss of wetland habitat is associated with this project:

*"I declare under penalty of law that this document and all enclosures were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Executed on the 19<sup>th</sup> day of July, 2022 in Alhambra, California.

Ms. Celine Gallon  
July 26, 2022  
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If you have any questions regarding this report, please contact Mr. Ahmet Tatlioglu of my staff at (626) 458-7810 or [atatlioglu@pw.lacounty.gov](mailto:atatlioglu@pw.lacounty.gov).

Very truly yours,

MARK PESTRELLA, PE  
Director of Public Works

A handwritten signature in blue ink that reads "Jolene Guerrero". The signature is written in a cursive, flowing style.

JOLENE GUERRERO, PE  
Assistant Deputy Director  
Stormwater Maintenance Division

JR:sl

P:\pw01\pwpublic\fdpub\General\Jessica Rojas\2019-2020 SBC Annual Maintenance and Monitor Reporting\3.RWQCB Submittal\2019-20 Annual Report Cover Letter RWQCB.docx

Enc.

cc: Regional Water Quality Control Board (Valerie Carrillo Zara, Snejana Toneva )

**ATTACHMENT NO. 1**  
FINAL 2019-20 ANNUAL SOFT-BOTTOM CHANNEL  
MAINTENANCE SCHEDULE

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## FINAL 2019-2020 ANNUAL SOFT-BOTTOM CHANNEL MAINTENANCE SCHEDULE

Reach No.	Name of Channel Reach	Maintenance Yard	Sensitive Reach?	Maintenance Date		Comments/ Recommendations
				Start	Completion	
1	Bell Creek - MTD 963 M.C.I.	West	Non-sensitive	11/22/2019	11/23/2019	
2	Dry Canyon (Calabasas) PD T1845	West	Non-sensitive	9/3/2019	9/19/2019	
3	Santa Susana Ck M.C.I.	West	Non-sensitive	9/3/2019	9/3/2019	
4	Brown Creek	West	Non-sensitive	3/4/2020	4/1/2020	
5	Caballero Creek M.C.I. (West Fork)	West	Non-sensitive	10/17/2019	10/26/2019	
6	Caballero Creek M.C.I. (East Fork)	West	Non-sensitive	10/29/2019	11/1/2019	
7	Bull Creek M.C.	West	Sensitive	10/16/2019	11/7/2019	MMPP Reach
8	Hayvenhurst Drain - Project 470 Outlet	West	Non-sensitive	11/2/2019	11/21/2019	
9	Project 106 Outlet	West	Non-sensitive	9/25/2019	10/1/2019	MMPP Reach
10	Project No. 469	West	Non-sensitive	9/4/2019	9/25/2019	
12	Haines Canyon M.C.O.	West	Sensitive	1/31/2020	2/4/2020	
13	Project No. 5215 Unit 1	West	Non-sensitive	10/8/2019	10/8/2019	
14	May Channel M.C.O. (into Pacoima Canyon)	West	Sensitive	10/9/2019	10/10/2019	
15	Pacoima Wash	West	Non-sensitive	9/27/2019	10/7/2019	
16	Verdugo Wash - Las Barras Canyon	West	Non-sensitive	1/28/2020	1/28/2020	
18	Engleheard Channel	West	Non-sensitive	1/28/2020	1/28/2020	
19	Pickens Canyon	West	Non-sensitive	1/23/2020	1/24/2020	
20	Webber Channel (@ private bridge)	West	Non-sensitive	1/27/2020	1/27/2020	MMPP Reach
21	Webber Channel (@ downstream of bridge)	West	Non-sensitive	1/27/2020	1/27/2020	MMPP Reach
22	Halls Canyon	West	Non-sensitive	1/24/2020	1/27/2020	
24	Compton Creek	South	Non-sensitive	9/16/2019	12/18/2019	MMPP Reach
25a	Los Angeles River - Willow to PCH (East/Left Bank)	South	Non-sensitive	10/24/2019	11/14/2019	MMPP Reach
25b	Los Angeles River - Willow to PCH (West/Right Bank)	South	Non-sensitive	10/24/2019	11/14/2019	MMPP Reach
26	Project 740	South	Non-sensitive	9/13/2019	9/23/2019	
27	Wilmington Drain	South	Sensitive	9/16/2019	11/27/2019	
28	Triunfo Creek (PD T2200)	West	Sensitive	12/20/2019	1/8/2020	
29	Las Virgines Creek (PD T1684) M.C.I.	West	Non-sensitive	12/13/2019	12/18/2019	
32	Stokes Channel (PDT043)	West	Non-sensitive	9/27/2019	10/10/2019	
33	Medea Creek (PD T1378)	West	Non-sensitive	1/11/2020	1/25/2020	
35	Medea Creek - Main	West	Non-sensitive	12/10/2019	12/11/2019	
36	Cheseboro Inlet (PDT043)	West	Non-sensitive	12/6/2019	12/7/2019	
37	Medea - Cheseboro Outlet	West	Non-sensitive	12/12/2019	12/12/2019	
38	Lindero M.C.O.	West	Non-sensitive	10/12/2019	10/16/2019	
39	Beatty Channel Outlet @ SGR	East	Sensitive	10/1/2019	10/1/2019	
40a	(a) San Gabriel River – Santa Fe Dam to I-10 Freeway	East	Non-sensitive	9/30/2019	12/2/2019	
40b	(b) San Gabriel River – I-10 Freeway to Thienes Avenue	East	Sensitive	11/25/2019	12/16/2019	
41	Walnut Creek	East	Non-sensitive	9/27/2019	10/27/2019	
42	San Jose Creek d/s 1000' from end of concrete channel	East	Non-sensitive	1/7/2020	1/15/2020	
43a	(a) San Gabriel River- Upper	South	Sensitive	9/16/2019	11/22/2019	
43b	(b) San Gabriel River- Lower	South	Sensitive	9/16/2019	11/22/2019	

## FINAL 2019-2020 ANNUAL SOFT-BOTTOM CHANNEL MAINTENANCE SCHEDULE

Reach No.	Name of Channel Reach	Maintenance Yard	Sensitive Reach?	Maintenance Date		Comments/ Recommendations
				Start	Completion	
44	San Gabriel River - Rubber Dams	South	Non-sensitive	9/23/2019	1/31/2020	
45	Sand Canyon (PD T1307) Main Channel Inlet	West	Non-sensitive	10/7/2019	10/7/2019	
46	Sand Canyon (PD T1307) Main Channel Outlet	West	Non-sensitive	10/7/2019	10/7/2019	
47	Santa Clara River Main Channel (PD T1733-Unit 1)	West	Sensitive	10/4/2019	10/4/2019	
48	Mint Canyon Channel between Sierra Highway & Adon Avenue	West	Non-sensitive	11/7/2019	11/8/2019	
49	Mint Canyon Channel between Adon Avenue & Scherzinger Lane	West	Non-sensitive	11/7/2019	11/8/2019	
50	Mint Canyon Channel between Solamint & Soledad	West	Non-sensitive	No maintenance done - Due to City of Santa Clarita construction in the Reach		
51	Mint Canyon M.C.O. (PD 1894)/Santa Clara River – Main Channel	West	Sensitive	10/2/2019	10/15/2019	
52	Sierra Hwy Rd Drainage (CDR 523.203)	West	Non-sensitive	No maintenance done - Due to City of Santa Clarita construction in the Reach		
53	Santa Clara River Non-main Chnl. (PD 832) M.C.I.	West	Non-sensitive	10/2/2019	10/2/2019	
54	Santa Clara River Non-Main Channel (PD 832) Main Channel Outlet	West	Sensitive	10/3/2019	10/3/2019	
55	Santa Clara River Main Channel – Right Bank Reach (PD's 910, 832, 1758, & 1562 Unit 2)	West	Sensitive	10/2/2019	10/2/2019	
56	Santa Clara River Main Channel – Left Bank Reach (PD 832)	West	Sensitive	10/3/2019	10/3/2019	
57	Whites Canyon (PD T704 M.C.I.)	West	Non-sensitive	10/10/2019	10/10/2019	
58	Santa Clara River Main Channel – Right Bank Reach (PD 374)	West	Sensitive	10/1/2019	10/2/2019	
60	Santa Clara River Main Channel – Right Bank Reach (PD's 1339 and 374)	West	Sensitive	10/1/2019	10/2/2019	
61	Santa Clara River Main Channel (PD 659 & 754)	West	Sensitive	9/30/2019	10/15/2019	
63	Oak Ave Rd Drainage (CDR 523.081)	West	Sensitive	10/16/2019	10/22/2019	
64	Soledad Canyon Road Drain (CDR 523.071 D outlet)	West	Sensitive	10/16/2019	10/23/2019	
66	Santa Clara River Main Channel (PD 1538)	West	Sensitive	10/9/2019	10/9/2019	
67	Bouquet Canyon Upper (PD's 1201, 802, 700B, & 625)	West	Sensitive	9/3/2019	9/9/2019	
69	Bouquet Canyon Middle (PD's 722, 773, 1365, 1065, & 451)	West	Sensitive	9/3/2019	9/12/2019	
70	Bouquet Canyon Lower (PD's 544 & 345)	West	Sensitive	9/10/2019	9/12/2019	
71	Santa Clara River Main Channel (PD 1946)	West	Sensitive	9/27/2019	9/27/2019	
72	South Fork- SCR (Smizer Ranch M.C.I.)	West	Non-sensitive	9/30/2019	9/30/2019	
73	Wildwood Cyn Chnl (PD T361) M.C.I.	West	Non-sensitive	No Maintenance Done		
75	South Fork-Santa Clara River (PD's 725, 916, 1041, & 1300)	West	Sensitive	9/12/2019	9/27/2019	
76	Pico Canyon (PD 813)	West	Sensitive	9/16/2019	9/19/2019	
77	Newhall Creek Outlet	West	Sensitive	9/20/2019	9/20/2019	
78	Placerita Creek	Wes	Sensitive	9/20/2019	9/20/2019	
79	South Fork- Santa Clara River (Valencia Boulevard Bridge Stabilizer)	West	Sensitive	9/26/2019	9/27/2019	
80	South Fork-Santa Clara River (PD's 1947 & 1946)	West	Sensitive	9/26/2019	9/27/2019	
82	Santa Clara River Main Channel (PD 2278)	West	Sensitive	11/6/2019	11/6/2019	
86	Violin Canyon Main Channel Outlet	West	Sensitive	9/26/2019	9/27/2019	
87	Castaic- Old Road Drainage (CDR 525.021D) Outlet	West	Sensitive	10/10/2019	10/15/2019	
88	Hasley Canyon Upper (PD T1496)	West	Non-sensitive	10/29/2019	10/29/2019	
89	Hasley Canyon South Fork (PD T1496)	West	Non-sensitive	10/29/2019	10/29/2019	
90	Hasley Canyon Lower (North Fork PD T1496)	West	Non-sensitive	10/29/2019	10/29/2019	
91	San Martinez Chiquito Canyon Channel u/s of Kenington Road	West	Non-sensitive	11/4/2019	11/4/2019	

## FINAL 2019-2020 ANNUAL SOFT-BOTTOM CHANNEL MAINTENANCE SCHEDULE

Reach No.	Name of Channel Reach	Maintenance Yard	Sensitive Reach?	Maintenance Date		Comments/ Recommendations
				Start	Completion	
92	San Martinez Chiquito Canyon (North Fork) unnamed	West	Non-sensitive	11/4/2019	11/4/2019	
93	San Martinez Chiquito Canyon between Kenington Road and Val Verde Park	West	Non-sensitive	11/4/2019	11/4/2019	
94	San Martinez Chiquito Canyon between Val Verde Park to d/s of Madison Street	West	Non-sensitive	11/4/2019	11/4/2019	
95	Project No. 1224	West	Non-sensitive	11/12/2019	11/12/2019	
96	PD 1591, Calabasas	West	Non-sensitive	9/20/2019	9/26/2019	
97	PD T1982, Castaic Creek	West	Sensitive	10/17/2019	10/21/2019	
98	Walnut Creek – Channel Inlet	East	Non-sensitive	10/10/2019	10/10/2019	
99	Kagel Canyon – Tujunga Wash	West	Non-sensitive	9/6/2019	10/25/2019	
100	Dry Canyon, Calabasas Creek Inlet	West	Non-sensitive	11/26/2019	11/26/2019	
101	Violin Canyon (PD 2312)	West	Non-sensitive	No maintenance done		
102	Violin Canyon (PD 2275)	West	Non-sensitive	No maintenance done		
103	Bouquet Canyon Channel (PD 2225)	West	Sensitive	No maintenance done		
104	Castaic Creek (PD 2441 Unit 2)	West	Sensitive	No maintenance done		
105	San Francisquito Canyon Channel (PD 2456)	West		No maintenance done		
108	Pico Canyon ( PD 2528)	West	Non-sensitive	10/28/2019	11/13/2019	
109	Santa Clara River - South Bank West of Mcbean Parkway (MTD1510)	West	Sensitive	No maintenance done		
110	Hasley Canyon Channel (PD2262)	West	Sensitive	No maintenance done		
112 Upper	Ballona Creek	South	Non-sensitive	12/9/2019	12/20/2019	Vegetation clearing only above Ordinary High Water Mark (OHWM)
112 Lower	Ballona Creek	South	Non-sensitive	No maintenance done		
113	Dominguez Channel	South	Non-sensitive	No maintenance done		
114	Los Angeles River	South	Non-sensitive	11/15/2019	12/31/2019	
115	San Gabriel River	South	Sensitive	10/1/2019	12/9/2019	Vegetation clearing only above Ordinary High Water Mark (OHWM)
116	Los Cerritos Channel	South	Non-sensitive	No maintenance done		
117	Centinel Creek	South	Non-sensitive	No maintenance done		
118	Rustic Canyon	South	Non-sensitive	11/12/2019	12/31/2019	Hand clearing vegetation clearing only above Ordinary High Water Mark (OHWM)
119	Rivas Canyon	South	Non-sensitive	11/12/2019	12/31/2019	Hand clearing vegetation clearing only above Ordinary High Water Mark (OHWM)
120	Jake's Way (PD 2496)	West	TBD	No maintenance done		
121	San Francisquito Creek (PD 2271)	West	TBD	No maintenance done		

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**ATTACHMENT NO. 2**  
PRE- AND POST-CLEARING MITIGATION FORMS

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LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 1 Bell Creek MTD 963**

**T.G.: 529-D5**

**Permit Requirements:**

*The channel clearing work will involve hand cutting a 15-foot-wide "tunnel" through the vegetation to the right-of-way boundary to train flows to the center of the channel inlet.*

*The operator shall not impact the 0.27-acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

All power tools used to remove vegetation from soft  
bottom are fitted with approved exhaust so as not  
to affect air quality

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Project start date: 11/22/19

Project end date: 11/23/19

Completed by: Name: Ryan Murello Title: CREW LEADER Date: 11/22/19

Approved by: Name: Baltazar Moreno Title: PCCS Date: 11/26/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No. 1 Bell Creek MTD 963**

**T.G.: 529-D5**

**Permit Requirements:**

*The channel clearing work will involve hand cutting a 15-foot-wide "tunnel" through the vegetation to the right-of-way boundary to train flows to the center of the channel inlet.*

*The operator shall not impact the 0.27-acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

All power tools such as weed eaters, hedge trimmers, pole saws etc. are fitted with approved mufflers. Work was not started before 8:00 am so as not disturb neighbors,

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

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Completed by: Name: Ryan Mueller

Title: CREW LEADER Date: 11/22/19

Approved by: Name: Baltazar Moreno

Title: FCS Date: 11/24/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach #: **Reach No. 1 Bell Creek MTD 963**      T.G.: **529-D5**

**Permit Requirements:**

*The channel clearing work will involve hand cutting a 15-foot-wide "tunnel" through the vegetation to the right-of-way boundary to train flows to the center of the channel inlet.*

*The operator shall not impact the 0.27-acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

BROOM WAS PLACED AT END OF REACH.

Biologist on site:  Yes     No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: Ryan Muzillo

Title: CREW LEADER Date: 11/22/19

Approved by: Name: Baltazar Moreno

Title: FCS Date: 11/26/19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name BELL CREEK MTD 963

Reach Number # 1

Date	Air	H2O	Noise	Comment	Initial
11/22	✓	✓	✓	PLACED BEAM AT END OF REACH	R.M
11/23	✓	✓	✓	COMPLETED AND REMOVED BEAM	R.M

ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach # 2 Dry Canyon (Calabasas) (PD T1845)** T.G.: 559-G5

**Permit Requirements:**

*The channel clearing work will involve maintaining and clearing a 20-foot-wide path along the centerline of the channel. A canopy of vegetation (trees along both banks) will be left in place. Hand clearing will be performed annually to keep the center portion of the channel clear and vegetation will be removed from the openings in the crib walls to the extent necessary to prevent structural damage to the crib walls.*

*The Operator shall not impact the 0.39-acre of vegetation that was allowed to remain in 1997. Trees with a 3-inch DBH or greater shall not be removed. All exotics shall be selectively removed from the area during maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS (WEED EATERS, HEDGE TRIMMERS, CHAIN SAWS, ETC.) ARE FITTED WITH CERTIFIED EXHAUST TO MEET STATE STANDARDS.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below).
- Mitigation measure is not in compliance. Further action is required. (Please explain below).

**Comments/Revisions:**

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Project start date: 9/3/19 Project end date: 9/19/19

Completed by: Name: Ryan Morillo Title: CREW LEADER Date: 9/19/19

Approved by: Name: Baltazar Moreno Title: FCCS Date: 9/20/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach # 2 Dry Canyon (Calabasas) (PD T1845)** T.G.: 559-G5

**Permit Requirements:**

*The channel clearing work will involve maintaining and clearing a 20-foot-wide path along the centerline of the channel. A canopy of vegetation (trees along both banks) will be left in place. Hand clearing will be performed annually to keep the center portion of the channel clear and vegetation will be removed from the openings in the crib walls to the extent necessary to prevent structural damage to the crib walls.*

*The Operator shall not impact the 0.39-acre of vegetation that was allowed to remain in 1997. Trees with a 3-inch DBH or greater shall not be removed. All exotics shall be selectively removed from the area during maintenance activities.*

**Description of Activity/Method of Implementation:**

All POWER TOOLS ARE EQUIPPED WITH NOISE SUPPRESSANT  
MUFFLERS FOR NOISE REDUCTION.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: Ryan Murrell

Title: CREW LEADER Date: 9/19/19

Approved by: Name: Baltazar Morens

Title: PLCS Date: 9/20/19



Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name DRY Canyon PD 1845  
 Reach Number #2

Date	Air	H2O	Noise	Comment	Initial
9/3/19	✓	✓	✓	CHECKED FOR BIRD NESTING AND PLACED BEAM AT END OF STREAMBED	RM
9/4/19	✓	✓	✓		RM
9/5/19	✓	✓	✓		RM
9/6/19	✓	✓	✓		RM
9/7/19	✓	✓	✓		RM
9/10/19	✓	✓	✓		RM
9/11/19	✓	✓	✓		RM
9/12/19	✓	✓	✓		RM
9/13/19	✓	✓	✓		RM
9/14/19	✓	✓	✓		RM
9/17/19	✓	✓	✓		RM
9/18/19	✓	✓	✓		RM

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name DRY Canyons PD 1845  
 Reach Number #2

Date	Air	H2O	Noise	Comment	Initial
9/19/19	✓	✓	✓		RMA

**2019-2020**

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**

2019-2020

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 3 Santa Susanna Creek M.C.I.** T.G.: 499-J2

**Permit Requirements:**

*Hand cutting and clearing vegetation and trees will be done in an 18-foot-wide area by 75-foot-long area at the inlet to the channel. Oak trees will be left in place.*

**Description of Activity/Method of Implementation:**

Soft Bottom Clearing Work Was Performed  
USING Hand tools. (weed whips & Hedgers)

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

BIRD SURVEY PERFORMED BEFORE THE WORK STARTED.  
NO BIRDS OR NESTING LOCATED. NO EXOTIC PLANTS LOCATED

Project start date: 9-3-19 Project end date: 9-3-19

Completed by: Name: Jorge Jaramillo Title: Crew Leader Date: 9-3-19

Approved by: Name: Michael A. Olimpio Title: FCCS Date: 09-3-2019  
*mas*

# 2019-2020

## LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT MITIGATION MONITORING PROGRAM

2019-2020

### Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) NONE

Location/Channel Reach#: # **Reach No. 3 Santa Susanna Creek M.C.I.**      T.G.: **499-J2**

#### Permit Requirements:

*Hand cutting and clearing vegetation and trees will be done in an 18-foot-wide area by 75-foot-long area at the inlet to the channel. Oak trees will be left in place.*

#### Description of Activity/Method of Implementation:

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input checked="" type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing                     |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                                    |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                             |

- Disposition:    \_\_\_\_\_ Mitigation measure has been implemented. No further action is required.
- \_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- \_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

#### Comments/Revisions:

SOFT BOTTOM IS DRY, NO WATER PRESENT.

Biologist on site:     Yes     No      Date: \_\_\_\_\_

#### Biologist Comments/Instructions:

Completed by: Name: Jorge Jaramillo      Title: Crew Leader.      Date: 9-3-19

Approved by: Name: Michael A. Olimpio      Title: FCCS      Date: 09-3-19

# 2019-2020

## LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT MITIGATION MONITORING PROGRAM

2019-2020

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: #: **Reach No. 3 Santa Susanna Creek M.C.I.** T.G.: 499-J2

### Permit Requirements:

*Hand cutting and clearing vegetation and trees will be done in an 18-foot-wide area by 75-foot-long area at the inlet to the channel. Oak trees will be left in place.*

### Description of Activity/Method of Implementation:

NOISE WAS MINIMAL.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

### Comments/Revisions:

BEFORE during AND AFTER PHOTO'S TAKEN AND SUBMITTED INTO E54.

Completed by: Name: Jorge Jaramillo

Title: Crew Leader Date: 9-3-19

Approved by: Name: Michael G. Myer

Title: FCCS Date: 09-03-19

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

2019-2020

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 4 Browns Creek** T.G.: 500-B2

**Permit Requirements:**

*Mechanical equipment will be used to keep clear all vegetation from bank to bank within the rail and timber revetment.*

**Description of Activity/Method of Implementation:**

WORK WAS PERFORMED USING HAND TOOL TO PREVENT FIRES THIS YEAR.  
WEED TRIMMERS, HEDGE TRIMMERS RAKES AND PITCH FORKS USED.  
BRUSH WAS LOADED ONTO DUMP TRUCKS

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

BIRD SURVEY PERFORMED BEFORE THE WORK STARTED.  
NO BIRDS OR NESTING OR EXOTIC PLANTS LOCATED.

Project start date: \_\_\_\_\_

Project end date: \_\_\_\_\_

Completed by: Name: JORGE JARAMILLO Title: P.W.C.L Date: 3-7-2020

Approved by: Name: Michael A. Olimpio Title: FCCS Date: 3-21-2020

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

2019-2020

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 4 Browns Creek**      T.G.: **500-B2**

**Permit Requirements:**

*Mechanical equipment will be used to keep clear all vegetation from bank to bank within the rail and timber revetment.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling       ESC2 Preservation of Existing Vegetation
- ESC21 Dust Control       ESC22 Temporary Stream Crossing
- ESC31 Temporary Drains and Swales       ESC50 Silt Fence
- ESC51 Straw Bale Barriers       ESC52 Sand Bag Barriers

- Disposition:  Mitigation measure has been implemented. No further action is required.
- \_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- \_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NONE NO BIRDS OR NESTING IN AREA.

Biologist on site:  Yes     No      Date: \_\_\_\_\_

Biologist Comments/Instructions:  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Jorge Jaramillo      Title: RWCL      Date: 3-7-20

Approved by: Name: Michael A. Olimpio      Title: FCCS      Date: 3-21-20

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

2019-2020

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 4 Browns Creek T.G.: 500-B2**

**Permit Requirements:**

*Mechanical equipment will be used to keep clear all vegetation from bank to bank within the rail and timber revetment.*

**Description of Activity/Method of Implementation:**

~~Minimum~~ NO MECHANICAL EQUIPMENT USE TO LOAD DUMP TRUCK. HAND  
LOADING WITH PITCH FORKS. LIGHT ADVISE WITH WEED TRIMMERS AND  
HEDGERS.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NONE

Completed by: Name: Jorge Tarami / D

Title: P.W. C.L Date: 3-7-20

Approved by: Name: Michael A. Olimpio

Title: FCCS Date: 3-21-20



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 5 Caballero M.C.I. (West Fork)**      T.G.: **560-J5**

**Permit Requirements:**

*The vegetation clearing work will involve hand clearing a 20-foot-wide path along the centerline of the channel.*

*The vegetation (0.36 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

HAY BOOMS ARE IN PLACE DOWN STREAM. NO RUNNING WATER.

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ryan Norillo      Title: CREW LEADER      Date: 10/17/19

Approved by: Name: Baltazar Moreno      Title: Fish      Date: 10/18/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 5 Caballero M.C.I. (West Fork)** T.G.: 560-J5

**Permit Requirements:**

*The vegetation clearing work will involve hand clearing a 20-foot-wide path along the centerline of the channel.*

*The vegetation (0.36 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities*

**Description of Activity/Method of Implementation:**

ALL VEGETATION WAS REMOVED BY HAND. LIMITED USE OF  
POWER TOOLS THAT ARE FITTED WITH APPROVED EXHAUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Project start date: 10/17/19

Project end date: 10/26/19

Completed by: Name: Ryan Murrello Title: CREW LEADER Date: 10/17/19

Approved by: Name: Baltazar Moreno Title: FCCS Date: 10/18/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 5 Caballero M.C.I. (West Fork) T.G.: 560-J5**

**Permit Requirements:**

*The vegetation clearing work will involve hand clearing a 20-foot-wide path along the centerline of the channel.*

*The vegetation (0.36 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS FITTED WITH APPROVED MUFFLERS. ALL  
VEGETATION REMOVED AND LOAD BY HAND INTO DUMP TRUCK,

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: Ryan Murillo

Title: CREW LEADER Date: 10/17/19

Approved by: Name: Baltazar Moreno

Title: FCCS Date: 10/18/19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name CABALLERO CREEK (WEST)

Reach Number #5

Date	Air	H2O	Noise	Comment	Initial
10/17/19	✓	✓	✓	HAY BOOM AT END OF REACH	R.M
10/18/19	✓	✓	✓		R.M
10/19/19	✓	✓	✓		R.M
10/22/19	✓	✓	✓		R.M
10/23/19	✓	✓	✓		R.M
10/24/19	✓	✓	✓		R.M
10/26/19	✓	✓	✓	WEST SIDE COMPLETED	R.M

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 6 Caballero Creek (East Fork)** T.G.: 560-J5

**Permit Requirements:** *The vegetation clearing work will involve hand clearing a 20-foot-wide path along the centerline of the channel.*

*The vegetation (0.36 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities. Exotics shall be removed during maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS SUCH AS WEED EATERS, HEDGE TRIMMERS AND POLE SAWS  
ARE FITTED WITH APPROVED EXHAUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Project start date: 10/29/19 Project end date: 11/1/19

Completed by: Name: Ryan Muzillo Title: CREW LEADER Date: 10/29/19  
Approved by: Name: Baltazar Moreno Title: FCCS Date: 10/30/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 6 Caballero Creek (East Fork)**      T.G.: **560-J5**

**Permit Requirements:** *The vegetation clearing work will involve hand clearing a 20-foot-wide path along the centerline of the channel.*

*The vegetation (0.36 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities. Exotics shall be removed during maintenance activities.*

**Description of Activity/Method of Implementation:**  
Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling       ESC2 Preservation of Existing Vegetation
- ESC21 Dust Control       ESC22 Temporary Stream Crossing
- ESC31 Temporary Drains and Swales       ESC50 Silt Fence
- ESC51 Straw Bale Barriers       ESC52 Sand Bag Barriers

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required. (Please explain below.)  
 Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**  
STRAW BALE IS PLACED AT END OF REACH

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ryan Mucillo      Title: CREW LEADER      Date: 10/29/19  
Approved by: Name: Baltazar Moreno      Title: FCS      Date: 10/30/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 6 Caballero Creek (East Fork)** T.G.: **560-J5**

**Permit Requirements:** *The vegetation clearing work will involve hand clearing a 20-foot-wide path along the centerline of the channel.*

*The vegetation (0.36 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities. Exotics shall be removed during maintenance activities.*

**Description of Activity/Method of Implementation:**

All VEGETATION REMOVED USING SMALL POWER TOOLS FITTED  
WITH APPROVED EXHAUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: Ryan Muzillo

Title: CREW LEADER Date: 10/29/19

Approved by: Name: Baltazar Moreno

Title: PCCS Date: 10/30/19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name Cabrero Creek (East)

Reach Number #-C

Date	Air	H2O	Noise	Comment	Initial
10/29/19	✓	✓	✓	STRAW BEAM AT END OF REACH	R.M.
11/1/19	✓	✓	✓	Completed	R.M.



2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

2019-2020

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 7 Bull Creek M.C.O**

**T.G.: 531-D7**

**Permit Requirements:** *The work will involve hand clearing dead vegetation and trimming tree limbs along the banks to ensure clear flow within the channel. This work will be done only in the first 400 feet of natural channel downstream from the concrete channel outlet to ensure that flow does not back up into the concrete channel upstream of Victory Boulevard.*

The trimming and removal of dead vegetation along the banks within the 400 linear feet shall not exceed a width of 15 feet on each bank. The Operator shall not impact the 1.45 acres of vegetation that was allowed to remain in 1997.

**Description of Activity/Method of Implementation:**

*SMALL POWER TOOLS WERE USED TO CUT & DEBRUSH VEGETATION. Loppers & Machetes were also used.*

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

*PHOTOS WERE TAKEN - BEFORE - DURING & AFTER.*

Project start date: 10-16-19

Project end date: 11-7-19

Completed by: Name: Jorge Jaramilla Title: P.W. CL. Date: 10-16-19

Approved by: Name: Michael A. Olympia Title: FCOS Date: 10-16-19  
11-07-19

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

2019-2020

Impact Issue: Hydrology and Water Quality

Trash/Debris Removed (Tons) 1 ton

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) MINIMAL

Location/Channel Reach#: Reach No. 7 Bull Creek M.C.O

T.G.: 531-D7

**Permit Requirements:** *The work will involve hand clearing dead vegetation and trimming tree limbs along the banks to ensure clear flow within the channel. This work will be done only in the first 400 feet of natural channel downstream from the concrete channel outlet to ensure that flow does not back up into the concrete channel upstream of Victory Boulevard.*

The trimming and removal of dead vegetation along the banks within the 400 linear feet shall not exceed a width of 15 feet on each bank. The Operator shall not impact the 1.45 acres of vegetation that was allowed to remain in 1997.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling
- ESC2 Preservation of Existing Vegetation
- ESC21 Dust Control
- ESC22 Temporary Stream Crossing
- ESC31 Temporary Drains and Swales
- ESC50 Silt Fence
- ESC51 Straw Bale Barriers
- ESC52 Sand Bag Barriers

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

BMP WAS USED.

Biologist on site:  No  Yes

Date: 10-16-19

**Biologist Comments/Instructions:**

Completed by: Name: Jorge Jaramilla Title: P.W. C.L. Date: 10-16-19

Approved by: Name: Michael A. Olvera Title: FCCS Date: 11-07-19

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

2019-2020

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 7 Bull Creek M.C.O**

T.G.: 531-D7

**Permit Requirements:** *The work will involve hand clearing dead vegetation and trimming tree limbs along the banks to ensure clear flow within the channel. This work will be done only in the first 400 feet of natural channel downstream from the concrete channel outlet to ensure that flow does not back up into the concrete channel upstream of Victory Boulevard.*

The trimming and removal of dead vegetation along the banks within the 400 linear feet shall not exceed a width of 15 feet on each bank. The Operator shall not impact the 1.45 acres of vegetation that was allowed to remain in 1997.

**Description of Activity/Method of Implementation:**

*Noise was minimal, we used small power tools for a limited amount of time. The rest of vegetation was cut using loppers & machetes.*

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Jorge Jaramillo

Title: P.W.C.L. Date: 11-7-19 <sup>JJ.</sup>

Approved by: Name: Michael A. Olimpio

Title: FCCS Date: 11-07-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name BULL CREEK

Reach Number #7

Date	Air	H2O	Noise	Comment	Initial
10-16-19	X		X		J.J.
10-17-19	X		X		J.J.
10-25-19	X		X		J.J.
10-29-19	X		X		J.J.
10-30-19	X		X		J.J.
11-7-19	X		X		J.J.

*Mao*

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 8 Project 470 Outlet**

**T.G.: 561-E3**

**Permit Requirements:**

All vegetation in the channel will be kept clear during the dry season using hand-clearing methods.

**Description of Activity/Method of Implementation:**

ALL VEGITATION WAS REMOVED WITH HAND TOOLS AND  
POWER TOOLS THAT ARE FITTED WITH APPROVED EXHAUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Project start date: 11/2/19

Project end date: 11/21/19

Completed by: Name: Ryan Muello Title: CREW LEADER Date: 11/21/19

Approved by: Name: Baltazar Moreno Title: PECS Date: 11/22/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 8 Project 470 Outlet**      T.G.: 561-E3

**Permit Requirements:**

All vegetation in the channel will be kept clear during the dry season using hand-clearing methods.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- \_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- \_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

STRAW BALE PUT IN PLACE AT END OF REACH.

Biologist on site:  No  Yes

Date: 11/2/19

**Biologist Comments/Instructions:**

ADDED ANOTHER STRAW BALE BEFORE EXISTING ONE.

Completed by: Name: Ryan Murrell

Title: CREW LEADER Date: 11/21/19

Approved by: Name: Baltazar Moreno

Title: FCS Date: 11/22/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 8 Project 470 Outlet**

**T.G.: 561-E3**

**Permit Requirements:**

All vegetation in the channel will be kept clear during the dry season using hand-clearing methods.

**Description of Activity/Method of Implementation:**

REMOVED ALL VEGITATION WITH HAND AND POWER TOOLS  
THAT ARE FITTED WITH APPROVED MUFFLERS.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

ALL WORK WAS DONE AFTER 8:00 AM SO NOT TO  
DISTURB OUR NEIGHBORS.

Completed by: Name: Ryan Murrello

Title: CREW LEADER Date: 11/21/19

Approved by: Name: Baltazar Moreno

Title: PECS Date: 11/22/19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name HARVEST DRAIN  
 Reach Number #8

Date	Air	H2O	Noise	Comment	Initial
11/2/19	✓	✓	✓	PLACED BOOM AT END OF REACH	R.M.
11/5/19	✓	✓	✓		R.M.
11/6/19	✓	✓	✓		R.M.
11/7/19	✓	✓	✓		R.M.
11/8/19	✓	✓	✓		R.M.
11/9/19	✓	✓	✓		R.M.
11/16/19	✓	✓	✓		R.M.
11/19/19	✓	✓	✓		R.M.
11/21/19	✓	✓	✓	COMPLETED AND REMOVED BOOM	R.M.



2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

2019-2020

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 9 Project 106 Outlet**

**T.G.: 531-G7**

**Permit Requirements:**

Brush and tree trimming will be performed where needed to keep growth at the levels that were left in November 1997.

Impacts shall not exceed 0.12 acre.

**Description of Activity/Method of Implementation:**

HAND CLEARING WITH TOOLS SUCH AS HAND TRIMMERS, MACHETES AND  
LOPPERS. GAS POWER 4-STROKE WEED TRIMMERS AND HEDGERS USE TO  
CLEAR VEGETATION.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

THE WORK AREA AIR QUALITY WAS NOT IMPACTED DUE TO HAND  
CLEARING.

Project start date: 09-25-2020

Project end date: 10-01-2019

Completed by: Name: Jorge Jaramillo Title: PWCL Date: 10-01-2019

Approved by: Name: Michael A. Olympia Title: FCCS Date: 10-01-2019

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

2019-2020

Impact Issue: **Hydrology and Water Quality** Trash/Debris Removed (Tons) 1.5

Mitigation Measure #: 2 Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 9 Project 106 Outlet** T.G.: 531-G7

**Permit Requirements:**

Brush and tree trimming will be performed where needed to keep growth at the levels that were left in November 1997.

Impacts shall not exceed 0.12 acre.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling
- ESC21 Dust Control
- ESC31 Temporary Drains and Swales
- ESC51 Straw Bale Barriers
- ESC2 Preservation of Existing Vegetation
- ESC22 Temporary Stream Crossing
- ESC50 Silt Fence
- ESC52 Sand Bag Barriers

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

Comments/Revisions: BMP INSTALLED.

Biologist on site:  No  Yes Date: \_\_\_\_\_

Biologist Comments/Instructions: \_\_\_\_\_

Completed by: Name: Jorge Jimenez Title: DW CL Date: 10-01-2019  
Approved by: Name: Michael G. Lopez Title: FCS Date: 10-07-2019

2019-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

2019-2020

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 9 Project 106 Outlet** T.G.: 531-G7

**Permit Requirements:**

Brush and tree trimming will be performed where needed to keep growth at the levels that were left in November 1997.

Impacts shall not exceed 0.12 acre.

**Description of Activity/Method of Implementation:**

NO EXCESSIVE NOISE CREATED DUE TO HAND CLEARING ONLY.  
ALL POWER TOOLS AND DUMP TRUCK ARE EQUIPPED WITH APPROVED  
EXHAUST MUFFLERS AS REQUIRED BY STATE AND FEDERAL LAWS.  
DUMP TRUCK WAS PARKED WITH ENGINE OFF.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

BEFORE DURING AND AFTER PHOTOS WERE TAKEN.

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Completed by: Name: Jorge Jaramillo

Title: PW CL Date: 10-01-2019

Approved by: Name: Michael G. Duffin

Title: FCC 9 Date: 10-01-2019

2019-2020

WOODLEY DRAIN F200 2067 TASK – AF 22 WO# 6293061

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

2019-2020

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 10 Project No. 469**

T.G.: 531- J7 TO 561- F1

**Permit Requirements:**

*Due to a recent toxic spill, no work was performed in November 1997, since virtually all of the vegetation was killed. Vegetation and dead vegetation will be mechanically removed to the extent necessary to prevent restricting flows in the storm drain upstream of Victory Boulevard. This will require clearing the channel for approximately 4,000 feet downstream of Victory Boulevard. The reach will be maintained clear of all vegetation during the dry season.*

*The Operator shall not impact 2.11 acres of vegetation that was allowed to remain in the channel in 1997.*

**Description of Activity/Method of Implementation:**

Brush was Cleared with Hand tools, weed whips, Hedgers, Pitch Forks. Power tools were fueled over absorbant Pads.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

Bird survey was performed Before work started.

Project start date: 9-5-19

Project end date: 9-25-19

Completed by: Name: George Jaramilla Title: B.P.W.-C.L. Date: 9-25-19

Approved by: Name: Michelle D. Dykes Title: FCCS Date: 9-25-19

2019-2020

WOODLEY DRAIN F200 2067 TASK – AF 22 WO# 6293061

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT

MITIGATION MONITORING PROGRAM

Compliance Verification Form

2019-2020

Impact Issue: Hydrology and Water Quality

Trash/Debris Removed (Tons) 2.5

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) NONE

Location/Channel Reach #: Reach No. 10 Project No. 469 T.G.: 531- J7 TO 561- F1

Permit Requirements: Due to a recent toxic spill, no work was performed in November 1997, since virtually all of the vegetation was killed. Vegetation and dead vegetation will be mechanically removed to the extent necessary to prevent restricting flows in the storm drain upstream of Victory Boulevard. This will require clearing the channel for approximately 4,000 feet downstream of Victory Boulevard. The reach will be maintained clear of all vegetation during the dry season.

The Operator shall not impact 2.11 acres of vegetation that was allowed to remain in the channel in 1997.

Description of Activity/Method of Implementation:

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling (checked)
ESC2 Preservation of Existing Vegetation
ESC21 Dust Control
ESC22 Temporary Stream Crossing
ESC31 Temporary Drains and Swales
ESC50 Silt Fence
ESC51 Straw Bale Barriers
ESC52 Sand Bag Barriers

Disposition: X Mitigation measure has been implemented. No further action is required.
Mitigation measure is not fully implemented. Further action is required.
Mitigation measure is not in compliance. Further action is required.

Comments/Revisions:

no BMP needed.

Biologist on site: Yes No (checked)

Date:

Biologist Comments/Instructions:

Completed by: Name: Jorge Jaramilla

Title: P.W.C.L. Date: 9-25-19

Approved by: Name: Michael G. Olyson

Title: FCCS Date: 9-25-19

2019-2020

WOODLEY DRAIN F200 2067 TASK – AF 22 WO# 6293061

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT

MITIGATION MONITORING PROGRAM

Compliance Verification Form

2019-2020

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No. 10 Project No. 469 T.G.: 531- J7 TO 561- F1**

**Permit Requirements:** *Due to a recent toxic spill, no work was performed in November 1997, since virtually all of the vegetation was killed. Vegetation and dead vegetation will be mechanically removed to the extent necessary to prevent restricting flows in the storm drain upstream of Victory Boulevard. This will require clearing the channel for approximately 4,000 feet downstream of Victory Boulevard. The reach will be maintained clear of all vegetation during the dry season.*

*The Operator shall not impact 2.11 acres of vegetation that was allowed to remain in the channel in 1997.*

**Description of Activity/Method of Implementation:**

small power tools were used to cut All Brush At  
Bottom of Rock Section.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

PHOTOS were taken Before, During & After work  
was performed.

Completed by: Name: Jorge Jaramillo

Title: PWCL Date: 9-25-19

Approved by: Name: Michael A. [Signature]

Title: FCCS Date: 9-25-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 12 Haines Cyn M.C.O** T.G.: 503-F2

**Permit Requirements:**

*Hand clearing of all vegetation will be used to keep the reach clear of vegetation, except for vegetation that was allowed to remain. This process will be repeated annually to prevent growth from restricting flows at the outlet to the channel.*

**Description of Activity/Method of Implementation:**

Mowed by hand using small tools, weed-eaters, and hedgers. We cut and remove invasive plants and vegetation. Air quality is good

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

None

Project start date: 1/31/20

Project end date: 2/4/20

Completed by: Name: Mauricio Canter Title: P.W.C.L Date: 1/31/20

Approved by: Name: Santiago Vazquez Title: FCCS Date: 1/31/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 2

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 300

Location/Channel Reach #: **Reach No. 12 Haines Cyn M.C.O**

T.G.: 503-F2

**Permit Requirements:**

*Hand clearing of all vegetation will be used to keep the reach clear of vegetation, except for vegetation that was allowed to remain. This process will be repeated annually to prevent growth from restricting flows at the outlet to the channel.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Biologist on site:  Yes  No

Date: 1/31/20

**Biologist Comments/Instructions:**

None

Completed by: Name: Mauricio Carter

Title: P.W.C.L Date: 1/31/20

Approved by: Name: Santiago Vargas

Title: RCS Date: 1/31/20



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No. 12 Haines Cyn M.C.O**

**T.G.: 503-F2**

**Permit Requirements:**

*Hand clearing of all vegetation will be used to keep the reach clear of vegetation, except for vegetation that was allowed to remain. This process will be repeated annually to prevent growth from restricting flows at the outlet to the channel.*

**Description of Activity/Method of Implementation:**

The removal of vegetation is performed by cutting out  
vegetation from soft bottom outlet. We remove vegetation  
and debris using small hand tools

- Disposition:  Mitigation measure has been implemented. No further action is required.  
N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Mauricio Canter Title: P.W.C.L Date: 1/31/20  
Approved by: Name: Santiago Vazquez Title: FCCS Date: 1/31/20

# Los Angeles County Channel Maintenance Project

## Mitigation Monitoring Program

Reach Name Haines Canyon Channel # 8  
 Reach Number 12

Date	Air	H2O	Noise	Comment	Initial
1/31/00	Good	None	95 DB	_____	N/C

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.13 Project 5215 unit 1** T.G.: 503-B2

**Permit Requirements:**

*The channel clearing work involve mechanical clearing the earthen outlet channel with a backhoe and hand cutting all vegetation from the first 250 feet of channel bottom (12-foot wide) downstream at the end of Christie Avenue. Bank vegetation and the remaining 300 feet of channel will not be cleared.*

**Description of Activity/Method of Implementation:**

ALL CLEARING DONE BY HAND, USED STIHL TWO CYCLE  
ENGINE TRIMMERS, AND HAND TOOLS

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

VEGETATION CLEARING DONE BY HAND

Project start date: 10/8/2019

Project end date: 10/8/2019

Completed by: Name: RICHARDO ALMAZA Title: PWMW Date: 10/8/2019

Approved by: Name: MAURILIO TORRES Title: FCCS Date: 10/8/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 3 YARDS

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.)     

Location/Channel Reach #: **Reach No.13 Project 5215 unit 1**      T.G.: 503-B2

**Permit Requirements:**

*The channel clearing work involve mechanical clearing the earthen outlet channel with a backhoe and hand cutting all vegetation from the first 250 feet of channel bottom (12-feet wide) downstream at the end of Christie Avenue. Bank vegetation and the remaining 300 feet of channel will not be cleared.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling           | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  Yes     No      Date: 10/8/2019

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Richard Almanza      Title: PWMW      Date: 10/8/2019

Approved by: Name: MAURICIO TORRES      Title: FCCS      Date: 10/8/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No.13 Project 5215 unit 1**

**T.G.: 503-B2**

**Permit Requirements:**

*The channel clearing work involve mechanical clearing the earthen outlet channel with a backhoe and hand cutting all vegetation from the first 250 feet of channel bottom (12-foot wide) downstream at the end of Christie Avenue. Bank vegetation and the remaining 300 feet of channel will not be cleared.*

**Description of Activity/Method of Implementation:**

NO MECHANICAL ~~USED~~ TOOLS, ALL CLEARING WAS DONE  
BY HAND TOOLS RACKING / CLEARING

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NONE

Completed by: Name: Richard Almanza Title: PWMW Date: 10/8/2019

Approved by: Name: Maurilio Torres Title: FCCS Date: 10/8/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.14 May Chan. (M.C.O. into Pacoima Cyn.) T.G.: 482-E3**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*The Operator shall not impact the 0.5-acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

VEGETATION REMOVED AND CUT USING SMALL 2-CICLE ENGINE  
TRIMMERS AND HAND TOOLS

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

VEGETATION CLEARING COMPLETED USING HAND TOOLS

Project start date: 10/8/2019

Project end date: 10/8/2019

Completed by: Name: JOSE MURILLO  
UNDERGROUND CREW Title: PWCL Date: 10/8/2019

Approved by: Name: MAURICIO TORRES Title: FCCS Date: 10/8/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: Hydrology and Water Quality      Trash/Debris Removed (Tons) 3

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 20'

Location/Channel Reach#: Reach No.14 May Chan. (M.C.O. into Pacoima Cyn.)      T.G.: 482-E3

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*The Operator shall not impact the 0.5-acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input type="checkbox"/> ESC1 Scheduling                   | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input checked="" type="checkbox"/> ESC52 Sand Bag Barriers       |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

TRIM AND REMOVE VEGETATION,  
CUT AND REMOVE DEAD VEGETATION, TRIM TREES (LIGHT TRIMMING)

Biologist on site:  Yes       No      Date: 10/7/2019

**Biologist Comments/Instructions:**

\_\_\_\_\_

\_\_\_\_\_

Completed by: Name: UG (REW JOSE M)      Title: PWCL      Date: 10/8/2019

Approved by: Name: MAURILIO TORRES      Title: FCCS      Date: 10/8/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No.14 May Chan. (M.C.O. into Pacoima Cyn.) T.G.: 482-E3**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*The Operator shall not impact the 0.5-acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

ALL VEGETATION AND TREE TRIMMING WAS PERFORMED  
USING STATION 2-CYCLE ENGINE TRIMMERS AND HAND TOOLS

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

VEGETATION AND TRIMMING WAS DONE BY USING  
HAND TOOLS AND 2-CYCLE ENGINE TRIMMERS

Completed by: Name: UG crew JOSE MURILLO

Title: P.W.C.L  
10/8/2019 Date: 10/8/2019

Approved by: Name: MAURICIO TORRES

Title: FCCS Date: 10/8/2019



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.15 Pacoima Wash T.G.: 531-H1 TO J3**

**Permit Requirements:**

*Mechanical equipment and hand cutting will be used to keep the reach cleared of all vegetation.*

*The Operator shall not impact 0.01 acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

VEGETATION FULLY CUT AND REMOVED BY HAND TOOLS  
USING 2-CYCLE ENGINE TRIMMERS AND TARPS TO REMOVE  
TRASH

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

VEGETATION, TRASH, BULKY ITEMS CUT/REMOVED BY USING  
HAND TOOLS

Project start date: 9/27/2019

Project end date: 10/7/2019

Completed by: Name: ALPHONSE ROMAIN Title: PWSC1 Date: 10/7/2019

Approved by: Name: MARINO TORRES Title: FCCS Date: 10/7/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 35

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No.15 Pacoima Wash**      T.G.: 531-H1 TO J3

**Permit Requirements:**

*Mechanical equipment and hand cutting will be used to keep the reach cleared of all vegetation.*

*The Operator shall not impact 0.01 acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input type="checkbox"/> ESC1 Scheduling                   | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input checked="" type="checkbox"/> ESC52 Sand Bag Barriers       |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

CUT AND REMOVED LIVE VEGETATION  
REMOVED TRASH AND BULKY ITEMS DUMPED BY "PEH" TRANSIENTS

Biologist on site:  Yes       No      Date: 9/24/2019

**Biologist Comments/Instructions:**

PERFORMED PRE-WORK BASELINE MONITORING AND SAMPLING AT UPSTREAM, INTERNAL, AND DOWNSTREAM POINTS AT PACOIMA WASH

Completed by: Name: ALPHONSE ROMAN      Title: PWCL      Date: 10/7/2019  
Approved by: Name: DAVID TORRES      Title: FCCS      Date: 10/7/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No.15 Pacoima Wash T.G.: 531-H1 TO J3**

**Permit Requirements:**

*Mechanical equipment and hand cutting will be used to keep the reach cleared of all vegetation.*

*The Operator shall not impact 0.01 acre of vegetation that was allowed to remain in 1997.*

**Description of Activity/Method of Implementation:**

*ALL VEGETATION WAS CUT BY USING 2-CYCLE TRIMMERS AND HAND TOOLS, REMOVED TRASH AND BULKY ITEMS FROM WATER*

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required. (Please explain below.)  
 Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

*VEGETATION AND TRIMMING DONE BY USING HAND TOOLS AND 2-CYCLE TRIMMERS, TRASH WAS REMOVED USING LARGE BAGS*

Completed by: Name: ALPHONSE ROMAIN

Title: P.W.C.L Date: 10/7/2019

Approved by: Name: MAURILIO TORRES

Title: F.C.C.S Date: 10/7/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 16 Verdugo Wash-Las Barras Cyn** T.G.: 504-C7  
(Channel Inlet)

**Permit Requirements:**

*Hand clearing work will be used to keep the reach clear of all vegetation.*

*Impacts shall not exceed 0.07 acre.*

**Description of Activity/Method of Implementation:**

Mowed by hand using small tools, weed eaters, and hedgers. We cut and remove invasive plants and vegetation. Air quality is good.

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Project start date: 1/28/20

Project end date: 1/28/20

Completed by: Name: Mauricio Carter Title: P.W.C.L Date: 1/28/20

Approved by: Name: Santiago Vazquez Title: FCCS Date: 1/28/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 16 Verdugo Wash-Las Barras Cyn**      T.G.: 504-C7  
(Channel Inlet)

**Permit Requirements:**

*Hand clearing work will be used to keep the reach clear of all vegetation.*

*Impacts shall not exceed 0.07 acre.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:** None

Biologist on site:  Yes       No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: Mauricio Cantu

Title: P.W.C.L.      Date: 1/28/20

Approved by: Name: Lamberto Vazquez

Title: RTCS      Date: 1/28/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No. 16 Verdugo Wash-Las Barras Cyn** T.G.: 504-C7  
(Channel Inlet)

**Permit Requirements:**

*Hand clearing work will be used to keep the reach clear of all vegetation.*

*Impacts shall not exceed 0.07 acre.*

**Description of Activity/Method of Implementation:**

*The removal of vegetation is performed by cutting out vegetation in and around soft bottom channel inlet. We remove vegetation using small hand tools*

Disposition:  Mitigation measure has been implemented. No further action is required.

*N/A* Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

*N/A* Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

*None*

Completed by: Name: Mauricio Cantu

Title: P.W.C.L Date: 1/28/20

Approved by: Name: Pantayo Vargas  
*of*

Title: FCCS Date: 1/28/20

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name Verdugo Wash - Las Barras  
 Reach Number 16

*[Handwritten signature]*

Date	Air	H2O	Noise	Comment	Initial
1/28/20	Good	None	85 DB	—	MC

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: **1**

Location/Channel Reach #: **Reach No. 18 Engleheard Channel T.G.: 534- F3 To G3**

**Permit Requirements:**

*Hand clearing work will only involve dead vegetation and tree branches from between the pipe and wire revetments. All vegetation will be cleared by manual methods during the dry season.*

**Description of Activity/Method of Implementation:**

Mowed by hand using small tools, weed eaters, and hedges. We cut and remove invasive plants and vegetation. Air quality is good.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 N/A Mitigation measure is not fully implemented. Further action is required. (Please explain below.)  
 N/A Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

None

Project start date: 1/28/20 Project end date: 1/28/20

Completed by: Name: Mauricio Cantu Title: P.W.C.L Date: 1/28/20

Approved by: Name: Santiago Vazquez Title: FCC S Date: 1/28/20



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 3

Location/Channel Reach#: **Reach No. 18 Engleheard Channel**      T.G.: 534- F3 To G3

**Permit Requirements:**

*Hand clearing work will only involve dead vegetation and tree branches from between the pipe and wire revetments. All vegetation will be cleared by manual methods during the dry season.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Biologist on site:  Yes       No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: Mauricio Canter

Title: P.W.C.L.      Date: 1/28/20

Approved by: Name: Santiago Vazquez

Title: PCCS      Date: 1/28/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 18 Engleheard Channel** T.G.: 534- F3 To G3

**Permit Requirements:**

*Hand clearing work will only involve dead vegetation and tree branches from between the pipe and wire revetments. All vegetation will be cleared by manual methods during the dry season.*

**Description of Activity/Method of Implementation:**

The removal of vegetation is performed by cutting out vegetation in and around soft bottom invert. We remove vegetation using small hand tools.

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Mauricio Cantu Title: P.W.C.L Date: 1/28/20

Approved by: Name: Santiago Vazquez Title: FCC S Date: 1/28/20

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Engleheard channel  
Reach Number 18

~~SS~~

Date	Air	H2O	Noise	Comment	Initial
1/28/20	Good	None	85 DB	—	MC

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.19 Pickens Cyn** T.G.: 504-H5 To 534-H1

**Permit Requirements:**

*Manual removal of all vegetation adjacent to or growing out of the crib structures will be performed.*

**Description of Activity/Method of Implementation:**

*Mowed by hand, using small fork, weed eaters, and  
hedgers. We cut and removed invasive plants and  
vegetation. Air Quality is good.*

Disposition:  Mitigation measure has been implemented. No further action is required.

*N/A*  Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

*N/A*  Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

*None*

Project start date: 1/23/20

Project end date: 1/23/20

Completed by: Name: Paul Jacobs

Title: crew leader Date: 1/23/20

Approved by: Name: Santropo Lopez

Title: FCS Date: 1/23/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 0

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 300

Location/Channel Reach#: **Reach No.19 Pickens Cyn**

T.G.: **504-H5 To 534-H1**

**Permit Requirements:**

*Manual removal of all vegetation adjacent to or growing out of the crib structures will be performed.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

~~N/A~~ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

~~N/A~~ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Biologist on site:  Yes  No

Date: 1/23/20

**Biologist Comments/Instructions:**

Completed by: Name: Paul James

Title: Crew Leader Date: 1/23/20

Approved by: Name: Santiago Vazquez

Title: FCCS Date: 1/23/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No.19 Pickens Cyn** T.G.: 504-H5 To 534-H1

**Permit Requirements:**

Manual removal of all vegetation adjacent to or growing out of the crib structures will be performed.

**Description of Activity/Method of Implementation:**

The removal of vegetation are performed by cutting out vegetation in front and behind crib structure and also in the spaces of the actual structure. We remove these using small hand tools.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Paul Jacobs

Title: Crewleader Date: 1/23/20

Approved by: Name: Santiago Vazquez

Title: KCCS Date: 1/23/20

# Los Angeles County Channel Maintenance Project

## Mitigation Monitoring Program

Reach Name

*Pickens Canyon Channel*

Reach Number

*1-7 (Sect-pattern)*

*8*

Date	Air	H2O	Noise	Comment	Initial
<i>1/23/20</i>	<i>Good</i>	<i>None</i>	<i>35 dbA</i>	<i>/</i>	<i>[Signature]</i>
<i>1/24/20</i>	<i>Good</i>	<i>None</i>	<i>35 dbA</i>	<i>/</i>	<i>[Signature]</i>

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 20 Webber Chan.**  
(strm @ private bridge)

T.G.: 504-J7

**Permit Requirements:**

*Mechanical equipment will be used to keep the channel clear of all vegetation.*

*Impacts shall not exceed 0.13 acre (115 linear feet by 50 feet wide).*

**Description of Activity/Method of Implementation:**

*Mowed by hand using small tools, weed-eaters, and hedgers.  
We cut and removed invasive plants and vegetation. Air quality  
is good.*

Disposition:  Mitigation measure has been implemented. No further action is required.

*N/A* Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

*N/A* Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

*None*

Project start date: 1/27/20

Project end date: 1/27/20

Completed by: Name: Mauricio Canter Title: P.W.C.L Date: 1/27/20

Approved by: Name: Jamie Lopez Title: RCC S Date: 1/27/20



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 20 Webber Chan.**      T.G.: 504-J7  
(strm @ private bridge)

**Permit Requirements:**

*Mechanical equipment will be used to keep the channel clear of all vegetation.*

*Impacts shall not exceed 0.13 acre (115 linear feet by 50 feet wide).*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_

Completed by: Name: Mauricio C.      Title: P.W.C.L      Date: 1/27/20

Approved by: Name: Santiago Vargas      Title: KCS      Date: 1/27/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 20 Webber Chan.  
(strm @ private bridge)**

T.G.: 504-J7

**Permit Requirements:**

*Mechanical equipment will be used to keep the channel clear of all vegetation.*

*Impacts shall not exceed 0.13 acre (115 linear feet by 50 feet wide).*

**Description of Activity/Method of Implementation:**

The removal of vegetation is performed by cutting out vegetation in front of and behind crib structures, also in spaces of the actual structure. We remove these using small hand tools.

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Mauricio C.

Title: P.W.C.L Date: 1/27/20

Approved by: Name: Santiago Vozar

Title: RCCS Date: 1/27/20

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Webber Channel

Reach Number 20

~~25~~ 28

Date	Air	H2O	Noise	Comment	Initial
1/27/20	Good	None	85db	—	MC

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 21 Webber Channel**  
(Main channel inlet D/S Bridge)

T.G.: 505- J7

**Permit Requirements:**

*Hand clearing work will be performed to keep the reach clear of all vegetation.*

*Impacts shall not exceed 0.03 acre.*

**Description of Activity/Method of Implementation:**

Mowed by hand using small tools, weed eaters, and  
hedgers. We cut and remove invasive plants and vegetation.  
Air quality is good.

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Project start date: 1/27/20 Project end date: 1/27/20

Completed by: Name: Mauricio Canter Title: P.W.C.L Date: 1/27/20

Approved by: Name: Santiago Lopez Title: FCCS Date: 1/27/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 10

Location/Channel Reach#: **Reach No. 21 Webber Channel**      T.G.: 505- J7  
(Main channel inlet D/S Bridge)

**Permit Requirements:**

*Hand clearing work will be performed to keep the reach clear of all vegetation.*

*Impacts shall not exceed 0.03 acre.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_

Completed by: Name: Mauricio Cantu      Title: P.W.C.L      Date: 1/27/20

Approved by: Name: Santiago Ugo      Title: FCS      Date: 1/27/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 21 Webber Channel  
(Main channel inlet D/S Bridge)**

T.G.: 505- J7

**Permit Requirements:**

*Hand clearing work will be performed to keep the reach clear of all vegetation.*

*Impacts shall not exceed 0.03 acre.*

**Description of Activity/Method of Implementation:**

The removal of vegetation is performed by cutting  
out vegetation in and around soft bottom invert.  
We remove these using small hand tools.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

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Completed by: Name: Mauricio Cantu Title: P.W.C.L Date: 1/27/20

Approved by: Name: Santiago Unger Title: KCC S Date: 1/27/20

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name Webber Channel  
 Reach Number 21

~~§~~ ~~§~~

Date	Air	H2O	Noise	Comment	Initial
1/27/20	Good	None	95 DB	—	MC

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 22 Halls Canyon**

**T.G.: 534- J1**

**Permit Requirements:**

*Manual removal of all vegetation adjacent to or growing out of the crib structures will be performed.*

**Description of Activity/Method of Implementation:**

Mowed by hand using small tools, weed eaters, and hedgers. We cut and remove invasive plants and vegetation. Air quality is good.

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

None

Project start date: 1/24/20

Project end date: 1/27/20

Completed by: Name: Mauricio Carter Title: P.W.C.L Date: 1/27/20

Approved by: Name: Santiago Lopez Title: FCCS Date: 1/27/20



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 20

Location/Channel Reach#: **Reach No. 22 Halls Canyon**      T.G.: **534- J1**

**Permit Requirements:**

*Manual removal of all vegetation adjacent to or growing out of the crib structures will be performed.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Biologist on site:  Yes       No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: Maricario Cantu

Title: P.W.C.L      Date: 1/27/20

Approved by: Name: Emilio Vargas

Title: RCCS      Date: 1/27/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 22 Halls Canyon**

**T.G.: 534- J1**

**Permit Requirements:**

*Manual removal of all vegetation adjacent to or growing out of the crib structures will be performed.*

**Description of Activity/Method of Implementation:**

The removal of vegetation is performed by cutting out  
vegetation, both in front of and behind crib structure, as  
well as on the actual structure itself. We remove  
vegetation using small hand tools.

Disposition:  Mitigation measure has been implemented. No further action is required.

N/A Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

N/A Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

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Completed by: Name: Mauricio Canter

Title: P.W.C.L Date: 1/27/20

Approved by: Name: Santiago Lopez

Title: FCCS Date: 1/27/20

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 24 (Compton Creek)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Removal of all vegetation from the reach and/or restoration of the channel's hydraulic conveyance capacity by driving tracked equipment over vegetated areas. The LACFCD will inspect and mechanically remove accumulated sediment, debris, and all vegetation in the reach to ensure the proper functioning of the flood-control infrastructure. Weeds and grasses may be controlled by mowing or hand labor. The reach will be cleared annually to the same baseline condition as that approved for clearing activities. Reach work will also include mechanical grading to train flows to the centerline of the reach.

**Description of Activity/Method of Implementation:**

Vegetation was mowed and all exotic/invasive vegetation were removed by mechanical and hand tools. Mechanical grading to train flows to the centerline was conducted. Minimal amount of dust was generated. Water trucks were used for dust suppression when needed.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs.

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**Project Start Date:** 9/16/19

**Project End Date:** 11/18/19

*Completed by:*

Name:	<i>[Signature]</i>
Title:	Construction Superintendent
Date:	7/01/2020

*JAC*

*Approved by:*

Name:	<i>Ron Lacayo</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 24 (Compton Creek)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	119.10

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water sampling was conducted before, during and after during all clearing activity. Vegetation was mowed and all exotic/invasive vegetation were removed by mechanical and hand tools. All equipment and trucks had their tires and undercarriage washed before leaving the site. BMP's were implemented to maintain water quality. The following Best Management Practice were deemed to be applicable and were implemented:

- SS-1 Scheduling
- SS-2 Preservation of Existing Vegetation
- WE-1 Wind Erosion Control
- SS-8 Sand Bag Barrier
- SS-9 Straw Bale Barrier
- NS-8 Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** No

**Date on Site:** \_\_\_\_\_

**Comments/Revisions:**

Work was done in the channel avoiding water. Water Quality Sampling results provided in Annual Report.

*Completed by:*

*Approved by:*

Name:	<i>Angus M. Jones</i>
Title:	Construction Superintendent
Date:	7/01/2020

*JAC*

Name:	<i>Rm Lacay</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 24 (Compton Creek)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

Vegetation was mowed and all exotic/invasive vegetation were removed by mechanical and hand tools. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

Name:	<i>[Signature]</i>
Title:	Construction Superintendent
Date:	7/01/2020

*JOC*

*Approved by:*

Name:	<i>Rm Lacey</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name Compton Creek  
 Reach Number 24

Date	Air	H2O	Noise	Comment	Initial
9/16/19	good	good	ok	Air quality was good/Water quality after testing was good/Noise was minimal.	<del>SW</del>
9/17/19	good	good	ok	"	<del>SW</del>
9/18/19	good	good	ok	"	<del>SW</del>
9/19/19	good	good	ok	"	<del>SW</del>
9/20/19	good	good	ok	"	<del>SW</del>
9/21/19	good	good	ok	"	<del>SW</del>
9/23/19	good	good	ok	"	<del>SW</del>
9/24/19	good	good	ok	"	<del>SW</del>
9/25/19	good	good	ok	"	<del>SW</del>
9/26/19	good	good	ok	"	<del>SW</del>
9/27/19	good	good	ok	"	<del>SW</del>
9/28/19	good	good	ok	"	<del>SW</del>

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name Compton Creek  
 Reach Number 24

Date	Air	H2O	Noise	Comment	Initial
9/30/19	good	good	ok	Air quality was good / water quality good	<del>STW</del>
10/1/19	good	good	ok	Noise was minimal	<del>STW</del>
10/2/19	good	good	ok	"	<del>STW</del>
10/3/19	good	good	ok	"	<del>STW</del>
10/4/19	good	good	ok	"	<del>STW</del>
10/5/19	good	good	ok	"	<del>STW</del>
10/7/19	good	good	ok	"	<del>STW</del>
10/8/19	good	good	ok	"	<del>STW</del>
10/10/19	good	good	ok	"	<del>STW</del>
10/11/19	good	good	ok	"	<del>STW</del>
10/15/19	good	good	ok	"	<del>STW</del>
10/16/19	good	good	ok	"	<del>STW</del>

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name Compton Creek  
 Reach Number 24

Date	Air	H2O	Noise	Comment	Initial
10/17/19	good	good	ok	Air quality good/water quality good	<del>OK</del>
10/18/19	good	good	ok	"	<del>OK</del>
10/19/19	good	good	ok	"	<del>OK</del>
10/21/19	good	good	ok	"	<del>OK</del>
10/22/19	good	good	ok	"	<del>OK</del>
10/23/19	good	good	ok	"	<del>OK</del>
10/24/19	good	good	ok	"	<del>OK</del>
10/25/19	good	good	ok	"	<del>OK</del>
10/28/19	good	good	ok	"	<del>OK</del>
10/29/19	good	good	ok	"	<del>OK</del>
10/30/19	good	good	ok	"	<del>OK</del>
10/31/19	good	good	ok	"	<del>OK</del>



Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name Compton Creek  
 Reach Number 24

Date	Air	H2O	Noise	Comment	Initial
11/1/19	good	good	ok	Air quality good / water quality good Noise level normal	<del>SR</del>
11/2/19					
11/4/19					
11/5/19					
11/6/19					
11/7/19					
11/12/19					
11/13/19					
11/14/19					
11/15/19					
11/17/19					
11/18/19					A

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 25 (Los Angeles River)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Los Angeles River - Willow Street to Pacific Coast Highway, Using mechanical equipment, all exotic/invasive vegetation will be removed throughout this reach. Weeds and grasses may be controlled by mowing or hand labor. The reach will be cleared annually to the same baseline condition as that of November 1997.

**Description of Activity/Method of Implementation:**

Vegetation was mowed and all exotic/invasive vegetation were removed by mechanical and hand tools. Minimal dust was generated. Water trucks were used for dust suppression when needed.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs.

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**Project Start Date:** 10/21/19

**Project End Date:** 12/17/19

*Completed by:*

<b>Name:</b>	<i>[Signature]</i>
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	7/01/2020

*JGL*

*Approved by:*

<b>Name:</b>	<i>[Signature]</i>
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 25 (Los Angeles River)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	37.72

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water sampling was conducted before, during and after during all clearing activity. Vegetation was mowed and all exotic/invasive vegetation were removed by mechanical and hand tools. All equipment and trucks had their tires and undercarriage cleaned before leaving the site. BMP's were implemented to maintain water quality. The following Best Management Practice were deemed to be applicable and were implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

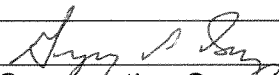
**Biologist on Site:** No

**Date on Site:** \_\_\_\_\_

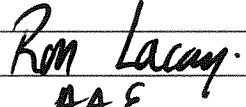
**Comments/Revisions:**

Work was done in the channel avoiding water. Water Quality Sampling results provided in Annual Report.

Completed by:

Name:	
Title:	Construction Superintendent
Date:	7/01/2020

Approved by:

Name:	
Title:	AAE
Date:	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 25 (Los Angeles River)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

Vegetation was mowed and all exotic/invasive vegetation were removed by mechanical and hand tools. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

<b>Name:</b>	<i>Suzanne M. Dwyer</i>
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	7/01/2020

*JSC*

*Approved by:*

<b>Name:</b>	<i>Ron Lacay</i>
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

10/21 - 11/4

# Los Angeles County Channel Maintenance Project 2019-20 Mitigation Monitoring Program

Reach Name Los Angeles River  
Reach Number 25

F6057919 A488

willow → PCH

Date	Air	H2O	Noise	Comment	Initial
10/21/19	good	good	minimal	Air and water quality are good, Noise levels are minimal. Tool and equipment are fueled off site.	<del>DF</del>
10/22/19	✓	✓	✓	"	<del>DF</del>
10/23/19	✓	✓	✓	"	<del>DF</del>
10/24/19	✓	✓	✓	"	<del>DF</del>
10/25/19	✓	✓	✓	"	<del>DF</del>
10/26/19	✓	✓	✓	"	<del>DF</del>
10/28/19	✓	✓	✓	"	<del>DF</del>
10/29/19	✓	✓	✓	"	<del>DF</del>
10/30/19	✓	✓	✓	"	<del>DF</del>
10/31/19	✓	✓	✓	"	<del>DF</del>
11/1/19	✓	✓	✓	"	<del>DF</del>
11/2/19	✓	✓	✓	"	<del>DF</del>





# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 26 (Project 74)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Project 74 - 500-feet Upstream of Artesia Boulevard to Dominguez Channel. The channel will be cleared using hand manual labor. Hand labor will be used to trim the vegetation which has been allowed to remain. New growth will not be allowed to become established and will be removed annually by manual methods.

**Description of Activity/Method of Implementation:**

Air quality was fair to good during working hours. The crews worked with hand tools to remove ground vegetation and trimming tools to cut bushes. Trees were trimmed, and non-native trees removed. Debris was put onto tarps, pulled to the asphalt driveway. Equipment was used to pick up the debris and loaded on dump trucks. The dump trucks hauled away the debris to a local landfill transfer station. Minimal amount of dust was generated.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs.

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**Project Start Date:** 09/13/19

**Project End Date:** 09/24/19

*Completed by:*

<b>Name:</b>	Mike Stephenson
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

*JAL*

*Approved by:*

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020



# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 26 (Project 74)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	43.45

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB) for flowing water. The crews worked with hand tools to remove ground vegetation and trimming tools to cut bushes. Trees were trimmed, and non-native trees removed. All equipment and hand tools cleaned before leaving the site to maintain water quality.

The following Best Management Practice was deemed to be applicable and was implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:**   No  

**Date on Site:** \_\_\_\_\_

**Comments/Revisions:**

There was no flowing water through the Reach <sup>yet</sup>

*Completed by:*

*Approved by:*

<b>Name:</b>	Mike Stephenson
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 26 (Project 74)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

We had trimming crews working ahead of crews clearing ground vegetation. The ground clearing crews were using manual tools to remove overgrowth along the hillsides, fence line and around drain pipes. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

<b>Name:</b>	Mike Stephenson
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

*JS*

*Approved by:*

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program

Reach Name Project 74

Reach Number 26

Date	Air	H2O	Noise	Comment	Initial
9-13-19	Good	Good	Moderate	Begin cutting vegetation	MG
9-14-19	Moderate	Good	Moderate	Continue cutting vegetation	MG
9-16-19	Good	Good	Moderate	Continue cutting vegetation	MG
9-17-19	Moderate	Good	Moderate	Continue cutting vegetation	MG
9-18-19	Good	"	Moderate	Continue cutting vegetation	MG
9-19-19	Good	"	"	Continue cutting vegetation	MG
9-20-19	Good	"	"	"	MG
9-21-19	Good	"	"	"	MG
9-23-19	Good	"	"	"	MG
9-24-19	Dry	Good	Low	Done with Project 74	MG

**LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE  
2019-2020 MITIGATION MONITORING PROGRAM**

**Compliance Verification Form**

<b>Location/Channel Reach</b>	Reach No. 27 (Wilmington Drain)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

All vegetation from the reach in the area upstream of Lomita Boulevard will be kept cleared. Between Lomita Boulevard and Pacific Coast Highway (PCH), vegetation will be kept clear from the two reaches, but vegetation on the island and on the reach banks will remain. Clearing work in the reach invert will be done with mechanical equipment. Vegetation on the banks (from toe up 3 feet) will be trimmed with hand tools so that it does not impede flow on the invert.

**Description of Activity/Method of Implementation:**

All vegetation from the reach in the area upstream of Lomita Boulevard was cleared. Clearing work in the invert downstream of Lomita to PCH was completed using mechanical equipment. Vegetation on the lower banks was trimmed up to 3 feet with hand tools so that it did not impede flow. Minimal dust was generated. Water trucks were used for dust suppression as necessary.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs.

**Project Start Date:** 09/16/19

**Project End Date:** 12/05/19

*Completed by:*

<b>Name:</b>	<i>Dym A. [Signature]</i>
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	7/01/2020

*JSC*

*Approved by:*

<b>Name:</b>	<i>Rm Lacay.</i>
<b>Title:</b>	<i>AAE</i>
<b>Date:</b>	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

<b>Location/Channel Reach</b>	Reach No. 27 (Wilmington Drain)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	60.00

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water sampling was conducted before, during and after during all clearing activity. Clearing work in the invert downstream of Lomita to PCH was completed using mechanical equipment. Vegetation on the lower banks was trimmed up to 3 feet with hand tools so that it did not impede flow. A biologist was on-site during clearing activities. Decontamination measures were implemented, and BMP's were placed to maintain water quality. All equipment, and trucks had their tires and undercarriage cleaned before leaving the site. BMP's were implemented to maintain water quality. The following Best Management Practice were deemed to be applicable and were implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** Yes

**Date on Site:** During site activity

**Comments/Revisions:**

Work was done in the channel avoiding water. Water Quality Sampling results provided in Annual Report.

*Completed by:*

*Approved by:*

Name:	<i>Stephen A. Day</i>
Title:	Construction Superintendent
Date:	7/01/2020

*JAC*

Name:	<i>Ron Lacey</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

**LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE  
2019-2020 MITIGATION MONITORING PROGRAM**

**Compliance Verification Form**

<b>Location/Channel Reach</b>	Reach No. 27 (Wilmington Drain)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

All vegetation from the reach in the area upstream of Lomita Boulevard was cleared. Clearing work in the invert downstream of Lomita to PCH was completed using mechanical equipment. Vegetation on the lower banks was trimmed up to 3 feet with hand tools so that it did not impede flow. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

<b>Name:</b>	<i>[Signature]</i>
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	7/01/2020

*[Signature]*

*Approved by:*

<b>Name:</b>	<i>[Signature]</i>
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program

Reach Name Wilmington Drain

Reach Number 27

Date	Air	H2O	Noise	Comment	Initial
9/16	GOOD	N/A	Medium	Rubber track skid steer, 10 yard dump truck, 5 weed eaters, 3 hedgers, chainsaw	SC
9/17	GOOD	N/A	Medium	"	SC
9/19	GOOD	N/A	Medium	"	SC
9/20	GOOD	N/A	Medium	"	SC
9/21	GOOD	N/A	Medium	"	SC
9/23	Good	N/A	Medium	"	SC
9/24	Good	N/A	Medium	"	SC
9/25	Good	N/A	Medium	"	SC
9/26	Good	N/A	Medium	"	SC
9/27	Good	N/A	Medium	"	SC
9/28	Good	N/A	Medium	"	SC
9/30	Good	N/A	Medium	"	SC

Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program

Reach Name Wilmington Drain

Reach Number 27

Date	Air	H2O	Noise	Comment	Initial
10/1	Good	N/A	MED	CHAINSAW, Hedge Trimmers, WEEDWACKER	A.C.
10/2	Good	N/A	MED	SKIDSTEER MOWER MINNIE EXCAVATOR	A.C.
10/3	Good	N/A	MED	"	A.C.
10/4	Good	N/A	MED	"	A.C.
10/8	Good	N/A	MED	"	A.C.
10/9	Good	N/A	MED	"	A.C.
10/10	Good	N/A	MED	"	A.C.
10/11	Good	N/A	MED	"	A.C.
10/15	Good	N/A	MED	"	A.C.
10/16	Good	N/A	MED	"	A.C.
10/17	Good	N/A	MED	"	A.C.
10/18	Good	N/A	MED	"	A.C.



Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program

Reach Name Wilmington Drain

Reach Number 27

Date	Air	H2O	Noise	Comment	Initial
10/19	GOOD	N/A	MED	Rubber track skid steer, 10 yard pump truck, 5 weed eater, 3 Hedgers, chain saw	SC
10/21	GOOD	N/A	MED	"	SC
10/22	GOOD	N/A	MED	"	SC
10/23	GOOD	N/A	MED	"	SC
10/24	GOOD	N/A	MED	"	SC
10/25	GOOD	N/A	MED	"	SC
10/26	GOOD	N/A	MED	"	SC
10/28	GOOD	N/A	MED	"	SC
10/29	GOOD	N/A	MED	"	SC
10/31	GOOD	N/A	MED	"	SC
11/1	GOOD	N/A	MED	"	SC
11/2	GOOD	N/A	MED	"	SC



Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program

Reach Name Wilmington Drain

Reach Number 27

Date	Air	H2O	Noise	Comment	Initial
11/14	GOOD	N/A	MED	CHAINSAW, HEDGE TRIMMERS, WEEDWACKER skidsteer mower, mini excavator	A.C.
11/15	GOOD	N/A	MED	"	A.C.
11/18	GOOD	N/A	MED	"	A.C.
11/21	GOOD	N/A	MED	"	A.C.
11/22	GOOD	N/A	MED	"	A.C.
11/25	GOOD	N/A	MED	"	A.C.
12/5	GOOD	N/A	MED	"	A.C.

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Halls Canyon

Reach Number 22

CF  
⊗

Date	Air	H2O	Noise	Comment	Initial
1/24/20	Good	None	85 DB	—	MC

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: #: **Reach No. 28 Triunfo Ck (PD T2200)** T.G.: **587 H-3**

**Permit Requirements:**

*The channel clearing work will involve removing all vegetation from the ungrouted rock levee, hand clearing all vegetation along the levee from the base to a distance of 20 feet.*

*The Operator shall avoid impacts to southwestern pond turtles. Clearing shall not extend beyond the area that was cleared in 1997 or as stated in the maintenance plan without prior approvals from the Department. Surveys for sensitive species (i.e., pond turtles) may be required if additional clearing is needed. No native trees shall be removed with a 2 inch diameter at breast height or greater. The 0.2-acre of vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

*All work was started after 8:00<sup>am</sup> so not to disturb our neighbors, Vegetation was removed with Hand tools and power tools that are fitted with noise suppressors.*

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ray Lumos Jr  
Approved by: Name: Baltazar Moreno

Title: Crew leader Date: 1-8-2020  
Title: Fees Date: 1/9/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: #: **Reach No. 28 Triunfo Ck (PD T2200)**      T.G.: **587 H-3**

**Permit Requirements:**

*The channel clearing work will involve removing all vegetation from the ungrouted rock levee, hand clearing all vegetation along the levee from the base to a distance of 20 feet.*

*The Operator shall avoid impacts to southwestern pond turtles. Clearing shall not extend beyond the area that was cleared in 1997 or as stated in the maintenance plan without prior approvals from the Department. Surveys for sensitive species (i.e., pond turtles) may be required if additional clearing is needed. No native trees shall be removed with a 2 inch diameter at breast height or greater. The 0.2-acre of vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input type="checkbox"/> ESC1 Scheduling                   | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition: \_\_\_\_\_ Mitigation measure has been implemented. No further action is required.

\_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_ Dry Creek Bed \_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  Yes     No

Date: 12-20-19

**Biologist Comments/Instructions:**

Completed by: Name: Ray Lemos Jr

Title: Crew leader    Date: 1-8-2020

Approved by: Name: Baltazar Moreno

Title: FCCS    Date: 1/9/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 28 Triunfo Ck (PD T2200)**

**T.G.: 587 H-3**

**Permit Requirements:**

*The channel clearing work will involve removing all vegetation from the ungrouted rock levee, hand clearing all vegetation along the levee from the base to a distance of 20 feet.*

*The Operator shall avoid impacts to southwestern pond turtles. Clearing shall not extend beyond the area that was cleared in 1997 or as stated in the maintenance plan without prior approvals from the Department. Surveys for sensitive species (i.e., pond turtles) may be required if additional clearing is needed. No native trees shall be removed with a 2 inch diameter at breast height or greater. The 0.2-acre of vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

All vegetation was removed with Hand and Power tools such as = Banana Saw's, Pruners, Pitch Forks, Weed Eaters and Hedge trimmers, all trucks were hand loaded

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Project start date: 12-20-19

Project end date: 1-8-2020

Completed by: Name: Ray Lumsden Title: Crew leader Date: 1-8-2020

Approved by: Name: Baltazar Moreno Title: PECS Date: 1/9/20

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Triunfo Creek PD 2200  
Reach Number # 28

Date	Air	H2O	Noise	Comment	Initial
12/20/19	✓	✓	✓	No boom needed	R.L.-
1/2/20	✓	✓	✓		R.L.-
1/3/20	✓	✓	✓		R.L.-
1/7/20	✓	✓	✓		R.L.-
1/8/20	✓	✓	✓		R.L.-



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.29 Las Virgenes (PD T1684) M.C.I. T.G.: 558-H3**

**Permit Requirements:**

*The channel clearing work will involve hand clearing a 30-foot-wide strip along the watercourse low flow from the debris posts to the right-of-way boundary.*

*The Operator shall avoid impacts to southwestern pond turtles. The Operator shall not impact the 0.61-acre of vegetation that was allowed to remain in 1997. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

MOST VEGETATION REMOVED BY HAND WITH LITTLE USE OF POWER TOOLS THAT ARE FITTED WITH APPROVED EXHAUST AND AIR FILTERS. ALL VEGETATION HAND LOADED IN TRUCK.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

DRY CREEK - NO BOOM NEEDED

Project start date: 12/13/19

Project end date: 12/18/19

Completed by: Name: RYAN MURILLO Title: CREW LEADER Date: 12/13/19

Approved by: Name: BALTHAZAR MORENO Title: FCCS Date: 12/17/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: #: **Reach No.29 Las Virgenes (PD T1684) M.C.I. T.G.: 558-H3**

**Permit Requirements:**

*The channel clearing work will involve hand clearing a 30-foot-wide strip along the watercourse low flow from the debris posts to the right-of-way boundary.*

*The Operator shall avoid impacts to southwestern pond turtles. The Operator shall not impact the 0.61-acre of vegetation that was allowed to remain in 1997. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input type="checkbox"/> ESC1 Scheduling                   | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition: \_\_\_\_\_ Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- \_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WATER IN CREEK, NO BOOM NEEDED

Biologist on site:  Yes     No

Date: 12/13/19

**Biologist Comments/Instructions:**

Completed by: Name: Ryan Murillo

Title: CREW LEADER Date: 12/13/19

Approved by: Name: Baltazar Moreno

Title: FCCS Date: 12/17/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: #: **Reach No.29 Las Virgenes (PD T1684) M.C.I. T.G.: 558-H3**

**Permit Requirements:**

*The channel clearing work will involve hand clearing a 30-foot-wide strip along the watercourse low flow from the debris posts to the right-of-way boundary.*

*The Operator shall avoid impacts to southwestern pond turtles. The Operator shall not impact the 0.61-acre of vegetation that was allowed to remain in 1997. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS USED SUCH AS WEED EATERS AND HEDGE TRIMMERS ARE FITTED WITH APPROVED MUFFLERS.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

DRY CREEK, NO BOOM NECESSARY

Completed by: Name: Ryan Murillo

Title: CREW LEADER Date: 12/13/19

Approved by: Name: Baltazar Moreno

Title: FCCS Date: 12/17/19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name LAS VIRGENES CREEK  
Reach Number # 29

Date	Air	H2O	Noise	Comment	Initial
12/13/19	✓	✓	✓	No Boom Needed, Dry Creek	R.M.
12/14/19	✓	✓	✓		R.M.
12/17/19	✓	✓	✓		R.M.
12/18/19	✓	✓	✓	Completed Soft Bottom	R.M.

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 32 Stokes Canyon  
Channel. PD T043**

**T.G.: 588- J4 TO H4**

**Permit Requirements:**

*The work will involve hand clearing of all vegetation between the pipe and wire. Embankment vegetation outside the pipe and wire channel will be left in place.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS SUCH AS, POLESAWS, WEED EATERS AND  
HEDGE TRIMMERS ARE FITTED WITH APPROVED EXHAUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

THERE IS NO NEED FOR BOOM DUE TO DRY SOFT BOTTOM.

Project start date:

9/27/19

Project end date:

10/10/19

Completed by: Name:

Ryan Marillo

Title:

CREW LEADER

Date:

10/10/19

Approved by: Name:

Baltazar Moreno

Title:

PCES

Date:

10/11/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 32 Stokes Canyon**      T.G.: 588- J4 TO H4  
   **Channel. PD T043**

**Permit Requirements:**

*The work will involve hand clearing of all vegetation between the pipe and wire. Embankment vegetation outside the pipe and wire channel will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling       ESC2 Preservation of Existing Vegetation
- ESC21 Dust Control       ESC22 Temporary Stream Crossing
- ESC31 Temporary Drains and Swales       ESC50 Silt Fence
- ESC51 Straw Bale Barriers       ESC52 Sand Bag Barriers

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

SOFT BOTTOM IS DRY.

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ryan Muoillo      Title: CREW LEADER      Date: 9/27/19  
 Approved by: Name: Baltazar Moreno      Title: FCCS      Date: 10/11/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 32 Stokes Canyon  
Channel. PD T043**

**T.G.: 588- J4 TO H4**

**Permit Requirements:**

*The work will involve hand clearing of all vegetation between the pipe and wire. Embankment vegetation outside the pipe and wire channel will be left in place.*

**Description of Activity/Method of Implementation:**

All POWER TOOLS ARE FITTED WITH MUFFLERS AND  
WORK DOESN'T START TILL AFTER 8:00AM SO OUR NEIGHBORS  
ARE NOT DISTURBED.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: Ryan Murillo

Title: CREW LEADER Date: 9/27/19

Approved by: Name: Baltazar Moreno

Title: FCCS Date: 10/11/19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name STOKES CANYON CHANNEL  
 Reach Number # 32

Date	Air	H2O	Noise	Comment	Initial
9/27/19	✓	✓	✓	No Boom NECESSARY, CREEK IS DRY	R.M.
9/28/19	✓	✓	✓		R.M.
10/1/19	✓	✓	✓		R.M.
10/2/19	✓	✓	✓		R.M.
10/3/19	✓	✓	✓		R.M.
10/4/19	✓	✓	✓		R.M.
10/5/19	✓	✓	✓		R.M.
10/8/19	✓	✓	✓		R.M.
10/9/19	✓	✓	✓		R.M.
10/10/19	✓	✓	✓		R.M.



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 33 Medea Creek (PD T1378 u.2)** T.G.: 558-A4

**Permit Requirements:**

*The work will involve mechanical clearing of all the vegetation in the channel.*

*The Operator shall avoid vegetation clearing due to sensitive resources. If any vegetation needs to be cleared during future maintenance activities, the Operator shall provide additional mitigation for those impacts. The entire 0.69-acre mod. area is vegetated. Therefore, if clearing all vegetation, need to mitigate for an additional 0.69 acre of riparian vegetation. Vegetation shall be removed by hand clearing only. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS WERE USED TO A MINIMUM AND FITTED WITH APPROVED EXHAUST. POWER TOOLS USED (CHAINSAW, HEDGERS AND WEED EATERS) TO CLEAR ALL BRUSH ALONG WITH PITCH FORKS, RAKES, PRUNNERS AND TARPS.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Project start date: 1/11/20 Project end date: 1/25/20

Completed by: Name: Ryan Murrello Title: CREW LEADER Date: 1/11/20

Approved by: Name: Baltazar Motens Title: FCCS Date: 1/14/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 33 Medea Creek (PD T1378 u.2)**      T.G.: **558-A4**

**Permit Requirements:**

*The work will involve mechanical clearing of all the vegetation in the channel.*

*The Operator shall avoid vegetation clearing due to sensitive resources. If any vegetation needs to be cleared during future maintenance activities, the Operator shall provide additional mitigation for those impacts. The entire 0.69-acre mod. area is vegetated. Therefore, if clearing all vegetation, need to mitigate for an additional 0.69 acre of riparian vegetation. Vegetation shall be removed by hand clearing only. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HAY BOOM PLACED U/S AND D/S OF JOB SITE.

Biologist on site:  Yes     No

Date: 1/11/20

**Biologist Comments/Instructions:**

NO WORKING IN WATER AND NO PRUNING TREES ABOVE 7'.

Completed by: Name: Ryan Muehl

Title: CREW LEADER Date: 1/11/20

Approved by: Name: Baltazar Moreno

Title: FCCS Date: 1/14/20

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 33 Medea Creek (PD T1378 u.2)** T.G.: 558-A4

**Permit Requirements:**

*The work will involve mechanical clearing of all the vegetation in the channel.*

*The Operator shall avoid vegetation clearing due to sensitive resources. If any vegetation needs to be cleared during future maintenance activities, the Operator shall provide additional mitigation for those impacts. The entire 0.69-acre mod. area is vegetated. Therefore, if clearing all vegetation, need to mitigate for an additional 0.69 acre of riparian vegetation. Vegetation shall be removed by hand clearing only. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

POWER TOOLS SUCH AS WEEDEATERS, HEDGERS AND CHAINSAWS  
THAT ARE FITTED WITH APPROVED MUFFLERS, WERE USED TO A  
MINIMUM.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

WORK STARTED AFTER 8:00 AM SO NOT TO DISTURB  
NEIGHBORS.

Completed by: Name: Ryan Morillo

Title: CREW LEADER Date: 1/11/20

Approved by: Name: Baltazar Moreno

Title: FCCS Date: 1/14/20

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name MEDEA CREEK - PD 1378 U2

Reach Number #33

Date	Air	H2O	Noise	Comment	Initial
1/11/20	✓	✓	✓	BMP'S PLACED AT END OF WORK AREA AND AT FIRST DROP	R.M.
1/16/20	✓	✓	✓		R.M.
1/18/20	✓	✓	✓		R.M.
1/21/20	✓	✓	✓		R.M.
1/22/20	✓	✓	✓		R.M.
1/23/20	✓	✓	✓		R.M.
1/25/20	✓	✓	✓	COMPLETED SOFT BOTTOM CLEARING	R.M.

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 35 Medea Creek**  
**Main Channel Inlet - under Route 101**

T.G.: 558-A5

**Permit Requirements:**

*Hand clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.14 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

Power tools used = weed eaters, pole saw and Hedge Trimmers  
are all fitted with approved exhaust.  
Vegetation was removed by Hand and Power Tools.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project start date: 12-10-19 Project end date: 12-11-19

Completed by: Name: Ray Lemas Jr Title: Crewheader Date: 12-11-19  
Approved by: Name: Baltazar Moreno Title: PCes Date: 12/12/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 35 Medea Creek**      T.G.: 558-A5  
**Main Channel Inlet - under Route 101**

**Permit Requirements:**

*Hand clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.14 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- \_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- \_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Placed Hay Broom at end of Channel Outlet

Biologist on site:  Yes     No      Date: 12-10-19

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ray Lemos Jr      Title: Crew leader      Date: 12-11-19  
Approved by: Name: Baltazar Moreno      Title: PCCS      Date: 12/12/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 35 Medea Creek  
Main Channel Inlet - under Route 101**

T.G.: 558-A5

**Permit Requirements:**

*Hand clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.14 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

*All power tools used on job site are fitted with approved mufflers. Removed all vegetation by hand with Tarps and forks.*

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: Jay Ramos Jr

Title: Crewleader Date: 12-11-19

Approved by: Name: Baltazar Moreno

Title: PCES Date: 12/12/19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name Medea Creek Inlet  
 Reach Number #35

Date	Air	H2O	Noise	Comment	Initial
12/10/19	✓	✓	✓	Layed down boom at Outlet	R.L.
12/11/19	✓	✓	✓		R.L.



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 36 Cheseboro Main Channel Inlet T.G.: 558-C6**

**Permit Requirements:**

*The clearing work will involve hand cutting/trimming three two-inch diameter trees. New vegetation will be cleared annually to prevent blockage of the inlet during the dry season.*

*The Operator shall not impact the 0.05-acre of vegetation that was allowed to remain in 1997. The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities*

**Description of Activity/Method of Implementation:**

MOST CLEARING DONE BY HAND. MINIMAL USE OF POWER TOOLS  
SUCH AS WEED EATER, HEDGE TRIMMER AND CHAIN SAW THAT  
ARE FITTED WITH APPROVED EXHAUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO BOOM NECESSARY, NO WATER.

Project start date: 12/6/19 Project end date: 12/7/19

Completed by: Name: Ryan Mueillo Title: CREW LEADER Date: 12/7/19  
Approved by: Name: Baltazar Morenci Title: PCS Date: 12/10/19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 36 Cheseboro Main Channel Inlet T.G.: 558-C6**

**Permit Requirements:**

*The clearing work will involve hand cutting/trimming three two-inch diameter trees. New vegetation will be cleared annually to prevent blockage of the inlet during the dry season.*

*The Operator shall not impact the 0.05-acre of vegetation that was allowed to remain in 1997. The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities*

**Description of Activity/Method of Implementation:**

MOST CLEARING DONE BY HAND. MINIMAL USE OF POWER TOOLS SUCH AS WEED EATER, HEDGE TRIMMER AND CHAINSAW THAT ARE FITTED WITH APPROVED MUFFLERS.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO BOOM NECESSARY, NO WATER.

Completed by: Name: RYAN MURILLO

Title: CREW LEADER Date: 12/7/19

Approved by: Name: BALTAZAR MORENO

Title: PECH Date: 12/10/19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Cheseboro Cyn Channel Inlet

Reach Number # 36

Date	Air	H2O	Noise	Comment	Initial
12/6/19	✓	✓	✓	No Boom needed, No water	RJM
12/7/19	✓	✓	✓	Completed	RJM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 37 Medea Ck/Chesesboro Ck Outlet T.G.: 558-A6**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*No work was done and 0.25 acres of vegetation was present in the channel in 1997. The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

All power tools on Job site are fitted with  
approved Exhaust's on them

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project start date: 12-12-19 Project end date: 12-12-19

Completed by: Name: Ray Ramos Jr Title: Crew leader Date: 12-12-19  
Approved by: Name: Baltazar Moreno Title: FCS Date: 12/13/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 37 Medea Ck/Chesesboro Ck Outlet T.G.: 558-A6**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*No work was done and 0.25 acres of vegetation was present in the channel in 1997. The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Hay Boom in place at end of soft bottom outlet

Biologist on site:  Yes     No      Date: 12-12-19

**Biologist Comments/Instructions:**

Completed by: Name: Ray Ramos Jr      Title: Crew leader      Date: 12-12-19  
Approved by: Name: Baltazar Motenc      Title: Fees      Date: 12/13/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 37 Medea Ck/Chesesboro Ck Outlet T.G.: 558-A6**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*No work was done and 0.25 acres of vegetation was present in the channel in 1997. The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

All power tools = Weed Eater and Hedge Trimmers  
are fitted with approved mufflers.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ray Lemos Jr Title: Crewleader Date: 12-12-19  
Approved by: Name: Baltazar Moreno Title: PECS Date: 12/13/19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Medea Creek Outlet

Reach Number # 37

Date	Air	H2O	Noise	Comment	Initial
12/12/19	✓	✓	✓	Removed boom on 12-13-19	R.L.



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 38 Lindero M.C.O. T.G.: 558-A6**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.19 acre. No native trees shall be removed with a 2 inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS SUCH AS, CHAIN SAWS, WEED EATERS, TRIMMERS, ETC.  
ARE FITTED WITH APPROVED EXHAUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Project start date: 10/12/19

Project end date: 10/16/19

Completed by: Name: Ryan Mucillo Title: CREW LEADER Date: 10/16/19

Approved by: Name: Balazar Moreno Title: Fees Date: 10/17/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 38 Lindero M.C.O. T.G.: 558-A6**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.19 acre. No native trees shall be removed with a 2 inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HAY BOOM IN PLACE DOWN STREAM. WATER TENDER ON SITE TO WASH OFF TOOLS AT END OF DAY.

Biologist on site:  Yes     No      Date: 10/12/19

**Biologist Comments/Instructions:**

ADD EXTRA HAY BOOM AT HALF WAY OF SOFT BOTTOM

Completed by: Name: Ryan Muriello

Title: CREW LEADER    Date: 10/12/19

Approved by: Name: Bethy Moens

Title: FCCS    Date: 10/17/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 38 Lindero M.C.O. T.G.: 558-A6**

**Permit Requirements:**

*Hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.19 acre. No native trees shall be removed with a 2 inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

ALL POWER TOOLS FITTED WITH APPROVED MUFFLERS AND ALL  
VEGETATION HAND LOADED.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: Ryan Muozillo

Title: CREW LEADER Date: 10/12/19

Approved by: Name: Baltazar Morens

Title: Pces Date: 10/12/19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 39 Beatty Channel Outlet @ SGR** T.G.: 568-F4

**Permit Requirements:**

There are no permit requirements requiring mitigation of air quality.

**Description of Activity/Method of Implementation:**

No mitigation of air quality efforts were undertaken

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**


None

Project start date: 10-1-2019

Project end date: 10-1-2019

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**    **Trash/Debris Removed (Tons)**   21  

Mitigation Measure #:   2                                        **Exotic Veg. Removed (Sq. Ft.)**   30  

Location/Channel Reach#: **Reach No. 39 Beatty Channel Outlet @ SGR**    **T.G.: 568-F4**

**Permit Requirements:**

The permit requires that we monitor water quality at both the upstream and downstream limits of the work when water is diverted.

**Description of Activity/Method of Implementation:**

There was no water present during clearing activities. A water diversion plan was not prepared and water sampling was not conducted. Crews utilized a flail mower and hand tools to cut and remove all debris within the soft bottom reach and disposed of it at Puente Hills Materials Recovery Facility.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

**Biologist on site:**     Yes     No                      **Date:** \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name:   Nik Reppuhn                        Title:   Assoc. Civil Engr.      Date:   3-12-2020  

Approved by: Name:                       Title:   Principal Engr      Date:   3-12-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 39 Beatty Channel Outlet @ SGR** T.G.: 568-F4

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise.

**Description of Activity/Method of Implementation:**

No mitigation of noise efforts were undertaken

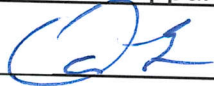
- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Air Quality**

Mitigation Measure #: **1**

Location/Channel Reach #: **Reach No. 40A San Gabriel River**

**T.G.: 597-H5**

**Permit Requirements:**

There are no permit requirements requiring mitigation of air quality.

**Description of Activity/Method of Implementation:**

No mitigation of air quality efforts was undertaken. Vegetation removed from the stream bed was hauled via truck to Puente Hills Material Recovery Facility.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**


None

**Project start date:** 09/30/2019

**Project end date:** 12/2/2019

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 40A San Gabriel River**

**T.G.: 597-H5**

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise.

**Description of Activity/Method of Implementation:**

No mitigation of noise efforts were undertaken, however noise was not an issue on this clearing project. During the contractor's work we received no complaint calls from adjacent businesses or homeowners due to noise, dust or any other nuisance.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)


Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 281.75

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 130

Location/Channel Reach#: **Reach No. 40A San Gabriel River**      T.G.: **597-H5**

**Permit Requirements:**

The permit requires that we monitor water quality at both the upstream and downstream limits of the work when water is diverted.

**Description of Activity/Method of Implementation:**

Water at the site was not present during this annual clearing event. A contractor carried out the soft bottom clearing efforts in this reach utilizing a combination of mowers and hand clearing.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

No equipment used. Water samples were not taken.

**Biologist on site:**  No     Yes


**Date:** \_\_\_\_\_

**Biologist Comments/Instructions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr.    Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr    Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 40B San Gabriel River**

**T.G.: 637-F4**

**Permit Requirements:**

There are no permit requirements requiring mitigation of air quality.

**Description of Activity/Method of Implementation:**

No mitigation of air quality efforts was undertaken. Vegetation removed from the stream bed was hauled via truck to Puente Hills Material Recovery Facility.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**


None

**Project start date:** 11/25/2019

**Project end date:** 12/16/2019

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 109.63

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 80

Location/Channel Reach#: **Reach No. 40B San Gabriel River**      T.G.: **637-F4**

**Permit Requirements:**

The permit requires that we monitor water quality at both the upstream and downstream limits of the work when water is diverted.

**Description of Activity/Method of Implementation:**

Water at the site was not present during this annual clearing event. A contractor carried out the soft bottom clearing efforts in this reach utilizing a combination of mowers and hand clearing. A biologist was on site before and during the work in Reach 40B marking vegetation to be protected or removed.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Work was carried out in the river only where water was not present.

**Biologist on site:**     No     Yes


**Date:** During clearing efforts

**Biologist Comments/Instructions:**

A biologist was on site before and during the mowing activities. He marked all those trees to be protected and those to be removed with a tagging system. Red ribbon was to be protected and blue ribbon was to be removed.

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr.    Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr    Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 40B San Gabriel River**

**T.G.: 637-F4**

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise.

**Description of Activity/Method of Implementation:**

No mitigation of noise efforts were undertaken, however noise was not an issue on this clearing project. During the contractor's work we received no complaint calls from adjacent businesses or homeowners due to noise, dust or any other nuisance.


- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Air Quality**

Mitigation Measure #: **1**

Location/Channel Reach #: **Reach No. 41 Walnut Creek**

**T.G.: 637-H2**

**Permit Requirements:**

There are no permit requirements requiring mitigation of air quality.

**Description of Activity/Method of Implementation:**

No mitigation of air quality efforts was undertaken. Trash and cuttings in the river bottom were collected and hauled to Puente Hills Materials Recovery Facility for disposal.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

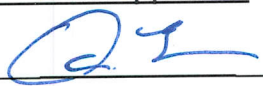
None

**Project start date:** 09/27/2019

**Project end date:** 10/27/2019

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 41 Walnut Creek**

**T.G.: 637-H2**

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise.

**Description of Activity/Method of Implementation:**

No mitigation of noise efforts were undertaken, however noise was not an issue on this clearing project. During our operation we received no complaint calls from adjacent businesses or homeowners due to noise, dust or any other nuisance.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)


Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 90

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 40

Location/Channel Reach#: **Reach No. 41 Walnut Creek**      T.G.: **637-H2**

**Permit Requirements:**

The permit requires that we monitor water quality at the site and prepare a water diversion plan, if water is present. Flail mowers removed the majority of the vegetation within the soft bottom and hand crews were dispatched ahead of the mowers to remove any invasive/exotics that were identified.

**Description of Activity/Method of Implementation:**

There was no flowing water within the work site.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

No equipment used. Water samples were taken before, during, and after completed work

Biologist on site:  No     Yes


Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr.    Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr    Date: 3-12-2020

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 42 San Jose Creek**

T.G.: 637-E5

**Permit Requirements:**

There are no permit requirements requiring mitigation of air quality.

**Description of Activity/Method of Implementation:**

No mitigation of air quality efforts were undertaken

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Project start date: 1-7-2020

Project end date: 1-15-2020

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020



# LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT MITIGATION MONITORING PROGRAM

## Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**    **Trash/Debris Removed (Tons)** 18

Mitigation Measure #: 2    **Exotic Veg. Removed (Sq. Ft.)** 12

Location/Channel Reach#: **Reach No. 42 San Jose Creek**    **T.G.: 637-E5**

**Permit Requirements:**

The permit requires that we monitor water quality at both the upstream and downstream limits of the work when water is flowing.

**Description of Activity/Method of Implementation:**

Water sampling was conducted before, during and after our efforts on the river. All the trash/debris was hauled to Puente Hills Material Recovery Facility for disposal.

Due to the water flow, water sampling was conducted upstream, downstream and at the work site. Straw Wattle was placed across the downstream portion of the channel to contain all flows.

Disposition: X Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**


**Biologist on site:**     Yes     No

**Date:** \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr.    Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr    Date: 3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 42 San Jose Creek**

T.G.: 637-E5

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise.

**Description of Activity/Method of Implementation:**

No mitigation of noise efforts were undertaken, however noise was not an issue on this clearing project. During our operation we received no complaint calls from adjacent businesses or homeowners due to noise, dust or any other nuisance.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

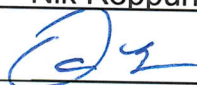
Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name LINDERO CANYON CHANNEL OUTLET

Reach Number # 38

Date	Air	H2O	Noise	Comment	Initial
10/12/19	✓	✓	✓	BOOM PLACED AT END OF REACH	R.M.
10/15/19	✓	✓	✓	2 <sup>ND</sup> BOOM ADDED HALF WAY.	R.M.
10/16/19	✓	✓	✓		R.M.

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 43 (San Gabriel River)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	218.08

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB) for flowing water. The crews worked with hand tools to remove ground vegetation and trimming tools to cut bushes. Trees were trimmed, and non-native trees removed. Debris was put on to tarps and removed. All equipment and trucks had their tires and undercarriage cleaned before leaving the site. Biologist on site during clearing activity and BMP's were implemented to maintain water quality. The following Best Management Practice were deemed to be applicable and implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** Yes

**Date on Site:** During site activity

**Comments/Revisions:**

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Completed by:

Name:	<i>[Signature]</i>
Title:	<i>Channel Maintenance Supt</i>
Date:	<i>06/24/2020</i>

Approved by:

Name:	<i>[Signature]</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 43 (San Gabriel River)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Mechanical clearing of vegetation will be used for approved clearing activities. Trimming of the riparian vegetation may be necessary in the future as growth occurs. The vegetation that is seasonally occupied by the least Bell's vireo will be flagged and a qualified biological monitor will be present during clearing activities.

**Description of Activity/Method of Implementation:**

The crews worked with hand tools to remove ground vegetation and trimming tools to cut bushes. Trees were trimmed, and non-native trees removed. Debris was put on to tarps and removed. Minimal amount of dust was generated. Water trucks were used for dust suppression when necessary.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs.

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**Project Start Date:** 09/09/19

**Project End Date:** 11/21/19

*Completed by:*

Name:	<i>[Signature]</i>
Title:	<i>Channel Maintenance Supt</i>
Date:	<i>06/24/2020</i>

*Approved by:*

Name:	<i>[Signature]</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 43 (San Gabriel River)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

The crews worked with hand tools to remove ground vegetation and trimming tools to cut bushes. Trees were trimmed, and non-native trees removed. Debris was put on to tarps and removed. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

Name:	<i>[Signature]</i>
Title:	<i>CONSTRUCTION Supt</i>
Date:	<i>06/24/2020</i>

*JOC* *Approved by:*

Name:	<i>Ron Lacay</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name San Gabriel River Whittier Narrows

Reach Number 43

Date	Air	H2O	Noise	Comment	Initial
9-16-19	Good	Ø	70-90 DBA acceptable	FIRST DAY OF S.B. CLEARING	O.A.
9-17-19	Good	Ø	" "	BMPs & STEEL PLATES in place	JG
9-18-19	Good	Ø	" "	PRESSURE WASHER ON SITE for DECON	JG
9-19-19	Good	Ø	" "	1 truck/screw working on Arundo Fig	JG
9-20-19	Good	Ø	" "	1 truck/screw working on Arundo SEEDS	JG
9-23-19	Good	Ø	" "	1 truck/screw working on Arundo	JG
9-24-19	Good	Ø	" "	1 truck/screw reminded them about PPE	JG
9-25-19	Good	Ø	" "	1 truck/screw continued on Arundo	JG
9-26-19	Good	Ø	" "	unable to be seen but tracked back of Arundo	JG
9-27-19	Good	Ø	" "	"no comments"	JG
10-01-19	Good	Ø	" "	"no comments" "Jonathan Castillo"	JC
10-02-19	Good	Ø	" "	walked on Arundo along the invert	JG

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name San Gabriel River Whittier Narrows  
 Reach Number 43

Date	Air	H2O	Noise	Comment	Initial
10/03/19	good	Ø	70-90 dB acceptable	Found a few hundred beetle seen glass insect.	JB
10/04/19	good	Ø	"	"	JB
10/07/19	good	Ø	"	1 truck few birds a lot of bees seen normal	JB
10/08/19	good	Ø	"	1 truck few birds walked some of them	JB
10/09/19	good	Ø	"	"	JB
10/10/19	good	Ø	"	walked some of them, along the mid-west	JB
10/14/19	good	Ø	"	Found a few birds, 1 large bee, fly	JB
10/15/19	good	Ø	"	1 truck few at once walked on birds	JB
10/16/19	good	Ø	"	"	JB
10/17/19	good	Ø	"	Found a few "Blue Ribbons" very many seen	JB
10/18/19	good	Ø	"	"	JB
10/21/19	good	Ø	"	"	JB



Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name San Gabriel River Whittier Narrows  
 Reach Number 43

Date	Air	H2O	Noise	Comment	Initial
10/22/19	good	Ø	70-90 dBA acceptable	HOT 98° Banned to remove Hand/Leaf/BEAN	JB
10/23/19	good	Ø	" "	" "	JB
10/24/19	good	Ø	" "	" "	JB
10/25/19	good	Ø	" "	Remaining Hand/Leaf/BEAN & Blue ribbon 2 trucks/crow	JB
10/28/19	good	Ø	" "	(1) ARundo removed (2) CATIBAN SEED	JB
10/29/19	good	Ø	" "	worked on ARundo & Fg sapling	JB
10/30/19	good	Ø	" "	Remaining Fg sapling along WATERWAY	JB
10/31/19	good	Ø	" "	" "	JB
11/01/19	good	Ø	" "	Remaining Fg sapling slows water way to ARundo next SGR PUMP	JB
11/04/19	good	Ø	" "	Remaining seedbed "Blue ribbon"	JB
11/05/19	good	Ø	" "	Reminded contractor do not leave ARundo Remaining unworked vegetation	JB
11/06/19	good	Ø	" "	along the NE side	JB

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name San Gabriel River Whittier Narrows  
 Reach Number 43

Date	Air	H2O	Noise	Comment	Initial
11/07/19	good	Ø	70-90 dBA Acceptable	2 TRUCKS 2 CREWS Remains F&S, Avoids slope the Me & wider	VB
11/08/19	good	Ø	" "	" "	VB
11/11/19	N/A	N/A	NA	NO WORK HOLIDAY	VB
11/12/19	good	Ø	" "	Avoids animal (Insect & Cater) Bear on slope	VB
11/13/19	good	Ø	" "	Remains low lying branches for slope	VB
11/14/19	good	Ø	" "	" "	VB
11/15/19	good	Ø	" "	WORKS NOT BEING BY Blvd remains	VB
11/18/19	good	Ø	" "	Working Branches, Cater Bear on slope	VB
11/19/19	good	Ø	" "	" "	VB
11/20/19	good	RAIN	" "	Hand crew on slopes remains vegetation Equipment with at 562 PKWY SOUTH AT DAM	VB
11/21/19	good	Ø	" "	SPUT-down at 11:00 AM equipment returned, Hand crew done REACH 43 COMPLETED	VB

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 44 (San Gabriel River)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Mechanical clearing of vegetation will be used for clearing activities. Some trimming of the riparian vegetation may be necessary as growth occurs per original permit conditions.

**Description of Activity/Method of Implementation:**

Mechanical equipment was used to keep the channel clear of vegetation. Mowers were used in most areas. Trees were trimmed, and non-native trees removed. Minimal amount of dust was generated. Water trucks were used for dust suppression as necessary.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Project Start Date:** 09/23/19

**Project End Date:** 01/31/20

**Completed by:**

Name:	<i>[Signature]</i>
Title:	Construction Super
Date:	06/24/2020

**Approved by:**

Name:	<i>[Signature]</i>
Title:	AAE
Date:	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 44 (San Gabriel River)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	95.48

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB) for flowing water. Mechanical equipment was used to keep the channel clear of vegetation. Mowers were used in most areas. Trees were trimmed, and non-native trees removed. All equipment and trucks had their tires and undercarriage cleaned before leaving the site to maintain water quality.

The following Best Management Practice was deemed to be applicable and was implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** Yes

**Date on Site:** During site activity

**Comments/Revisions:**

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Completed by:

Name:	<i>[Signature]</i>
Title:	<i>Construction Supt</i>
Date:	<i>06/24/2020</i>

Approved by:

Name:	<i>[Signature]</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 44 (San Gabriel River)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

Mechanical equipment was used to keep the channel clear of vegetation. Mowers were used in most areas. Trees were trimmed, and non-native trees removed. Activity in the reach maintained minimal noise during the working hours. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

Name:	<i>[Signature]</i>
Title:	<i>CONCRETE Supt</i>
Date:	<i>06/24/2020</i>

*Approved by:*

Name:	<i>[Signature]</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name San Gabriel River Rubber Dams, SD, 4  
 Reach Number 44

Date	Air	H2O	Noise	Comment	Initial
9/23/19	good	Ø	70-90 dBA acceptable	DAY 1 moving along THE EAST SIDE OF SGR @ SGR PKWY SOUTH of concrete structure	JG
9/24/19	good	Ø	" "	worked along THE EAST side up to Beverly	JG
9/25/19	good	Ø	" "	contractor called in unavailable to work	JG
9/26/19	good	Ø	" "	" "	JG
9/27/19	good	Ø	" "	NO COMMENTS	JG
9/30/19	good	Ø	" "	SOUTH OF SGR PKWY along the spine	JG
10/01/19	good	Ø	" "	" "	JG
10/02/19	good	Ø	" "	NO work called in, NO slope mark	JG
10/03/19	good	Ø	" "	marking SGR PKWY upside to Beverly	JG
10/04/19	good	Ø	" "	S/SGR PKWY along west side of channel	JG
10/07/19	good	Ø	" "	BOTH EAST & WEST BANKS, SOUTH SGR PKWY to Beverly complete.	JG
10/08/19	good	Ø	" "	working south of Beverly Blvd. Two slope markers marking E/w slopes	JG

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name San Gabriel River Rubber Dams, SD, 4  
 Reach Number 44

Date	Air	H2O	Noise	Comment	Initial
10/09/19	good	Ø	70-90 dBA acceptable	Two slope mowers working along E/W slope	JG
10/10/19	good	Ø	"	Relocated south of whitler Blvd	JG
10/11/19	good	Ø	"	continued to park south of whitler	JG
10/14/19	good	Ø	"	mower, shield-steer	JG
10/15/19	good	Ø	"	mowing south of whitler Blvd	JG
10/15/19	good	Ø	"	mowing south of whitler walked Ye day	JG
10/16/19	good	Ø	"	mowing south of whitler Blvd.	JG
10/17/19	good	Ø	"	whitler to Washington Blvd. complete	JG
10/18/19	good	Ø	"	washington Blvd. to RD4 completed	JG
10/21/19	good	Ø	"	1 slope mower working south of RD4	JG
10/22/19	good	Ø	"	"	JG
10/23/19	good	Ø	"	Flax-wing mower got stuck in road.	JG
10/24/19	good	Ø	"	Slope mower south of RD4	JG

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name San Gabriel River Rubber Dams, SD, 4  
 Reach Number 44

Date	Air	H2O	Noise	Comment	Initial
10/25/19	good	☺	70-90 dBA acceptable	minor mechanical problem, RD4-RD5 completed	JG
10/28/19	good	☺	" "	working south of RD5 to 5Fwy	JG
10/29/19	good	☺	" "	RD5 to 5Fwy/RD6 completed	JG
10/30/19	good	☺	" "	Placed mats to Beverly-Whittier 2 crews	JG
10/31/19	good	☺	" "	Leaves Beverly-Whittier crew of RD6	JG
11/01/19	good	☺	" "	2 crews	JG
11/04/19	good	☺	" "	Finishes up south of Beverly	JG
11/05/19	good	☺	" "	slope moved at Florence - RD7	JG
11/06/19	good	☺	" "	" "	JG
11/07/19	good	☺	" "	minor mechanical issues by dike hole	JG
11/08/19	good	☺	" "	slope moved @ Florence - Rd 7	JG
11/11/19	---	---	" "	Holiday	JG





WORK # 6292903

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 45 Sand Canyon (PD T1307)**  
**Main Channel Inlet**

T.G.: 4552-C1

**Permit Requirements:**

*Mechanical clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.05 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

HAND CLEARING OF ALL VEGETATION WITHIN PERMITTED  
LIMITS PERFORMED. NO MECHANICAL WORK REQUIRED TO  
COMPLETE PROJECT

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS < 5 MPH.  
NO DUST LEFT PROJECT SITE.

Project start date: 10-7-19

Project end date: 10-7-19

Completed by: Name: LOUIS MONTES DEUCAT Title: PWCL Date: 10-7-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-7-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 5 BACS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ϕ

Location/Channel Reach#: **Reach No. 45 Sand Canyon (PD T1307)  
Main Channel Inlet**

T.G.: 4552-C1

**Permit Requirements:**

*Mechanical clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.05 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling           | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control        | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON LENGTH OF REACH.

Biologist on site:  Yes  No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-7-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-7-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 45 Sand Canyon (PD T1307)  
Main Channel Inlet**

T.G.: 4552-C1

**Permit Requirements:**

*Mechanical clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.05 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS IN COMPLIANCE  
WITH LOCAL NOISE ORDINANCE NO POWER TOOLS WERE  
STARTED PRIOR TO 7:00AM.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-7-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-7-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name SAND CANYON INLET

Reach Number 45

Date	Air	H2O	Noise	Comment	Initial
10.7.2019	√	√	√	NO INVASIVE VEGETATION FOUND ON REACH	LM

wo# 6292903

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 46 Sand Canyon (PD T1307)  
Main Channel Outlet**

T.G.: 4552-C1

**Permit Requirements:**

*Mechanical clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.06 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater. If additional areas need to be impacted, the areas shall be quantified in the annual report and mitigation for impacts to vegetation will be required.*

**Description of Activity/Method of Implementation:**

HAND CLEARING OF VEGETATION WITHIN PERMITTED LIMITS  
PERFORMED. NO EQUIPMENT REQUIRED TO COMPLETE WORKORDER.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS, NO DUST LEFT PROJECT SITE.

Project start date: 10-7-19

Project end date: 10-7-19

Completed by: Name: LUIS MONTES DECCA Title: PWCL Date: 10-7-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-8-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality** Trash/Debris Removed (Tons) 5 BAGS

Mitigation Measure #: 2 Exotic Veg. Removed (Sq. Ft.) ϕ

Location/Channel Reach#: **Reach No. 46 Sand Canyon (PD T1307)** T.G.: 4552-C1  
**Main Channel Outlet**

**Permit Requirements:**

*Mechanical clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.06 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater. If additional areas need to be impacted, the areas shall be quantified in the annual report and mitigation for impacts to vegetation will be required.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH.

Biologist on site:  Yes  No Date: \_\_\_\_\_

Biologist Comments/Instructions:  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LOUIS MONTES DE OCA Title: DWCL Date: 10-7-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-8-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 46 Sand Canyon (PD T1307)  
Main Channel Outlet**

T.G.: 4552-C1

**Permit Requirements:**

*Mechanical clearing will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.06 acre. No native trees shall be removed with a 2-inch diameter at breast height or greater. If additional areas need to be impacted, the areas shall be quantified in the annual report and mitigation for impacts to vegetation will be required.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS COMPLETED DURING DAYLIGHT HOURS IN  
COMPLIANCE WITH LOCAL NOISE ORDINANCE NO POWER TOOL WAS  
STARTED PRIOR TO 7:00AM.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-7-19

Approved by: Name: MARTY LEMUS

Title: FCS

Date: 10-8-19



# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

Reach Name SAND CANYON OUTLET

Reach Number 46

Date	Air	H2O	Noise	Comment	Initial
10.7.19	✓	✓	✓	NO INVASIVE VEGETATION ON REACH	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 48 Mint Cyn Channel T.G.: 4552-A1 TO 4551- J2**  
**Between Sierra Hwy & Adon Ave**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND LABOR PERFORMED TO REMOVE ALL  
VEGETATION WITHIN REACH LIMITS. WATER TRUCK ON SITE AT  
ALL TIMES TO SPRAY WATER AS NEEDED FOR DUST CONTROL PURPOSES.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS 5 MPH.

Project start date: 11-07-2019

Project end date: 11-08-2019

Completed by: Name: L. MONTESDEON Title: PWCL Date: 11-08-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-13-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 3 TONS  
Mitigation Measure #: **2**      Exotic Veg. Removed (Sq. Ft.) 40 SF  
Location/Channel Reach#: **Reach No. 48 Mint Cyn Channel**      T.G.: **4552-A1 TO 4551- J2**  
**Between Sierra Hwy & Adon Ave**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

40 Sq. Ft. OF INVASIVE VEGETATION REMOVED.  
(TOBACCO)

Biologist on site:  Yes       No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: L. MONTES DE OCA      Title: PNCL      Date: 11-08-2019

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 11-13-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 48 Mint Cyn Channel T.G.: 4552-A1 TO 4551- J2  
Between Sierra Hwy & Adon Ave**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED WITHIN DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK WAS COMMENCED PRIOR TO 7:00AM.

Completed by: Name: L. MONTES DE OGA Title: PWCL Date: 11-08-2019  
Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-13-19

WO # 6292507

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 49 Mint Cyn. Channel  
Between Adon Ave & Scherzinger Ln**

T.G.: 4551- J2

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation. This process will be repeated annually during the dry season.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING WORK TO REMOVE VEGETATION WITHIN REACH LIMITS PERFORMED. WATERTRUCK ON SITE AT ALL TIMES TO SPRAY WATER AS NEEDED FOR DUST CONTROL PURPOSES.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS 5 MPH

Project start date: 11-07-2019

Project end date: 11-08-2019

Completed by: Name: L. MONTES DE OCA Title: PWCL Date: 11-08-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-13-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 1.32 TONS

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 10 sq ft.

Location/Channel Reach#: **Reach No. 49 Mint Cyn. Channel**      T.G.: 4551- J2  
**Between Adon Ave & Scherzinger Ln**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation. This process will be repeated annually during the dry season.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

10 sq ft of INVASIVE VEGETATION  
REMOVED (TOBACCO)

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: L. MONTES DE OCA      Title: PWCL      Date: 11-08-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 11-13-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 49 Mint Cyn. Channel  
Between Adon Ave & Scherzinger Ln**

T.G.: 4551- J2

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation. This process will be repeated annually during the dry season.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS COMPLETED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK WAS COMMENCED PRIOR TO 7:00 AM.

Completed by: Name: LIMONTES DE OGA

Title: PWCL Date: 11-08-19

Approved by: Name: MARTY LEMUS

Title: FCCS Date: 11-13-19

WD# 6292507

# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

Reach Name MINT CANYON CHANNEL  
Reach Number 4-8 - 49

Date	Air	H2O	Noise	Comment	Initial
11.7.2019	✓	✓	✓	50 SF OF INVASIVE VEGETATION REMOVED: GEORGINA	LM
11.8.2019	✓	✓	✓		LM



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: **1**

Location/Channel Reach #: **Reach No. 51 Mint Cyn M.C.O. (PD 1894)** T.G.: **4551- J3 TO H3**  
**Santa Clara - Main Channel**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.9 acre (932 linear feet by 20 feet wide along each levee). Clearing shall not extend more than 20 feet beyond the toe of the levee. The vegetation (0.01 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION COMPLETED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE  
DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

DURING PROJECT SCHEDULE, NO WORKING DAY WIND CONDITIONS  
EXCEEDED 25 MPH. NO DUST LEFT WORKSITE.

Project start date: 10.2.2019

Project end date: 10.15.19

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10.15.19

Approved by: Name: MARTY LEMUS Title: FCLS Date: 10-16-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 761

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 10

Location/Channel Reach#: **Reach No. 51 Mint Cyn M.C.O. (PD 1894)**      T.G.: 4551- J3 TO H3  
**Santa Clara - Main Channel**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.9 acre (932 linear feet by 20 feet wide along each levee). Clearing shall not extend more than 20 feet beyond the toe of the levee. The vegetation (0.01 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

REPAIRED LARGE EROSION AT END OF HBC CHANNEL TO PREVENT STRUCTURAL DAMAGE. 10 SF OF TOBACCO REMOVED

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_

\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA      Title: PWCC      Date: 10-15-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-16-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 51 Mint Cyn M.C.O. (PD 1894)**      T.G.: 4551- J3 TO H3  
**Santa Clara - Main Channel**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.9 acre (932 linear feet by 20 feet wide along each levee). Clearing shall not extend more than 20 feet beyond the toe of the levee. The vegetation (0.01 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE WITH LOCAL NOISE ORDINANCE.  
\_\_\_\_\_  
\_\_\_\_\_

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO EQUIPMENT STARTED WORK PRIOR TO 7:00 AM.  
NO WEEKEND WORK.  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA      Title: PWJCL      Date: 10-15-19  
Approved by: Name: MARTY LEMUS      Title: FCLS      Date: 10-16-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name MCO MINT CYNCH  
 Reach Number 51

Date	Air	H2O	Noise	Comment	Initial
10.2.19	✓	✓	✓	10 SF OF INVASIVE VEGETATION	LM
10.3.19	✓	✓	✓	REMOVED. TOBACCO	LM
10.4.19	✓	✓	✓		LM
10.7.19	✓	✓	✓		LM
10.8.19	✓	✓	✓		LM
10.9.19	✓	✓	✓		LM
10.10.19	✓	✓	✓		LM
10.11.19	✓	✓	✓		LM
10.15.19	✓	✓	✓		LM

WO# 6292268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 53 Santa Clara River (PD 832) T.G.: 4551-H4  
Main Channel Inlet**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.03 acre.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF VEGETATION AND  
DEBRIS PERFORMED WITHIN ALLOWABLE LIMITS.  
MOST OF THE WORK WAS PERFORMED BY HAND CREW  
BACKHOE WAS USED TO LOAD DEBRIS/VEGETATION INTO HEAVY  
TRUCK.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HEAVY TRUCK DUMP BOX TARPED DURING TRANSPORTATION OF  
DEBRIS AND VEGETATION TO LANDFILL.

Project start date: 10.2.2019

Project end date: 10.2.2019

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10.3.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 15 BAES

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 53 Santa Clara River (PD 832)** T.G.: 4551-H4  
**Main Channel Inlet**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.03 acre.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH.

Biologist on site:  Yes  No Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-3-2019  
Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 53 Santa Clara River (PD 832) T.G.: 4551-H4  
Main Channel Inlet**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.03 acre.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

ALL HEAVY EQUIPMENT / TRUCKS IN COMPLIANCE WITH  
NOISE ORDINANCE REGULATIONS. NO AFTERMARKET EXHAUST.  
NO EQUIPMENT STARTED BEFORE 7:00AM.

Completed by: Name: LUIS MONTES DE OWA Title: FWCC Date: 10-3-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019



Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name MAIN CHANNEL INLET PD832  
Reach Number 53

Date	Air	H2O	Noise	Comment	Initial
10.2.19	✓	✓	✓	NO INVASIVE VEGETATION FOUND ON LENGTH OF REACH.	LM



NO # 629 2268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 54 Santa Clara River (PD 832) T.G.: 4551-H3 TO H4  
Main Channel Outlet**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.31 acre.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING PERFORMED TO REMOVE  
VEGETATION. HEAVY EQUIPMENT GRADED DIRT TO ELIMINATE  
WATER FROM PONDING AT OUTLET. WATER TRUCKS SPRAYED  
WATER AS NEEDED TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HEAVY TRUCKS DUMP BOX TAPPED DURING TRANSPORTATION  
OF DEBRIS AND VEGETATION TO LANDFILL.

Project start date: 10.3.2019

Project end date: 10.3.2019

Completed by: Name: WISMONTES DE OCA Title: PWCL Date: 10.3.19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 2.93

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 54 Santa Clara River (PD 832) T.G.: 4551-H3 TO H4  
Main Channel Outlet**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.31 acre.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON  
LENGTH OF REACH.

Biologist on site:  Yes  No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: JUIS MONTEZ DE OCA

Title: FWCL

Date: 10.3.19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 54 Santa Clara River (PD 832) T.G.: 4551-H3 TO H4  
Main Channel Outlet**

**Permit Requirements:**

*Mechanical and hand clearing work will be performed to keep reach clear of all vegetation.*

*Impacts shall not exceed 0.31 acre.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS AND  
IN COMPLIANCE WITH LOCAL NOISE ORDINANCE.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

ALL WORK ACTIVITIES WERE COMMENCED AFTER 7:00 AM.  
NO WEEKEND WORK.

Completed by: Name: LUIS NONTES DE OGA Title: PRJCL Date: 10-3-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name MAIN CHANNEL OUTLET  
Reach Number 54

Date	Air	H2O	Noise	Comment	Initial
10.3.19	✓	✓	✓	NO INVASIVE VEGETATION ON REACH	LM

WO# 629 2268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 55 Santa Clara River Main Chan. T.G.: 4551-H3 TO H4 (PD's 910, 832, 1758, & 1562 unit 2)**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 2.75 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF VEGETATION WITHIN 20 FEET FROM TOE OF LEVEE SLOPE PERFORMED. ALL DIRT WITHIN 20 FEET GRADED TO ELIMINATE UNDERMINING OF CONCRETE LINING.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS < 5 MPH.  
WATER TRUCKS ON SITE AND SPRAYED WATER AS NEEDED TO MINIMIZE DUST.

Project start date: 10.2.2019

Project end date: 10.2.2019

Completed by: Name: LUIS MONTES DE OCA Title: DWCL Date: 10.3.19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 8.00

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 20

Location/Channel Reach#: **Reach No. 55 Santa Clara River Main Chan.**      T.G.: 4551-H3 TO H4  
(PD's 910, 832, 1758, & 1562 unit)

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 2.75 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

20'SF-TAMARISK INVASIVE PLANT REMOVED FROM REACH.

Biologist on site:  Yes       No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA      Title: PHDCC      Date: 10-3-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 55 Santa Clara River Main Chan. T.G.: 4551-H3 TO H4  
(PD's 910, 832, 1758, & 1562 unit**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 2.75 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED WITHIN DAYLIGHT HOURS IN COMPLIANCE WITH LOCAL NOISE ORDINANCE. NO ENGINE WAS STARTED BEFORE 7:00 AM.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: LUIS MONTES DE OCA Title: PWCC Date: 10-3-2019

Approved by: Name: MARTY LEMUS Title: FCS Date: 10-4-2019



Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name SANTA CLAY PINE MAIN

Reach Number 7-55

Date	Air	H2O	Noise	Comment	Initial
10.2.19	✓	✓	✓	20 SF OF TAMARISK VEGETATION REMOVED.	LM



WO # 6292268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 56 Santa Clara River  
(PD 1562 unit 2)**

T.G.: 4551-G1

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.47 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF VEGETATION  
WITHIN PERMIT LIMITS CONDUCTED. WATER TRUCK ON SITE  
AT ALL TIMES TO SPRAY WATER AS NEEDED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HEAVY TRUCK DUMP BOX TAPPED DURING TRANSPORTATION  
OF VEGETATION AND DEBRIS TO LANDFILL.

Project start date: 10.3.2019

Project end date: 10.3.2019

Completed by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

Approved by: Name: JOHN RICE Title: C.S Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 20 BAGS

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 56 Santa Clara River**      T.G.: 4551-G1  
(PD 1562 unit 2)

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.47 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**  
NO INVASIVE VEGETATION FOUND ON REACH.

Biologist on site:  Yes     No      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA    Title: PWCL    Date: 10-3-19  
Approved by: Name: MARTY LEMUS    Title: FCCS    Date: 10-4-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 56 Santa Clara River  
(PD 1562 unit 2)**

**T.G.: 4551-G1**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.47 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

ALL WORK OPERATIONS COMPLETED DURING DAULIGHT  
HOURS AND WITHIN COMPLIANCE OF LOCAL NOISE  
ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK WAS COMMENCED UNTIL AFTER 7:00AM.  
NO WEEKEND WORK PERFORMED.

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-3-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

# Los Angeles County Channel Maintenance Project

## Mitigation Monitoring Program

Reach Name SANTA CLARA RIVER MAIN

Reach Number 56

Date	Air	H2O	Noise	Comment	Initial
10.3.19	✓	✓	✓	NO INVASIVE VEGETATION ON REACH	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: **1**

Location/Channel Reach #: **Reach No. 57 Whites Cyn (PD T 704 M.C.I.) T.G.: 4551-G1**

**Permit Requirements:**

*Mechanical or hand clearing work will be performed to keep reach clear of all vegetation.*

*The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
PERFORMED. WATER TRUCK ON SITE TO SPRAY WATER AS  
NEEDED TO PERFORM DUST CONTROL.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HIGH WIND CONDITIONS > 20 MPH.  
NO DUST LEFT PROJECT SITE, AS WORKING AREA WAS  
PRE, DURING AND POST SPRAYED WITH WATER.

Project start date: 10.10.19

Project end date: 10.10.19

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10.10.19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-11-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 0.56

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 57 Whites Cyn (PD T 704 M.C.I.)** T.G.: 4551-G1

**Permit Requirements:**

*Mechanical or hand clearing work will be performed to keep reach clear of all vegetation.*

*The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH.

Biologist on site:  Yes  No Date: \_\_\_\_\_

Biologist Comments/Instructions:  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA Title: PWCC Date: 10-10-19  
Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-11-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 57 Whites Cyn (PD T 704 M.C.I.) T.G.: 4551-G1**

**Permit Requirements:**

*Mechanical or hand clearing work will be performed to keep reach clear of all vegetation.*

*The vegetation that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

WORK WAS CONDUCTED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK WAS COMMENCED PRIOR TO 7:00AM.

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-10-19

Approved by: Name: MARTY LEMUS Title: FCS Date: 10-11-19



WO#6292268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 58 Santa Clara River (PD374)** T.G.: **4551-G3 TO F3**  
**U/S side old Soledad Cyn. Rd Bridge**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.95 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION WITHIN 20 FEET FROM TOE OF LEVEE PERFORMED. WATER TRUCKS ON SITE AT ALL TIMES TO SPRAY WATER AS NEEDED TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS < 5MPH.  
HEAVY TRUCK DUMP BOX TAPPED DURING TRANSPORTATION OF VEGETATION AND DEBRIS.

Project start date: 10.1.2019

Project end date: 10.2.2019

Completed by: Name: LUIS MONTES DE OCA Title: PLCCL Date: 10.3.19

Approved by: Name: MARTY LEMUS Title: FGCS Date: 10-4-2019



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 25 BAGS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 58 Santa Clara River (PD374)** T.G.: 4551-G3 TO F3  
**U/S side old Soledad Cyn. Rd Bridge**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.95 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE PLANTS FOUND ON LENGTH OF REACH.  
NO WATER CROSSING.

Biologist on site:  Yes  No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-3-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 58 Santa Clara River (PD374)** T.G.: **4551-G3 TO F3**  
**U/S side old Soledad Cyn. Rd Bridge**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.95 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS  
IN COMPLIANCE WITH LOCAL NOISE ORDINANCE.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

ALL HEAVY EQUIPMENT AND TRUCKS IN COMPLIANCE WITH  
LOCAL NOISE ORDINANCE NO EQUIPMENT WAS STARTED BEFORE  
7:00 AM

Completed by: Name: LUIS MONTES DE OCA Title: PWCC Date: 10-3-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name J' SANTA ANITA FIVE SOLEDAD  
 Reach Number 58

Date	Air	H2O	Noise	Comment	Initial
10.1.19	✓	✓	✓	NO INVASIVES FOUND ON LENGTH OF REACH	JM
10.2.19	✓	✓	✓	" "	JM

WO# 6292268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 60 Santa Clara River**  
**(PD's 1339 & 374)**

T.G.: 4551- F3 TO E2

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 1.50 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
PERFORMED WITHIN PERMITTED LIMITS. WATER TRUCKS ON SITE  
AT ALL TIMES TO SPRAY WATER AS NEEDED TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS < 5 MPH.  
HEAVY TRUCKS TAPPED DURING TRANSPORTATION OF DEBRIS AND  
VEGETATION TO LANDFILL.

Project start date: 10.1.2019

Project end date: 10.2.2019

Completed by: Name: NIS NORTES DE OCA Title: pujcc Date: 10.3.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 10 BAGS

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 60 Santa Clara River**      T.G.: **4551- F3 TO E2**  
**(PD's 1339 & 374)**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 1.50 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**  
NO INVASIVE PLANTS FOUND ON LENGTH OF REACH

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OYA      Title: FULL      Date: 10-3-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-4-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 60 Santa Clara River  
(PD's 1339 & 374)**

T.G.: 4551- F3 TO E2

**Permit Requirements** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 1.50 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

ALL WORK COMPLETED DURING DAYLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

ALL HEAVY EQUIPMENT IN COMPLIANCE WITH NOISE ORDINANCE,  
NO EQUIPMENT WAS STARTED BEFORE 7:00AM.

Completed by: Name: LUIS MONTES DE OCA

Title: PNLCL

Date: 10-3-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-4-2019

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name SANTA CLARA RIVER  
 Reach Number 60

Date	Air	H2O	Noise	Comment	Initial
10-1-19	✓	✓	✓	NO INVASIVE VEGETATION FOUND	LM
10-2-19	✓	✓	✓	ON LENGTH OF REACH.	LM



WO # 629 2268

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 61 Santa Clara River (PD 659) T.G.: 4551-E2**  
**D/S New Soledad Canyon. Rd. Bridge**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.75 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
WITHIN 20' LIMIT COMPLETED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO  
MINIMIZE DUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

DURING PROJECT SCHEDULE, NO WORKING DAY  
WIND CONDITIONS EXCEEDED 25 MPH.  
NO DUST LEFT PROJECT SITE.

Project start date: 9.30.2019

Project end date: 10.15.19

Completed by: Name: LUIS MONTES DE OCA Title: PWICL Date: 10-15-19

Approved by: Name: MARTY LEMUS Title: FCS Date: 10-16-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 24.94

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 100

Location/Channel Reach#: **Reach No. 61 Santa Clara River (PD 659) T.G.: 4551-E2**  
**D/S New Soledad Canyon. Rd. Bridge**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.75 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling       ESC2 Preservation of Existing Vegetation
- ESC21 Dust Control       ESC22 Temporary Stream Crossing
- ESC31 Temporary Drains and Swales       ESC50 Silt Fence
- ESC51 Straw Bale Barriers       ESC52 Sand Bag Barriers

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required. (Please explain below.)  
 Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

100SF INVASIVE VEGETATION REMOVED  
TAMARISK AND TOBACCO.

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA      Title: fulcl      Date: 10-15-19

Approved by: Name: MARTY LEMUS      Title: FECS      Date: 10-16-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 61 Santa Clara River (PD 659) T.G.: 4551-E2  
D/S New Soledad Canyon. Rd. Bridge**

**Permit Requirements:** *The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the levee slope lining along the entire reach.*

*Impacts shall not exceed 0.75 acre. Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS COMPLETED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO HEAVY EQUIPMENT COMMENCED WORK PRIOR TO  
7:00 AM, NO WEEKEND WORK CONDUCTED.

Completed by: Name: LUIS MONTES DE OYA Title: PWCL Date: 10-15-19

Approved by: Name: MARTY LEMUS Title: FELS Date: 10-16-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name SC RIVER HONOLY AVE  
 Reach Number 61

Date	Air	H2O	Noise	Comment	Initial
9.30.19	✓	✓	✓	100 SF OF INVASIVE	LM
10.1.19	✓	✓	✓	VEGETATION REMOVED.	LM
10.2.19	✓	✓	✓	TAMARISK-TOBACCO	LM
10.3.19	✓	✓	✓		LM
10.4.19	✓	✓	✓		LM
10.7.19	✓	✓	✓		LM
10.8.19	✓	✓	✓		LM
10.9.19	✓	✓	✓		LM
10.10.19	✓	✓	✓		LM
10.11.19	✓	✓	✓		LM
10.15.19	✓	✓	✓		LM

WO # 6292668

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 63 Oak Ave Rd Drainage  
(CDR 523.081)**

T.G.: 4551-C2

**Permit Requirements:**

*The channel clearing work will involve mechanized removal of all vegetation bank to bank.*

Impacts shall not exceed 0.85 acre.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION COMPLETED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE  
DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS DURING COMPLETION OF PROJECT.  
WIND SPEED NEVER EXCEEDED 25 MPH.

Project start date: 10.10.2019

Project end date: 10.22.19

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10.22.19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-24-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 20 BAES

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 63 Oak Ave Rd Drainage  
(CDR 523.081)**

T.G.: 4551-C2

**Permit Requirements:**

*The channel clearing work will involve mechanized removal of all vegetation bank to bank.*

Impacts shall not exceed 0.85 acre.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

ESC1 Scheduling

ESC2 Preservation of Existing Vegetation

ESC21 Dust Control

ESC22 Temporary Stream Crossing

ESC31 Temporary Drains and Swales

ESC50 Silt Fence

ESC51 Straw Bale Barriers

ESC52 Sand Bag Barriers

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH.

REPAIRED EROSION TO PREVENT STRUCTURAL DAMAGE TO CONCRETE  
CHANNEL INVERT.

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-22-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-24-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 63 Oak Ave Rd Drainage  
(CDR 523.081)**

T.G.: 4551-C2

**Permit Requirements:**

*The channel clearing work will involve mechanized removal of all vegetation bank to bank.*

Impacts shall not exceed 0.85 acre.

**Description of Activity/Method of Implementation:**

ALL WORK CONDUCTED WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.  
HEAVY EQUIPMENT COMMENCED WORK AFTER 7:00AM.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: LUIS MONTES DE OCA

Title: PWU

Date: 10-22-19

Approved by: Name: MARTY LEMUS

Title: FCLS

Date: 10-24-19

W0 # 6292668

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name   DAK AVE RD DRAINAGE    
Reach Number   63  

Date	Air	H2O	Noise	Comment	Initial
10.16.19	✓	✓	✓	NO INVASIVE VEGETATION	LM
10.17.19	✓	✓	✓	FOUND ON LENGTH OF REACH	LM
10.18.19	✓	✓	✓	"	LM
10.21.19	✓	✓	✓	"	LM
10.22.19	✓	✓	✓	"	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 64 Soledad Cyn Rd Drainage T.G.: 4551 - B2**  
**(CDR523.071 D Outlet)**

**Permit Requirements:**

*The channel clearing work will involve clearing an 8-foot-wide path along the centerline of the channel. All vegetation will be removed by hand labor.*

*Impacts shall not exceed 0.10 acre (8 feet wide by 577 linear feet).*

**Description of Activity/Method of Implementation:**

HAND LABOR TO REMOVE VEGETATION COMPLETED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO  
MINIMIZE DUST ON TRUCK HAUL ROUTE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS >5 MPH.

**Project start date:** 10-18-2019

**Project end date:** 10-23-2019

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-23-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-24-2019



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 70.87

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 20 SF

Location/Channel Reach#: **Reach No. 64 Soledad Cyn Rd Drainage**      T.G.: 4551 - B2  
**(CDR523.071 D Outlet)**

**Permit Requirements:**

*The channel clearing work will involve clearing an 8-foot-wide path along the centerline of the channel. All vegetation will be removed by hand labor.*

*Impacts shall not exceed 0.10 acre (8 feet wide by 577 linear feet).*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

20 SF OF INVASIVE VEGETATION REMOVED. (TAMARISK)

Biologist on site:  No       Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA      Title: PWJCL      Date: 10-23-2019

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-24-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 64 Soledad Cyn Rd Drainage T.G.: 4551 - B2  
(CDR523.071 D Outlet)**

**Permit Requirements:**

*The channel clearing work will involve clearing an 8-foot-wide path along the centerline of the channel. All vegetation will be removed by hand labor.*

*Impacts shall not exceed 0.10 acre (8 feet wide by 577 linear feet).*

**Description of Activity/Method of Implementation:**

ALL WORK COMPLETED DURING DAYLIGHT HOURS IN  
COMPLIANCE WITH LOCAL NOISE ORDINANCE.  
\_\_\_\_\_  
\_\_\_\_\_

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK COMMENCED PRIOR TO 7:00 AM.  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OLA Title: DWCL Date: 10-23-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-24-2019

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name CDR 523.071C  
 Reach Number 64

Date	Air	H2O	Noise	Comment	Initial
10.18.19	✓	✓	✓	20SF OF INVASIVE VEGETATION	LN
10.21.19	✓	✓	✓	REMOVED (TAMARISK)	LN
10.22.19	✓	✓	✓		LN
10.23.19	✓	✓	✓		LN

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 66 Santa Clara River (PD 1538)** T.G.: 4550-H2

**Permit Requirements:**

*The channel clearing will involve mechanized removal of all vegetation within 20 feet from the slope lining along the entire reach.*

*Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION WITHIN  
20' LIMIT PERFORMED. WATER TRUCK SPRAYED WATER AS NEEDED TO  
MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

WIND CONDITIONS >10 MPH. HEAVY TRUCK DUMP BOX TARPED  
DURING TRANSPORTATION OF DEBRIS/VEGETATION TO LANDFILL.

Project start date: 10-9-2019

Project end date: 10-9-2019

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-9-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-10-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 7.61 TONS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 66 Santa Clara River (PD 1538)**

T.G.: **4550-H2**

**Permit Requirements:**

*The channel clearing will involve mechanized removal of all vegetation within 20 feet from the slope lining along the entire reach.*

*Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-9-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-10-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 66 Santa Clara River (PD 1538)** T.G.: 4550-H2

**Permit Requirements:**

*The channel clearing will involve mechanized removal of all vegetation within 20 feet from the slope lining along the entire reach.*

*Clearing shall not extend more than 20 feet beyond the toe of the levee.*

**Description of Activity/Method of Implementation:**

WORK PERFORMED DURING DAYLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

ALL WORK WAS COMMENCED AFTER 7:00AM.

Completed by: Name: LUIS MONTES DE OMA Title: PWCL Date: 10-9-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-10-2019

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name SANTA CLARA RIVER  
Reach Number W6

Date	Air	H2O	Noise	Comment	Initial
10.9.2019	✓	✓	✓	7.61 TONS OF VEGETATION AND DEBRIS HAULED TO LANDFILL.	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 67 Bouquet Canyon Upper T.G.: 4461-D1 TO D6  
(PD's 1201, 802, 700B, & 625B)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near the centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

*The vegetation (1.33 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
COMPLETED WITHIN PERMISSIBLE LIMITS. WATER TRUCK  
SPRAYED WATER BEFORE, DURING AND AFTER PROCEDURE  
TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

MILD WIND CONDITIONS. ALL HEAVY TRUCKS TAPPED  
DURING TRANSPORTATION OF VEGETATION AND DEBRIS.

Project start date: 9-3-2019

Project end date: 9-9-19

Completed by: Name: MARTY LEMUS Title: FCCS Date: 9-13-19

Approved by: Name: JOHN RICE Title: CS Date: 9-13-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 209.23

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 100

Location/Channel Reach#: **Reach No. 67 Bouquet Canyon Upper T.G.: 4461-D1 TO D6 (PD's 1201, 802, 700B, & 625B)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near the centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

*The vegetation (1.33 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling
- ESC21 Dust Control
- ESC31 Temporary Drains and Swales
- ESC51 Straw Bale Barriers
- ESC2 Preservation of Existing Vegetation
- ESC22 Temporary Stream Crossing
- ESC50 Silt Fence
- ESC52 Sand Bag Barriers

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

EXOTIC VEGETATION REMOVED WAS TAMARISK

Biologist on site:  No  Yes Date: \_\_\_\_\_

Biologist Comments/Instructions:  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: JULIE MONTES DE OGA Title: PW/CL Date: 9-9-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 9-13-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 67 Bouquet Canyon Upper T.G.: 4461-D1 TO D6  
(PD's 1201, 802, 700B, & 625B)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near the centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

*The vegetation (1.33 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

WORK DONE DURING DAYLIGHT HOURS IN COMPLIANCE WITH LOCAL NOISE ORDENANCE. ALL EQUIPMENT AND VEHICLES EQUIPPED WITH PROPER EXHAUST DEVICES. NO WEEKEND WORK CONDUCTED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OGA Title: PWCL Date: 9-9-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 9-13-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name FOUSUET CANYON UPPER  
 Reach Number 07

Date	Air	H2O	Noise	Comment	Initial
9-4-19	✓	✓	✓	100 SF OF INVASIVES REMOVED	LM
9-5-19	✓	✓	✓	(TAMARISK)	ML
9-6-19	✓	✓	✓	NO CHANGES	ML
9-9-19	✓	✓	✓	NO CHANGES	ML

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 69 Bouquet Canyon Middle T.G.: 4461-C6 TO A7  
(PD's 722,773,1365,1065, & 451)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

*The vegetation (0.62 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
COMPLETED WITHIN PERMISSIBLE LIMITS. WATER TRUCKS  
SPRAYED WATER BEFORE, DURING AND AFTER PROCEDURE  
TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

MILD WIND CONDITIONS. ALL HEAVY TRUCKS TRUCKS  
TARPED DURING THE TRANSPORTATION OF VEGETATION AND DEBRIS.

Project start date: 9-3-2019

Project end date: 9-12-19

Completed by: Name: MARTY LEMUS Title: FCCS Date: 9-16-19

Approved by: Name: JOHN RICE Title: CS Date: 9-16-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 214.97

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 50

Location/Channel Reach#: **Reach No. 69 Bouquet Canyon Middle T.G.: 4461-C6 TO A7  
(PD's 722,773,1365,1065, & 451)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

*The vegetation (0.62 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

EXOTIC VEGETATION REMOVED WAS TAMARISK

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: JUJIS MONTES DE OCA Title: PWCL Date: 9-12-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 9-16-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 69 Bouquet Canyon Middle T.G.: 4461-C6 TO A7  
(PD's 722,773,1365,1065, & 451)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

*The vegetation (0.62 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL WORK DONE DURING DAYLIGHT HOURS IN COMPLIANCE  
WITH LOCAL NOISE ORDENANCE. NO WEEKEND WORK CONDUCTED.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: LUIS MONTES DE OMA Title: PWCC Date: 9-12-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 9-16-19

Wo # 6292592

# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

Reach Name BOUQUET CANYON MIDDLE

Reach Number R-69

Date	Air	H2O	Noise	Comment	Initial
9-4-19	✓	✓	✓	50 SF OF INVASIVES REMOVED	LM
9-5-19	✓	✓	✓	'TAMPAISKI	ML
9-6-19	✓	✓	✓	NO CHANGES	
9-9-19	✓	✓	✓		
9-10-19	✓	✓	✓		
9-11-19	✓	✓	✓		
9-12-19	✓	✓	✓		
					ML



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 70 Bouquet Canyon Lower T.G.: 4550- J1 TO H-1 (PD's 544 & 345)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near the centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
WITHIN PERMISSIBLE LIMITS COMPLETED. WATER TRUCKS  
SPRAYED AT ALL TIMES DURING PROCEDURE TO MINIMIZE  
DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

MILD WIND CONDITIONS. HEAVY TRUCK TAPPED DURING  
THE TRANSPORTATION OF VEGETATION AND DEBRIS.

Project start date: 9-10-19

Project end date: 9-12-19

Completed by: Name: LUIS MONTES DE OCA Title: FWCL Date: 9-13-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 9-16-19



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 2.37

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 70 Bouquet Canyon Lower T.G.: 4550- J1 TO H-1 (PD's 544 & 345)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near the centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling           | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control        | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

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Completed by: Name: LUIS MONTES DE OCA      Title: PWCL      Date: 9-12-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 9-16-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 70 Bouquet Canyon Lower T.G.: 4550- J1 TO H-1  
(PD's 544 & 345)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation, except for a 10-foot-wide strip near the centerline of the channel. This process will be repeated annually, except that the 10-foot strip left will alternate from one side of the channel to the other.*

The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

WORK CONDUCTED DURING DAYLIGHT HOURS IN COMPLIANCE  
WITH LOCAL NOISE ORDINANCE. NO WEEKEND WORK CONDUCTED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HEAVY EQUIPMENT START TIME WAS 7:00 AM.

Completed by: Name: JULIS MONTES DE OCA

Title: PWCL Date: 9-12-19

Approved by: Name: MARTY LEMUS

Title: FCS Date: 9-16-19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name BOUQUET CANYON LOWER

Reach Number R-70

Date	Air	H2O	Noise	Comment	Initial
9-11-19	✓	✓	✓	- NO INVASIVE PLANTS -	LM
9-12-19	✓	✓	✓	NO CHANGES	ML

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 72 South Fork - Santa Clara River T.G.: 4640-F2 (Smizer Ranch M.C.I.)**

**Permit Requirements:** The channel clearing work will involve hand clearing dead vegetation and cutting invasive and trimming riparian vegetation that would obstruct flows. Tree canopy will be retained, yet a clear "tunnel" path will be provided to convey flows.

**Description of Activity/Method of Implementation:**

HAND CLEARING OF VEEETATION WITHIN ALLOWABLE LIMITS CONDUCTED. MECHANICAL EQUIPMENT WAS USED AT DOWNSTREAM HBC TO LOAD OUT VEEETATION AND DEBRIS.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

HEAVY TRUCKS TAPPED DURING TRANSPORTATION OF VEEETATION. LOW WIND CONDITIONS 5MPH.

Project start date: 9.30.2019

Project end date: 9.30.2019

Completed by: Name: MIS-FONTES, MCO Title: RWCL Date: 9.30.2019

Approved by: Name: MARTY LEMUS Title: FCLS Date: 10-2-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 1.61

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 10

Location/Channel Reach#: **Reach No. 72 South Fork - Santa Clara River T.G.: 4640-F2 (Smizer Ranch M.C.I.)**

**Permit Requirements:** The channel clearing work will involve hand clearing dead vegetation and cutting invasive and trimming riparian vegetation that would obstruct flows. Tree canopy will be retained, yet a clear "tunnel" path will be provided to convey flows.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input checked="" type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                                    |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                             |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

TAMARISK INVASIVES REMOVED FROM REACH.

Biologist on site:  No  Yes

Date: 9.30.2019

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 9.30.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-2-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 72 South Fork - Santa Clara River T.G.: 4640-F2  
(Smizer Ranch M.C.I.)**

**Permit Requirements:** The channel clearing work will involve hand clearing dead vegetation and cutting invasive and trimming riparian vegetation that would obstruct flows. Tree canopy will be retained, yet a clear "tunnel" path will be provided to convey flows.

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT  
HOURS AND WITHIN COMPLIANCE WITH LOCAL NOISE  
ORDINANCE NO WEEKEND WORK PERFORMED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: LUIS MONTES DE OCA Title: PWICL Date: 9-30-2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-2-2019

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name SMIZER RANCH MCI

Reach Number 72

Date	Air	H2O	Noise	Comment	Initial
9.30.19	✓	✓	✓	10 SF OF INVASIVES REMOVED.	LM
				TAMARISK —	



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 75 South Fork Santa Clara River (PD's 725, 916, 1041, & 1300)** T.G.: **4640-F1 TO 450-G3**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation bank to bank from Lyons Avenue to Orchard Village Road.*

*Mechanical grading and clearing of invasive vegetation from bank to bank will be performed from Orchard Village Road to the confluence with Newhall Creek.*

*Mechanical clearing of all vegetation will be done along the base of the concrete levee from the confluence with Newhall Creek to Magic Mountain Parkway. A 20-foot-wide strip will be maintained clear along the entire length of the levee and 45 degree grading of low-flow channels from side outlets to the center of the watercourse will also be maintained clear of all vegetation to minimize pounding and blockage of side outlet flows. A centerline watercourse low flow 12-foot wide will be maintained clear of all vegetation and will be graded along the entire length in this reach. Two island areas supporting mature trees will be left in place as well as the riparian vegetation. Tree pruning of dead branches and limbs that could obstruct flow will be removed by hand labor.*

*The vegetation (15.37 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION WITHIN PERMITTED LIMITS PERFORMED. MECHANICAL WORK WAS CONDUCTED TO GRADE WATER COURSE LOW FLOW ALONG ENTIRE LENGTH OF REACH.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required. (Please explain below.)

Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

DURING PROJECT ACTIVITIES WE ENCOUNTER LOW WIND CONDITIONS. WATER TRUCKS SPRAYED WATER TO MINIMIZE DUST. HEAVY TRUCKS TAPPED DURING TRANSPORTATION OF VEGETATION.

Project start date: 9.12.2019

Project end date: 9.27.2019

Completed by: Name: JULIS MONTES FCOA Title: PWCL Date: 9.30.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-2-2019



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT**  
**MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 479.15

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 200

Location/Channel Reach#: **Reach No. 75 South Fork      T.G.: 4640-F1 TO 450-G3**  
**Santa Clara River**  
**(PD's 725, 916, 1041, & 1300)**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation bank to bank from Lyons Avenue to Orchard Village Road.*

*Mechanical grading and clearing of invasive vegetation from bank to bank will be performed from Orchard Village Road to the confluence with Newhall Creek.*

*Mechanical clearing of all vegetation will be done along the base of the concrete levee from the confluence with Newhall Creek to Magic Mountain Parkway. A 20-foot-wide strip will be maintained clear along the entire length of the levee and 45 degree grading of low-flow channels from side outlets to the center of the watercourse will also be maintained clear of all vegetation to minimize pounding and blockage of side outlet flows. A centerline watercourse low flow 12-foot wide will be maintained clear of all vegetation and will be graded along the entire length in this reach. Two island areas supporting mature trees will be left in place as well as the riparian vegetation. Tree pruning of dead branches and limbs that could obstruct flow will be removed by hand labor.*

*The vegetation (15.37 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input checked="" type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                                    |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                             |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

TAMARISK AND TOBACCO INVASIVE  
PLANTS REMOVED FROM REACH.

**Biologist on site:**  No  Yes

**Date:** 9.17.19

**Biologist Comments/Instructions:**

MINIMIZE WATER CROSSING AND  
GRADE OUTLETS AT A 45 DEGREE PRIOR TO MECHANICALLY  
MOWING OF VEGETATION.

**Completed by: Name:** LUIS MONTES DE OCA **Title:** PWICL **Date:** 9.30.2019

**Approved by: Name:** MARTY LEMUS **Title:** FCCS **Date:** 10-2-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 75 South Fork Santa Clara River  
(PD's 725, 916, 1041, & 1300)**      **T.G.: 4640-F1 TO 450-G3**

**Permit Requirements:** *The channel clearing work will involve mechanical clearing and grading of all vegetation bank to bank from Lyons Avenue to Orchard Village Road.*

*Mechanical grading and clearing of invasive vegetation from bank to bank will be performed from Orchard Village Road to the confluence with Newhall Creek.*

*Mechanical clearing of all vegetation will be done along the base of the concrete levee from the confluence with Newhall Creek to Magic Mountain Parkway. A 20-foot-wide strip will be maintained clear along the entire length of the levee and 45 degree grading of low-flow channels from side outlets to the center of the watercourse will also be maintained clear of all vegetation to minimize pounding and blockage of side outlet flows. A centerline watercourse low flow 12-foot wide will be maintained clear of all vegetation and will be graded along the entire length in this reach. Two island areas supporting mature trees will be left in place as well as the riparian vegetation. Tree pruning of dead branches and limbs that could obstruct flow will be removed by hand labor.*

The vegetation (15.37 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

ALL WORK CONDUCTED DURING DAYLIGHT HOURS AND WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA      Title: PWCL      Date: 9-30-2019  
Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-2-2019

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name SANTA CLAY (SOUTH FORK) <sup>ML</sup>  
Reach Number 75

Date	Air	H2O	Noise	Comment	Initial
9.12.19	✓	✓	✓	200 SF OF INVASIVES	LM
9.13.19	✓	✓	✓	REMOVED FROM REACH.	LM
9.16.19	✓	✓	✓	TAMARISK - TOBACCO	LM
9.17.19	✓	✓	✓	BLOUWEIST BRIAN DANIELSON SITE	LM
9.18.19	✓	✓	✓		LM
9.19.19	✓	✓	✓		LM
9.20.19	✓	✓	✓		LM
9.23.19	✓	✓	✓		LM
9.24.19	✓	✓	✓		LM
9.25.19	✓	✓	✓		LM
9.26.19	✓	✓	✓		LM
9.27.19	✓	✓	✓	PROJECT COMPLETED.	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 76 Pico Canyon (PD 813)** T.G.: **4550-F7 TO G7**

**Permit Requirements:** The channel clearing work will involve bank-to-bank removal of all vegetation using mechanical equipment.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION FROM BANK TO BANK  
WATER TRUCKS SPRAYED WATER PRIOR AND DURING PROCEDURE TO  
MINIMIZE DUST. WATER TRUCKS ON SITE AT ALL TIMES.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

MILD WIND CONDITIONS. HEAVY TRUCKS TAPPED DURING  
TRANSPORTATION OF VEGETATION TO LANDFILL.

Project start date: 9.16.2019

Project end date: 9.19.2019

Completed by: Name: LUIS MONTES DE OCA Title: PWJCL Date: 9.19.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 9-20-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 279.49  
Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) ∅  
Location/Channel Reach#: **Reach No. 76 Pico Canyon (PD 813)**      T.G.: 4550-F7 TO G7

**Permit Requirements:** The channel clearing work will involve bank-to-bank removal of all vegetation using mechanical equipment.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO FLOWING WATER IN REACH  
\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: JULIS MONTES DE OCA      Title: PubCL      Date: 9-19-2019  
Approved by: Name: MARTY LEMUS      Title: FCS      Date: 9-20-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 76 Pico Canyon (PD 813)**      **T.G.: 4550-F7 TO G7**

**Permit Requirements:** The channel clearing work will involve bank-to-bank removal of all vegetation using mechanical equipment.

**Description of Activity/Method of Implementation:**

WORK DONE DURING DAYLIGHT HOURS IN COMPLIANCE WITH  
LOCAL NOISE ORDINANCE, ALL EQUIPMENT AND VEHICLES EQUIPPED  
WITH PROPER EXHAUST DEVICES.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: LUIS MONTES DE OLA      Title: Public      Date: 9-19-2019  
Approved by: Name: MARTY LEMUS      Title: Fees      Date: 9-20-19



Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name PICO CANYON CHANNEL  
Reach Number R. 76

Date	Air	H2O	Noise	Comment	Initial
9.16.19	✓	✓	✓	φ INVASIVES REMOVED	LM
9.17.19	✓	✓	✓	" "	LM
9.18.19	✓	✓	✓	" "	LM
9.19.19	✓	✓	✓	" "	LM



WO# 6292554

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 77 Newhall Creek Outlet** T.G.: 4550-H6

**Permit Requirements:**

*Mechanical equipment will be used to maintain the reach clear of all vegetation.*

The vegetation (0.89 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL VEGETATION  
COMPLETED WITHIN PERMITTED LIMITS. WATER TRUCKS  
ON SITE AT ALL TIMES TO SPRAY WATER AND MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

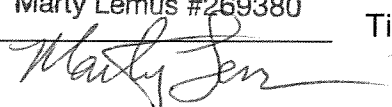
**Comments/Revisions:**

LEHT WIND CONDITIONS - NE 5MPH - ALL TRUCKS TARPED DURING  
TRANSPORTATION OF VEGETATION.

Project start date: 9-20-19

Project end date: 9-20-19

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 9-20-19

Approved by: Name: Marty Lemus #269380 Title: FCCS Date: 9-23-19  


LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 5.68 TONS  
Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0  
Location/Channel Reach#: **Reach No. 77 Newhall Creek Outlet**      T.G.: **4550-H6**

**Permit Requirements:**

*Mechanical equipment will be used to maintain the reach clear of all vegetation.*

The vegetation (0.89 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA      Title: PWJCL      Date: 9-20-19  
Approved by: Name: Marty Lane      Title: FCCS      Date: 9-23-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 77 Newhall Creek Outlet** T.G.: 4550-H6

**Permit Requirements:**

*Mechanical equipment will be used to maintain the reach clear of all vegetation.*

The vegetation (0.89 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

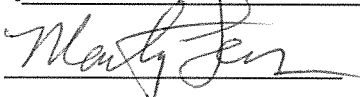
**Description of Activity/Method of Implementation:**

ALL WORK CONDUCTED DURING DAYLIGHT HOURS IN COMPLIANCE WITH  
LOCAL NOISE ORDINANCE. ALL HEAVY EQUIPMENT AND TRUCKS  
EQUIPPED WITH PROPER EXHAUST DEVICES TO MINIMIZE NOISE.  
NO WEEKEND WORK CONDUCTED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: JUJIS MONTES DE OCA Title: PA/CL Date: 9.10.19  
Approved by: Name:  Title: PCS Date: 9-23-19

WO# 6292571

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.78 Placerita Creek** T.G.: 4550 H6

**Permit Requirements:**

*Mechanical equipment will be used to maintain the reach clear of all vegetation.*

The vegetation (0.01 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF ALL  
VEGETATION CONDUCTED WITHIN APPROVED LIMITS.  
WATER TRUCKS ON SITE TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LIGHT WIND CONDITIONS - SE 5MPH -  
ALL HEAVY TRUCKS TARPED DURING TRANSPORTATION OF  
VEGETATION.

Project start date: 9-20-19

Project end date: 9-20-19

Completed by: Name: JULIS MONTES DE OCA Title: PWCL Date: 9-20-19

Approved by: Name:  Title: FCS Date: 9-23-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 10.33 TONS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No.78 Placerita Creek**

T.G.: 4550 H6

**Permit Requirements:**

*Mechanical equipment will be used to maintain the reach clear of all vegetation.*

The vegetation (0.01 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

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Completed by: Name: JULIS MONTES DE OCA

Title: PWCL

Date: 9-20-19

Approved by: Name: Marty Jim

Title: FCS

Date: 9-23-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No.78 Placerita Creek** T.G.: 4550 H6

**Permit Requirements:**

*Mechanical equipment will be used to maintain the reach clear of all vegetation.*

The vegetation (0.01 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

ALL WORK DONE DURING DAYLIGHT HOURS IN COMPLIANCE  
WITH LOCAL NOISE ORDINANCE. NO WEEKEND WORK CONDUCTED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HEAVY TRUCKS AND EQUIPMENT <sup>HAVE</sup> ~~WITH~~ UPDATED  
EXHAUST SYSTEMS TO MINIMIZE NOISE

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 9-20-19  
Approved by: Name: Marty Jensen Title: FCCS Date: 9-23-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 79 South Fork- Santa Clara River T.G.: 4550-G3  
(Valencia Blvd Bridge Stabilizer)**

**Permit Requirements:**

Mechanical equipment will be used to maintain the reach clear of all vegetation.

The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF VEGETATION  
PERFORMED. WATER TRUCK ON SITE TO SPRAY WATER  
AS NEEDED.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

HEAVY TRUCKS TARPED DURING TRANSPORTATION  
OF DEBRIS/VEGETATION TO LANDFILL.

Project start date: 9.27.2019

Project end date: 9.27.2019

Completed by: Name: LUIS MONTES DEUCA Title: PWCL Date: 9.30.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-2-2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 3.08

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: **Reach No. 79 South Fork- Santa Clara River**      T.G.: **4550-G3**  
**(Valencia Blvd Bridge Stabilizer)**

**Permit Requirements:**

Mechanical equipment will be used to maintain the reach clear of all vegetation.

The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: JULIS MONTES DE OCA      Title: PWJCL      Date: 9.30.2019

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-2-2019



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 79 South Fork- Santa Clara River T.G.: 4550-G3  
(Valencia Blvd Bridge Stabilizer)**

**Permit Requirements:**

Mechanical equipment will be used to maintain the reach clear of all vegetation.

The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

ALL WORK PERFORMED DURING DAYLIGHT HOURS  
AND WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WEEKEND WORK PERFORMED.

Completed by: Name: LUIS MONTES DE OCA

Title: PNCL

Date: 9-30-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-2-2019

# Los Angeles County Channel Maintenance Project

## Mitigation Monitoring Program

Reach Name VALENCIA BRIDGE STABILIZER

Reach Number 79

Date	Air	H2O	Noise	Comment	Initial
9.27.19	✓	✓	✓	NO INVASIVES FOUND ON REACH	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 80 South Fork- Santa Clara River T.G.: 4550-F2  
(PD's 1947 & 1946)**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the toe of the concrete levee along the entire length.*

*Clearing shall not extend more than 20 feet beyond the toe of the levee. The vegetation (2.05 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND CLEARING OF VEGETATION  
PERFORMED WITHIN ALLOWABLE LIMITS. WATER TRUCKS  
ON SITE AND SPRAYED WATER AS NEEDED TO MINIMIZE  
DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS < 5 MPH.

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Project start date: 9.27.2019

Project end date: 9.27.2019

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 9.30.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-2-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 0

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 80 South Fork- Santa Clara River T.G.: 4550-F2**  
**(PD's 1947 & 1946)**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the toe of the concrete levee along the entire length.*

*Clearing shall not extend more than 20 feet beyond the toe of the levee. The vegetation (2.05 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA

Title: fulcr Date: 9.30.2019

Approved by: Name: MARTY LEMUS

Title: FCCS Date: 10-2-2019

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 80 South Fork- Santa Clara River T.G.: 4550-F2  
(PD's 1947 & 1946)**

**Permit Requirements:**

*The channel clearing work will involve mechanical removal of all vegetation within 20 feet from the toe of the concrete levee along the entire length.*

*Clearing shall not extend more than 20 feet beyond the toe of the levee. The vegetation (2.05 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL WORK CONDUCTED DURING DAYLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WEEKEND WORK PERFORMED.

Completed by: Name: LUIS MONTES DE OCA

Title: FWCL

Date: 9-30-2019

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-2-2019

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name SOUTH FORK PD 1947/1946

Reach Number 80

Date	Air	H2O	Noise	Comment	Initial
9.27.19	✓	✓	✓	NO INVASIVES FOUND ON REACH.	LM

WO # 6292520

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 82 Santa Clara River  
Main Channel (PD 2278)**

T.G.: 4550 - D1

**Permit Requirements:**

Channel clearing work will involve mechanically removing all vegetation within 20 feet from the toe of the concrete levee along the entire reach.

Future maintenance activities shall involve mechanical means and shall not extend more than 20 feet beyond the toe of the levee, impacts within this reach shall not exceed 0.40 acre.

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND LABOR COMPLETED TO REMOVE  
VEGETATION WITHIN ALLOWABLE LIMITS. WATER ON SITE  
TO SPRAY WATER FOR DUST CONTROL PURPOSES

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS - 5MPH -

Project start date: 11.06.2019

Project end date: 11.06.2019

Completed by: Name: L. MONTES DE OCA Title: PWCL Date: 11.07.2019

Approved by: Name: M. LEMUS Title: FCCS Date: 11-8-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 4.97

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 82 Santa Clara River**      T.G.: 4550 - D1  
**Main Channel (PD 2278)**

**Permit Requirements:**

Channel clearing work will involve mechanically removing all vegetation within 20 feet from the toe of the concrete levee along the entire reach.

Future maintenance activities shall involve mechanical means and shall not extend more than 20 feet beyond the toe of the levee, impacts within this reach shall not exceed 0.40 acre.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- \_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- \_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: L. MONTES DE OCA      Title: PWCL      Date: 11-7-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 11-8-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 82 Santa Clara River  
Main Channel (PD 2278)**

T.G.: 4550 - D1

**Permit Requirements:**

Channel clearing work will involve mechanically removing all vegetation within 20 feet from the toe of the concrete levee along the entire reach.

Future maintenance activities shall involve mechanical means and shall not extend more than 20 feet beyond the toe of the levee, impacts within this reach shall not exceed 0.40 acre.

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: A. MONTES DE OCA

Title: PWCL

Date: 11-7-19

Approved by: Name: MARTY LEMUS

Title: FCS

Date: 11-8-19

NO# 6292520

# Los Angeles County Channel Maintenance Project

## Mitigation Monitoring Program

Reach Name SANTA CLAYA FIVE F 1.1. 2178

Reach Number 82

Date	Air	H2O	Noise	Comment	Initial
11.6.19	✓	✓	✓	NO INVASIVE VEGETATION FOUND ON REACH.	LM

W04#6292560

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 86 Violin Canyon M.C.O.** T.G.: 4369 - J7

**Permit Requirements:**

Mechanical equipment will be used to maintain the reach clear of all vegetation.

The vegetation (0.41 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

MECHANICAL EQUIPMENT USED TO CLEAR ALL VEGETATION ON REACH  
WITHIN THE PERMIT LIMITS ALLOWED, WATER TRUCK WAS USED TO  
MINIMIZED DUST AT ALL TIMES. DUMP TRUCKS WERE USED FOR REMOVING  
OF VEGETATION, TRUCKS WERE TAPPED AT ALL TIMES.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

DRY WEATHER CONDITIONS AND CALM WINDS, FAVORABLE CONDITIONS  
DURING MOWING WORK!

Project start date: 9-26-19

Project end date: 9-27-19

Completed by: Name: EMILIO NIEVES-ORDONEZ Title: PWCL Date: 9-26-19

Approved by: Name: MARTY LEMUS Title: FLES Date: 10-7-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 4.46

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 86 Violin Canyon M.C.O.**

T.G.: 4369 - J7

**Permit Requirements:**

Mechanical equipment will be used to maintain the reach clear of all vegetation.

The vegetation (0.41 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: EMILIONIBES-ORDONEZ

Title: PWCL

Date: 9-26-19

Approved by: Name: MARTY VENUS

Title: FCCS

Date: 10-7-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 86 Violin Canyon M.C.O.**      **T.G.: 4369 - J7**

**Permit Requirements:**

Mechanical equipment will be used to maintain the reach clear of all vegetation.

The vegetation (0.41 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.

**Description of Activity/Method of Implementation:**

WORK ACTIVITIES PERFORM DURING DAYLIGHT ONLY  
WORKING IN COMPLIANCE UNDER LOCAL NOISE ORDINANCES,  
VEHICLES AND EQUIPMENT WELL MAINTAIN AND NO AFTERMARKET  
EXHAUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: EMILIO NIBES-ORDONEZ

Title: PWCL      Date: 9-26-19

Approved by: Name: MARTY LEMUS

Title: FCS      Date: 10-7-19

Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program

Reach Name VIOLIN CYN CHANNEL

Reach Number 86

Date	Air	H2O	Noise	Comment	Initial
9-26-19	✓	✓	✓	NO INVASIVE PLANTS WERE FOUND.	ENO

6292565

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 87 Castaic-The Old Road Drainage T.G.: 4459-H5  
(CDR 525.021D) Outlet**

**Permit Requirements:**

The channel clearing work will involve hand cutting and clearing a 20-foot path from the riprap outlet to the main watercourse, Castaic Creek.

**Description of Activity/Method of Implementation:**

HAND CLEARING OF ALL VEGETATION OF A 20-FOOT PATH FROM RIPRAP OUTLET  
WATER TRUCK WAS USED PRIOR TO VEGETATION REMOVAL TO KEEP THE DUST DOWN.  
WATER TRUCK REMAIN ON SITE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

CLEAR DAY WITH NO WIND, ALL TRUCKS TAPPED DURING TRANSPORTATION  
TO DUMP SITE.

Project start date: 10-10-19

Project end date: 10-15-19

Completed by: Name: EMILIO NIEVES-ORDONEZ Title: PWCL Date: 10-15-19

Approved by: Name: Jose Morillo Title: F.C.C.S Date: 10/18/19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 5.45

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 20

Location/Channel Reach#: **Reach No. 87 Castaic-The Old Road Drainage T.G.: 4459-H5  
(CDR 525.021D) Outlet**

**Permit Requirements:**

The channel clearing work will involve hand cutting and clearing a 20-foot path from the riprap outlet to the main watercourse, Castaic Creek.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation   |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input checked="" type="checkbox"/> ESC22 Temporary Stream Crossing |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                           |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                    |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

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Completed by: Name: EMILIO NIEVES-ORDONEZ

Title: PWCL Date: 10-15-19

Approved by: Name: Jose Morillo

Title: F.C.C.S Date: 10/15/19



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 87 Castaic-The Old Road Drainage T.G.: 4459-H5  
(CDR 525.021D) Outlet**

**Permit Requirements:**

The channel clearing work will involve hand cutting and clearing a 20-foot path from the riprap outlet to the main watercourse, Castaic Creek.

**Description of Activity/Method of Implementation:**

WORK WAS DONE DURING DAYLIGHT HOURS IN COMPLIANCE WITH  
LOCAL NOISE ORDINANCES ; TRUCK EQUIPPED WITH PROPER EXHAUST

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: EMILIO NIEVES-ORDONEZ

Title: PWCL Date: 10-15-19

Approved by: Name: Jose Murillo

Title: F.C.C-S Date: 10/15/19

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name CDR 525.021 OUTLET

Reach Number REACH 87

Date	Air	H2O	Noise	Comment	Initial
10-10-19	✓	✓	✓	20 SA FT TAMPAISK REMOVED.	ENJ

WO# 6292653

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 88 Hasley Canyon Upper  
(PD T1496)**

T.G.: 4459 - C3

**Permit Requirements:** The channel clearing work will involve mechanical equipment to remove all vegetation from bank to bank from Sharp Road to 755 feet upstream. From 330 feet downstream of Sharp Road to Sharp Road, hand clearing will be done.

Impacts shall not exceed 0.42 acre (1085 linear feet by 17 feet wide).

**Description of Activity/Method of Implementation:**

erty

HAND CLEARING OF ALL VEGETATION COMPLETED.  
HEAVY EQUIPMENT WAS UTILIZED TO LOAD TRIMMINES INTO DUMP TRUCK.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS. NO DUST LEFT PROJECT SITE.

Project start date: 10.29.19

Project end date: 10.29.19

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10.29.19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-30-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 20 BAGS

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 10

Location/Channel Reach#: **Reach No. 88 Hasley Canyon Upper**      T.G.: **4459 - C3**  
**(PD T1496)**

**Permit Requirements:** The channel clearing work will involve mechanical equipment to remove all vegetation from bank to bank from Sharp Road to 755 feet upstream. From 330 feet downstream of Sharp Road to Sharp Road, hand clearing will be done.

Impacts shall not exceed 0.42 acre (1085 linear feet by 17 feet wide).

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling       ESC2 Preservation of Existing Vegetation
- ESC21 Dust Control       ESC22 Temporary Stream Crossing
- ESC31 Temporary Drains and Swales       ESC50 Silt Fence
- ESC51 Straw Bale Barriers       ESC52 Sand Bag Barriers

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:** 10 SQUARE FEET OF TOBACCO REMOVED FROM  
LENGTH OF REACH.

**Biologist on site:**  No       Yes      **Date:** \_\_\_\_\_

**Biologist Comments/Instructions:**  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA      Title: PWJCL      Date: 10-29-19  
Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-30-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 88 Hasley Canyon Upper  
(PD T1496)**

**T.G.: 4459 - C3**

**Permit Requirements:** The channel clearing work will involve mechanical equipment to remove all vegetation from bank to bank from Sharp Road to 755 feet upstream. From 330 feet downstream of Sharp Road to Sharp Road, hand clearing will be done.

Impacts shall not exceed 0.42 acre (1085 linear feet by 17 feet wide).

**Description of Activity/Method of Implementation:**

ALL WORK COMPLETED DURING DAYLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK WAS COMMENCED PRIOR TO 7:00AM.

Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-29-19

Approved by: Name: MARCY LEMUS

Title: FCS

Date: 10-30-19

W0# 6292653

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 89 Hasley Canyon South Fork T.G.: 4459-C3  
(PD T1496)**

**Permit Requirements:**

*The channel clearing work will involve hand labor clearing of alluvial sage scrub.*

*The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

HAND LABOR TO REMOVE VEGETATION COMPLETED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS.

Project start date: 10-29-19

Project end date: 10-29-19

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-29-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-30-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 7.76 TONS

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 10

Location/Channel Reach#: **Reach No. 89 Hasley Canyon South Fork**      T.G.: 4459-C3  
(PD T1496)

**Permit Requirements:**

*The channel clearing work will involve hand labor clearing of alluvial sage scrub.*

*The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- ESC1 Scheduling
- ESC21 Dust Control
- ESC31 Temporary Drains and Swales
- ESC51 Straw Bale Barriers
- ESC2 Preservation of Existing Vegetation
- ESC22 Temporary Stream Crossing
- ESC50 Silt Fence
- ESC52 Sand Bag Barriers

Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

10 SQUARE FEET OF INVASIVE VEGETATION  
REMOVED FROM REACH (TOBACCO)

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OGA      Title: PWDCL      Date: 10-29-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 10-30-19



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 89 Hasley Canyon South Fork T.G.: 4459-C3  
(PD T1496)**

**Permit Requirements:**

*The channel clearing work will involve hand labor clearing of alluvial sage scrub.*

*The vegetation (0.02 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL WORK COMPLETED DURING DAYLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE.  
\_\_\_\_\_  
\_\_\_\_\_

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO SMALL POWER TOOLS WERE STARTED PRIOR TO 7:00AM.  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OCA Title: PWCL Date: 10-29-19  
Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-30-19



West 6292653

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 90 Hasley Canyon Lower  
(North Fork RD T1496)**

T.G.: 4459-C3

**Permit Requirements:** *The channel clearing work will involve hand clearing and mechanized removal of vegetation. Portions of the channel bottom will be denuded of vegetation while leaving the earthen bank vegetated, clusters of mature growth in the channel bottom will remain to the level it was left in November 1997.*

*The vegetation (0.19 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

HAND LABOR COMPLETED TO REMOVE VEGETATION. HEAVY EQUIPMENT WAS UTILIZED TO LOAD TRIMMINES INTO HEAVY TRUCKS.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE DUST. DUMP TRUCK TARPED DURING TRANSPORTATION OF DEBRIS/VEGETATION.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS. NO DUST LEFT PROJECT SITE.

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Project start date: 10-29-19

Project end date: 10-29-19

Completed by: Name: LUIS MONTES DE OGA Title: PWCL Date: 10-29-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 10-30-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 10 BAGS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 20

Location/Channel Reach#: **Reach No. 90 Hasley Canyon Lower  
(North Fork RD T1496)**

T.G.: 4459-C3

**Permit Requirements:** *The channel clearing work will involve hand clearing and mechanized removal of vegetation. Portions of the channel bottom will be denuded of vegetation while leaving the earthen bank vegetated, clusters of mature growth in the channel bottom will remain to the level it was left in November 1997.*

*The vegetation (0.19 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

80 SQUARE FEET OF VEGETATION REMOVED  
(TOBACCO) FROM LENGTH OF REACH.

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: LUIS MONTES DE OCA

Title: PWCL

Date: 10-29-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-30-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 90 Hasley Canyon Lower  
(North Fork RD T1496)**

**T.G.: 4459-C3**

**Permit Requirements:** *The channel clearing work will involve hand clearing and mechanized removal of vegetation. Portions of the channel bottom will be denuded of vegetation while leaving the earthen bank vegetated, clusters of mature growth in the channel bottom will remain to the level it was left in November 1997.*

*The vegetation (0.19 acre) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

ALL WORK CONDUCTED DURING DAYLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: LUIS MONTES DE OGA

Title: JULC L

Date: 10-29-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 10-30-19

# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

Reach Name HASLEN CANYON CH  
Reach Number 88 89 90

Date	Air	H2O	Noise	Comment	Initial
10.29.19	✓	✓	✓	40 SQUARE FEET OF INVASIVE VEGETATION REMOVED (TOBACCO)	lm

WO # 6292449

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 91 San Martinez Chiquito** T.G.: 4459-A6 TO B6  
U/S of Keningston Rd

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL VEGETATION REMOVED WITHIN PIPE AND WIRE.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE  
DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LIGHT WIND CONDITIONS, NO PROJECT DUST LEFT JOBSITE.

Project start date: 11 04 2019

Project end date: 11 04 2019

Completed by: Name: L MONTE DE OCA Title: PWCC Date: 11 04 19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-6-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 1 TON

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 10 SF

Location/Channel Reach#: **Reach No. 91 San Martinez Chiquito U/S of Kenington Rd** T.G.: 4459-A6 TO B6

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

10 SQUARE FEET OF INVASIVE VEGETATION  
REMOVED (TAMARISK)

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: L. MONTES DE OCA

Title: PAJCL Date: 11-04-19

Approved by: Name: MARTY LEMUS

Title: FCCS Date: 11-6-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 91 San Martinez Chiquito U/S of Kennington Rd** T.G.: 4459-A6 TO B6

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS COMPLETED DURING DAYLIGHT HOURS AND WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

NO POWER TOOLS WERE STARTED PRIOR TO 7:00AM.

Completed by: Name: L. MONTES DE OGA Title: PWCL Date: 11-04-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-6-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 92 San Martinez Chiquito T.G.: 4459-A6 TO B6  
Unnamed tributary U/S of Kennington Rd**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL VEGETATION WITHIN PIPE AND WIRE REMOVED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO MINIMIZE  
DUST.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO DUST LEFT JOBSITE, AS WATER TRUCK SPRAYED WATER  
PRIOR TO STARTING ANY WORK.

Project start date: 11-04-19

Project end date: 11-04-19

Completed by: Name: L. MONTES DE OGA Title: PWCC Date: 11-04-19

Approved by: Name: MARTY LEMUS Title: FLCS Date: 11-6-19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: Hydrology and Water Quality      Trash/Debris Removed (Tons) 1. TON

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 10 SF

Location/Channel Reach#: **Reach No. 92 San Martinez Chiquito**      T.G.: 4459-A6 TO B6  
**Unnamed tributary U/S of Keningston Rd**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

10 SQUARE FEET OF VEGETATION REMOVED.  
(TAMARISK)

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: L. MONTES DE OGA      Title: FWCC      Date: 11-04-19

Approved by: Name: MARTY LEMUS      Title: FCCS      Date: 11-6-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 92 San Martinez Chiquito T.G.: 4459-A6 TO B6  
Unnamed tributary U/S of Keningston Rd**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE  
\_\_\_\_\_  
\_\_\_\_\_

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO POWER TOOLS WERE STARTED PRIOR TO 7:00AM.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: L. MONTES DE OCA Title: PWCC Date: 11-04-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-6-19

WO# 6292449

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 93 San Martinez Chiquito  
Kenington Rd to Val Verde Park**

T.G.: 4459 - B6

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

HAND LABOR TO REMOVE VEGETATION WITHIN PIPE AND WIRE  
COMPLETED. WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED TO  
MINIMIZE DUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS 5 MPH

Project start date: 11-04-19

Project end date: 11-05-19

Completed by: Name: L. MONTES DE OSA Title: PWCL Date: 11-05-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-7-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 10 BAES  
Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) Ø  
Location/Channel Reach#: **Reach No. 93 San Martinez Chiquito**      T.G.: 4459 - B6  
**Kenington Rd to Val Verde Park**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH

Biologist on site:  No     Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: L. MONTES DE OGA

Title: PWCL      Date: 11-5-19

Approved by: Name: MARTY LEMUS

Title: FCCS      Date: 11-7-19

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 93 San Martinez Chiquito  
Kennington Rd to Val Verde Park**

T.G.: 4459 - B6

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS CONDUCTED DURING DANLIGHT HOURS AND WITHIN  
COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO POWER TOOLS WERE STARTED PRIOR TO 7:00AM.

Completed by: Name: L MONTES DE OCA

Title: PWJCL Date: 11-5-19

Approved by: Name: MARTY LEMUS

Title: FCCS Date: 11-7-19

WO# 6292449

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 94 San Martinez Chiquito T.G.: 4459 - C6 TO D7  
Val Verde Park to D/S of Madison St**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL VEEETATION WITHIN PIPE AND WIRE REMOVED.  
WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED  
TO MINIMIZE DUST FROM LEAVING JOBSITE.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS 5MPH.

Project start date: 11.5.19

Project end date: 11.5.19

Completed by: Name: L. MONTES DE OGA Title: PAJCL Date: 11.5.19

Approved by: Name: MARTY VENUS Title: FCCS Date: 11-7-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 2.9 TONS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 94 San Martinez Chiquito** T.G.: 4459 - C6 TO D7  
**Val Verde Park to D/S of Madison St**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON  
LENGTH OF REACH

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: L. MONTES DE OCA

Title: FWCL

Date: 11-5-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 11-7-19



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 94 San Martinez Chiquito T.G.: 4459 - C6 TO D7  
Val Verde Park to D/S of Madison St**

**Permit Requirements:**

*The channel clearing work will involve removal of all the vegetation within the pipe and wire channel using hand labor, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL WORK WAS COMPLETED DURING DAYLIGHT HOURS AND  
WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO POWER TOOLS WERE STARTED PRIOR TO 7:00AM.

Completed by: Name: L. MONTES DE OCA Title: PWCL Date: 11-5-19  
Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-7-19



WU# 6292449

# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

Reach Name SAN MARTINEZ  
 Reach Number 91 92 93 94

Date	Air	H2O	Noise	Comment	Initial
11.04.19	✓	✓	✓	REMOVED 20 SQUARE FEET	LM <sup>M</sup>
11.05.19	✓	✓	✓	OF VEGETATION (TAMARISK)	LM <sup>M</sup>

WO# 6293763

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 95 Project No. 1224**

**T.G.: 4087 - H5**

**Permit Requirements:**

*The channel clearing work will involve removal of all vegetation within the pipe and wire channel using mechanical equipment, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND LABOR COMPLETED TO REMOVE VEGETATION WITHIN PIPE AND WIRE. WATER TRUCK ON SITE TO SPRAY WATER AS NEEDED FOR DUST CONTROL PURPOSES.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

LOW WIND CONDITIONS 5 MPH.

Project start date: 11.12.2019

Project end date: 11.12.2019

Completed by: Name: L. MONTES DE OCA Title: PWCL Date: 11.12.2019

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11-13-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: Hydrology and Water Quality

Trash/Debris Removed (Tons) 20 BAGS

Mitigation Measure #: 2

Exotic Veg. Removed (Sq. Ft.) ∅

Location/Channel Reach#: Reach No. 95 Project No. 1224

T.G.: 4087 - H5

**Permit Requirements:**

*The channel clearing work will involve removal of all vegetation within the pipe and wire channel using mechanical equipment, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

ESC1 Scheduling

ESC2 Preservation of Existing Vegetation

ESC21 Dust Control

ESC22 Temporary Stream Crossing

ESC31 Temporary Drains and Swales

ESC50 Silt Fence

ESC51 Straw Bale Barriers

ESC52 Sand Bag Barriers

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO INVASIVE VEGETATION FOUND ON REACH.

Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

Completed by: Name: L. MONTES DE OCA

Title: PWCL Date: 11-12-2019

Approved by: Name: MARTY LEMUS

Title: FCCS Date: 11-13-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: Reach No. 95 Project No. 1224

T.G.: 4087 - H5

**Permit Requirements:**

*The channel clearing work will involve removal of all vegetation within the pipe and wire channel using mechanical equipment, but the embankment vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

ALL WORK OPERATIONS COMPLETED DURING DAYLIGHT HOURS  
AND WITHIN COMPLIANCE OF LOCAL NOISE ORDINANCE.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

NO WORK WAS COMMENCED PRIOR TO 7:00AM.

Completed by: Name: L. MONTES DE OCA

Title: PWCL Date: 11-12-2019

Approved by: Name: MARTY LEMUS

Title: FCCS Date: 11-13-19

WO# 6293763

# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

Reach Name PROJECT 1224

Reach Number 95

Date	Air	H2O	Noise	Comment	Initial
11.12.19	✓	✓	✓	NO INVASIVE VEGETATION FOUND ON REACH.	LM

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 96 PD 1591 Calabasas**

**T.G.: 599-G5**

**Permit Requirements:**

*The channel clearing will involve removing all vegetation from the inlet and outlet approaches to the box culvert under Vicasa Drive. Clearing work will be done by hand labor and only within the dedicated right of way.*

**Description of Activity/Method of Implementation:**

Hand loaded all vegetation onto Trucks so that  
we can keep dust to a minimum.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Project start date: 9-20-2019

Project end date: 9/26/19

Completed by: Name: Jay Lumosh Title: Crew Leader Date: 9/26/19

Approved by: Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) \_\_\_\_\_

Location/Channel Reach#: **Reach No. 96 PD 1591 Calabasas**      T.G.: **599-G5**

**Permit Requirements:**

*The channel clearing will involve removing all vegetation from the inlet and outlet approaches to the box culvert under Vicasa Drive. Clearing work will be done by hand labor and only within the dedicated right of way.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

\_\_\_\_\_ Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

\_\_\_\_\_ Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Layed down Boom at end of Reach  
before Job started.

Biologist on site:  No     Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Jay Armas Jr

Title: Crew leader    Date: 9/26/19

Approved by: Name: Baltazar Moreno

Title: FCS    Date: 9/27/19



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 96 PD 1591 Calabasas**

**T.G.: 599-G5**

**Permit Requirements:**

*The channel clearing will involve removing all vegetation from the inlet and outlet approaches to the box culvert under Vicasa Drive. Clearing work will be done by hand labor and only within the dedicated right of way.*

**Description of Activity/Method of Implementation:**

All Power Tools Fitted with mufflers and spark  
arrestors.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Completed by: Name: Ryan Morillo

Title: CREW LEADER Date: 9/26/19

Approved by: Name: Balazar Moreno

Title: PECS Date: 9/27/19



Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name Dry Canyon (Calabasas) (PD1591) = Uicasa  
Reach Number # 96

Date	Air	H2O	Noise	Comment	Initial
9/20	✓	✓	✓	Layed down Booms at end of Reach	R.L-
9/21	✓	✓	✓		RM
9/24	✓	✓	✓		RM
9/25	✓	✓	✓		RM
9/26	✓	✓	✓		RM

6292260

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 97 PD 1982**

**T.G.: 4459- H5 TO H6**

**Permit Requirements:** *The channel clearing work will involve hand cutting and mechanized removal of all vegetation and trees along the entire length of the levee at a width of 20 feet and clearing and grading 45-degree, 12-foot-wide low flows from the side outlets to the center of the main watercourse.*

*The Operator shall leave a total of 1.17 acre of vegetation. The vegetation (1.17 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

EQUIPMENT USED ON CLEARING OF ALL VEGETATION WITHIN 20' LIMIT.  
WATER TRUCK USED PRIOR TO VEGETATION REMOVAL IN ORDER TO MINIMIZED DUST.  
WATER TRUCK WAS USED AS NEEDED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

SUNNY DAY, NO WIND GOOD WORKING CONDITIONS OVERALL.

Project start date: 10-17-19

Project end date: \_\_\_\_\_

Completed by: Name: EMILIO NIEVES-ORDONEZ Title: PWCL Date: 10-17-19

Approved by: Name: Marty Lemus #269380 Title: FCCS Date: 10-22-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 97 PD 1982**

**T.G.: 4459- H5 TO H6**

**Permit Requirements:** *The channel clearing work will involve hand cutting and mechanized removal of all vegetation and trees along the entire length of the levee at a width of 20 feet and clearing and grading 45-degree, 12-foot-wide low flows from the side outlets to the center of the main watercourse.*

*The Operator shall leave a total of 1.17 acre of vegetation. The vegetation (1.17 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

WORK PERFORMED DURING DAYLIGHT HOURS ONLY IN COMPLIANCE  
WITH LOCAL NOISE ORDINANCES, EQUIPMENT & TRUCKS USED ALL EQUIPPED  
WITH PROPER EXHAUST.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

Completed by: Name: EMILIO NIEVES-ORDONEZ

Marty Lemus #269380

Approved by: Name: \_\_\_\_\_

Title: PWCL Date: 10-17-19

Title: FCCS Date: 10-22-19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) 0

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) NONE

Location/Channel Reach#: **Reach No. 97 PD 1982**      T.G.: 4459- H5 TO H6

**Permit Requirements:** *The channel clearing work will involve hand cutting and mechanized removal of all vegetation and trees along the entire length of the levee at a width of 20 feet and clearing and grading 45-degree, 12-foot-wide low flows from the side outlets to the center of the main watercourse.*

*The Operator shall leave a total of 1.17 acre of vegetation. The vegetation (1.17 acres) that was allowed to remain in 1997 shall not be impacted during future maintenance activities.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling        | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control     | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input type="checkbox"/> ESC51 Straw Bale Barriers         | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_

Biologist on site:  No     Yes      Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: EMILIO NIEVES-ORDONEZ      Title: PWCL      Date: 10-17-19  
Marty Lemus #269380  
Approved by: Name: \_\_\_\_\_      Title: FCCS      Date: 10-22-19

# Los Angeles County Channel Maintenance Project Mitigation Monitoring Program

PROJECT NUMBER 14-000000

Marty Lentius #269380

Reach Name PO 1982 / CASIAC CREEK

Reach Number 017

Date	Air	H2O	Noise	Comment	Initial
10-17-19	✓	✓	✓	NO INVASIVE PLANTS WERE FOUND.	ENO

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 98 Walnut Creek - Channel Inlet** T.G.: 599-E6

**Permit Requirements:**

There are no permit requirements requiring mitigation of air quality.

**Description of Activity/Method of Implementation:**

Crews cut the vegetation with hand tools and collected the cuttings for proper disposal.

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

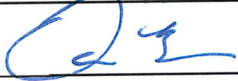
None

**Project start date:** 10-10-19

**Project end date:** 10-10-19

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr. Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr Date: 3-12-2020



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons)   10  

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.)   10  

Location/Channel Reach#: **Reach No. 98 Walnut Creek - Channel Inlet**      T.G.: **599-E6**

**Permit Requirements:**

The permit requires that we monitor water quality at both the upstream and downstream limits of the work when water is flowing.

**Description of Activity/Method of Implementation:**

Water was present at the site and water quality sampling was conducted before, during, and after our work at the site. The clearing takes place at the transition from a natural stream to a hard bottom stream. Water ponds just upstream of the concrete lined channel headwall. BMP's were installed just downstream to catch any cuttings or debris that may wash down as a result of our efforts. All clearing work in this reach was carried out by hand. During the work, water quality was monitored upstream, downstream, and within the work area.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

No equipment used. Water samples were taken before, during, and after completed work

**Biologist on site:**     No     Yes

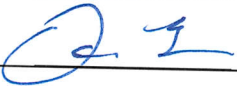
**Date:** \_\_\_\_\_

**Biologist Comments/Instructions:**

None

Completed by: Name:   Nik Reppuhn  

Title:   Assoc. Civil Engr.      Date:   3-12-2020  

Approved by: Name:     

Title:   Principal Engr      Date:   3-12-2020

**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM**  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 98 Walnut Creek - Channel Inlet**      T.G.: 599-E6

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise.

**Description of Activity/Method of Implementation:**

No mitigation of noise efforts were undertaken, however noise was not an issue on this clearing project because everything was removed by hand crews and no equipment was utilized. During our operation we received no complaint calls from adjacent businesses or homeowners due to noise, dust or any other nuisance.


- Disposition:     Mitigation measure has been implemented. No further action is required.  
                       Mitigation measure is not fully implemented. Further action is required.  
  (Please explain below.)  
                       Mitigation measure is not in compliance. Further action is required.  
  (Please explain below.)

**Comments/Revisions:**

None

Completed by: Name: Nik Reppuhn

Title: Assoc. Civil Engr.    Date: 3-12-2020

Approved by: Name: 

Title: Principal Engr      Date: 3-12-2020



LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach#: **Reach No. 99 Kagel Canyon**

**T.G.: 482- J5 TO J7**

**Permit Requirements:**

*Hand clearing work will be performed to keep all vegetation clear in this reach.*

**Description of Activity/Method of Implementation:**

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- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

*VEGETATION AND TRIMMING WAS PERFORMED BY  
USING HAND TOOLS AND 2-CYCLE ENGINE TRIMMERS  
VEGETATION AND TREE LIMBS WAS PULLED OUT WITH TRAPS*

Completed by: Name: *MICHAEL SEGUIN*

Title: *PWCL* Date: *10/23/2019*

Approved by: Name: *MAURILIO TORRES  
HECTOR SANCHEZ*

Title: *FCCS  
FCCS* Date: *10/23/2019  
10/23/2019*

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality** Trash/Debris Removed (Tons) 6

Mitigation Measure #: 2 Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach#: **Reach No. 99 Kagel Canyon** T.G.: 482- J5 TO J7

**Permit Requirements:**

Hand clearing work will be performed to keep all vegetation clear in this reach.

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling           | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input checked="" type="checkbox"/> ESC52 Sand Bag Barriers       |

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

Comments/Revisions: REMOVED ALL DEAD VEGETATION FROM WATER.

Biologist on site:  No  Yes Date: 9/3/2019

Biologist Comments/Instructions: MR. GARD AVOYAN

EVALUATED SURFACE WATER FLOW PRIOR TO INITIATING BASELINE MONITORING AND SAMPLING

Completed by: Name: MAURICIO TORRES Title: FCCS Date: 9/3/2019

Approved by: Name: MAURICIO TORRES Title: FCCS Date: 9/3/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No. 99 Kagel Canyon**

**T.G.: 482- J5 TO J7**

**Permit Requirements:**

*Hand clearing work will be performed to keep all vegetation clear in this reach.*

**Description of Activity/Method of Implementation:**

VEGETATION, TREE LIMBS, VINES AND WEEDS  
CUT AND TRIMMED, CHOPPED USING HAND TOOLS

- Disposition:  Mitigation measure has been implemented. No further action is required.  
 Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)  
 Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

USED 2-CYCLE TRIMMERS AND HAND TOOLS  
ALL VEGETATION WAS CARRY OUT USING TARPS

Project start date: 9/6/2019

Project end date: 10/23/2019

Completed by: Name: ALPHONSE ROMAIN Title: PWCL Date: 10/23/2019  
*UNDERGROUND CREW*

Approved by: Name: MAURICIO TORRES Title: FCCS Date: 10/23/2019

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: 1

Location/Channel Reach #: **Reach No.100 Dry Canyon Calabasas**

**T.G.: 559-G4**

**Permit Requirements:**

*The channel clearing work will involve hand clearing all vegetation at the channel inlet. Bank vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Most of the clearing was done by hand and few power tools were used. All power tools such as weed eaters, hedge trimmers and chainsaws are fitted with approved exhaust.

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

boom was placed at end of reach. just some standing water, no flow.

Project start date: 11/26/19

Project end date: 11/26/19

Completed by: Name: Ryan Mucillo Title: CREW LEADER Date: 11/26/19

Approved by: Name: Baltazar Motens Title: FCS Date: 11/27/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**      Trash/Debris Removed (Tons) \_\_\_\_\_

Mitigation Measure #: 2      Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach #: **Reach No.100 Dry Canyon Calabasas**      T.G.: **559-G4**

**Permit Requirements:**

*The channel clearing work will involve hand clearing all vegetation at the channel inlet. Bank vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practice were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input type="checkbox"/> ESC1 Scheduling                      | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input type="checkbox"/> ESC21 Dust Control                   | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

BOOM WAS PLACED AT END REACH. JUST SOME STANDING WATER,  
No Flow.

Biologist on site:  Yes     No

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: Ryan Morillo

Title: CREW LEADER    Date: 11/26/19

Approved by: Name: Baltazar Moreno

Title: FCCS    Date: 11/27/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM

Compliance Verification Form

Impact Issue: **Noise**

Mitigation Measure #: 3

Location/Channel Reach #: **Reach No.100 Dry Canyon Calabasas** T.G.: **559-G4**

**Permit Requirements:**

*The channel clearing work will involve hand clearing all vegetation at the channel inlet. Bank vegetation will be left in place.*

**Description of Activity/Method of Implementation:**

MOST CLEARING WAS DONE BY HAND, FEW POWER TOOLS USED. ALL  
POWER TOOLS SUCH AS HEDGE TRIMMERS, WEED EATERS AND CHAIN SAWS  
ARE FITTED WITH APPROVED MUFFLERS.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

BOOM PLACED AT END OF REACH, JUST SOME STANDING  
WATER, NO FLOW.

Completed by: Name: Ryan Murillo

Title: CREW LEADER Date: 11/26/19

Approved by: Name: Baltazar Mueens

Title: FCCS Date: 11/27/19

no  
# 6293780

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Air Quality**

Mitigation Measure #: **1**

Location/Channel Reach #: **Reach No. 108 – Pico Canyon Channel – PD 2528  
T.G.: 4640-C1 to C7**

**Permit Requirements:**

*The channel clearing work will involve removing all the vegetation within the channel using hand tools and mechanical equipment.*

**Description of Activity/Method of Implementation:**

MECHANICAL AND HAND WORK CLEARING OF ALL VEGETATION WITHIN THE CHANNEL, WATER TRUCK SPRAYED WATER PRIOR TO VEGETATION REMOVAL AND KEPT IT FOR DUST CONTROL ON SITE AND USED AS NEEDED.

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required. (Please explain below.)
- Mitigation measure is not in compliance. Further action is required. (Please explain below.)

**Comments/Revisions:**

WIND CONDITIONS WERE MILD DURING MOWING AND DUST WAS REALLY LOW.

Project start date: 10-30-19

Project end date: 11-13-19

Completed by: Name: EMILIO NIBES-ORDONEZ Title: PWCL Date: 10-30-19

Approved by: Name: MARTY LEMUS Title: FCCS Date: 11/14/19

LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form

Impact Issue: **Hydrology and Water Quality**

Trash/Debris Removed (Tons) 0

Mitigation Measure #: **2**

Exotic Veg. Removed (Sq. Ft.) 0

Location/Channel Reach #:

**Reach No. 108 – Pico Canyon Channel – PD 2528  
T.G.: 4640-C1 to C7**

**Permit Requirements:**

*The channel clearing work will involve removing all the vegetation within the channel using hand tools and mechanical equipment.*

**Description of Activity/Method of Implementation:**

Due to hydrological conditions in the reach during the vegetation clearing operations, the following Best Management Practices were deemed to be applicable and were implemented:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ESC1 Scheduling           | <input type="checkbox"/> ESC2 Preservation of Existing Vegetation |
| <input checked="" type="checkbox"/> ESC21 Dust Control        | <input type="checkbox"/> ESC22 Temporary Stream Crossing          |
| <input type="checkbox"/> ESC31 Temporary Drains and Swales    | <input type="checkbox"/> ESC50 Silt Fence                         |
| <input checked="" type="checkbox"/> ESC51 Straw Bale Barriers | <input type="checkbox"/> ESC52 Sand Bag Barriers                  |

- Disposition:  Mitigation measure has been implemented. No further action is required.
- Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)
- Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

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Biologist on site:  No  Yes

Date: \_\_\_\_\_

**Biologist Comments/Instructions:**

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Completed by: Name: MILLO NIDES-ORDONEZ

Title: PWCL

Date: 10-30-19

Approved by: Name: MARTY LEMUS

Title: FCCS

Date: 11/14/19



**LOS ANGELES COUNTY CHANNEL MAINTENANCE PROJECT  
MITIGATION MONITORING PROGRAM  
Compliance Verification Form**

Impact Issue: **Noise**

Mitigation Measure #: **3**

Location/Channel Reach #: **Reach No. 108 – Pico Canyon Channel – PD 2528  
T.G.: 4640-C1 to C7**

**Permit Requirements:**

*The channel clearing work will involve removing all the vegetation within the channel using hand tools and mechanical equipment.*

**Description of Activity/Method of Implementation:**

WORK DONE DURING DAYLIGHT HOURS ONLY, EQUIPMENT EQUIPPED  
WITH PROPER EXHAUST DEVICE -

Disposition:  Mitigation measure has been implemented. No further action is required.

Mitigation measure is not fully implemented. Further action is required.  
(Please explain below.)

Mitigation measure is not in compliance. Further action is required.  
(Please explain below.)

**Comments/Revisions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed by: Name: EMILIO NIEVES ORTIZ

Title: PWCL

Date: 10-30-19

Approved by: Name: MARTY LEMUS

Title: PLCS

Date: 11/14/19

NO# 6293780

Los Angeles County Channel Maintenance Project  
Mitigation Monitoring Program

Reach Name REACH #108 PICO CYN CHANNEL

Reach Number 108

Date	Air	H2O	Noise	Comment	Initial
10/30/19	✓	✓	✓		ENO
10/31/19	✓	✓	✓		ENO
11/01/19	✓	✓	✓		ENO
11/04/19	✓	✓	✓		ENO
11/05/19	✓	✓	✓		ENO
11/06/19	✓	✓	✓		ENO
11/07/19	✓	✓	✓		ENO
11/08/19	✓	✓	✓		ENO
11/12/19	✓	✓	✓		ENO
11/13/19	✓	✓	✓		ENO

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 112 (Ballona Creek-Upper)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

The maintenance plan for vegetation removal includes the usage of hand tools and mechanical equipment, and associated repair of riprap at locations designated for vegetation removal. Annual vegetation removal will remove invasive and exotic vegetation. California bulrush marsh will be mowed down to six-inches above the height of the grouted riprap. Any overgrown vegetation affecting the original capacity of the channel surface area will be maintained by pulling the roots outside the area with a long reach excavator. There will be no removal of root mass from existing 0.66 acres of California bulrush marsh in the upper section. No herbicide will be used. A boom with a silt curtain will be temporarily installed to prevent sediment from entering the water column.

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted at Ballona Creek. Bulrush was not mowed this year. All non-native vegetation was removed and hauled away using hand tools. Floating debris was collected by hand and disposed of properly. Minimal amount of dust was generated. Water trucks were used for dust suppression when appropriate.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs. See Attached Community Flyer

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**Project Start Date:** 12/09/19

**Project End Date:** 12/16/19

*Completed by:*

<b>Name:</b>	Mike Stephenson
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

*JAC*

*Approved by:*

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 112 (Ballona Creek-Upper)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	15.48

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted at Ballona Creek. Bulrush was not mowed this year. All non-native vegetation was removed and hauled away using hand tools. A silt curtain was installed, and floating debris was collected and disposed of properly. All equipment was cleaned before leaving the site. BMP's including a floating boom with silt curtain were implemented. The following Best Management Practice were also deemed to be applicable and implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** No

**Date on Site:** \_\_\_\_\_

**Comments/Revisions:**

Work was done avoiding water. Water Quality Sampling results provided in Annual Report. Work done above the OHWL.

*Completed by:*

*YSL*

*Approved by:*

Name:	Mike Stephenson
Title:	Construction Superintendent
Date:	6-23-20

Name:	<i>Rm Lacey</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 112 (Ballona Creek-Upper)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted at Ballona Creek. Bulrush was not mowed this year. All non-native vegetation was removed and hauled away using hand tools. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

<b>Name:</b>	Mike Stephenson
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

*JGC*

*Approved by:*

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020



Los Angeles County Channel Maintenance Project  
 Mitigation Monitoring Program  
 Reach Name Ballona Creek Upper  
 Reach Number 112

Date	Air	H2O	Noise	Comment	Initial
12-9-19	GOOD	GOOD	MODERATE	CREW STARTED CUTTING VEG. @ CENTINELA AVE HEADING D/S "RICH BANK"	RS
12-10-19	GOOD	GOOD	MODERATE	CONTINUED HEADING D/S TOWARD 90 FWY.	RS
12-11-19	GOOD	GOOD	MODERATE	CREW FINISHED & CUTTING RIGHT BANK	RS
12-12-19	GOOD	GOOD	MODERATE	CREW STARTED CUTTING VEG @ " " CENTINELA AVE HEADING D/S LEFT BANK	RS
12-13-19	GOOD	GOOD	MODERATE	CREW CONTINUED CUTTING LEFT BANK	RS
12-16-19	GOOD	GOOD	MODERATE	CREW COMPLETED CUTTING & PICKING UP ALL VEG.	RS

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 114 (Los Angeles River)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

The annual maintenance activities (from PCH to Seaside St) shall include the mechanical removal of accumulated debris, mowing of vegetation growing on the banks and stream bed, and in-kind structural repair to restore facility to as-built condition. Weeds and grasses may be controlled by mowing or hand labor. No herbicide will be used. A boom with a silt curtain will be installed to prevent sediment from entering the water column and decontamination of all tools and equipment prior to entering and exiting the Reach is required.

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted along the Los Angeles River. Vegetation was removed by hand tools and mechanical equipment, which included mowing and removal of Arundo and Castor Bean along invert and side slopes. A contractor (Orozco) was used to do side slope work on the Left Bank. Generation of dust was kept at a minimum during vegetation removal. Water trucks were used for dust suppression when appropriate.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs.

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**Project Start Date:** 11/05/19

**Project End Date:** 01/15/20

*Completed by:*

<b>Name:</b>	<i>Ryan S. Dwyer</i>
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	7/01/2020

*JSC*

*Approved by:*

<b>Name:</b>	<i>Ron Lacey</i>
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 114 (Los Angeles River)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	10.31

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water sampling was conducted "before, during and after" during all clearing activity. Vegetation was removed by hand tools and mechanical equipment, which included mowing and removal of Arundo and Castor Bean along invert and side slopes. A contractor (Orozco) was used to do side slope work on the Left Bank. Any floating debris in the water column was collected by hand and disposed of properly. All equipment was washed before leaving the site. The following Best Management Practice were deemed to be applicable and were implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** No

**Date on Site:** \_\_\_\_\_

**Comments/Revisions:**

Work was done in the channel avoiding water. Water Quality Sampling results provided in Annual Report.

*Completed by:*

<b>Name:</b>	<i>[Signature]</i>
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	7/01/2020

*Approved by:*

<b>Name:</b>	<i>[Signature]</i>
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

*JSC*



# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 114 (Los Angeles River)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted along the Los Angeles River. Vegetation was removed by hand tools and mechanical equipment, which included mowing and removal of Arundo and Castor Bean along invert and side slopes. A contractor (Orozco) was used to do side slope work on the Left Bank. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

Name:	<i>Argon A. Diaz</i>
Title:	Construction Superintendent
Date:	7/01/2020

*JAC*

*Approved by:*

Name:	<i>KM Lalay</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

11/5- 11/18

Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program  
 Reach Name Los Angeles River  
 Reach Number 114

Date	Air	H2O	Noise	Comment	Initial
11/5/19	good	good	minimal	Air and water quality are good Noise was minimal.	<del>AR</del>
11/6/19	✓	✓	✓	"	<del>AR</del>
11/7/19	✓	✓	✓	"	<del>AR</del>
11/12/19	✓	✓	✓	"	<del>AR</del>
11/13/19	✓	✓	✓	"	<del>AR</del>
11/14/19	✓	✓	✓	"	<del>AR</del>
11/15/19	✓	✓	✓	"	<del>AR</del>
11/16/19	✓	✓	✓	"	<del>AR</del>
11/18/19	✓	✓	✓	"	<del>AR</del>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 115 (San Gabriel River)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Maintenance activity includes a one-time woody vegetation removal with hand tools, mechanical equipment, and repair of displaced soil and rip rap along the levee. The annual maintenance activities shall include removal of accumulated debris, vegetation, woody plants by hand tools and/or mechanical equipment. A silt curtain containing a floating boom with a skirt below the water level will be installed to prevent sediment from entering the water column. Floating debris shall be collected and disposed of properly. To avoid loss of Bats maintenance activity shall be conducted between October 1 and February 28. A turtle mitigation plan shall be approved prior to annual maintenance activity can begin.

**Description of Activity/Method of Implementation:**

Proper woody vegetation removal methods were conducted along the San Gabriel River. Vegetation, trees, and shrubs were removed using mechanical equipment and hand tools. Levee repair will be conducted Spring 2020-21. Generation of dust was kept at a minimum during vegetation removal. Water trucks were used for dust suppression when appropriate.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

See Attached Daily Field Logs. See Attached Community Flyer

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**Project Start Date:** 10/01/19

**Project End Date:** 12/05/19

**Completed by:**

Name:	<i>[Signature]</i>
Title:	<i>Inspection Supt</i>
Date:	<i>06/24/2020</i>

**Approved by:**

Name:	<i>RM Lacey</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 115 (San Gabriel River)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	69.25

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water sampling was conducted before, during and after during all clearing activity. Proper woody vegetation removal methods were conducted along the San Gabriel River. Vegetation, trees, and shrubs were removed using mechanical equipment and hand tools. Levee repair will be conducted Spring 2020-21. A silt curtain was installed, and floating debris was collected and disposed of properly. All equipment was cleaned before leaving the site. BMP's including a floating boom with silt curtain were implemented. The following Best Management Practice were also deemed to be applicable and implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** Yes

**Date on Site:** During site activity

**Comments/Revisions:**

Work was done avoiding water. Water Quality Sampling results provided in Annual Report. Biologist ensured staying above OHWL and implantation of Turtle Mitigation Plan.

Completed by:

Name:	<i>[Signature]</i>
Title:	<i>Construction Supt.</i>
Date:	<i>06/24/2020</i>

Approved by:

*JAC*

Name:	<i>Rm Lacey</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 115 (San Gabriel River)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

Proper woody vegetation removal methods were conducted along the San Gabriel River. Vegetation, trees, and shrubs were removed using mechanical equipment and hand tools. Levee repair will be conducted Spring 2020-21. A silt curtain was installed, and floating debris was collected and disposed of properly. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

Name:	<i>S. A. A. M.</i>
Title:	<i>CONSTRUCTION Supt</i>
Date:	<i>06/24/2020</i>

*YBC* *Approved by:*

Name:	<i>Ron Lacey</i>
Title:	<i>AAE</i>
Date:	<i>7/28/2020</i>

Los Angeles County Channel Maintenance Project  
 2019-ZO Mitigation Monitoring Program

Reach Name San Gabriel River

Reach Number 115

Date	Air	H2O	Noise	Comment	Initial
10-1-19	Good	Murky	Medium	Boom was in place	MM
10-2-19	Moderate	Murky	Medium	"	MM
10-4-19	Moderate	Murky	Medium	"	MM
10-7-19	Moderate	Murky	Medium	"	MM
10-8-19	Good	Murky	Medium	"	MM
10-9-19	Good	Murky	Medium	"	MM
10-10-19	Moderate	Murky	Medium	"	MM
10-15-19	Moderate	Murky	Medium	"	MM
10-21-19	Good	Murky	Low	Silt Fencing was used (no boom)	MM
10-22-19	Moderate	Murky	Low	"	MM
10-23-19	Moderate	Murky	Low	"	MM
10-24-19	Moderate	Murky	Low	"	MM

Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program  
 Reach Name San Gabriel River  
 Reach Number 115

Date	Air	H2O	Noise	Comment	Initial
10-25-19	Good	Murky	Low		MM
10-29-19	Moderate	Murky	Low		MM
11-4-19	Moderate	Murky	High	Boom was in place	MM
11-5-19	Moderate	Murky	High		MM
11-7-19	Moderate	Murky	High		MM
11-12-19	Moderate	Murky	High		MM
11-13-19	Moderate	Murky	High		MM
11-14-19	Moderate	Murky	High		MM
11-15-19	Moderate	Murky	High		MM
11-16-19	Good	Murky	High		MM
11-19-19	Good	Murky	High		MM
11-21-19	Good	Murky	High		MM

Los Angeles County Channel Maintenance Project  
 2019 - 20 Mitigation Monitoring Program  
 Reach Name San Gabriel River  
 Reach Number 115

Date	Air	H2O	Noise	Comment	Initial
11-12-19	mid fog	High tide	fair	Cleared 74 of River	MLC
11-13-19	mid. Fog	High tide	fair	Weeded out bottom & cut vegetation	MLC
11-14-19	mid. Fog	High tide	fair	Weeded out bottom & cut vegi	MLC
11-15-19	fair visible	High tide	fair		MLC
11-18-19	fair visible	Low tide	fair	Due to low tide were able to cut Heronida	MLC
11-19-19	fair visible	Low tide	fair		MLC
11-26-19	fair visible	High tide	fair	Picked up vegetation & cut trees	MLC

115  
 |  
 115



Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program  
 Reach Name San Gabriel River  
 Reach Number 115

Date	Air	H2O	Noise	Comment	Initial
12-2-19	Good	Murky	Low	- NO Boom Only removed vegetation from RipRap	MM
12-3-19	Moderate	Murky	Low		MM
12-5-19	Good	Murky	Low		MM

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 118 and 119 (Rustic and Rivas Channels)
<b>Impact Issue:</b>	Air Quality
<b>Mitigation Measure No:</b>	1

**Permit Requirements:**

Maintenance activity for these channels include vegetation removal by hand using hand tools such as weed eaters, hedge trimmers chainsaws, hoes, loppers, machetes, and a rubber-tracked skid steer as necessary. Minor deficiencies discovered will be repaired including filling voids with onsite material, repairing small portions of the wood walls, replacing support structures for the walls and appurtenant structure, and other miscellaneous items encountered. A two-striped garter snake relocation plan is required, and biological monitoring is required on-site daily during project activity.

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted along Rustic and Rivas Channels. Vegetation and shrubs were removed using hand tools and a rubber tracked skid steer. Channel repairs will be conducted in 2020-21. Minimal dust was generated during vegetation removal.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)


**Comments/Revisions:**

See Attached Daily Field Logs.  
See Attached Separate Annual Report by Psomas

**Project Start Date:** 11/18/19

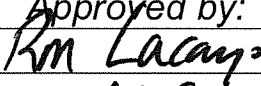
**Project End Date:** 12/18/19

*Completed by:*

<b>Name:</b>	Mike Stephenson 
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

*JEC*

*Approved by:*

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 118 and 119 (Rustic and Rivas Channels)
<b>Impact Issue:</b>	Hydrology and Water Quality
<b>Mitigation Measure No:</b>	2
<b>Tons Trash/Debris Removed</b>	13.72

**Permit Requirements:**

The permit requires that we monitor water quality at upstream, midpoint and downstream limits when water is flowing in the channel.

**Description of Activity/Method of Implementation:**

Water sampling was conducted before, during and after during all clearing activity. Proper vegetation removal methods were conducted along Rustic and Rivas Channels. Vegetation and shrubs were removed using hand tools and a rubber tracked skid steer. Channel repairs will be conducted in 2020-21. All equipment and hand tools were cleaned before leaving the site. BMP's were implemented to maintain water quality. The following Best Management Practice were deemed to be applicable and were implemented:

- SS-1                      Scheduling
- SS-2                      Preservation of Existing Vegetation
- WE-1                      Wind Erosion Control
- SS-8                      Sand Bag Barrier
- SS-9                      Straw Bale Barrier
- NS-8                      Vehicle and Equipment Cleaning

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Biologist on Site:** Yes

**Date on Site:** During site activity


**Comments/Revisions:**

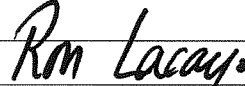
Work was done in the channel avoiding water. Water Quality Sampling results provided in Annual Report.

Completed by:



Approved by:

<b>Name:</b>	Mike Stephenson 
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

# LOS ANGELES COUNTY SOFT BOTTOM CHANNEL MAINTENANCE 2019-2020 MITIGATION MONITORING PROGRAM

## Compliance Verification Form

<b>Location/Channel Reach</b>	Reach No. 118 and 119 (Rustic and Rivas Channels)
<b>Impact Issue:</b>	Noise
<b>Mitigation Measure No:</b>	3

**Permit Requirements:**

There are no permit requirements requiring mitigation of noise levels.

**Description of Activity/Method of Implementation:**

Proper vegetation removal methods were conducted along Rustic and Rivas Channels. Vegetation and shrubs were removed using hand tools and a rubber tracked skid steer. Channel repairs will be conducted in 2020-21. Activity in the reach maintained moderate noise levels during the daily working hours (Mon-Sat, 7am-4pm). Hand crews and equipment did not have any significant noise problems and we received no complaints from businesses or homeowners.

**Disposition:**

<input checked="" type="checkbox"/>	Mitigation measure has been implemented. No future action is required.
<input type="checkbox"/>	Mitigation measure is not fully implemented. Further action is required. (Please explain below)
<input type="checkbox"/>	The mitigation measure is not in compliance. Further action is required. (Please explain below)

**Comments/Revisions:**

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*Completed by:*

<b>Name:</b>	Mike Stephenson
<b>Title:</b>	Construction Superintendent
<b>Date:</b>	6-23-20

*JSC*

*Approved by:*

<b>Name:</b>	
<b>Title:</b>	AAE
<b>Date:</b>	7/28/2020

Los Angeles County Channel Maintenance Project  
 2019-20 Mitigation Monitoring Program  
 Reach Name Rustic Rivas Channel  
 Reach Number 118-119

<b>Date</b>	<b>Air</b>	<b>H2O</b>	<b>Noise</b>	<b>Comment</b>	<b>Initial</b>
11/18/19	GOOD	GOOD	GOOD	START AT CONFLUENCE, WORKING UPSTRESAM IN RIVAS, 14 WORKERS	RN
11/19/19	GOOD	GOOD	GOOD	WORKING MID POINT RIVAS TO SUNSET, 9 WORKERS, REPORTED MULTIPLE HIVES	RN
11/20/19	GOOD	GOOD	GOOD	START RUSTIC CONFLUENCE, 9 WORKERS, BIOLOGIST CLEARED, STOPED AT 11AM FOR	RN
11/25/19	GOOD	GOOD	GOOD	START CONFLUENCE, 10 WORKERS, BIOLOGIST CLEARED, SPRAYED FOR YELLOW	RN
11/26/19	GOOD	GOOD	GOOD	START RIVAS, 9 WORKERS, ONE TRASH CONTAINER PICKED UP	RN
12/9/19	GOOD	GOOD	GOOD	START SECOND TIER AT RUSTIC, BIOLOGIST CLEARED TO MOVE FORWARD, 12 WORKERS	RN
12/10/19	GOOD	GOOD	GOOD	WORKED TO BROOKTREE BRIDGE IN RUSTIC, 13 WORKERS	RN
12/11/19	GOOD	GOOD	GOOD	STARTED AT BROOKTREE BRIDGE, 13 WORKERS	RN
12/12/19	GOOD	GOOD	GOOD	STARTED AT ACCESS ROAD AT HIGHTREE, UPSTREAM AND DOWNSTREAM, 12 WORKERS	RN
12/13/19	GOOD	GOOD	GOOD	STARTED UPSTREAM OF CUL DE SACS AT HIGHTREE, 12 WORKERS,	RN
12/16/19	GOOD	GOOD	GOOD	STARTED AT THE BOTTOM ON E RUSTIC RD, 10 WORKERS,	RN
12/17/19	GOOD	GOOD	GOOD	CONTINUED AT THE BOTTOM ON E RUSTIC RD, 8 WORKERS,	RN
12/18/19	GOOD	GOOD	GOOD	CONTINUED AT THE BOTTOM ON E RUSTIC RD, 10 WORKERS	RN

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**ATTACHMENT NO. 3**  
PRE- AND POST-CLEARING BIOLOGICAL  
RESOURCES MONITORING FORMS

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County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 1

Special Permit Conditions (list):

*The operator shall not impact the 0.27 acre of vegetation allowed to remain in 1997. All removal shall be by hand operated tools only.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 1, 2; Riparian herb and ruderal vegetation in area maintained; invasives not a problem.*

Name of Biological Monitor: Alice Mork Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 9, 10; willows.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Alice Mork Date: January 14, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 2

Special Permit Conditions (list):

Operator shall not impact the 0.39 acre of vegetation allowed to remain in 1997. Hand Clearing only. Width of clearing shall not exceed 20 ft. No mature trees with a DBH of 3 inches or greater shall be removed.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 24, 25, 26; Riparian herb and reed vegetation in area maintained; A variety of ornamental vegetation present, most not a problem, but some ground cover are invasive.

Name of Biological Monitor: Steve Morin Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 4, 5, 6; Willows and Sycamores, but also some ornamental trees and shrubs.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: January 14, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 3

Special Permit Conditions (list):

Hand Clearing only.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 3, 4; Rubus vegetation in area maintained; some Castor Bean present.

Name of Biological Monitor: Steve Mouch Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 10, 11; Eucalyptus and Coast Live Oaks.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Mouch Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 4

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; Riparian herb and sedal vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Mark Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; Mix of ornamental and native trees and shrubs outside channel; invasives not a problem.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: me Date: April 8, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 5

Special Permit Conditions (list):

*Hand Clearing only. Exotics shall be removed during maintenance activities. That vegetation allowed to remain in 1997 shall not be disrupted by future maintenance activities.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 18, 19, 20; Riparian herb in area maintained; invasives not a problem.*

Name of Biological Monitor: Steve Morris Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 11, 12, 13; Willow riparian.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris Date: January 14, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 6

Special Permit Conditions (list):

Hand Clearing Only. Exotics shall be removed. Vegetation allowed to remain for PPT shall not be impacted by future maintenance activities.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 21, 22; Riparian herb, willow branches, and ruderal vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Morin Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 14, 15; Willows, Coast Live oak, and some ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: January 14, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 7

Special Permit Conditions (list):

Special permit conditions for least Bell's vine (LBV) apply.  
Note that the ACOB/City of L.A. restoration project  
in 2008 changed existing conditions at this reach.

Observation of Special Status Species: none detected during Aug 26, 2019 visit

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; willow and cottonwood saplings at toe of  
both riprap covered slopes – note cattails and Nippon  
scrub growing on sediment bar forming on invert;  
invasives not a problem (fine damaged vegetation  
on top of banks resulting from unregulated fires  
in homeless encampments).

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; Four young cottonwoods at toe of  
right (or west) bank selected for protection.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Nov. 19, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 8

Special Permit Conditions (list):

Hand Clearing only.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 16, 17; Riparian herb and ruderal vegetation in area maintained; duckweed not a problem.

Name of Biological Monitor: Steve Morley Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 7, 8; No vegetation allowed to remain in this channel - adjacent ornamental trees "overhang" the reach somewhat.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morley Date: December 13, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 9

Special Permit Conditions (list):

Hand Clearing only; impacts shall not exceed 0.12 acre of  
Vegetation.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 10,11; some ruderal vegetation in area maintained;  
invasives not a problem but trash from increasing homeless  
population prevalent at this reach.

Name of Biological Monitor: Gene Moulh Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 17,18; Non-native Ash Trees.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Gene Moulh Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 10

Special Permit Conditions (list):

operator shall not impact the 2.11 acres of vegetation allowed to remain in 1997.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions -- (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 12, 13, 14, 15; Riparian herb and subalpine vegetation in area maintained; Washington's Palms as well as other ornamental trees growing in rip-rap at upper end of reach.

Name of Biological Monitor: Steve Mouch Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4, 5, 6; There is no protected vegetation in this channel.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Usually all vegetation is removed from this channel but a large portion remains. Many Palms and Tree Tobacco also present.

Name of Biological Monitor: Steve Mouch Date: February 19, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 12

Special Permit Conditions (list):

Hand clearing only. Special permit conditions for the Santa Ana sucker (SAS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; some cattails and other herbaceous species, but downstream end of reach has been cleared (recently) by unknown entity (may have been fire abatement activities as that habitat had been impacted by drought - it contained grove of ornamental cottonwoods that had died).

Name of Biological Monitor: Brian Daniels Date: Aug 16, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; willows along right bank of outlet, plus two large willows inside right-of-way that are lollipopped; otherwise willows and some ornamental trees downstream of maintenance area.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Trevor Bristle Date: March 12, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 13

Special Permit Conditions (list):

No special permit conditions apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; primarily unvegetated in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 16, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; alluvial sage scrub vegetation & /s of maintained area.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Oct. 17, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 14

Special Permit Conditions (list):

Operator shall not impact the 0.5 acre of vegetation allowed to remain in 1997. Special permit conditions for least Bell's vireo apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; herbaceous vegetation in area maintained (the invert); invasives not a problem. The combination of drought and wild fires has negatively affected the "protected" vegetation on the banks of this reach.

Name of Biological Monitor: Brian Daniels Date: Aug 16, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; much of the protected vegetation burned in the Creek Fire (Dec 5, 2017 - Jan 9, 2018); some willows recovering; tree-of-heaven vantage points proliferating on left bank.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Problems or Recommendations (if more space is needed continue on the back of this form):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name of Biological Monitor: Brian Daniels Date: Oct. 14, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 15

Special Permit Conditions (list):

operator shall not impact the 0.01 acre vegetation allowed to remain in 1997.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 5, 6, 7, 8, 9; Riparian herb and ruderal vegetation in area maintained; invasives not a problem but trash from households present at upper end of reach.

Name of Biological Monitor: Steve Moulton Date: August 22, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 12, 13, 14, 15, 16; No vegetation allowed to remain in channel except small patch (0.01 acre) at downstream terminus of reach.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Recommend alternating removal of downstream patch so that it doesn't become stagnant with trash and invasives similar to previous protected patch.

Name of Biological Monitor: Steve Moulton Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 16

Special Permit Conditions (list):

Hand Clearing only. impacts shall not exceed 0.07 acre.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 7, 8; Ruderal vegetation in area maintained;  
invasives not a problem.

Name of Biological Monitor: Steve Mowbr Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos; 1, 2; Oak woodland at upstream end of reach.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Mowbr Date: January 16, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 18

Special Permit Conditions (list):

Hand Clearing only.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 9, 10, 11; Ruderal Vegetation and some overhanging ornamental tree branches in area maintained; large tree of Heaven on right bank just up of entrance bridge to Camp Mel Strauss; some Castor Bean also present.

Name of Biological Monitor: Steve Moritz Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4, 5; Chaparral, Coast live oaks, and ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moritz Date: January 16, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 19

Special Permit Conditions (list):

Hand Clearing only. (Note that the current ACOE permit continues to include this reach and list for Least Bell's Sparrow and Santa Ana shrike despite experts determining no potential for either of these two species.)

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 12, 13; Riparian herb and ruderal vegetation in area maintained; some Castor Bean present.

Name of Biological Monitor: Steve Morris Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 6, 7; Ornamental vegetation and some chaparral and/or alluvial sage scrub.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris Date: January 16, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 20

Special Permit Conditions (list):

Imports shall not exceed 0.13 acre (115 FT. linear by 50 FT. wide).

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 19, 20; Rubus vegetation in area maintained; some Castor Bean present.

Name of Biological Monitor: Steve Martin Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4; a mix of ornamental vegetation and oak.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Martin Date: March 9, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 21

Special Permit Conditions (list):

Hand Clearing only, impacts shall not exceed 0.03 acre.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 17,18; Ruderal vegetation in area maintained; invasives not a problem

Name of Biological Monitor: Steve Morik Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1,2; a mix of ornamental vegetation and oaks.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morik Date: March 9, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 22

Special Permit Conditions (list):

Hand Clearing only.

Observation of Special Status Species: None observed.

**Pre-Clearing Documentation**

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 14, 15, 16; sparse growth of subcanal vegetation in area maintained; Castor Bean present.

Name of Biological Monitor: Steve Morris Date: August 19, 2019

**Post-Clearing Documentation**

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 8, 9, 10; A mix of ornamental vegetation from adjacent homes with some Chaparral, Sycamores, and oaks.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Some Castor Bean still present.

Name of Biological Monitor: Steve Morris Date: January 16, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 24

Special Permit Conditions (list):

No special permit conditions pertain to this reach, but the general terms and conditions of the permits apply.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 7, 8, 9, 10, 11; Riparian herb and suberal vegetation in area maintained; Castor Bean present.

Name of Biological Monitor: Steve Moulis Date: August 17, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5; some reed beds in middle of low-flow channel, but otherwise all vegetation removed.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moulis Date: November 23, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 25

Special Permit Conditions (list):

Operator shall not impact the 9.37 acres of vegetation allowed to remain in 1997. (NOTE: The ACOE removed much of this vegetation in 2000.)

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 12, 13, 14, 15, 16 (EAST BANK) & 17, 18, 19, 20, 21 (WEST BANK); Primarily reedbed growth in area maintained; Arundo and Castor Bean present.

Name of Biological Monitor: Steve Morris Date: August 17, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5 (EAST BANK) & 6, 7, 8, 9, 10 (WEST BANK); Large Willows on east bank, otherwise all vegetation removed. A few small patches of Arundo on east bank.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris Date: January 7, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 26

Special Permit Conditions (list):

Hand Clearing only.

Observation of Special Status Species: \_\_\_\_\_

**Pre-Clearing Documentation**

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6; Ruderal, riparian herb, and ornamental  
Vegetation in area maintained; Castor Bean present.

Name of Biological Monitor: Steve Morris

Date: August 17, 2019

**Post-Clearing Documentation**

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5, 6; Willows and ornamental trees (mostly ash trees).

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris

Date: October 19, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 27

Special Permit Conditions (list):

The current management plan includes full clearing of invert, trimming of vegetation on banks including trees up to 3 ft. above ground, and island vegetation is protected.

Observation of Special Status Species: None observed (this is LBV reach)

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5; the invert supports dense growth of cattails and herbaceous vegetation, and banks support dense growth of shrubs and trees that haven't been cleared (except for homeless activities) since proposition "D" restoration project.

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5; willow dominated riparian habitat on banks (trimmed/trimmed) and on island ("untouched").

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Jan. 10, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 28

Special Permit Conditions (list):

Hand Clearing only; operators shall avoid impacts on Southwestern  
Pond Turtle. Clearing shall not extend beyond area cleared in 1997.  
No native Trees with a DBH of 2 inches or greater shall be removed.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 14, 15, 16; Primarily riparian vegetation in area maintained; but  
some riparian herb under bridge; invasives not a problem.

Name of Biological Monitor: Kene Mork Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 9, 10, 11; Willows.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Kene Mork Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 29

Special Permit Conditions (list):

Hand Clearing only. Operator shall avoid impacts to southwestern Pond turtle.  
Operator shall not impact the 0.61 acre allowed to remain in 1997.  
No mature trees with a DBH of 2 inches or greater shall be removed.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 21, 22, 23; Riparian herb and ruderal vegetation in area  
maintained; Arundo not a problem.

Name of Biological Monitor: Steve Mork Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 19, 20, 21; Willow and grassland/ruderal field.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Mork Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 32

Special Permit Conditions (list):

Hard Clearing only. No vegetation was allowed to remain since 1997.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 17, 18, 19, 20; Riparian herb and ruderal vegetation in area maintained; Invasives not a problem.

Name of Biological Monitor: Steve Morik Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 15, 16, 17, 18; Chaparral, oak, and some ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morik Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 33

Special Permit Conditions (list):

*The maintenance activities performed for this reach include  
lollypopping of willow trees, removal of exotic/non-native vegetation,  
and removal of debris and trash, similar to the one-time permit issued by CDFW on  
11/3/15*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 5,6,7; Willow riparian forest and freshwater marsh  
habitat in areas where no clearing activities have been performed  
due to permit restrictions.*

Name of Biological Monitor: Steve Moulton Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 12,13,14; Willow and some reed beds.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moulton Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 35

Special Permit Conditions (list):

Hand Clearing only. No native trees with ~~DBH~~ DBH of 2 inches or greater shall be removed.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 12, 13; Riparian herb and ruderal vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Morik Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 7, 8; A few shrubs and small trees (olive & sycamore).

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morik Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 36

Special Permit Conditions (list):

Hand Clearing only. Operator shall not impact the 0.05 acre of vegetation allowed to remain in 1997.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 3,4; sparse ruderal vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Moulis Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1,2; Willow.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moulis Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 37

Special Permit Conditions (list):

*Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 10, 11; Riparian herb and meadow vegetation in area maintained; invasives not a problem.*

Name of Biological Monitor: Steve Merkle Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 5, 6; Willow.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Merkle Date: January 13, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 38

Special Permit Conditions (list):

Hand Clearing only, impacts shall not exceed 0.19 acre.  
No native trees with a DBH of 2 inches or greater shall be removed.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 8, 9; Riparian herb and wetland vegetation in area  
maintained; invasives not a problem.

Name of Biological Monitor: Steve Moritz Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4; Willow and grassland.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moritz Date: January 13, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 39

Special Permit Conditions (list):

Special permit conditions for the Santa Ana sucker (SAS) and least Bell's vireo (LBV) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; few willow saplings in area maintained, but mostly herbaceous vegetation; some arundo present.

Name of Biological Monitor: Brian Daniels Date: Aug 23, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; willows and mule fat on right bank and coastal sage scrub next to left bank access road/staging area.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Continue planting of willow saplings on right bank (right bank only) to establish overhead shading of invert to reduce amount of herbaceous vegetation growing in water (invert).

Name of Biological Monitor: Brian Daniels Date: Oct. 7, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 40a

Special Permit Conditions (list):

Santa Fe Dam to 8-10 Fwy: hand & mechanical clearing 10ft. from toe of levee and 75ft wide area cleared in alternate years.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5; two-year old vegetation dominated by mule fat, but also alluvial sage scrub species and herbaceous (non-native weeds) and ornamental species in area maintained; some castor bean present.

Name of Biological Monitor: Brian Daniels Date: Aug. 23, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5; due to continuing drought, very little vegetation present in area (one-year growth) allowed to remain this year.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: Feb. 18, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 40b

Special Permit Conditions (list):

P-10 Hwy to Thienes Ave: protect vegetation allowed to remain in 1997. Special permit conditions for least Bell's vireo (LBV) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6, 7, 8; mostly herbaceous (non-native weeds) vegetation in areas maintained; but some willow saplings present in wet areas (side outlets primarily); castor bean and arundo present.

Name of Biological Monitor: Brian Daniels Date: Aug. 23, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5, 6, 7, 8; willows and mulefat.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: Feb. 18, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 41

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 4, 5, 6; Riparian herb and ruderal vegetation in area maintained; Castor Bean present.

Name of Biological Monitor: Steve Morin Date: August 16, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; Willows.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: December 3, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 42

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: Yellow Warbler

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; Riparian herb and meadow vegetation in area maintained; Castor Bean present.

Name of Biological Monitor: Steve Morin Date: August 16, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; Willows.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: February 6, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 43a

Special Permit Conditions (list):

Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities. Special permit conditions for least Bell's vireo (LBV) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5; mostly herbaceous vegetation (non-native weeds) in areas maintained; arundo and castor bean continue to be difficult to manage in this reach.

Name of Biological Monitor: Brian Daniels Date: Aug. 28, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5; primarily willows and mulefat, but also some ornamental vegetation (ash trees and a couple of eucalyptus trees); arundo removal but not yet treated with herbicides.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: Feb. 18, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 43b

Special Permit Conditions (list):

Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities. Special permit conditions for least Bell's vireo (LBV) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; mostly herbaceous vegetation (non-native weeds) in areas maintained; some castor bean.

Name of Biological Monitor: Brian Daniels Date: Aug 23, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; mostly willows, but some mulefat along toe of right bank slope.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: Feb. 18, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 44

Special Permit Conditions (list):

Maintenance activities shall not go beyond areas cleared in 1997. Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13; mostly herbaceous vegetation (non-native weeds) in areas maintained, but also some cattails and willow saplings at mouths of some side outlets with water; some castor bean.

Name of Biological Monitor: Brian Daniels Date: Aug 28, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13; primarily willows and mulefat.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: Feb. 14, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 45

Special Permit Conditions (list):

Impacts shall not exceed 0.05 acre. No native trees with 2 inch or greater DBH shall be removed.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; dry herbaceous (weeds) vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; coast live oak and dry herbaceous vegetation on left right bank and chaparral on left bank (steep hillside).

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 46

Special Permit Conditions (list):

Impacts shall not exceed 0.06 acre. No native trees with 2 inch or greater DBH shall be removed.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; sparse growth of herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; herbaceous vegetation where trailers were removed.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 47

Special Permit Conditions (list):

Clearing shall not occur more than 20 ft. beyond toe of levee. Special permit conditions for unarmored three-spine stickleback (UTS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; primarily unvegetated in area maintained, but side outlets contain herbaceous (weeds and grasses) vegetation due to periodic releases of "nuisance" water; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; alluvial sage scrub vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 48

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; mostly unvegetated in area maintained, but wet area at U/S end of reach holds mix of riparian herb, tree-of-heaven, and arundo, and herbaceous vegetation.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; ornamental vegetation of adjacent residential yards, but also some vegetation on invert (wet section) at U/S end of reach next to Sierra Hwy

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 49

Special Permit Conditions (list):

no special permit conditions pertain to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; unvegetated in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; unwegetated banks

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 50

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; this channel reach is under construction and expected to be removed soon from the list of soft-bottom channels maintained by the L.A. County Flood Control District.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Developed

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations. (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 51

Special Permit Conditions (list):

Clearing shall not occur more than 20 ft. beyond toe of levee. Special permit conditions for unarmored three-spike straddleback (UTS) apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; very sparse growth of herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; alluvial sage scrub vegetation

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 52

Special Permit Conditions (list):

Hand clearing only. Impacts shall not exceed 0.04 acre.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photo 1; this channel reach is under construction and it's unclear what will happen (final design not apparent at this time).

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Developed

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 53

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; very sparse growth of herbaceous (non-native weeds and grasses) vegetation at edge of ponded water; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; basically unvegetated

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 11, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 54

Special Permit Conditions (list):

Impacts shall not exceed 0.31 acre. Special permit conditions for unarmored threespine stickleback (UTS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; very sparse growth of herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; Great Basin sagebrush and trees including cottonwood and eucalyptus over reach, but oaks nearby too.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 55

Special Permit Conditions (list):

Clearing shall not occur more than 20 ft beyond toe of levee. Special permit conditions for unarmored trussing stilledback (UTB) apply to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6, 7, 8; primarily unvegetated in area maintained, except for side outlets that contain herbaceous (non-native weeds and grasses) vegetation due to periodic releases of "invasive" water; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5, 6, 7, 8; alluvial sage scrub vegetation

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 56 ("left bank reach")

Special Permit Conditions (list):

Clearing shall not occur more than 20ft. beyond toe of levee. Special permit conditions for unarmored two-spike stickleback (UTS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; primarily unvegetated in area maintained, invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; alluvial sage scrub vegetation

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 57

Special Permit Conditions (list):

No special permit conditions pertain to this reach

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; recent facility improvements include concrete invert and adjoining access road. Previous adjacent vegetation (trees on left bank edge of reach) remain intact; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; residential yards with ornamental vegetation

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 58 (including former Reach 59)

Special Permit Conditions (list):

Clearing shall not occur beyond 20 ft. of toe of levee.  
Special permit conditions for unarmored three-pine  
stickleback (UTS) apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5; sparse growth of herbaceous and  
alluvial sage scrub vegetation in area maintained;  
invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5; alluvial sage scrub vegetation

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 60

Special Permit Conditions (list):

Clearing shall not occur beyond 20 ft. of toe of levee.  
Special permit conditions for unarmored toes/pine  
sticklebacks (UTS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; sparse growth of herbaceous and  
alluvial sage scrub vegetation in areas maintained;  
invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; alluvial sage scrub vegetation

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 61 (including former Reach 62)

Special Permit Conditions (list):

Clearing shall not occur more than 20 ft. beyond toe of levee. Special permit conditions for unarmored transverse sidebank (UTS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6; sparse growth of herbaceous and alluvial sage scrub vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5, 6; alluvial sage scrub vegetation and some cottonwoods

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 63

Special Permit Conditions (list):

Impacts shall not exceed 0.25 acre. Special permit conditions for unarmored threespine stickleback (UTS) apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; primarily unvegetated in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; largely unvegetated, but some alluvial sage scrub vegetation nearby as well as some willows and cottonwoods

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 11, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 64

Special Permit Conditions (list):

Impacts shall not exceed 0.10 acre. Special permit conditions for unarmored turbine stibdeback (UTS) apply to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; sparse growth of herbaceous vegetation w/s of aqueduct – mix of herbaceous vegetation and new willow/mule fat growth (saplings and branches from vegetation on banks that is protected); invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; mule fat, willows, cottonwoods, and an ornamental tree.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

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\_\_\_\_\_  
\_\_\_\_\_

Problems or Recommendations (if more space is needed continue on the back of this form):

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\_\_\_\_\_  
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Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 66

Special Permit Conditions (list):

Clearing shall not occur beyond 20ft. of toe of levee.  
Special permit conditions for unarmored three-spine stickleback (VTS) apply to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; primarily unvegetated in area maintained,  
but herbaceous vegetation at mouth of the one  
side outlet; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; alluvial sage scrub vegetation including  
mule fat and a cottonwood.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 2, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 67

Special Permit Conditions (list):

Special permit conditions for unarmored  
threespine stickleback (UTS) apply to this  
reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; alternating halves cleared annually  
producing one-yr. & two-yr. old strips of vegetation  
consisting of riparian scrub (willows, cottonwoods, and  
mud flat) and herbaceous species; some tamarisk  
and arundo.

Name of Biological Monitor: Brian Daniels Date: Aug 20, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; one-yr. old strip of riparian/herbaceous  
vegetation on left half of invert

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 69

Special Permit Conditions (list):

Special permit conditions for unarmored threespine stickleback (UTS) apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; alternating halves cleared annually producing one-yr. & two-yr. old strips of vegetation consisting of riparian scrub (willows, cottonwoods, mule fat) and herbaceous species; some tamarisk and arundo.

Name of Biological Monitor: Brian Daniels Date: Aug 20, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; one-year old strip of riparian/herbaceous vegetation on left half of invert.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 70

Special Permit Conditions (list):

Special permit conditions for unarmored threespine stickleback (UTS) apply to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; alternating halves cleared annually leaving one-yr. & two-yr. old vegetation (herbaceous species) in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 20, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; one-year old growth of herbaceous (sparse) vegetation on right half of invert.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 71

Special Permit Conditions (list):

Clearing shall not occur beyond 20 ft. of the levee. Special permit conditions for unarmored three-pine sticklebacks (UTS) apply to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; very sparse growth of herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug. 20, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; alluvial sage scrub vegetation and a few cottonwoods

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 72

Special Permit Conditions (list):

no special permit conditions pertain to this reach.

Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; herbaceous species with willow saplings at mouth of reach in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

photos 1, 2; willows + cottonwoods

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 73

Special Permit Conditions (list):

Impacts shall not exceed 0.05 acre.

Observation of Special Status Species: None observed

**Pre-Clearing Documentation**

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; sparse growth of herbaceous species in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

**Post-Clearing Documentation**

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; unvegetated

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 75 (Lyons Ave. to Orchard Village Dr.)

Special Permit Conditions (list):

The vegetation (15.37 acres) allowed to remain in 1997 shall not be impacted by future maintenance activities. (No vegetation allowed to remain between Lyons + Orchard Village Dr.)

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; mix of cattails, willow saplings, and herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; all vegetation removed in channel (although photos show some regrowth already occurring at this date).

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Nov. 5, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 75 (Orchard Village Dr. to Magic Mtn. Pkwy.)

Special Permit Conditions (list):

The vegetation (15.37 acres) allowed to remain in 1997 shall not be impacted by future maintenance activities. (The protected vegetation is all between Magic Mtn. Pkwy and Orchard Village Dr.)

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11; mostly unvegetated in areas maintained, but some herbaceous vegetation with cattails and willow saplings at wet outlets; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11; willows, cottonwoods, mule fat and alluvial sage scrub species.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Nov. 5, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 76

Special Permit Conditions (list):

No special permit conditions pertain to this reach, but the general conditions and measures of the permits apply.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 25, 26, 27; Ruderal Vegetation in area maintained; Invasives not a problem.

Name of Biological Monitor: Steve Moul Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4, 5; All vegetation removed from channel.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moul Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 77

Special Permit Conditions (list):

*Vegetation (0.89 acre) allowed to remain in 1987 shall not be impacted by future maintenance activities. (NOTE: This reach has no potential for least Bell's Vireo and/or Santa Ana sucker and should not be included as such on the COE permit.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 28, 29; Primarily unvegetated in area maintained, but a few ruderal species are present; Invasives not a problem.*

Name of Biological Monitor: Steve Morris Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 6, 7; some alluvial sage scrub vegetation at downstream end of reach (at confluence with Pleasite Creek-reach 78), but otherwise bare dirt.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 78

Special Permit Conditions (list):

*Vegetation (0.89 acre) allowed to remain in 1997 shall not be impacted by future maintenance activities. (NOTE: This reach has no potential for least Bell's Vireo and/or Santa Ana shrike and should not be included as such on the COE permit.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 30, 31; Primarily unvegetated area maintained, but a few nodular species not present; invasives not a problem.*

Name of Biological Monitor: Steve Morde Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 8, 9; Alluvial sage scrub vegetation on banks.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morde Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 79

Special Permit Conditions (list):

Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities. Special permit conditions for unarmored timber pile stillbank (UTS) apply to this reach.  
Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; mostly unvegetated in area maintained, but some herbaceous vegetation in wet spot below bridge; invasives not a problem.

Name of Biological Monitor: Brian Daniels

Date: Aug. 20  
Dec. 3, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; cottonwoods, mule fat, and Great Basin sagebrush.

Compliance with Permit Conditions:

Full

Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels

Date: Dec. 3, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 30

Special Permit Conditions (list):

Clearing shall not occur more than 20 ft. beyond toe of levee. Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities. Special permit conditions for unarmored tree-pine stakedback (UTS) apply to this reach.  
Observation of Special Status Species: none observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; sparse growth of herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels

Date: Aug 20, 2019  
Dec 3, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; willows, cottonwoods, mule fat, and Great Basin sagebrush.

Compliance with Permit Conditions:

Full

Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels

Date: Dec 3, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 32

Special Permit Conditions (list):

Clearing shall not extend more than 20ft. beyond toe of levee. Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities. Special permit conditions for unarmored trussing stillback (UTS) apply to this reach.

Observation of Special Status Species:

None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; cattails and herbaceous vegetation at mouth of side outlet, but otherwise sparse growth of herbaceous vegetation in area maintained (one area of willow saplings); invasives not a problem.

Name of Biological Monitor: Brian Daniels

Date: Aug 27, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; w. flows, cottonwoods, and mule fat.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels

Date: Dec. 3, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 86

Special Permit Conditions (list):

Vegetation allowed to remain in 1997 shall not be impacted by future maintenance activities. Special permit conditions issued on 12/09/03 apply to this reach. (Stittback)

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; Ruderal vegetation in low-flow channel maintained; Invasives not a problem.

Name of Biological Monitor: Steve Morris Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 4, 5, 6; Willow and Cottonwoods in Castore Creek at downstream end of reach.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris Date: December 13, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 87

Special Permit Conditions (list):

Special permit conditions issued on 12/02/03 apply to this reach. (HillReback)

Observation of Special Status Species: None observed.

**Pre-Clearing Documentation**

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 4, 5; Riparian herb and ruderal vegetation in area maintained; Invasives not a problem.

Name of Biological Monitor: Stan Moun Date: August 21, 2019

**Post-Clearing Documentation**

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2; Willows.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moun Date: October 17, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 88

Special Permit Conditions (list):

Impacts shall not exceed 0.42 acre (1,085 linear ft. by 17 ft. wide). (NOTE: This reach has no potential for least bell's vine of Santa Ana Project and should not be included as such on COE permit).

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 13, 14; sparse growth of riparian vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Moul Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 11, 12; large scrub/alluvial sage scrub.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moul Date: January 15, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 89

Special Permit Conditions (list):

*Vegetation (0.02 acre) allowed to remain in 1997 shall not be impacted by future maintenance activities. (NOTE: This reach has no potential for East Bellflower and/or Santa Ana sucker and should not be included as such on BOE permit).*  
Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photo 9; Very sparse growth of ruderal vegetation in area maintained; invasives not a problem.*

Name of Biological Monitor: Steve Morin Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photo 13; Alluvial sage scrub and ornamental vegetation.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: January 15, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 90

Special Permit Conditions (list):

Vegetation (0.19 acre) allowed to remain since 1997 shall not be impacted by future maintenance activities.

Observation of Special Status Species: None observed.

**Pre-Clearing Documentation**

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 10, 11, 12; sparse growth of ruderal vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Mouch Date: August 21, 2019

**Post-Clearing Documentation**

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 14, 15, 16; Alluvial sedge scrub and/or disturbed sedge scrub, and oaks.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Mouch Date: January 15, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 91

Special Permit Conditions (list):

*No special permit conditions pertain to this reach, but the general conditions and measures of the permits apply.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 21, 22; sparse growth of ruderal vegetation in area maintained; dunes not a problem.*

Name of Biological Monitor: Steve Mowl Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 7, 8; Ornamental vegetation.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Mowl Date: January 15, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 92

Special Permit Conditions (list):

*No special permit conditions pertain to this reach, but the general conditions and measures of the permit apply. (NOTE: This reach has no potential for least Bell's Vireo and for San Joaquin Antelope and should not be included as such on the BOC permit.)*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.).

*Photos 23, 24; sparse growth of ruderal vegetation in area maintained; disturbance not a problem.*

Name of Biological Monitor: Steve Morin Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 9, 10; Sage Scrub / alluvial Sage Scrub.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: January 15, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 93

Special Permit Conditions (list):

*No special permit conditions pertain to this reach, but the general conditions and measures of the permits apply.*

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 19, 20; sparse growth of ruderal vegetation in area maintained; invasives not a problem.*

Name of Biological Monitor: Steve Morris Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 5, 6; oaks, shepard, and some ornamental vegetation.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morris Date: January 15, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 94

Special Permit Conditions (list):

No special permit conditions pertain to this reach, but the general conditions and measures of the permits apply.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 15, 16, 17, 18; Very sparse growth of ruderal vegetation in area maintained; dunes are not a problem.

Name of Biological Monitor: Steve Moulh Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; Ornamental and ruderal vegetation dominant, but some sage scrub/Chaparral species present.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moulh Date: January 15, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 95

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; sparse growth of herbaceous vegetation (tumbleweed) in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug. 20, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; unwegetated

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 11, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 96

Special Permit Conditions (list):

Hand Clearing only.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 27, 28: Riparian herb and ruderal vegetation in area maintained; Arundo present d/s of bridge.

Name of Biological Monitor: Steve Morik Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 7, 8; Willows, Oaks, and some ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Some Arundo still present d/s of bridge.

Name of Biological Monitor: Steve Morik Date: January 14, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 97

Special Permit Conditions (list):

Operator shall not impact the vegetation (1.17 acre) allowed to remain in 1997. Special permit conditions issued on 12/09/03 apply to this reach. (Stillebaert).

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 6, 7, 8; Riparian herb and ruderal vegetation in area maintained; Invasives not a problem.

Name of Biological Monitor: Steve Moulis Date: August 21, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; Willows, Cottonwoods, and Mule Fat.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moulis Date: December 13, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 98

Special Permit Conditions (list):

Impacts shall not exceed 0.03 acre.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2; cattails and non-native grasses in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug. 16, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2;

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: \_\_\_\_\_

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 99

Special Permit Conditions (list):

No special permit conditions apply to this reach, but the general conditions and measures of the permits apply.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6; Riparian herb ornamental, willow branches and riparian vegetation in area maintained; Arundo and some Castor Bean present.

Name of Biological Monitor: Steve Moulle Date: August 19, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 9, 10, 11, 12, 13, 14; Mostly ornamental vegetation, but also some oaks, willows, and sycamores. Some Arundo on both sides of Kappel Canyon Road Bridge.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

If Arundo on both sides of Kappel Canyon Road Bridge is not growing on private property, then it should be removed.

Name of Biological Monitor: Steve Moulle Date: December 13, 2019



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 100

Special Permit Conditions (list):

No special permit conditions pertain to this reach, but the general conditions and measures of the permits apply.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 29, 30, 31; Riparian herb, ruderal, and ornamental vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Steve Mowbr Date: August 26, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; willows, oaks, and ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Mowbr Date: January 14, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 108

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed

**Pre-Clearing Documentation**

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1,2,3,4,5; mix of cattails, riparian scrub (mostly willow saplings), and herbaceous species; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 27, 2019

**Post-Clearing Documentation**

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1,2,3,4,5; all vegetation removed in channel.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Dec. 3, 2019

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 112

Special Permit Conditions (list):

No special permit conditions pertain to the upper part of this reach where work is now permitted

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photo 1; cattails and bulrushes with herbaceous (mix of native + non-native species) vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 29, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photo 1; All non-native vegetation (i.e., palm trees) removed from upper part of this reach. Native vegetation (i.e., cattails and bulrushes) remains untouched.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: January 8, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 114

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6; low growing herbaceous vegetation on sediment bank at toe of left and right bank levees between P.C.H. and Anaheim St; otherwise, the channel reach is unvegetated.

Name of Biological Monitor: Brian Daniels Date: Aug. 27, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4, 5; unvegetated.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: March 18, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 115

Special Permit Conditions (list):

Clearing of vegetation on banks shall occur with avoidance  
measures implemented for avoiding impacts to green sea  
turtles and roosting bats.

Observation of Special Status Species: None observed.

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5, 6, 7; mix of ornamental trees and shrubs  
on both banks - most dense vegetation upstream, less  
dense downstream; some arundo, castor bean, and  
Washingtonia palms.

Name of Biological Monitor: Brian Daniels Date: Sept. 3, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 5, 6, 7; these photos show where work has occurred  
on right (or west) bank. Vegetation clearing not yet complete,  
but work will resume during the 2020-2021 season.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: March 18, 2020



County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 118

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4, 5: herbaceous vegetation in area maintained; invasives not a problem

Name of Biological Monitor: Brian Daniels Date: Aug 29, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5: All vegetation removed from inside of channel. Some ornamental vegetation hangs over side of channel.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: January 8, 2020

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

Biological Resources Monitoring Form

Reach Number: 119

Special Permit Conditions (list):

No special permit conditions pertain to this reach.

Observation of Special Status Species: None observed

Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3, 4; herbaceous vegetation in area maintained; invasives not a problem.

Name of Biological Monitor: Brian Daniels Date: Aug 29, 2019

Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4; All vegetation removed from inside of channel. Some willows near the upper end of the reach and some ornamental vegetation hang over side of the channel.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Cristhian Mace Date: January 8, 2020

**ATTACHMENT NO. 4**  
PRE-CLEARING SURVEY AND REPORTS

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**RESULT OF BIOLOGICAL MONITORING AT  
REACH 118 (RUSTIC CANYON)  
AND  
REACH 119 (RIVAS CANYON) SOFT-BOTTOM  
CHANNEL REACHES**

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January 20, 2020

Ms. Nandini T. Moran  
Los Angeles County Flood Control District  
Flood Maintenance Division  
900 South Fremont Avenue, Annex Building, 2<sup>nd</sup> Floor  
Alhambra, California 91803-1331

**VIA EMAIL**  
**ntmoran@dpw.lacounty.gov**

**Subject:** Results of Biological Monitoring at Reach 118 (Rustic Canyon) and Reach 119 (Rivas Canyon) Soft-Bottom Channel Reaches in the Community of Pacific Palisades, City of Los Angeles, California

Dear Ms. Moran:

This Letter Report presents the results of biological monitoring for maintenance activities conducted by the Stormwater Maintenance Division (SWMD) of the Los Angeles County Flood Control District (LACFCD) at Soft-Bottom Channel Reaches 118 (Rustic Canyon Channel) and 119 (Rivas Canyon Channel) in the Community of Pacific Palisades, City of Los Angeles, California (hereinafter referred to as the “Project”).

### **PROJECT DESCRIPTION AND LOCATION**

Soft-bottom Channel Reaches 118 (Rustic Canyon Channel) and 119 (Rivas Canyon Channel) were added to the LACFCD’s Long Term MOU (No. 1600-1999-0076-R5) for “Routine Maintenance of Earth Bottom Channels” per an amendment dated October 17, 2014. The maintenance plan for these two Soft-bottom channel (SBC) reaches involves vegetation removal by hand tools and, as necessary, rubber-tracked skip loader or skid steer machines. Also permitted are minor repairs such as filling small voids with onsite materials, repairing deficiencies in walls and/or support structures, and other miscellaneous items that may be encountered during the course of annual maintenance activities.

The Project is located within the coastal community of Pacific Palisades on the west side of the City of Los Angeles, California. SBC Reaches 118 and 119 are contiguous upper and lower segments of the Rustic/Rivas Canyon Creeks located south of Sunset Boulevard (Exhibit 1). SBC Reach 119 extends approximately 1,200 feet from Sunset Boulevard to its confluence with Rustic Canyon Channel (SBC Reach 118). SBC Reach 118 consists of a portion of Rustic Canyon Channel from the confluence with Rivas Canyon Creek downstream approximately 3,200 feet to Rustic Road, where the channel transitions to a concrete-lined storm drain. Project elevations range from approximately 190 to 275 feet above mean sea level (msl). The Project site is located within the Topanga U.S. Geological Survey (USGS) 7.5-minute quadrangle.

225 South Lake Avenue  
Suite 1000  
Pasadena, CA 91101

Tel 626.351.2000  
Fax 626.351.2030  
[www.Psomas.com](http://www.Psomas.com)

Nandini T. Moran  
Page 2  
January 20, 2020  
Reach 118 and Reach 119 Pacific Palisades

**METHODS**

Biological clearance surveys were conducted for the two-striped garter snake (*Thamnophis hammondi*) and all wildlife species onsite during all days of maintenance activities by Psomas biologists Steve Morris, Cristhian Mace, Sarah Thomas, and senior biologist Brian Daniels. A total of twenty-one biological clearance surveys were conducted on November 12, 14, 15, 18-22, 25, 26, December 2, 3, 9-13, 16-18, and 20, 2019. Weather conditions during the surveys included temperatures ranging from approximately 54 to 66 degrees Fahrenheit, with wind speeds ranging from 0 to 3 miles per hour, and zero to 50 percent cloud cover.

Clearance surveys were conducted prior to ground disturbing activities. The surveys were conducted early in the morning at areas planned for vegetation removal. The biologists thoroughly searched rock crevices, animal burrows, leaf litter, loose rocks, logs, and debris to determine if any wildlife species were present. If any wildlife species were observed during clearance surveys, the biological monitor was prepared to relocate animals to appropriate habitat a safe distance away from maintenance activities. Photographs documenting Reach 118 and 119 before, during, and after maintenance monitoring are provided in Exhibits 2a, 2b, and 2c.

**RESULTS**

No sensitive plant or wildlife species were observed during clearance surveys. No wildlife species were relocated during the surveys. A complete list of all wildlife species detected during the surveys is provided in Attachment A.

Psomas appreciates the opportunity to assist on this project. If you have any comments or questions, please call Marc Blain at (626) 351-2000.

Sincerely,

**P S O M A S**



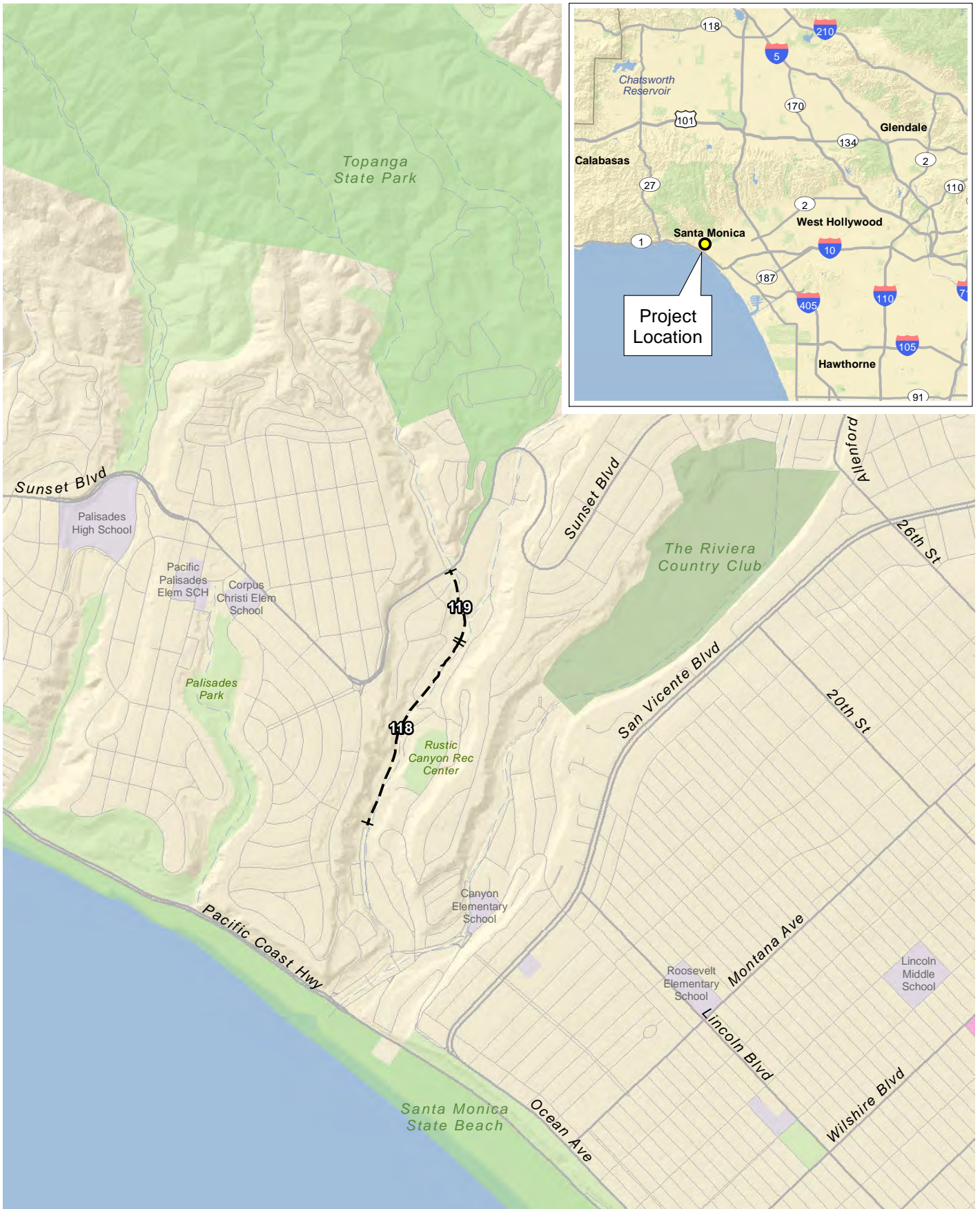
Ann M. Johnston  
Vice President, Resource Management



Marc T. Blain  
Senior Project Manager

Enclosures:    Exhibit 1 – Regional Location and Project Vicinity  
                  Exhibit 2a-1-2a-5 – Pre-monitoring Photographs  
                  Exhibit 2b-1-2b-2 – Monitoring Photographs  
                  Exhibit 2c-1-2c-5 – Post-monitoring Photographs  
                  Attachment A – Wildlife Compendium

cc:        Rainer Globus (RGLOBUS@dpw.lacounty.gov)

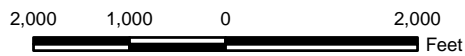


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## Regional Location and Local Vicinity

## Exhibit 1

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 118 Rustic Canyon before biological monitoring of vegetation removal.



View of Reach 118 Rustic Canyon before biological monitoring of vegetation removal.

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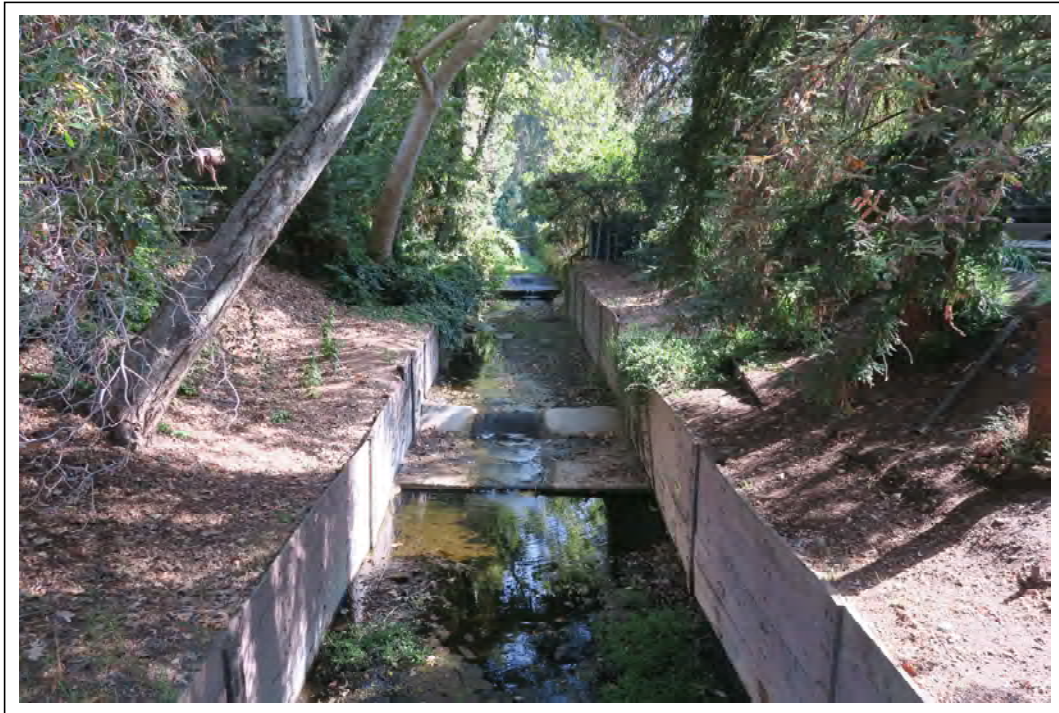
## Pre-monitoring Photos

## Exhibit 2a-1

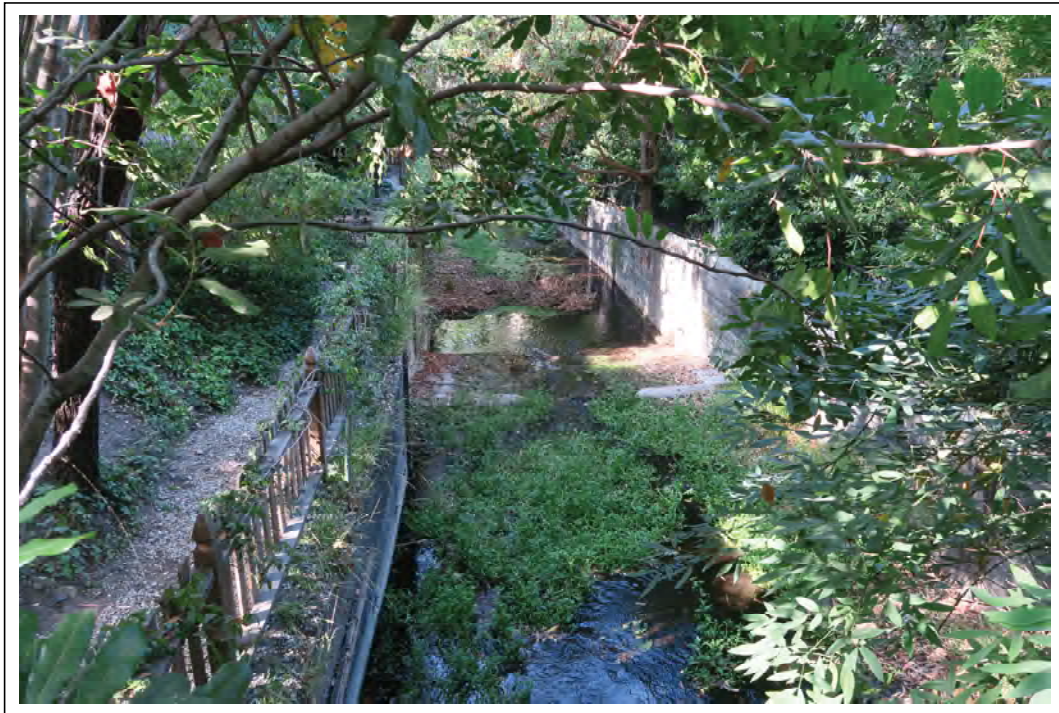
*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 118 Rustic Canyon before biological monitoring of vegetation removal.



View of Reach 118 Rustic Canyon before biological monitoring of vegetation removal.

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## Pre-monitoring Photos

Exhibit 2a-2

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 118 Rustic Canyon before biological monitoring of vegetation removal.



View of Reach 119 Rivas Canyon before biological monitoring of vegetation removal.

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## Pre-monitoring Photos

Exhibit 2a-3

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 119 Rivas Canyon before biological monitoring of vegetation removal.



View of Reach 119 Rivas Canyon before biological monitoring of vegetation removal.

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## Pre-monitoring Photos

Exhibit 2a-4

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 119 Rivas Canyon before biological monitoring of vegetation removal.

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## Pre-monitoring Photos

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*

Exhibit 2a-5







View of Reach 118 Rustic Canyon during biological monitoring of vegetation removal.



View of Reach 118 Rustic Canyon during biological monitoring of vegetation removal.

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## Monitoring Photos

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*

Exhibit 2b-1







View of Reach 118 Rustic Canyon during biological monitoring of vegetation removal.

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## Monitoring Photos

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*

Exhibit 2b-2





View of Reach 118 Rustic Canyon after biological monitoring of vegetation removal.



View of Reach 118 Rustic Canyon after biological monitoring of vegetation removal.

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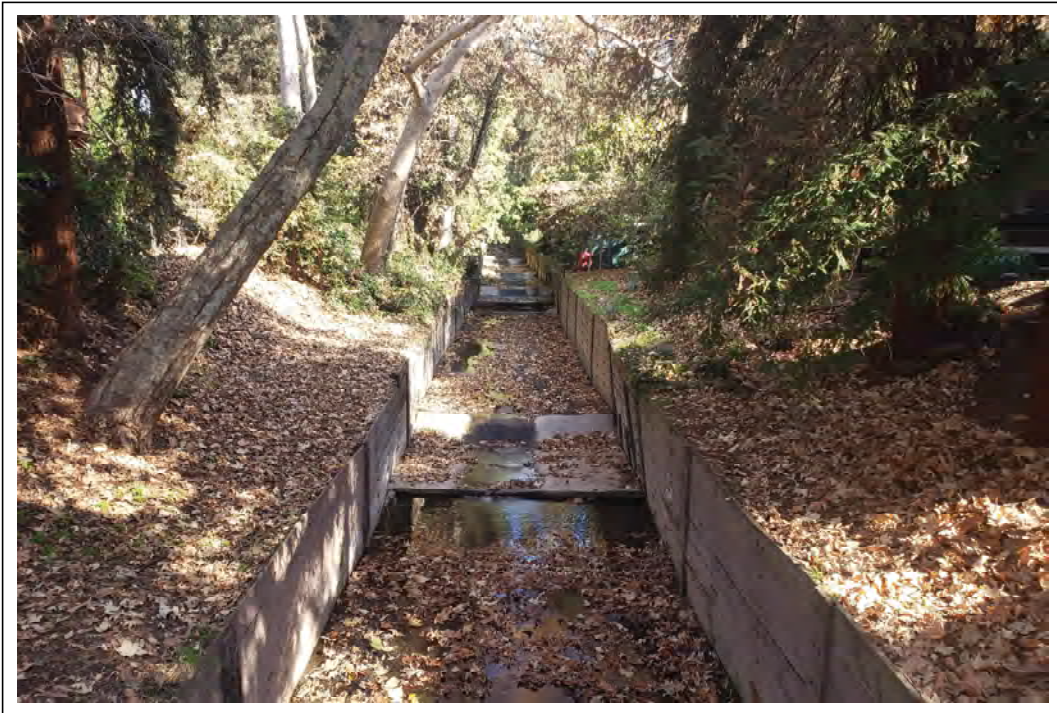
## Post-monitoring Photos

Exhibit 2c-1

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 118 Rustic Canyon after biological monitoring of vegetation removal.



View of Reach 118 Rustic Canyon after biological monitoring of vegetation removal.

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## Post-monitoring Photos

Exhibit 2c-2

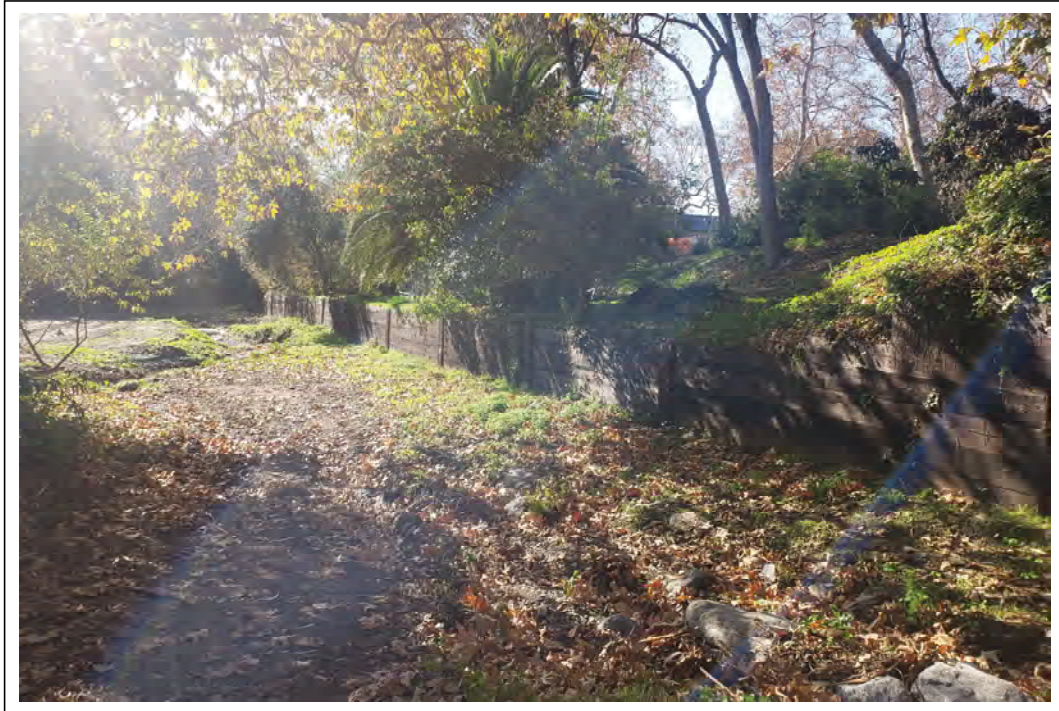
*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 118 Rustic Canyon after biological monitoring of vegetation removal.



View of Reach 119 Rivas Canyon after biological monitoring of vegetation removal.

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## Post-monitoring Photos

Exhibit 2c-3

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 119 Rivas Canyon after biological monitoring of vegetation removal.



View of Reach 119 Rivas Canyon after biological monitoring of vegetation removal.

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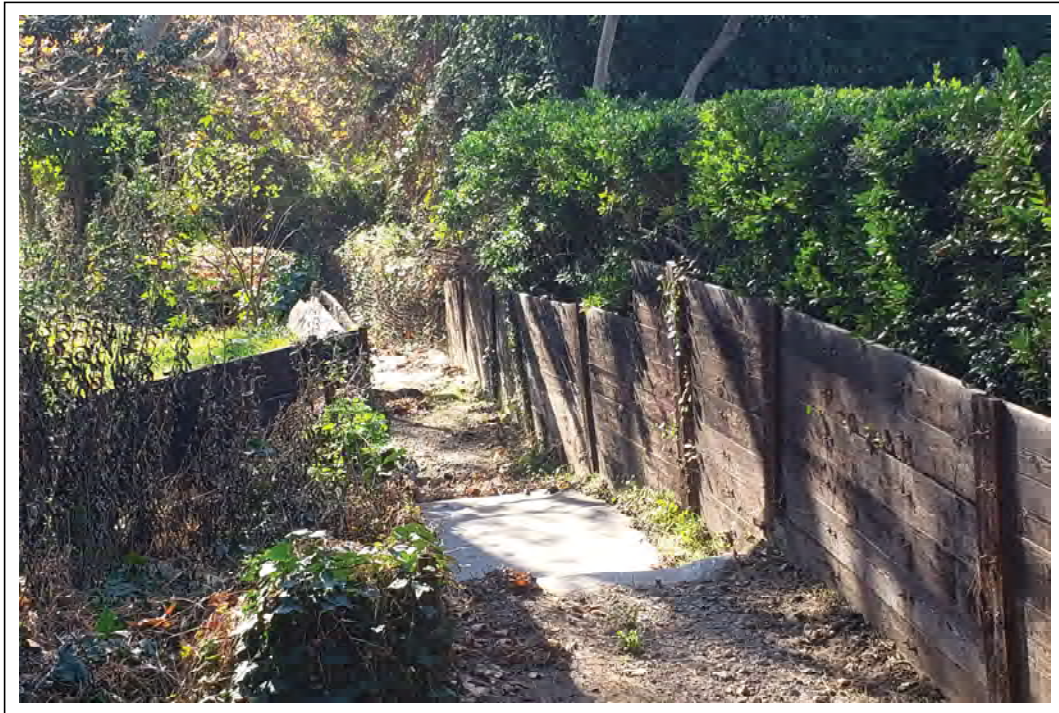
## Post-monitoring Photos

Exhibit 2c-4

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*







View of Reach 119 Rivas Canyon after biological monitoring of vegetation removal.

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## Post-monitoring Photos

Exhibit 2c-5

*Biological Monitoring at Rustic and Rivas Canyon Soft-Bottom Channel Reaches*



**ATTACHMENT A**  
**WILDLIFE COMPENDIUM**

## WILDLIFE COMPENDIUM

Scientific Name	Common Name
<b>AMPHIBIANS</b>	
HYLIDAE - TREEFROG FAMILY	
<i>Pseudacris cadaverina</i>	California treefrog
<i>Pseudacris hypochondriaca</i>	Baja California treefrog
<b>LIZARDS</b>	
PHRYNOSOMATIDAE - SPINY LIZARD FAMILY	
<i>Sceloporus occidentalis</i>	western fence lizard
<i>Uta stansburiana</i>	common side-blotched lizard
<b>BIRDS</b>	
COLUMBIDAE - PIGEON AND DOVE FAMILY	
<i>Patagioenas fasciata</i>	Band-tailed pigeon
<i>Zenaida macroura</i>	mourning dove
TROCHILIDAE - HUMMINGBIRD FAMILY	
<i>Calypte anna</i>	Anna's hummingbird
<i>Selasphorus sasin</i>	Allen's hummingbird
LARIDAE - GULL AND TERN FAMILY	
<i>Larus delawarensis</i>	Ring-billed gull
<i>Larus occidentalis</i>	western gull
ACCIPITRIDAE - HAWK FAMILY	
<i>Accipiter cooperii</i>	Cooper's hawk
<i>Buteo lineatus</i>	red-shouldered hawk
<i>Buteo jamaicensis</i>	red-tailed hawk
PICIDAE - WOODPECKER FAMILY	
<i>Melanerpes formicivorus</i>	acorn woodpecker
<i>Picoides nuttallii</i>	Nuttall's woodpecker
<i>Picoides pubescens</i>	downy woodpecker
<i>Colaptes auratus</i>	northern flicker
PSITTACIDAE - PARROT FAMILY	
<i>Aratinga nenday</i>	Nanday parakeet
<i>Amazona viridigenalis</i>	red-crowned parrot
TYRANNIDAE - TYRANT FLYCATCHER FAMILY	
<i>Contopus pertinax</i>	greater pewee
<i>Empidonax difficilis</i>	Pacific-slope flycatcher
<i>Sayornis nigricans</i>	black phoebe
VIREONIDAE - VIREO FAMILY	
<i>Vireo huttoni</i>	Hutton's vireo
CORVIDAE - JAY AND CROW FAMILY	
<i>Aphelocoma californica</i>	California scrub-jay
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	common raven
PARIDAE - TITMOUSE FAMILY	
<i>Baeolophus inornatus</i>	oak titmouse
AEGITHALIDAE - BUSHTIT FAMILY	
<i>Psaltriparus minimus</i>	bushtit

## WILDLIFE COMPENDIUM

Scientific Name	Common Name
SITTIDAE – NUTHATCH FAMILY	
<i>Sitta carolinensis</i>	white-breasted nuthatch
TROGLODYTIDAE - WREN FAMILY	
<i>Troglodytes aedon</i>	house wren
<i>Thryomanes bewickii</i>	Bewick's wren
REGULIDAE - KINGLET FAMILY	
<i>Regulus calendula</i>	ruby-crowned kinglet
TURDIDAE - THRUSH FAMILY	
<i>Catharus guttatus</i>	hermit thrush
<i>Turdus migratorius</i>	American robin
MIMIDAE - MOCKINGBIRD AND THRASHER FAMILY	
<i>Mimus polyglottos</i>	northern mockingbird
STURNIDAE - STARLING FAMILY	
<i>Sturnus vulgaris</i>	European starling
BOMBYCILLIDAE - WAXWING FAMILY	
<i>Bombycilla cedrorum</i>	cedar waxwing
PASSERIDAE - OLD WORLD SPARROW FAMILY	
<i>Passer domesticus</i>	house sparrow
FRINGILLIDAE - FINCH FAMILY	
<i>Haemorhous mexicanus</i>	house finch
<i>Spinus psaltria</i>	lesser goldfinch
PASSERELLIDAE - NEW WORLD SPARROW FAMILY	
<i>Pipilo maculatus</i>	spotted towhee
<i>Melospiza crissalis</i>	California towhee
<i>Melospiza melodia</i>	song sparrow
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
<i>Junco hyemalis</i>	dark-eyed junco
PARULIDAE - WOOD-WARBLER FAMILY	
<i>Oreothlypis celata</i>	orange-crowned warbler
<i>Setophaga coronata</i>	yellow-rumped warbler
<i>Setophaga townsendi</i>	Townsend's warbler
<i>Cardellina pusilla</i>	Wilson's warbler
<b>MAMMALS</b>	
SCIURIDAE - SQUIRREL FAMILY	
<i>Sciurus niger</i>	eastern fox squirrel
<i>Otospermophilus beecheyi</i>	California ground squirrel

**ATTACHMENT NO. 5**  
2019-20 SOFT-BOTTOM CHANNEL PRE- AND  
POST-MAINTENANCE PHOTOS

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# 2019-2020 Soft Bottom Channels

Reach 1

Bell Creek — MTD 963 M.C.I.

Before Photos 8/26/19



After Photos 1/14/20





# 2019-2020 Soft Bottom Channels

## Reach 2

### Dry Canyon (Calabasas) P.D. T1845

Before Photos 8/26/19



After Photos 1/14/20





# 2019-2019 Soft Bottom Channels

## Reach 3

### Santa Susana Creek M.C.I.

Before Photos 8/22/19



After Photos 10/17/19



# 2019-2020 Soft Bottom Channels

Reach 4

Browns Creek

Before Photos 8/22/19

After Photos 4/8/20





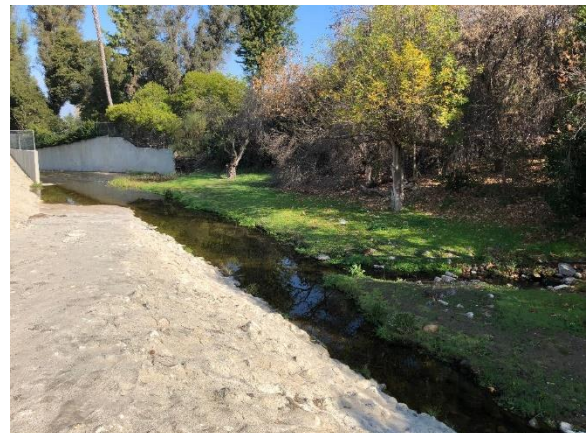
# 2019-2020 Soft Bottom Channels

## Reach 5

### Caballero Creek M.C.I. (West Fork)

Before Photos 8/22/19

After Photos 1/14/20





# 2019-2020 Soft Bottom Channels

## Reach 6

### Caballero Creek M.C.I. (East Fork)

Before Photos 8/22/19



After Photos 1/14/20





# 2019-2020 Soft Bottom Channels

Reach 7

Bull Creek M.C.O.

Before Photo 8/26/19

After Photos 11/19/19





# 2019-2020 Soft Bottom Channels

## Reach 8

### Hayvenhurst Drain — Project 470 Outlet

Before Photos 8/22/19



After Photos 12/13/19





# 2019-2020 Soft Bottom Channels

Reach 9

Project 106 Outlet

Before Photos 8/22/19

After Photos 12/13/19





# 2019-2020 Soft Bottom Channels

Reach 10

Project No. 469

Before Photos 8/22/19

After Photos 2/19/20



# 2019-2020 Soft Bottom Channels

Reach 10

Project No. 469

Before Photos 8/22/19



After Photos 2/19/20





# 2019-2020 Soft Bottom Channels

## Reach 12

Before Photos 8/16/19

After Photos 3/12/20





# 2019-2020 Soft Bottom Channels

Reach 13

Project No. 5215 Unit 1

Before Photos 08/16/19



After Photos 10/14/19





# 2019-2020 Soft Bottom Channels

## Reach 14

### May Channel (M.C.O. into Pacoima Canyon)

Before Photos 08/16/19

After Photos 10/14/19





# 2019-2020 Soft Bottom Channels

## Reach 15

### Pacoima Wash

Before Photos 8/22/19

After Photos 10/17/19





# 2019-2020 Soft Bottom Channels

Reach 15

Pacoima Wash

Before Photos 8/22/19

After Photos 10/17/19



# 2019-2020 Soft Bottom Channels

## Reach 16

### Verdugo Wash — Las Barras Canyon (Channel Inlet)

Before Photos 8/19/19

After Photos 1/16/20





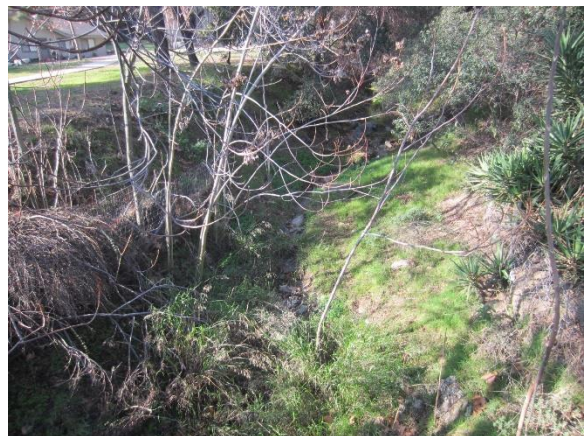
# 2019-2020 Soft Bottom Channels

## Reach 18

### Engleheard Channel

Before Photos 8/19/19

After Photos 1/16/20





# 2019-2020 Soft Bottom Channels

Reach 19

Pickens Canyon

Before Photos 8/19/19

After Photos 1/16/20





# 2019-2020 Soft Bottom Channels

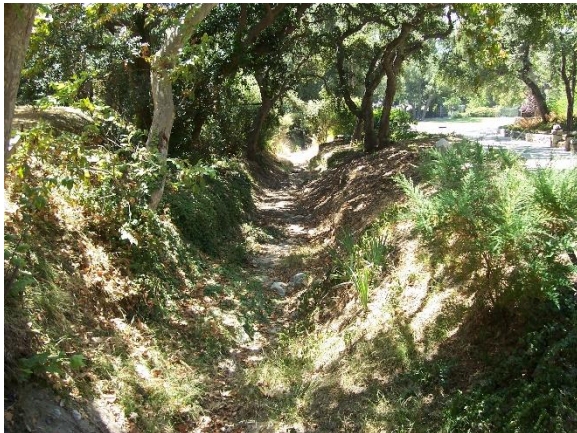
## Reach 20

### Webber Channel (Storm at Private Bridge)

Before Photos 8/19/19



After Photos 3/9/20





# 2019-2020 Soft Bottom Channels

## Reach 21

### Webber Channel (Main Channel Inlet d/s Bridge)

Before Photos 8/19/19

After Photos 3/9/20





# 2019-2020 Soft Bottom Channels

Reach 22

Halls Canyon

Before Photos 8/19/19

After Photos 1/16/20





# 2019-2020 Soft Bottom Channels

## Reach 24

### Compton Creek

Before Photos 8/17/19



After Photos 11/23/19





# 2019-2020 Soft Bottom Channels

Reach 24

Compton Creek

Before Photos 8/17/19

After Photos 11/23/19





# 2019-2020 Soft Bottom Channels

## Reach 25a

### Los Angeles River — Willow to PCH (East/Left Bank)

Before Photos 8/17/19



After Photos 1/7/20





# 2019-2020 Soft Bottom Channels

## Reach 25a

### Los Angeles River — Willow to PCH (East/Left Bank)

Before Photos 8/17/19

After Photos 1/7/20





# 2019-2020 Soft Bottom Channels

## Reach 25b

### Los Angeles River — Willow to PCH (West/Right Bank)

Before Photos 8/17/19



After Photos 1/7/20





# 2019-2020 Soft Bottom Channels

## Reach 25b

### Los Angeles River — Willow to PCH (West/Right Bank)

Before Photos 8/17/19



After Photos 1/7/20





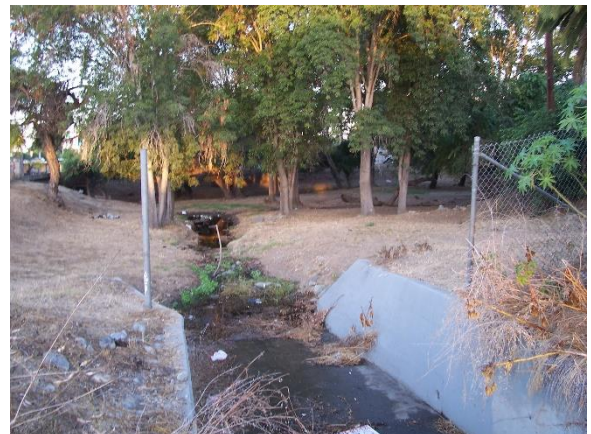
# 2019-2020 Soft Bottom Channels

Reach 26

Project 740

Before Photos 8/17/19

After Photos 10/19/19





# 2019-2020 Soft Bottom Channels

Reach 26

Project 740

Before Photos 8/17/19

After Photos 10/19/19





# 2019-2020 Soft Bottom Channels

Reach 27

Wilmington Drain (110 Freeway to s/o PCH)

Before Photos 8/26/19

After Photos 1/10/20





# 2019-2020 Soft Bottom Channels

Reach 27

Wilmington Drain (110 Freeway to s/o PCH)

Before Photos 8/26/19

After Photos 1/10/20





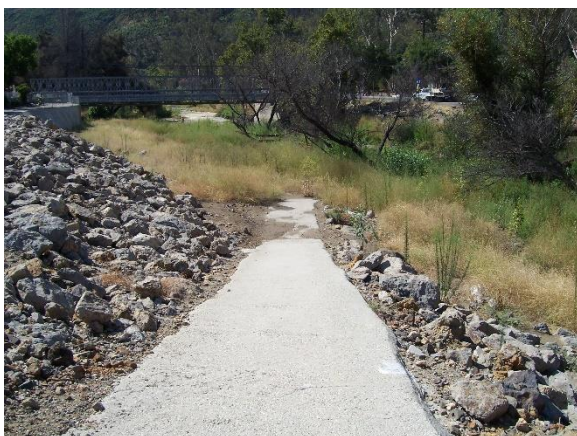
# 2019-2020 Soft Bottom Channels

Reach 28

Triunfo Creek (P.D. T2200)

Before Photos 8/26/19

After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

Reach 29

Las Virgenes Creek (P.D. T1684) M.C.I.

Before Photos 8/26/19

After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

Reach 32

Stokes Canyon Channel (P.D. T043)

Before Photos 8/26/19

After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

Reach 32

Stokes Canyon Channel (P.D. T043)

Before Photos 8/26/19



After Photos 1/13/20



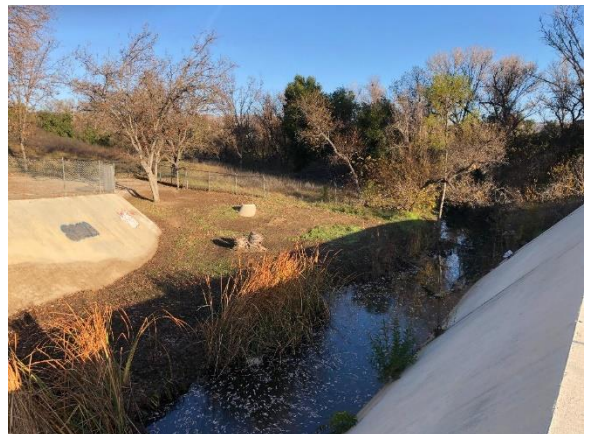
# 2019-2020 Soft Bottom Channels

Reach 33

Medea Creek (P.D. T1378 U.2)

Before Photos 8/26/19

After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

Reach 35

Medea Creek Main Channel Inlet — Under Route 101

Before Photos 8/26/19



After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

Reach 36

Cheseboro Main Channel Inlet

Before Photos 8/26/19



After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

Reach 37

Medea Creek/Cheseboro Creek Outlet

Before Photos 8/26/19

After Photos 1/13/20



# 2019-2020 Soft Bottom Channels

Reach 38

Lindero Main Channel Outlet

Before Photos 8/26/19



After Photos 1/13/20





# 2019-2020 Soft Bottom Channels

## Reach 39

### Beatty Channel Outlet at SGR 25+99.00

Before Photos 8/23/19

After Photos 10/7/19





# 2019-2020 Soft Bottom Channels

Reach 39

Beatty Channel Outlet at SGR 25+99.00

Before Photos 8/23/19



After Photos 10/7/19





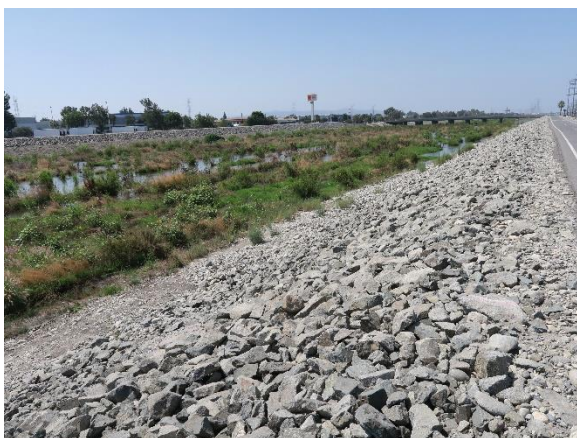
# 2019-2020 Soft Bottom Channels

## Reach 40a

### San Gabriel River — Santa Fe Dam to I-10 Freeway

Before Photos 8/23/19

After Photos 2/18/20





# 2019-2020 Soft Bottom Channels

## Reach 40a

### San Gabriel River — Santa Fe Dam to I-10 Freeway

Before Photos 8/23/19



After Photos 2/18/20





# 2019-2020 Soft Bottom Channels

Reach 40b

San Gabriel River — I-10 Freeway to Thienes Avenue

Before Photos 8/23/19

After Photos 3/18/20





# 2019-2020 Soft Bottom Channels

Reach 40b

San Gabriel River — I-10 Freeway to Thienes Avenue

Before Photos 8/23/19

After Photos 3/18/20





# 2019-2020 Soft Bottom Channels

Reach 40b

San Gabriel River — I-10 Freeway to Thienes Avenue

Before Photos 8/23/19

After Photos 3/18/20





# 2019-2020 Soft Bottom Channels

Reach 40b

San Gabriel River — I-10 Freeway to Thienes Avenue

Before Photos 8/23/19

After Photos 3/18/20





# 2019-2020 Soft Bottom Channels

## Reach 41

### Walnut Creek — Baldwin Park to San Gabriel River

Before Photos 8/16/19



After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 42

San Jose Creek d/s 1000 feet from end of concrete channel

Before Photos 8/16/19

After Photos 2/6/20





# 2019-2020 Soft Bottom Channels

Reach 43a

San Gabriel River — Upper

Before Photos 8/28/19

After Photos 2/18/20





# 2019-2020 Soft Bottom Channels

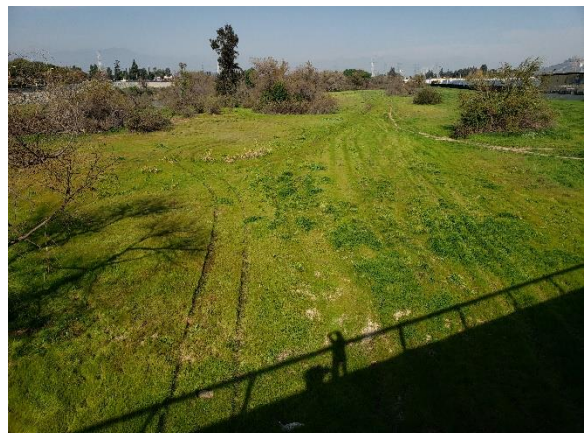
## Reach 43a

### San Gabriel River — Upper

Before Photos 8/28/19



After Photos 2/18/20





# 2019-2020 Soft Bottom Channels

Reach 43b

San Gabriel River — Lower

Before Photos 8/28/19

After Photos 3/18/20





# 2019-2020 Soft Bottom Channels

Reach 43b

San Gabriel River — Lower

Before Photos 8/28/19

After Photos 3/18/20





# 2019-2020 Soft Bottom Channels

Reach 44

San Gabriel River — Rubber Dams

Before Photos 8/28/19

After Photos 2/14/20





# 2019-2020 Soft Bottom Channels

Reach 44

San Gabriel River — Rubber Dams

Before Photos 8/28/19

After Photos 2/14/20





# 2019-2020 Soft Bottom Channels

Reach 44

San Gabriel River — Rubber Dams

Before Photos 8/28/19

After Photos 2/14/20





# 2019-2020 Soft Bottom Channels

Reach 44

San Gabriel River — Rubber Dams

Before Photos 8/28/19

After Photos 2/14/20



# 2019-2020 Soft Bottom Channels

Reach 44

San Gabriel River — Rubber Dams

Before Photos 8/28/19



After Photos 2/14/20





# 2019-2020 Soft Bottom Channels

Reach 45

Sand Canyon (P.D. T1307) Main Channel Inlet

Before Photos 8/19/19



After Photos 12/2/19



# 2019-2020 Soft Bottom Channels

Reach 46

Sand Canyon (P.D. T1307) Main Channel Outlet

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

## Reach 47

### Santa Clara River Main Channel (P.D. T1733-Unit 1)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 47

Santa Clara River Main Channel (P.D. T1733-Unit 1)

Before Photos 8/19/19



After Photos 12/2/19



# 2019-2020 Soft Bottom Channels

Reach 48

Mint Canyon Channel between Sierra Highway & Adon Avenue

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 49

Mint Canyon Channel between Adon Avenue & Scherzinger Lane

Before Photos 8/19/19



After Photos 12/2/19



# 2019-2020 Soft Bottom Channels

Reach 50

Mint Canyon Channel between Solamint Road and Soledad Canyon Road

**NO WORK DONE**

Photos 8/19/19



# 2019-2020 Soft Bottom Channels

## Reach 51

### Mint Canyon M.C.O. (P.D. 1894)/Santa Clara River — Main Channel

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 52

Sierra Highway Road Drainage (CDR 523.203)

**NO WORK DONE**

Before Photos 8/19/19



# 2019-2020 Soft Bottom Channels

Reach 53

Santa Clara River Non-Main Channel (P.D. 832) Main Channel Inlet

Before Photos 8/19/19

After Photos 12/11/19





# 2019-2020 Soft Bottom Channels

## Reach 54

### Santa Clara River Non-Main Channel (P.D. 832) Main Outlet Channel

Before Photos 8/19/19



After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 55

Santa Clara River Main Channel — Right Bank Reach

(P.D.'s 910, 832, 1758, and 1562 Unit 2)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 55

Santa Clara River Main Channel — Right Bank Reach

(P.D.'s 910, 832, 1758, and 1562 Unit 2)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 55

Santa Clara River Main Channel — Right Bank Reach

(P.D.'s 910, 832, 1758, and 1562 Unit 2)

Before Photos 8/19/19

After Photos 12/2/19





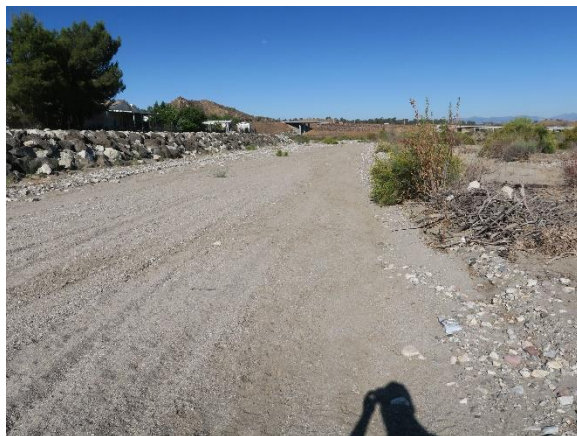
# 2019-2020 Soft Bottom Channels

## Reach 56

### Santa Clara River Main Channel — Left Bank Reach (P.D. 832)

Before Photos 8/19/19

After 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 57

Whites Canyon (P.D. T704 Main Channel Inlet)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 58 (combined with Reach 59)

Santa Clara River Main Channel — Right Bank Reach (P.D. 374)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 58 (combined with Reach 59)

Santa Clara River Main Channel — Right Bank Reach (P.D. 374)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

## Reach 60

### Santa Clara River Main Channel — Right Bank Reach (P.D.'s 1339 and 374)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 61 (combined with Reach 62)

Santa Clara River Main Channel (P.D.'s 659 and 754)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 61 (combined with Reach 62)

Santa Clara River Main Channel (P.D.'s 659 and 754)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

## Reach 63

### Oak Avenue Road Drainage (CDR 523.081)

Before Photos 8/19/19

After Photos 12/11/19





# 2019-2020 Soft Bottom Channels

## Reach 64

### Soledad Canyon Road Drainage (CDR 523.071 D Outlet)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 66

Santa Clara River Main Channel (P.D. 1538)

Before Photos 8/19/19

After Photos 12/2/19





# 2019-2020 Soft Bottom Channels

Reach 67

Bouquet Canyon Upper (P.D.'s 1201, 802, 700B, and 625)

Before Photos 8/20/19

After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 69

Bouquet Canyon Middle (P.D.'s 722, 773, 1365, 1065, and 451)

Before Photos 8/20/19

After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 70

Bouquet Canyon Lower (P.D.'s 544 and 345)

Before Photos 8/20/19

After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 70

Bouquet Canyon Lower (P.D.'s 544 and 345)

Before Photos 8/20/19



After Photos 12/3/19



# 2019-2020 Soft Bottom Channels

Reach 71

Santa Clara River Main Channel (P.D. 1946)

Before Photos 8/20/19

After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 72

South Fork — SCR (Smizer Ranch Main Channel Inlet)

Before Photos 8/26/19



After Photos 12/3/19



# 2019-2020 Soft Bottom Channels

Reach 73

Wildwood Canyon Channel (P.D. T361) Main Channel Inlet

Before Photos 8/26/19



After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 75

South Fork — Santa Clara River (P.D.'s 725, 916, 1041, and 1300)

Before Photos 8/26/19

After Photos 11/5/19





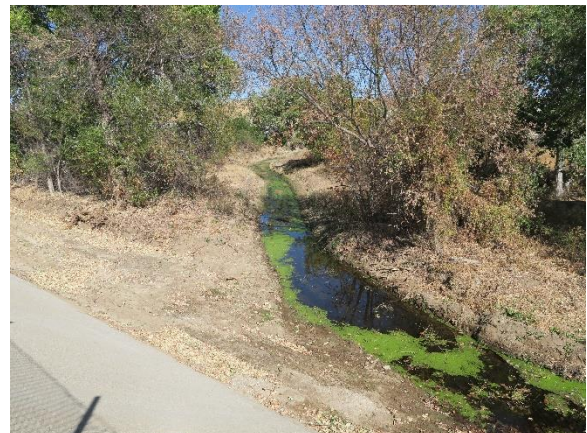
# 2019-2020 Soft Bottom Channels

Reach 75

South Fork — Santa Clara River (P.D.'s 725, 916, 1041, and 1300)

Before Photos 8/26/19

After Photos 11/5/19





# 2019-2020 Soft Bottom Channels

## Reach 75

### South Fork — Santa Clara River (P.D.'s 725, 916, 1041, and 1300)

Before Photos 8/26/19

After Photos 11/5/19





# 2019-2020 Soft Bottom Channels

## Reach 75

### South Fork — Santa Clara River (P.D.'s 725, 916, 1041, and 1300)

Before Photos 8/26/19

After Photos 11/5/19





# 2019-2020 Soft Bottom Channels

Reach 75

South Fork — Santa Clara River (P.D.'s 725, 916, 1041, and 1300)

Before Photos 8/26/19



After Photos 11/5/19



# 2019-2020 Soft Bottom Channels

Reach 76

Pico Canyon (P.D. 813)

Before Photos 8/21/19

After Photos 10/17/19





# 2019-2020 Soft Bottom Channels

Reach 77

Newhall Creek Outlet

Before Photos 8/21/19

After Photos 10/17/19



# 2019-2020 Soft Bottom Channels

Reach 78

Placerita Creek

Before Photos 8/21/19

After Photos 10/17/19





# 2019-2020 Soft Bottom Channels

## Reach 79

### South Fork — Santa Clara River (Valencia Boulevard Bridge Stabilizer)

Before Photos 8/20/19

After photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 80

South Fork — Santa Clara River (P.D.'s 1947 and 1946)

Before Photos 8/20/19

After photos 12/3/19



# 2019-2020 Soft Bottom Channels

Reach 80

South Fork — Santa Clara River (P.D.'s 1947 and 1946)

Before Photos 8/20/19

After photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 82

Santa Clara River Main Channel (P.D. 2278)

Before Photos 8/27/19

After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 82

Santa Clara River Main Channel (P.D. 2278)

Before Photos 8/27/19

After Photos 12/3/19



# 2019-2020 Soft Bottom Channels

Reach 86

Violin Canyon Main Channel Outlet

Before Photos 8/21/19

After Photos 12/13/19





# 2019-2020 Soft Bottom Channels

Reach 87

Castaic — Old Road Drainage (CDR 525.021D) Outlet

Before Photos 8/21/19

After Photos 10/17/19



# 2019-2020 Soft Bottom Channels

Reach 88

Hasley Canyon Upper (P.D. T1496)

Before Photos 8/21/19



After Photos 1/15/20





# 2019-2020 Soft Bottom Channels

Reach 89

Hasley Canyon South Fork (P.D. T1496)

Before Photos 8/21/19



After Photos 1/15/20



# 2019-2020 Soft Bottom Channels

Reach 90

Hasley Canyon Lower (North Fork P.D. T1496)

Before Photos 8/21/19



After Photos 1/15/20





# 2019-2020 Soft Bottom Channels

Reach 91

San Martinez Chiquito Canyon Channel u/s of Kennington Road

Before Photos 8/21/19

After Photos 1/15/20





# 2019-2020 Soft Bottom Channels

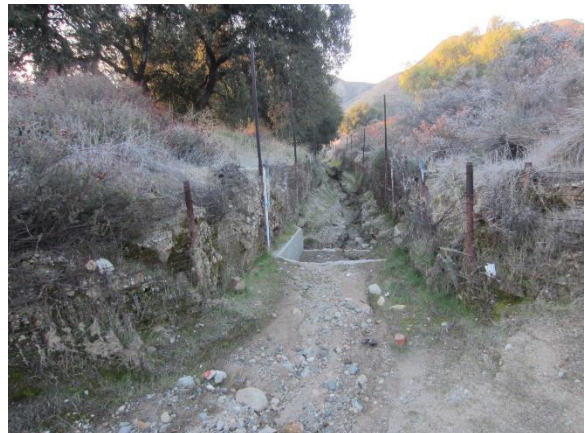
Reach 92

San Martinez Chiquito Canyon (North Fork) Unnamed

Before Photos 8/21/19



After Photos 1/15/20





# 2019-2020 Soft Bottom Channels

Reach 93

San Martinez Chiquito Canyon between Kenningston Road and Val Verde Park

Before Photos 8/21/19



After Photos 1/15/20





# 2019-2020 Soft Bottom Channels

Reach 94

San Martinez Chiquito Canyon between Val Verde Park and d/s of Madison Street

Before Photos 8/21/19

After Photos 1/15/20



# 2019-2020 Soft Bottom Channels

Reach 94

San Martinez Chiquito Canyon between Val Verde Park and d/s of Madison Street

Before Photos 8/21/19



After Photos 1/15/20





# 2019-2020 Soft Bottom Channels

Reach 95

Project No. 1224

Before Photos 8/20/19

After Photos 12/11/19





# 2019-2020 Soft Bottom Channels

Reach 95

Project No. 1224

Before Photos 8/20/19



After Photos 12/11/19



# 2019-2020 Soft Bottom Channels

Reach 96

PD 1591, Calabasas

Before Photos 8/26/19



After Photos 1/14/20





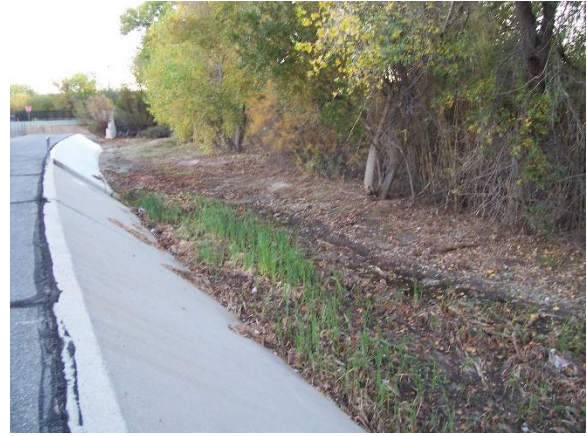
# 2019-2020 Soft Bottom Channels

Reach 97

P.D. T1982, Castaic Creek

Before Photos 8/21/19

After Photos 12/13/19





# 2019-2020 Soft Bottom Channels

Reach 98

Walnut Creek — Channel Inlet

Before Photos 8/16/19

After Photos 12/17/19





# 2019-2020 Soft Bottom Channels

Reach 99

Kagel Canyon — Tujunga Wash

Before Photos 8/19/19

After Photos 12/13/19





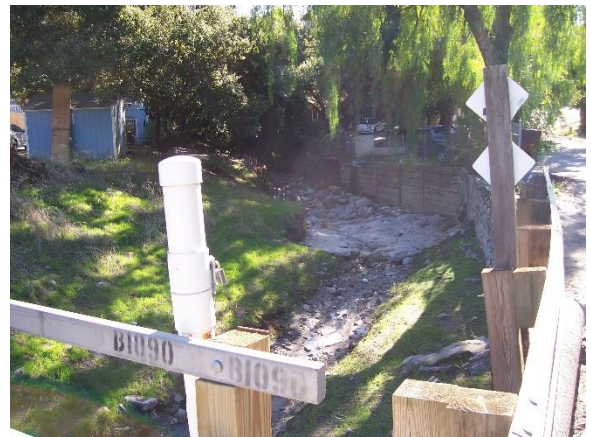
# 2019-2020 Soft Bottom Channels

Reach 99

Kagel Canyon — Tujunga Wash

Before Photos 8/19/19

After Photos 12/13/19





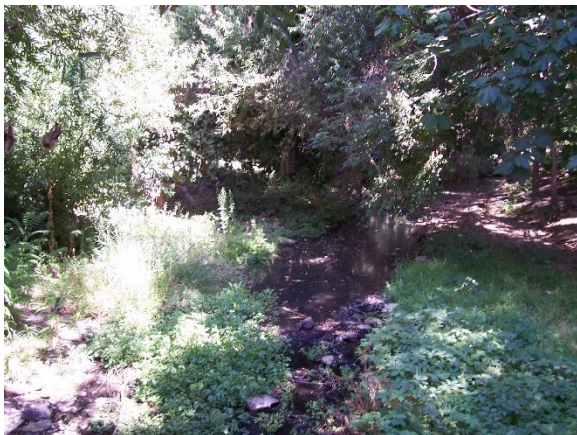
# 2019-2020 Soft Bottom Channels

Reach 100

Dry Canyon, Calabasas Creek Inlet

Before Photos 8/26/19

After Photos 1/14/20





# 2019-2020 Soft Bottom Channels

Reach 101

Violin Canyon (P.D. 2312)

**NO WORK DONE**

Photos 8/27/19





# 2019-2020 Soft Bottom Channels

Reach 101

Violin Canyon (P.D. 2312)

**NO WORK DONE**

Photos 8/27/19



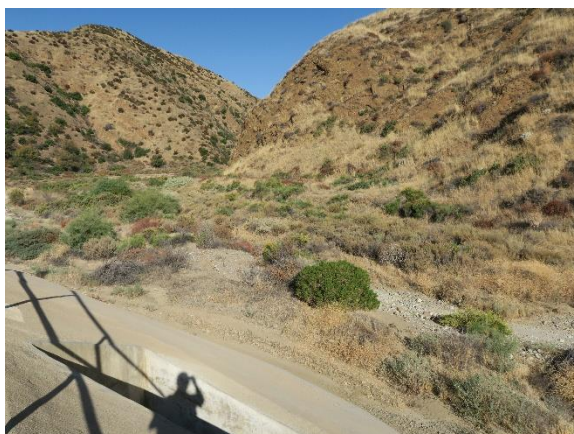
# 2019-2020 Soft Bottom Channels

Reach 102

Violin Canyon (P.D. 2275)

**NO WORK DONE**

Photos 8/27/19



# 2019-2020 Soft Bottom Channels

Reach 102

Violin Canyon (P.D. 2275)

**NO WORK DONE**

Photos 8/27/19





# 2019-2020 Soft Bottom Channels

Reach 102

Violin Canyon (P.D. 2275)

**NO WORK DONE**

Photos 8/27/19





# 2019-2020 Soft Bottom Channels

Reach 103

Bouquet Canyon Channel (P.D. 2225)

**NO WORK DONE**

Photos 9/18/19



# 2019-2020 Soft Bottom Channels

Reach 103

Bouquet Canyon Channel (P.D. 2225)

**NO WORK DONE**

Photos 9/18/19



# 2019-2020 Soft Bottom Channels

Reach 103

Bouquet Canyon Channel (P.D. 2225)

**NO WORK DONE**

Photos 9/18/19





# 2019-2020 Soft Bottom Channels

Reach 104

Castaic Creek (P.D. 2441 Unit 2)

**NO WORK DONE**

Photos 9/17/19





# 2019-2020 Soft Bottom Channels

Reach 104

Castaic Creek (P.D. 2441 Unit 2)

**NO WORK DONE**

Photos 9/17/19



# 2019-2020 Soft Bottom Channels

Reach 105

San Francisquito Canyon Channel (P.D. 2456)

**NO WORK DONE**

Photos 12/11/19





# 2019-2020 Soft Bottom Channels

Reach 105

San Francisquito Canyon Channel (P.D. 2456)

**NO WORK DONE**

Photos 12/11/19



# 2019-2020 Soft Bottom Channels

Reach 106

Castaic Drain Outlet

**NO WORK DONE**

Photos 9/17/19





# 2019-2020 Soft Bottom Channels

Reach 106

Castaic Drain Outlet

**NO WORK DONE**

Photos 9/17/19



# 2019-2020 Soft Bottom Channels

Reach 107

The Old Road Channel

**NO WORK DONE**

Photos 9/17/19



# 2019-2020 Soft Bottom Channels

Reach 107

The Old Road Channel

**NO WORK DONE**

Photos 9/17/19





# 2019-2020 Soft Bottom Channels

Reach 108

Pico Canyon (P.D. 2528)

Before Photos 8/27/19

After Photos 12/3/19





# 2019-2020 Soft Bottom Channels

Reach 108

Pico Canyon (P.D. 2528)

Before Photos 8/27/19

After Photos 12/3/19



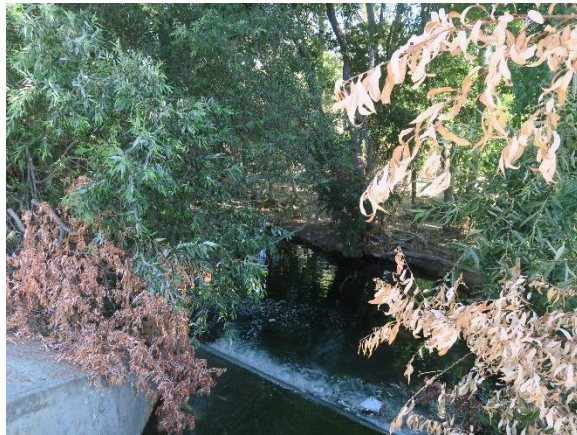
# 2019-2020 Soft Bottom Channels

Reach 109

Santa Clara River — South Bank West of McBean Parkway (MTD1510)

**NO WORK DONE**

Photos 8/20/19





# 2019-2020 Soft Bottom Channels

Reach 110

Hasley Canyon Channel (P.D. 2262)

**NO WORK DONE**

Photos 9/17/19



# 2018-2019 Soft Bottom Channels

Reach 110

Hasley Canyon Channel (P.D. 2262)

**NO WORK DONE**

Photos 9/17/19





# 2019-2020 Soft Bottom Channels

Reach 110

Hasley Canyon Channel (P.D. 2262)

**NO WORK DONE**

Photos 9/17/19



# 2019-2020 Soft Bottom Channels

Reach 110

Hasley Canyon Channel (P.D. 2262)

**NO WORK DONE**

Photos 9/17/19





# 2019-2020 Soft Bottom Channels

Reach 110

Hasley Canyon Channel (P.D. 2262)

**NO WORK DONE**

Photos 9/17/19



# 2019-2020 Soft Bottom Channels

Reach 110

Hasley Canyon Channel (P.D. 2262)

**NO WORK DONE**

Photos 9/17/19





# 2019-2020 Soft Bottom Channels

Reach 112

Ballona Creek

Before Photos 8/29/19

After Photos 1/8/20



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**

# 2019-2020 Soft Bottom Channels

Reach 112

Ballona Creek

Before Photos 8/29/19

After Photos 1/8/20



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**

# 2019-2020 Soft Bottom Channels

Reach 112

Ballona Creek

Before Photos 8/29/19



After Photos 1/8/20



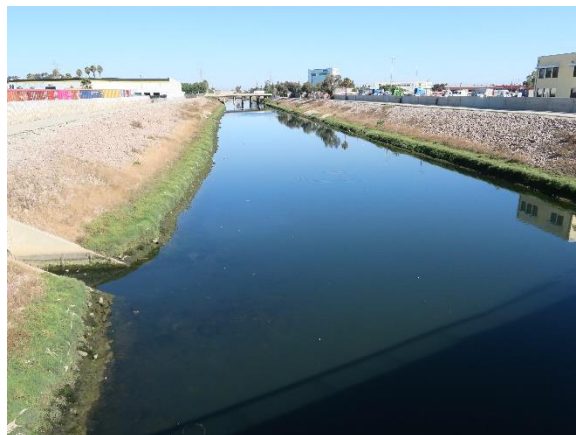
# 2019-2020 Soft Bottom Channels

Reach 113

Dominguez Channel

**NO WORK DONE**

Photos 9/4/19





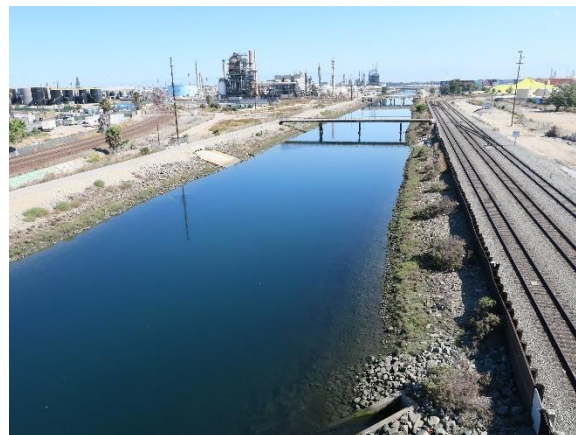
# 2019-2020 Soft Bottom Channels

Reach 113

Dominguez Channel

**NO WORK DONE**

Photos 9/4/19



# 2019-2020 Soft Bottom Channels

Reach 113

Dominguez Channel

**NO WORK DONE**

Photos 9/4/19





# 2019-2020 Soft Bottom Channels

Reach 114

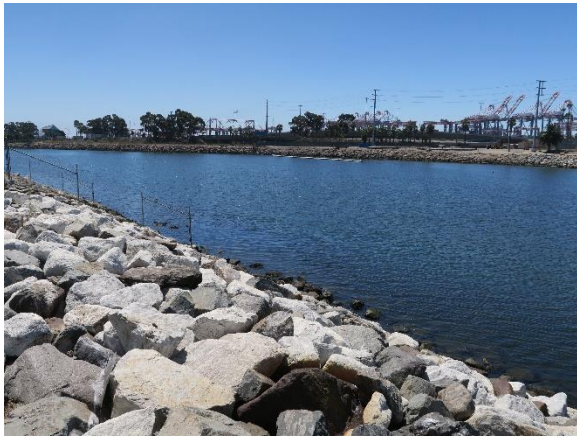
Los Angeles River

Before Photos 8/27/19

After Photos 3/18/20



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**





# 2019-2020 Soft Bottom Channels

Reach 114

Los Angeles River

Before Photos 8/27/19

After Photos 3/18/20



**NO WORK DONE  
IN THIS AREA**



# 2019-2020 Soft Bottom Channels

Reach 115

San Gabriel River

Before Photos 9/3/19

After Photos 3/18/20



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**



**NO WORK DONE  
IN THIS AREA**

# 2019-2020 Soft Bottom Channels

Reach 115

San Gabriel River

Before Photos 9/3/19

After Photos 3/18/20



**NO WORK DONE  
IN THIS AREA**





# 2019-2020 Soft Bottom Channels

Reach 115

San Gabriel River

Before Photos 9/3/19



After Photos 3/18/20



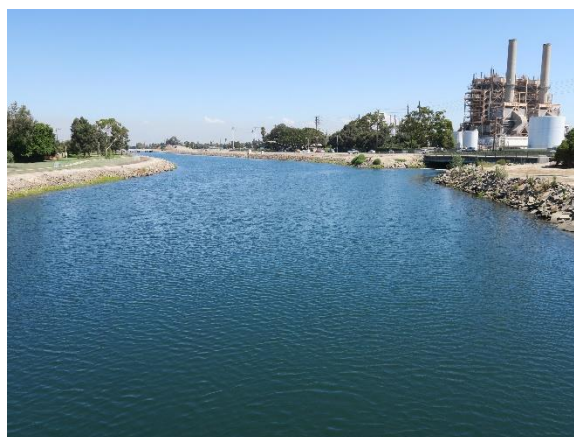
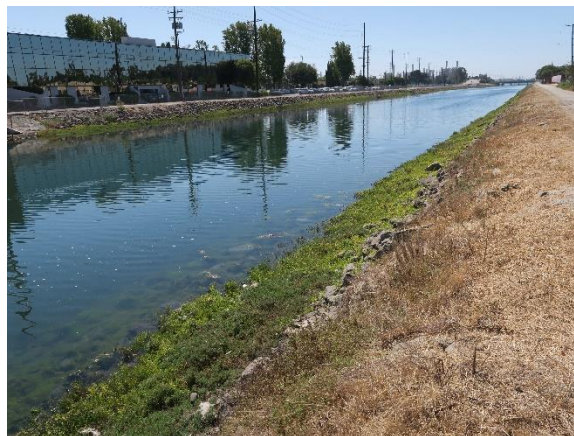
# 2019-2020 Soft Bottom Channels

Reach 116

Los Cerritos Channel

**NO WORK DONE**

Photos 9/3/19





# 2019-2020 Soft Bottom Channels

Reach 116

Los Cerritos Channel

**NO WORK DONE**

Photos 9/3/19



# 2019-2020 Soft Bottom Channels

Reach 117

Centinela Creek Channel

**NO WORK DONE**

Photos 8/29/19



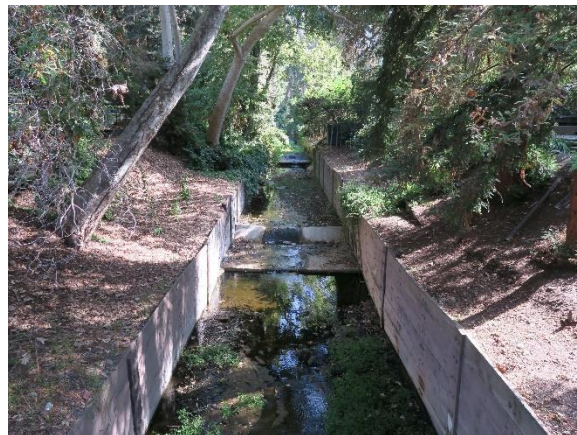


# 2019-2020 Soft Bottom Channels

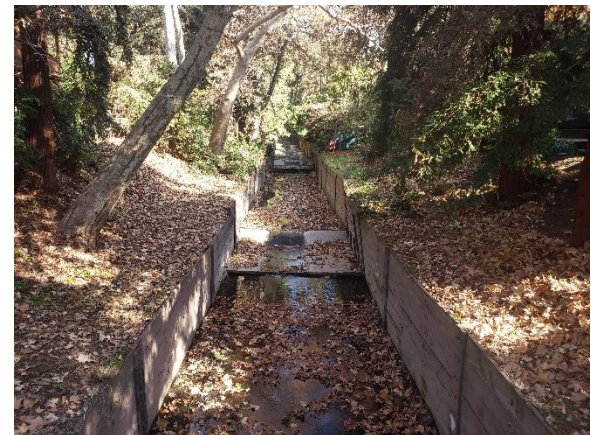
Reach 118

Rustic Canyon

Before Photos 8/29/19



After Photos 1/8/20





# 2019-2020 Soft Bottom Channels

Reach 118

Rustic Canyon

Before Photos 8/29/19



After Photos 1/8/20





# 2019-2020 Soft Bottom Channels

Reach 119

Rivas Canyon Channel

Before Photo 8/29/19



After Photos 1/8/20





# 2019-2020 Soft Bottom Channels

Reach 119

Rivas Canyon Channel

Before Photo 8/29/19



After Photos 1/8/20



# 2019-2020 Soft Bottom Channels

Reach 120

Jake's Way Channel

**NO WORK DONE**

Photos 9/18/19



# 2019-2020 Soft Bottom Channels

Reach 121

San Francisquito Creek (Newhall Ranch Road)

**NO WORK DONE**

Photos 8/22/19





# 2019-2020 Soft Bottom Channels

Reach 121

San Francisquito Creek (Newhall Ranch Road)

**NO WORK DONE**

Photos 8/22/19



# 2019-2020 Soft Bottom Channels

Reach 122

Las Virgenes Creek

**NO WORK DONE**

Photos 9/12/19





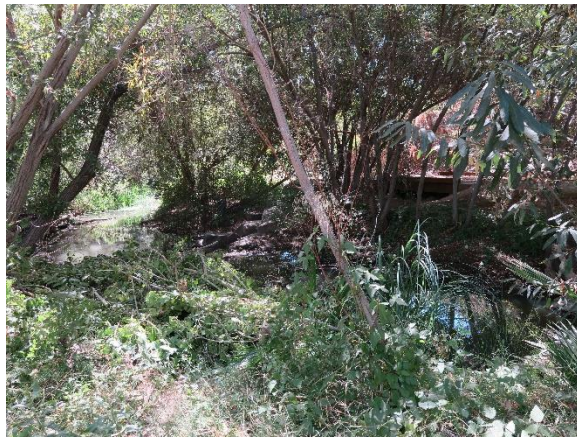
# 2019-2020 Soft Bottom Channels

Reach 122

Las Virgenes Creek

**NO WORK DONE**

Photos 9/12/19



# 2019-2020 Soft Bottom Channels

Reach 122

Las Virgenes Creek

**NO WORK DONE**

Photos 9/12/19





# 2019-2020 Soft Bottom Channels

Reach 123

Haskell Canyon

**NO WORK DONE**

Photos 12/11/19



**ATTACHMENT NO. 6**  
WATER QUALITY MONITORING SUMMARY REPORTS

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**Los Angeles Basin Watershed - Soft-Bottom Channels  
Feasibility Studies Technical Assessments and Recommendations  
WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Ballona Creek Reach 112 North</b>				<b>12/10/2019</b>
LATITUDE (approx.)	33.986765	33.984031	33.98021	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 1045am to performed pre-work baseline monitoring and sampling and due to last minute notification and scheduling also performed last day of water sampling at upstream, internal, and downstream points at the Upper Ballona Creek Reach 112 North Side. Crews were out cleaning vegetation on the slope of the channel. Between 1054 and 1121, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.415909	118.419688	118.424731	
ELEVATION (approx.)	6	6	6	
TIME	10:54	11:10	11:21	
SAMPLE NO.	BCNS-1	BCNS-2	BCNS-3	
TEMPERATURE (°C)	15.97	15.68	16.26	
pH	8.98	8.47	8.04	
TURBIDITY (NTUs)	5.97	2.45	2.64	
DISSOLVED O <sub>2</sub> (mg/L)	10.01	10	9.87	
TOTAL SUSPENDED SOLIDS (mg/L)	18	9	10	
<b>Ballona Creek Reach 112 North</b>				<b>12/13/2019</b>
LATITUDE (approx.)	33.986765	33.984031	33.98021	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1130am to performed post work monitoring and sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Crews have finished cleaning vegetation on the slope of the channel and the BMPs have been removed. Turbidity reading was slightly high at the internal point. Lots of dirt and some debris were in the area of the channel. Between 1140 and 1205, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.415909	118.419688	118.424731	
ELEVATION (approx.)	6	6	6	
TIME	11:40	12:05	11:55	
SAMPLE NO.	BCNS-1	BCNS-2	BCNS-3	
TEMPERATURE (°C)	17.88	17.18	17.36	
pH	8.96	8.69	8.31	
TURBIDITY (NTUs)	5.46	7.03	4.05	
DISSOLVED O <sub>2</sub> (mg/L)	10.05	9.9	9.99	
TOTAL SUSPENDED SOLIDS (mg/L)	22	6	20	
<b>Ballona Creek Reach 112 South</b>				<b>12/10/2019</b>
LATITUDE (approx.)	33.986641	33.984285	33.980196	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 1050am to performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Upper Ballona Creek Reach 112 South Side. BMPs were placed on the south side of the channel. Baseline monitoring and sampling was performed one day prior of start date. Between 1141 and 1210, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Wednesday 12/11.
LONGITUDE (approx.)	118.415761	118.418752	118.424032	
ELEVATION (approx.)	5	5	5	
TIME	12:10	11:55	11:41	
SAMPLE NO.	BCSS-1	BCSS-2	BCSS-3	
TEMPERATURE (°C)	18.44	16.92	16.97	
pH	9.81	8.66	8.13	
TURBIDITY (NTUs)	4.23	2.45	2.79	
DISSOLVED O <sub>2</sub> (mg/L)	10.01	9.9	9.93	
TOTAL SUSPENDED SOLIDS (mg/L)	7	24	55	
<b>Ballona Creek Reach 112 South</b>				<b>12/11/2019</b>
LATITUDE (approx.)	33.986641	33.984285	33.980196	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1000am to performed water monitoring and sampling at upstream, internal, and downstream points at the Upper Ballona Creek Reach 112 South Side. BMPs were placed on the south side of the channel. Field crew were removing vegetation by hand on the slop of the south side of the channel. Water flow was steady but the tide was a little high especially at the upstream point. Between 1015 and 1054, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. The downstream TSS value of 31 was over the daily TSS limit (DTSSL) of 17.6 mg/L (16+10%).
LONGITUDE (approx.)	118.415761	118.418752	118.424032	
ELEVATION (approx.)	5	5	5	
TIME	10:54	10:35	10:15	
SAMPLE NO.	BCSS-1	BCSS-2	BCSS-3	
TEMPERATURE (°C)	15.08	14.23	14.8	
pH	8.87	8.41	8.27	
TURBIDITY (NTUs)	3.42	2.98	3.29	
DISSOLVED O <sub>2</sub> (mg/L)	9.99	10.03	9.36	
TOTAL SUSPENDED SOLIDS (mg/L)	16	15	31	



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<b>Ballona Creek Reach 112 South</b>		<b>12/12/2019</b>		
LATITUDE (approx.)	33.986641	33.984285	33.980196	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring and sampling at upstream, internal, and downstream points at the Upper Ballona Creek Reach 112 South Side. Ocean Blue arrived out into the field to move the BMP from its original location and headed downstream on the south side of the channel. Field crew were removing vegetation by hand on the slop of the south side of the channel. Water level has risen but flow was steady. Between 0807 and 0840, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. The internal TSS value of 20 is over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.415761	118.418752	118.424032	
ELEVATION (approx.)	5	5	5	
TIME	8:40	8:17	8:07	
SAMPLE NO.	BCSS-1	BCSS-2	BCSS-3	
TEMPERATURE (°C)	13.03	13.59	13.9	
pH	8.62	8.42	8.44	
TURBIDITY (NTUs)	1.87	2.12	1.94	
DISSOLVED O <sub>2</sub> (mg/L)	9.93	9.8	10.03	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	20	ND	
<b>Ballona Creek Reach 112 South</b>		<b>12/16/2019</b>		
LATITUDE (approx.)	33.986641	33.984285	33.980196	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0745am to performed water monitoring and sampling at upstream, internal, and downstream points at the Upper Ballona Creek Reach 112 South Side. Ocean Blue moved the BMP towards downstream over the weekend for the field crew to continue hand removal vegetations from the slope of the channel. Turbidity readings were slightly high at the internal and downstream points because of the strong winds from the previous day (12/15/2019). There were lots of debris and trash floating on the surface of the water. Between 0805 and 0825, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. The internal and downstream turbidity readings of 1.88 and 2.05 NTU were over 20% above the Daily Turbidity Limit of 1.45 NTU (1.21 + 20%). The internal and downstream TSS values of 8 and 56 were over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.415761	118.418752	118.424032	
ELEVATION (approx.)	5	5	5	
TIME	8:05	8:15	8:25	
SAMPLE NO.	BCSS-1	BCSS-2	BCSS-3	
TEMPERATURE (°C)	8.73	8.68	10.52	
pH	8.58	8.5	8.12	
TURBIDITY (NTUs)	1.21	1.88	2.05	
DISSOLVED O <sub>2</sub> (mg/L)	10.04	9.99	9.98	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	8	56	
<b>Ballona Creek Reach 112 South</b>		<b>12/18/2019</b>		
LATITUDE (approx.)	33.986641	33.984285	33.980196	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0710am to perform post water monitoring and sampling at upstream, internal, and downstream points at the Upper Ballona Creek Reach 112 South Side. BMPs were removed and field crew finished all vegetation removal. Turbidity readings were slightly high at the internal and downstream points. The water level was very low and clear. Lots of trash and dirt were very visible. Between 0718 and 0756, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.415761	118.418752	118.424032	
ELEVATION (approx.)	5	5	5	
TIME	7:56	7:43	7:18	
SAMPLE NO.	BCSS-1	BCSS-2	BCSS-3	
TEMPERATURE (°C)	8.36	9.61	11.36	
pH	8.62	8.5	8.51	
TURBIDITY (NTUs)	1.09	3.14	2.21	
DISSOLVED O <sub>2</sub> (mg/L)	9.96	9.98	9.94	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	8	ND	
<b>Compton Creek</b>		<b>9/14/2019</b>		
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 7am met with Edgar Mazariegos from Stormwater Maintenance Imperial Yard . Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Compton Creek. Edgar Mazariegos assisted in cutting vegetation for a pathway for Upstream and Internal points. Baseline monitoring and sampling was performed two days prior of the placement of the BMPs and proposed start of cleanout operations. Between 0717 and 0825, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Monday 09/16.
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	7:51	8:25	7:17	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	20.9	22	21.7	
pH	7.3	7.5	7.5	
TURBIDITY (NTUs)	15.41	6.02	1.34	
DISSOLVED O <sub>2</sub> (mg/L)	9.73	8.79	8.87	
TOTAL SUSPENDED SOLIDS (mg/L)	19	22	14	

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<b>Compton Creek</b>				<b>9/16/2019</b>
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Greg Johnson arrived on-site about 0945 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Due to minimal water below the last BMP, downstream sampling point located in small pool immediately upstream of the lowest BMP. Between 1005 and 1059, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Phoned FMD Crew Leader Jeremy Winston with water quality results. The downstream TSS value of 25 was over the daily TSS limit (DTSSL) of 15.4 mg/L (14+10%).
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	10:05	10:42	10:59	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	21.36	21.85	23.91	
pH	7.29	7.22	8.37	
TURBIDITY (NTUs)	26.2	6.18	4.03	
DISSOLVED O <sub>2</sub> (mg/L)	1.89	11.17	10.5	
TOTAL SUSPENDED SOLIDS (mg/L)	14	8	25	
<b>Compton Creek</b>				<b>9/17/2019</b>
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 0800 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Had to walk in the channel and collect water samples for downstream because of a pieces of cut logs and placed on the concrete access ramp leading into the LA River. Due to minimal water below the last BMP, downstream sampling point located in small pool immediately upstream of the lowest BMP. Between 0825 and 0945, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Met with FMD Crew Leader Jeremy Winston with water quality results and discussed the removal of the pieces of log on the access ramp for future easy access.
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	9:20	9:45	8:25	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	22.8	21.9	20.9	
pH	7.78	7.65	7.3	
TURBIDITY (NTUs)	22.8	9.11	2.88	
DISSOLVED O <sub>2</sub> (mg/L)	8.8	8.54	9.83	
TOTAL SUSPENDED SOLIDS (mg/L)	12	ND	ND	
<b>Compton Creek</b>				<b>9/18/2019</b>
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 0800 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Due to minimal water below the last BMP, downstream sampling point located in small pool immediately upstream of the lowest BMP. Between 0820 and 0920, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Informed FMD Crew Leader Jeremy Winston via cell phone with water quality results. The downstream TSS value of 32 was over the daily TSS limit (DTSSL) of 8.8 mg/L (8+10%).
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	8:20	8:40	9:20	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	21.34	20.91	22.53	
pH	7.79	7.39	7.41	
TURBIDITY (NTUs)	29.42	10.92	3.31	
DISSOLVED O <sub>2</sub> (mg/L)	9.22	10.72	9.72	
TOTAL SUSPENDED SOLIDS (mg/L)	8	6	32	
<b>Compton Creek</b>				<b>9/19/2019</b>
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 0800 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. Ms. Cindy Harvey from Imperial Yard assisted with the water sampling at both upstream and internal points. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Due to minimal water below the last BMP, downstream sampling point located in small pool immediately upstream of the lowest BMP. Between 0830 and 0915, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Informed FMD Crew Leader Jeremy Winston via cell phone with water quality results. The internal and downstream TSS values of 10 and 27 were over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	8:30	8:57	9:15	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	22.4	22.6	24.6	
pH	6.39	7.19	7.88	
TURBIDITY (NTUs)	23.74	9.7	6.32	
DISSOLVED O <sub>2</sub> (mg/L)	9.26	10.08	9.51	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	10	27	

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<b>Compton Creek</b>				
<b>9/20/2019</b>				
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garó Avoyan arrived on-site about 0800 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. Ms. Cindy Harvey from Imperial Yard assisted with the water sampling at both upstream and internal points. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Due to minimal water below the last BMP, downstream sampling point located in small pool immediately upstream of the lowest BMP. Between 1015 and 1113, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Informed FMD Crew Leader Jeremy Winston via cell phone with water quality results.
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	10:55	11:13	10:15	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	22.56	22.47	22.26	
pH	8.21	7.18	8.01	
TURBIDITY (NTUs)	15.44	9.49	2.9	
DISSOLVED O <sub>2</sub> (mg/L)	8.81	9.83	9.56	
TOTAL SUSPENDED SOLIDS (mg/L)	8	6	6	
<b>Compton Creek</b>				
<b>9/21/2019</b>				
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garó Avoyan arrived on-site about 1010 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. Ms. Cindy Harvey from Imperial Yard assisted with the water sampling at internal point. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. There was a very good amount of water flow at the downstream point and sample was taken at mini water fall above the third straw waddle anchored with sand bags. Between 1020 and 1115, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Informed FMD Crew Leader Jeremy Winston via cell phone with water quality results. The internal TSS value of 20 was over the daily TSS limit (DTSSL) of 14.3 mg/L (13+10%).
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	11:15	10:50	10:20	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	24.58	24.4	24.49	
pH	6.65	7.32	6.74	
TURBIDITY (NTUs)	18.32	18.11	1.55	
DISSOLVED O <sub>2</sub> (mg/L)	9.97	9.61	9.93	
TOTAL SUSPENDED SOLIDS (mg/L)	13	20	14	
<b>Compton Creek</b>				
<b>9/23/2019</b>				
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garó Avoyan arrived on-site about 0805 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. Mr. Seth Fairfax from Imperial Yard assisted with the water sampling at internal point. Garó noticed lots of vegetation at the internal point as well as the turbidity readings rising each day of water sampling at the same point. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Due to minimal water below the last BMP, downstream sampling point located in small pool immediately upstream of the lowest BMP. Between 0835 and 0925, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Informed FMD Crew Leader Jeremy Winston via cell phone with water quality results. The internal and downstream TSS values of 8 and 11 were over the daily TSS limit (DTSSL) of 7.7 mg/L (7+10%).
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	8:35	8:57	9:25	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	21.97	21.2	22.2	
pH	6.61	7.01	6.82	
TURBIDITY (NTUs)	26.91	26.26	3.91	
DISSOLVED O <sub>2</sub> (mg/L)	9.88	9.96	9.99	
TOTAL SUSPENDED SOLIDS (mg/L)	7	8	11	
<b>Compton Creek</b>				
<b>10/4/2019</b>				
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garó Avoyan arrived on-site about 0830 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. For the internal point, there was a very bad odor as well as turbidity reading was very high at internal sampling point due lots of vegetations. Also Turbidity readings were a bit high at the downstream as well. There was a very good amount of water flow at the downstream point and sample was taken at mini water fall above the third straw waddle anchored with sand bags. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Between 0842 and 0929, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Garó informed FMD via cell phone with water quality results as well as the plan for the internal point cleanout of the vegetation. The internal and downstream turbidity readings of 18.82 and 8.51 NTU were over 20% above the Daily Turbidity Limit of 6.76 NTU (5.63 + 20%). The downstream TSS value of 7 was over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	
ELEVATION (approx.)	26	94	25	
TIME	8:42	9:09	9:29	
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3	
TEMPERATURE (°C)	22.69	21.23	21.02	
pH	14	6.98	7.19	
TURBIDITY (NTUs)	5.63	18.82	8.51	
DISSOLVED O <sub>2</sub> (mg/L)	10.28	10.25	10.25	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	7	

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<b>Compton Creek</b>				<b>10/10/2019</b>	
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0745 to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). Garo notified FMD via phone call. GMED will continue to monitor the area to re-confirm conditions.	
LONGITUDE (approx.)					
ELEVATION (approx.)					
TIME					
SAMPLE NO.					
TEMPERATURE (°C)					
pH					
TURBIDITY (NTUs)					
DISSOLVED O <sub>2</sub> (mg/L)					
TOTAL SUSPENDED SOLIDS (mg/L)					
<b>Compton Creek</b>				<b>10/17/2019</b>	
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0745 to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). Garo notified FMD via phone call. GMED will continue to monitor the area to re-confirm conditions.	
LONGITUDE (approx.)					
ELEVATION (approx.)					
TIME					
SAMPLE NO.					
TEMPERATURE (°C)					
pH					
TURBIDITY (NTUs)					
DISSOLVED O <sub>2</sub> (mg/L)					
TOTAL SUSPENDED SOLIDS (mg/L)					
<b>Compton Creek</b>				<b>10/24/2019</b>	
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 1130 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. All three (3) sampling points had great amounts of water flowing. Also Turbidity readings were a bit high at both internal and downstream. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Between 1148 and 1228, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Garo informed FMD via cell phone with water quality results. The internal and downstream turbidity readings of 2.2 and 1.77 NTU were over 20% above the Daily Turbidity Limit of 1.46 NTU (1.22 + 20%).	
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057		
ELEVATION (approx.)	26	94	25		
TIME	12:28	12:10	11:48		
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3		
TEMPERATURE (°C)	22.42	22.53	22.11		
pH	7.7	7.74	7.84		
TURBIDITY (NTUs)	1.22	2.2	1.77		
DISSOLVED O <sub>2</sub> (mg/L)	8.6	9.91	9.98		
TOTAL SUSPENDED SOLIDS (mg/L)	8	5	ND		
<b>Compton Creek</b>				<b>11/1/2019</b>	
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 0800 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. While sampling at the internal point, there was a minor malfunction with the water quality machine and it had to be taken to our vendor for repairs. Garo was able resume water sampling after 2 hours. BMPs consist of 3 separate rows of straw waddles anchored with sandbags from the end of the SBC to the LA River. Between 0810 and 1039 collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Garo informed FMD via text message with water quality results.	
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057		
ELEVATION (approx.)	26	94	25		
TIME	8:10	10:23	10:39		
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3		
TEMPERATURE (°C)	13.95	16.94	17.16		
pH	7.84	7.26	7.53		
TURBIDITY (NTUs)	13.27	3.45	1.2		
DISSOLVED O <sub>2</sub> (mg/L)	9.59	10.11	9.46		
TOTAL SUSPENDED SOLIDS (mg/L)	21	ND	ND		



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<b>Compton Creek</b>				<b>11/6/2019</b>	
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	<p>Garo Avoyan arrived on-site about 1030 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. BMPs consist of 3 separate rows of straw wattles anchored with sandbags from the end of the SBC to the LA River. Turbidity readings were high at both internal and downstream because of high volume of dirt. Also the water level at the third BMP as well as the water level also has risen with lots of dirt accumulated as well. The internal had foam bubbles. We discussed placing a bmp at the internal point to reduce turbidity readings. Between 1035 and 1109 collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Garo informed FMD via phone call with water quality results. The internal and downstream turbidity readings of 16.16 and 7.38 NTU were over 20% above the Daily Turbidity Limit of 2.56 NTU (2.13 + 20%). The internal TSS value of 47 was over the daily TSS limit (DTSSL) of 6.6 mg/L (6+10%)</p>	
ELEVATION (approx.)	26	94	25		
TIME	11:09	10:50	10:35		
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3		
TEMPERATURE (°C)	17.32	18.07	18.23		
pH	7.94	8.14	8.33		
TURBIDITY (NTUs)	2.13	16.16	7.38		
DISSOLVED O <sub>2</sub> (mg/L)	9.46	9.3	10.01		
TOTAL SUSPENDED SOLIDS (mg/L)	6	47	6		
<b>Compton Creek</b>					
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	<p>Garo Avoyan arrived on-site about 0920 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. BMPs consist of 3 separate rows of straw wattles anchored with sandbags from the end of the SBC to the LA River. Maintenance crew were operating heavy equipment on the north side of Compton Creek. Turbidity readings were slightly high at internal because of high volume of dirt. May need to add a BMP to reduce turbidity readings to allowance level. Between 0935 and 1028 collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Garo informed FMD via phone call with water quality results. The internal turbidity reading of 4.07 NTU was over 20% above the Daily Turbidity Limit of 1.98 NTU (1.65 + 20%). The internal TSS value of 10 was over the daily TSS limit (DTSSL) of 8.8 mg/L (8+10%).</p>	
ELEVATION (approx.)	26	94	25		
TIME	10:28	10:00	9:35		
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3		
TEMPERATURE (°C)	17.6	18.55	17.76		
pH	8.02	7.98	8.07		
TURBIDITY (NTUs)	1.65	4.07	1.45		
DISSOLVED O <sub>2</sub> (mg/L)	9.98	10.05	10.02		
TOTAL SUSPENDED SOLIDS (mg/L)	8	10	7		
<b>Compton Creek</b>					
LATITUDE (approx.)	33.8714707	33.8554341	33.8418539	Post-Work WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.2159757	118.2134476	118.2041057	<p>Garo Avoyan arrived on-site about 0925 to perform post water monitoring and sampling at the upstream, internal, and downstream points of Compton Creek. The BMPs placed at the downstream point were washed away in the rain from the previous weeks. Maintenance crew finished all vegetation removal. Turbidity readings was high at internal because of high volume of dirt. This was cause by the rain from the previous week. Between 0934 and 1020 collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.</p>	
ELEVATION (approx.)	26	94	25		
TIME	10:20	9:57	9:34		
SAMPLE NO.	CCSBC-1	CCSBC-2	CCSBC-3		
TEMPERATURE (°C)	15.45	15.54	15.43		
pH	7.68	8.4	9.27		
TURBIDITY (NTUs)	9.74	19.11	6.74		
DISSOLVED O <sub>2</sub> (mg/L)	10.04	9.98	9.92		
TOTAL SUSPENDED SOLIDS (mg/L)	7	9	8		

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<b>Dry Canyon PD 1845</b>				<b>8/30/2019</b>
LATITUDE (approx.)	34.147377	34.149478	34.150906	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.630441	118.631474	118.631781	
ELEVATION (approx.)	693	957	952	
TIME	8:00	8:20	8:45	
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3	
TEMPERATURE (°C)	20.79	20.39	20.36	
pH	7.79	7.85	8.03	
TURBIDITY (NTUs)	2.6	1.2	1.47	
DISSOLVED O <sub>2</sub> (mg/L)	4.97	4.4	4.96	
TOTAL SUSPENDED SOLIDS (mg/L)	9	5	10	
<b>Dry Canyon PD 1845</b>				<b>9/3/2019</b>
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.630441	118.631474	118.631781	
ELEVATION (approx.)	693	957	952	
TIME	11:00	11:15	11:30	
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3	
TEMPERATURE (°C)	23.44	25.02	24.96	
pH	8.08	8.32	8.48	
TURBIDITY (NTUs)	1.75	1.9	1.61	
DISSOLVED O <sub>2</sub> (mg/L)	4.63	5.69	5.59	
TOTAL SUSPENDED SOLIDS (mg/L)	12	ND	26	
<b>Dry Canyon PD 1845</b>				<b>9/4/2019</b>
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.630441	118.631474	118.631781	
ELEVATION (approx.)	693	957	952	
TIME	10:00	10:15	10:30	
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3	
TEMPERATURE (°C)	21.17	22.8	22.14	
pH	7.77	7.81	8.04	
TURBIDITY (NTUs)	2.09	2.01	2.54	
DISSOLVED O <sub>2</sub> (mg/L)	2.65	3.32	3.13	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	8	10	

Chris Cunningham performed baseline monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 08/30/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0800 and 0845. Collected and recorded field readings of temperature (20.36 to 20.79°C), pH (7.79 to 8.03), turbidity ( 1.20 to 2.60 NTUs), and dissolved oxygen (4.40 to 4.97mg/L).

Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/3/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 1100 and 1130. Collected and recorded field readings of temperature (23.44 to 25.02°C), pH (8.08 to 8.48), turbidity ( 1.61 to 1.75 NTUs), and dissolved oxygen (4.63 to 5.69mg/L). The downstream TSS value of 26 was over the daily TSS limit (DTSSL) of 13.2 mg/L (12+10%)

Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/4/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 1000 and 1030. Collected and recorded field readings of temperature (21.17 to 22.80°C), pH (7.77 to 8.04), turbidity ( 2.01 to 2.54 NTUs), and dissolved oxygen (2.65 to 3.32mg/L). The downstream turbidity reading of 2.54 NTU was over 20% above the Daily Turbidity Limit of 2.51 NTU (2.09 + 20%). The internal and downstream TSS values of 8 and 10 were over the daily TSS limit (DTSSL) of ND.

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Dry Canyon PD 1845				9/5/2019	
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.630441	118.631474	118.631781	Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/5/19 (Thursday). Upstream, downstream, and internal sampling was conducted between 0800 and 0830. Collected and recorded field readings of temperature (20.74 to 22.41°C), pH (7.77 to 8.05), turbidity ( 1.73 to 1.84 NTUs), and dissolved oxygen (2.18 to 7.62mg/L). The downstream TSS value of 15 was over the daily TSS limit (DTSSL) of 11 mg/L (10+10%).	
ELEVATION (approx.)	693	957	952		
TIME	8:00	8:15	8:30		
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3		
TEMPERATURE (°C)	20.74	22.41	21.28		
pH	7.77	7.9	8.05		
TURBIDITY (NTUs)	1.84	1.77	1.73		
DISSOLVED O <sub>2</sub> (mg/L)	2.18	7.62	7.43		
TOTAL SUSPENDED SOLIDS (mg/L)	10	10	15		
Dry Canyon PD 1845				9/6/2019	
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.630441	118.631474	118.631781	Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/6/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0700 and 0730. Collected and recorded field readings of temperature (19.60 to 21.34°C), pH (7.80 to 8.08), turbidity ( 1.53 to 1.93 NTUs), and dissolved oxygen (2.41 to 7.31mg/L). The downstream turbidity reading of 1.93 NTU was over 20% above the Daily Turbidity Limit of 1.84 NTU (1.53 + 20%).	
ELEVATION (approx.)	693	957	952		
TIME	7:00	7:15	7:30		
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3		
TEMPERATURE (°C)	19.6	21.34	20.24		
pH	7.8	7.94	8.08		
TURBIDITY (NTUs)	1.53	1.83	1.93		
DISSOLVED O <sub>2</sub> (mg/L)	7.31	4	2.41		
TOTAL SUSPENDED SOLIDS (mg/L)	16	12	14		
Dry Canyon PD 1845				9/7/2019	
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.630441	118.631474	118.631781	Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/7/19 (Saturday). Upstream, downstream, and internal sampling was conducted between 0700 and 0730. Collected and recorded field readings of temperature (19.13 to 20.60°C), pH (7.84 to 8.05), turbidity ( 1.30 to 1.75 NTUs), and dissolved oxygen (2.30 to 7.36mg/L). The internal and downstream turbidity readings of 1.75 and 1.64 NTU were over 20% above the Daily Turbidity Limit of 1.56 NTU (1.3 + 20%).	
ELEVATION (approx.)	693	957	952		
TIME	7:00	7:15	7:30		
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3		
TEMPERATURE (°C)	19.13	20.6	19.8		
pH	7.84	8	8.05		
TURBIDITY (NTUs)	1.3	1.75	1.64		
DISSOLVED O <sub>2</sub> (mg/L)	7.36	3.06	2.3		
TOTAL SUSPENDED SOLIDS (mg/L)	54	40	46		

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<b>Dry Canyon PD 1845</b>				<b>9/9/2019</b>	
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.630441	118.631474	118.631781	Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/9/19 (Monday). Upstream, downstream, and internal sampling was conducted between 0700 and 0730. Collected and recorded field readings of temperature (17.15 to 17.81°C), pH (7.84 to 8.05), turbidity ( 1.45 to 1.65 NTUs), and dissolved oxygen (2.08 to 2.97mg/L). The internal and downstream TSS values of 12 and 18 were over the daily TSS limit (DTSSL) of 11 mg/L (10+10%).	
ELEVATION (approx.)	693	957	952		
TIME	7:00	7:15	7:30		
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3		
TEMPERATURE (°C)	17.15	17.25	17.81		
pH	7.84	8.01	8.05		
TURBIDITY (NTUs)	1.45	1.65	1.41		
DISSOLVED O <sub>2</sub> (mg/L)	2.22	2.97	2.08		
TOTAL SUSPENDED SOLIDS (mg/L)	10	12	18		
<b>Dry Canyon PD 1845</b>					
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.630441	118.631474	118.631781	Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/10/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0700 and 0730. Collected and recorded field readings of temperature (18.88 to 19.75°C), pH (7.87 to 8.18), turbidity ( 1.19 to 1.57 NTUs), and dissolved oxygen (1.81 to 1.57mg/L). The internal turbidity reading of 1.57 NTU was over 20% above the Daily Turbidity Limit of 1.54 NTU (1.28 + 20%). The internal and downstream TSS values of 6 and 6 were over the daily TSS limit (DTSSL) of 5.5 mg/L (5+10%).	
ELEVATION (approx.)	693	957	952		
TIME	7:30	7:15	7:00		
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3		
TEMPERATURE (°C)	18.88	19.1	19.75		
pH	7.87	8.11	8.18		
TURBIDITY (NTUs)	1.28	1.57	1.19		
DISSOLVED O <sub>2</sub> (mg/L)	1.81	7.31	2.19		
TOTAL SUSPENDED SOLIDS (mg/L)	5	6	6		
<b>Dry Canyon PD 1845</b>					
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.630441	118.631474	118.631781	Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/17/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 1200 and 1230. The internal and downstream TSS values of 5 and 6 were over the daily TSS limit (DTSSL) of ND.	
ELEVATION (approx.)	693	957	952		
TIME	12:30	12:15	12:00		
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3		
TEMPERATURE (°C)	19.53	21.58	21.47		
pH	8.08	8.42	8.51		
TURBIDITY (NTUs)	1.43	1.38	1.7		
DISSOLVED O <sub>2</sub> (mg/L)	7.42	5.28	7.48		
TOTAL SUSPENDED SOLIDS (mg/L)	ND	5	6		



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Dry Canyon PD 1845		9/24/2019		
LATITUDE (approx.)	34.147377	34.149478	34.150906	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 09/24/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0800 and 0830. The internal TSS value of 12 was over the daily TSS limit (DTSSL) of 11 mg/L (10+10%).
LONGITUDE (approx.)	118.630441	118.631474	118.631781	
ELEVATION (approx.)	693	957	952	
TIME	8:30	8:15	8:00	
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3	
TEMPERATURE (°C)	16.35	16.31	16.61	
pH	7.95	8.17	8.23	
TURBIDITY (NTUs)	1.7	1.88	1.62	
DISSOLVED O <sub>2</sub> (mg/L)	2.74	3.04	6.33	
TOTAL SUSPENDED SOLIDS (mg/L)	10	12	8	

Dry Canyon PD 1845		10/1/2019		
LATITUDE (approx.)	34.147377	34.149478	34.150906	Post-Work WQ Monitoring & Sampling Results  Chris Cunningham performed post work monitoring and sampling for Dry Canyon PD 1845 Reach 2, on 10/1/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0800 and 0830.
LONGITUDE (approx.)	118.630441	118.631474	118.631781	
ELEVATION (approx.)	693	957	952	
TIME	8:30	8:15	8:00	
SAMPLE NO.	DCPD1845R2-1	DCPD1845R2-2	DCPD1845R2-3	
TEMPERATURE (°C)	13.28	12.97	12.63	
pH	7.94	8.13	8.19	
TURBIDITY (NTUs)	3.02	1.98	1.76	
DISSOLVED O <sub>2</sub> (mg/L)	1.75	2.03	1.93	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	6	10	

Dunsmuir Debris Basin		3/5/2020		
LATITUDE (approx.)	34.248695	34.248481	34.248135	Pre-Clearing/Baseline  Chris Cunningham, of GMED Geology Investigations, arrived on site about 745 to evaluate existing conditions at the upstream, internal, and downstream sampling points prior to performing pre-work/baseline water quality monitoring and sampling. Pre-work/baseline water quality monitoring and sampling was scheduled within 7 days of the proposed start date. From a water quality standpoint, project is "good to go" for proposed start on Friday, 3/06. Findings forwarded to FMD personnel at Hansen Yard.
LONGITUDE (approx.)	118.252994	118.253258	118.25334	
ELEVATION (approx.)	2256	2246	2243	
TIME	7:45	8:00	8:15	
SAMPLE NO.	DDB-1	DDB-2	DDB-3	
TEMPERATURE (°C)	11.06	10.76	12.58	
pH	8.19	9.08	8.82	
TURBIDITY (NTUs)	1.23	5.89	1.45	
DISSOLVED O <sub>2</sub> (mg/L)	5.23	6.98	6.42	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	9	ND	

Dunsmuir Debris Basin		3/6/2020		
LATITUDE (approx.)	34.248695	34.248481	34.248135	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham, of GMED Geology Investigations, arrived on site about 10:00 to evaluate existing conditions at the upstream, internal, and downstream sampling points prior to performing water quality monitoring and sampling. The internal turbidity reading of 4.58 NTU is over 20% above the Daily Turbidity Limit of 0.16 NTU (0.13 + 20%). The internal TSS value of 6.00 mg/L is over 10% above the Daily TSS Limit (DTSSL) of ND. Findings forwarded to FMD personnel at Hansen Yard.
LONGITUDE (approx.)	118.252994	118.253258	118.25334	
ELEVATION (approx.)	2256	2246	2243	
TIME	10:00	10:15	10:30	
SAMPLE NO.	DDB-1	DDB-2	DDB-3	
TEMPERATURE (°C)	17.34	16.87	17.91	
pH	8.82	10.08	9.44	
TURBIDITY (NTUs)	0.13	4.58	0.09	
DISSOLVED O <sub>2</sub> (mg/L)	5.69	9.81	5.43	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	6	ND	

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<b>Dunsmuir Debris Basin</b>		<b>3/11/2020</b>		
LATITUDE (approx.)	34.248695	34.248481	34.248135	Post-Work WQ Monitoring & Sampling Results  Chris Cunningham, of GMED Geology Investigations, arrived on site about 12:00 to evaluate existing conditions at the upstream, internal, and downstream sampling points prior to performing water quality monitoring and sampling. Findings forwarded to FMD personnel at Hansen Yard.
LONGITUDE (approx.)	118.252994	118.253258	118.25334	
ELEVATION (approx.)	2256	2246	2243	
TIME	12:00	12:15	12:30	
SAMPLE NO.	DDB-1	DDB-2	DDB-3	
TEMPERATURE (°C)	16.39	16.1	16.5	
pH	8.79	8.24	9.27	
TURBIDITY (NTUs)	0.35	5.11	0.04	
DISSOLVED O <sub>2</sub> (mg/L)	4.49	3.12	4.2	
TOTAL SUSPENDED SOLIDS (mg/L)	6	14	ND	

<b>Eagle Debris Basin</b>		<b>3/6/2020</b>		
LATITUDE (approx.)	34.238923°	34.235606°	34.233480°	Pre-Clearing/Baseline  Chris Cunningham, of GMED's Geology Investigations, arrived on site about 10:15 to evaluate existing conditions at the upstream, internal, and downstream sampling points prior to performing pre-work/baseline water quality monitoring and sampling. Baseline monitoring and sampling was performed within one (1) week of placement of BMPs and proposed start of cleanout operations. A significant amount of naturally-occurring suspended and floating debris was noted in the area of the internal sampling point which may affect turbidity and TSS values. From a water quality standpoint, project is "good to go" for proposed start on Tuesday, 03/10. Findings forwarded via e-mail to FMD personnel at Hansen Yard.
LONGITUDE (approx.)	118.240006°	118.236559°	118.237558°	
ELEVATION (approx.)	2009'	1850'	1804'	
TIME	10:15	12:30	12:45	
SAMPLE NO.	EDB-1	EDB-2	EDB-3	
TEMPERATURE (°C)	11.27	13.8	11.58	
pH	9.48	8.93	9.37	
TURBIDITY (NTUs)	3.1	0.89	0.36	
DISSOLVED O <sub>2</sub> (mg/L)	5.59	3.17	5.07	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	11	ND	

<b>Eagle Debris Basin</b>		<b>3/9/2020</b>		
LATITUDE (approx.)	34.238923°	34.235606°	34.233480°	During Maintenance WQ Monitoring & Sampling Results  1st day of field operations. Chris Cunningham, of GMED's Materials Lab, arrived on site about 10:15 to evaluate existing conditions at the upstream, internal, and downstream sampling points prior to performing during maintenance water quality monitoring and sampling. A significant amount of naturally-occurring suspended and floating debris was noted in the area of the internal sampling point which may affect turbidity and TSS values. The internal TSS values of 11 mg/L is above the Daily TSS Limit (DTSSL) of ND. Findings forwarded via e-mail to FMD personnel at Hansen Yard.
LONGITUDE (approx.)	118.240006°	118.236559°	118.237558°	
ELEVATION (approx.)	2009'	1850'	1804'	
TIME	10:15	12:30	12:45	
SAMPLE NO.	EDB-1	EDB-2	EDB-3	
TEMPERATURE (°C)	11.27	13.8	11.58	
pH	9.48	8.93	9.37	
TURBIDITY (NTUs)	3.1	0.89	0.36	
DISSOLVED O <sub>2</sub> (mg/L)	5.59	3.17	5.07	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	11	ND	

<b>Eagle Debris Basin</b>		<b>3/9/2020</b>		
LATITUDE (approx.)	34.238923°	34.235606°	34.233480°	Post-Work WQ Monitoring & Sampling Results  Chris Cunningham, of GMED's Materials Lab, arrived on site about 9:10 to evaluate existing conditions at the upstream, internal, and downstream sampling points prior to performing post-work water quality monitoring and sampling. BMP removed. A significant amount of naturally-occurring suspended and floating debris was noted in the area of the internal sampling point which may affect turbidity and TSS values. Findings forwarded via e-mail to FMD personnel at Hansen Yard.
LONGITUDE (approx.)	118.240006°	118.236559°	118.237558°	
ELEVATION (approx.)	2009'	1850'	1804'	
TIME	9:10	9:30	9:45	
SAMPLE NO.	EDB-1	EDB-2	EDB-3	
TEMPERATURE (°C)	10.46	10.44	11.4	
pH	9.51	8.34	8.75	
TURBIDITY (NTUs)	0.67	4.74	0.98	
DISSOLVED O <sub>2</sub> (mg/L)	3.99	5.17	3.1	
TOTAL SUSPENDED SOLIDS (mg/L)	9	61	11	

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**WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Golf Club Debris Basin</b>		<b>8/23/2019</b>		
LATITUDE (approx.)	34.17003	34.169839	34.16939	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 8am by entering through the gates from Golf Club Drive. Upon arrival, he met Mr. Jacob Villegas from Stormwater Maintenance Pickens Yard. Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Golf Club Debris Basin. Between 0824 and 0920, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Monday 08/26.
LONGITUDE (approx.)	118.203768	118.204058	118.204411	
ELEVATION (approx.)	879	879	870	
TIME	8:24	8:48	9:20	
SAMPLE NO.	GCDB-1	GCDB-2	GCDB-3	
TEMPERATURE (°C)	20.6	19.6	19.8	
pH	4.79	7.2	6.62	
TURBIDITY (NTUs)	0.31	2.74	3.45	
DISSOLVED O <sub>2</sub> (mg/L)	9.78	9.48	9.37	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	8	8	

<b>Golf Club Debris Basin</b>		<b>8/29/2019</b>		
LATITUDE (approx.)	34.17003	34.169839	34.16939	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 0915am by entering through the gates from Golf Club Drive. Upon arrival, he met with Mr. Marlin Thomas from Stormwater Maintenance Pickens Yard. Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Golf Club Debris Basin. Between 0930 and 1020, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Tuesday 09/03. <u>Water quality testing was subsequently canceled as the Department determined that the work within the basin was required due to construction of improvements rather than ordinary maintenance.</u>
LONGITUDE (approx.)	118.203768	118.204058	118.204411	
ELEVATION (approx.)	879	879	870	
TIME	9:30	9:58	10:20	
SAMPLE NO.	GCDB-1	GCDB-2	GCDB-3	
TEMPERATURE (°C)	22.8	22.5	22.3	
pH	0.78	3.96	4.39	
TURBIDITY (NTUs)	0.78	3.96	4.39	
DISSOLVED O <sub>2</sub> (mg/L)	9.84	9.09	9.04	
TOTAL SUSPENDED SOLIDS (mg/L)	7	14	14	

<b>Haines Canyon Channel Reach 12</b>		<b>1/30/2020</b>		
LATITUDE (approx.)				Pre-Clearing/Baseline  Garo Avoyan arrived on site about 0800 and met with Paul Jacobs, Public Works Crew Leader, from Stormwater Maintenance Pickens Yard to evaluate surface water flow prior to initiating baseline monitoring and sampling. The downstream sampling of Reach 12 located on the south bank of the channel about 530 feet west and downstream of the end of the open-box concrete channel was dry. Baseline water quality monitoring and sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. From a water quality standpoint, project is "good to go" for start on Friday 01/31.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>Haines Canyon Channel Reach 12</b>		<b>1/31/2020</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0800 and met with Paul Jacobs, Public Works Crew Leader, from Stormwater Maintenance Pickens Yard to conduct daily water monitoring and sampling. Internal sampling point is located on the north bank of the channel about 125 feet west and downstream of the end of the open box concrete channel and the downstream point is located on the south bank of the channel about 530 feet west and downstream of the end of the open-box concrete channel. These locations were dry. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garo Avoyan informed Paul Jacobs of these results as well.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>Haines Canyon Channel Reach 12</b>		<b>2/2/2020</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garó Avoyan arrived on site about 0800 and met with Paul Jacobs, Public Works Crew Leader, from Stormwater Maintenance Pickens Yard to conduct daily water monitoring and sampling. Internalsampling point is located on the north bank of the channel about 125 feet west and downstream of the end of the open box concrete channel and the downstream is located on the south bank of the channel about 530 feet west and downstream of the end of the open-box concrete channel. These locations were dry. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garó Avoyan informed Paul Jacobs of these results as well.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Haines Canyon Channel Reach 12</b>		<b>2/4/2020</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garó Avoyan arrived on site about 0930 and met with Paul Jacobs, Public Works Crew Leader, from Stormwater Maintenance Pickens Yard to conduct daily water monitoring and sampling. Internal sampling point is located on the north bank of the channel about 125 feet west and downstream of the end of the open box concrete channel and the downstream point is located on the south bank of the channel about 530 feet west and downstream of the end of the open-box concrete channel. These locations were dry. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garó Avoyan informed Paul Jacobs of these results as well.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Haines Canyon Channel Reach 12</b>		<b>2/11/2020</b>		
LATITUDE (approx.)				Post-Work WQ Monitoring & Sampling Results  Garó Avoyan arrived on site about 0800 perform post water monitoring and sampling. Internal sampling point is located on the north bank of the channel about 125 feet west and downstream of the end of the open box concrete channel and the downstream point is located on the south bank of the channel about 530 feet west and downstream of the end of the open-box concrete channel. These locations were dry. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB).
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Hayvenhurst Drain Reach 8</b>		<b>11/1/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	Pre-Clearing/Baseline  Garó Avoyan arrived on the jobsite at 1310 to performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Havenhurst Drain Reach 8. Baseline monitoring and sampling was performed one day prior of the placement of the BMPs and proposed start of cleanout operations. Between 1320 and 1350, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Saturday 11/02.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	13:55	13:40	13:20	
SAMPLE NO.	HDRAINR8-1	HDRAINR8-2	HDRAINR8-3	
TEMPERATURE (°C)	20.2	20.04	19.01	
pH	8.56	8.02	8.28	
TURBIDITY (NTUs)	5.78	3.84	0.84	
DISSOLVED O <sub>2</sub> (mg/L)	9.18	9.39	10.03	
TOTAL SUSPENDED SOLIDS (mg/L)	12	5	ND	



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<b>Hayvenhurst Drain Reach 8</b>		<b>11/2/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0751 to performed water monitoring and sampling at upstream, internal, and downstream points at the Havenhurst Drain Reach 8. Stormwater maintenance field crews were on-site to perform cleanup of vegetation in the channel. Garo requested the 3 water sampling areas be cut and cleared for easy access as well as one BMP was placed at the downstream, point with three sandbags anchored for support. Once water settled he proceeded with water sampling. Between 0840 and 0915, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	8:40	9:00	9:15	
SAMPLE NO.	HDRAINR8-1	HDRAINR8-2	HDRAINR8-3	
TEMPERATURE (°C)	15.65	14.63	14.48	
pH	8.39	8.26	8.26	
TURBIDITY (NTUs)	9.49	6.09	5.5	
DISSOLVED O <sub>2</sub> (mg/L)	10.01	10.03	10.07	
TOTAL SUSPENDED SOLIDS (mg/L)	46	36	30	
<b>Hayvenhurst Drain Reach 8</b>		<b>11/5/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800 to performed water monitoring and sampling at upstream, internal, and downstream points at the Havenhurst Drain Reach 8. Stormwater maintenance field crews were on-site to perform cleanup of vegetation in the channel. There was a high volume of dirt and small size debris accumulated at the upstream point which made water flow very slow. One BMP was placed at the downstream, point with three sandbags anchored for support. Once water settled he proceeded with water sampling. Between 0825 and 0915, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	8:25	8:55	9:15	
SAMPLE NO.	HDRAINR8-1	HDRAINR8-2	HDRAINR8-3	
TEMPERATURE (°C)	18.94	19.02	17.93	
pH	8.31	7.88	8.25	
TURBIDITY (NTUs)	12.41	2.6	2.81	
DISSOLVED O <sub>2</sub> (mg/L)	9.83	7.88	8.25	
TOTAL SUSPENDED SOLIDS (mg/L)	17	10	6	
<b>Hayvenhurst Drain Reach 8</b>		<b>11/6/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1250 to performed water monitoring and sampling at upstream, internal, and downstream points at the Havenhurst Drain Reach 8. Stormwater maintenance field crews were on-site to perform cleanup of vegetation in the channel. There was a high volume of dirt and small size debris accumulated at the upstream point which made water flow very slow. One BMP was placed at the downstream, point with three sandbags anchored for support. There were lots of vegetation floating at the downstream point and the water level rose to the top of the BMP with lots of accumulated vegetation. Garo notified Ryan Murillo, crew leader, and he agreed, even though the turbidity reading did not exceed the 20 percent allowance, that additional BMPs will be placed at the downstream area to decrease the vegetation flow. Between 0100 and 0130, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	1:00	1:15	1:30	
SAMPLE NO.	HDRAINR8-1	HDRAINR8-2	HDRAINR8-3	
TEMPERATURE (°C)	19.54	20.52	21.33	
pH	8.44	8.33	8.33	
TURBIDITY (NTUs)	20.19	9.73	21.85	
DISSOLVED O <sub>2</sub> (mg/L)	9.47	9.09	10.04	
TOTAL SUSPENDED SOLIDS (mg/L)	39	35	61	
<b>Hayvenhurst Drain Reach 8</b>		<b>11/7/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1050 to performed water monitoring and sampling at upstream, internal, and downstream points at the Havenhurst Drain Reach 8. Stormwater maintenance field crews were on-site to perform cleanup of vegetation in the channel. Two Bmps were placed at the downstream point with some spacing between them. Between 1110 and 1140, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	11:10	11:28	11:40	
SAMPLE NO.	HDRAINR8-1	HDRAINR8-2	HDRAINR8-3	
TEMPERATURE (°C)	20.18	19.81	21.31	
pH	8.56	8.43	8.38	
TURBIDITY (NTUs)	6.01	2.97	3.62	
DISSOLVED O <sub>2</sub> (mg/L)	9.8	8.43	8.38	
TOTAL SUSPENDED SOLIDS (mg/L)	12	7	11	

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<b>Hayvenhurst Drain Reach 8</b>		<b>11/8/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	During Maintenance WQ Monitoring & Sampling Results  Greg Johnson arrived on site about 1125 to performed water monitoring and sampling at upstream, internal, and downstream points at the Hayvenhurst Drain Reach 8. Stormwater maintenance field crews were at lunch but, a large amount of cut vegetation was laying on the bank and in the Drain. Floating and suspended debris was present at the upstream and internal sampling points. BMPs consist of two (2) separate rows of single straw wattles, with one placed at the end of the SBC and one placed at the entrance to the underground double-concrete box. Between 1134 and 1155, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Internal and downstream turbidity readings were both over 20% above the Daily Turbidity Limit of 6.52 NTU. The internal TSS value of 73 is over the daily TSS limit (DTSSL) of 22 mg/L (20+10%). This appeared to be the result of the crew working on the banks and in the water to remove vegetation from the SBC. Discussed this condition with the crew and advised to try and stay out of the water while cutting and removing vegetation.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	11:34	11:46	11:55	
SAMPLE NO.	HRAINR8-1	HRAINR8-2	HRAINR8-3	
TEMPERATURE (°C)	22.62	21.63	23.93	
pH	8.33	8.41	8.34	
TURBIDITY (NTUs)	5.44	13.23	10.47	
DISSOLVED O <sub>2</sub> (mg/L)	6.09	4.58	4.77	
TOTAL SUSPENDED SOLIDS (mg/L)	20	73	20	
<b>Hayvenhurst Drain Reach 8</b>		<b>11/16/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0810 to performed water monitoring and sampling at upstream, internal, and downstream points at the Hayvenhurst Drain Reach 8. Field crew returned to Drain channel cleanouts after temporary reassignment and performed vegetation cleanout. The upstream sampling point still had vegetation laying on the bank of the Drain as well as floating and suspended debris present. BMPs consist of two (2) separate rows of single straw wattles, with one placed at the end of the SBC and one placed at the entrance to the underground double-concrete box. Due to field crew clearing vegetation inside the drain which cause a disturbance in the dirt, he had to sample approximately 25' south of the internal point. Turbidity readings at downstream was slightly at the downstream because of the field crew working in the drain causing disturbance in the dirt flowing with the water flow. Downstream turbidity reading of 11.48 NTU was above the Daily Turbidity Limit of 10.33 NTU (8.61+20%). The internal TSS value of 56 is over the daily TSS limit (DTSSL) of 55 mg/L (50+10%). Between 0825 and 0910, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Garo informed Ryan Murillo, Field Crew Leader, of the results.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	8:25	8:55	9:10	
SAMPLE NO.	HRAINR8-1	HRAINR8-2	HRAINR8-3	
TEMPERATURE (°C)	18.35	18.95	20.84	
pH	8.5	8.43	8.48	
TURBIDITY (NTUs)	8.61	7.41	11.48	
DISSOLVED O <sub>2</sub> (mg/L)	9.98	9.93	9.98	
TOTAL SUSPENDED SOLIDS (mg/L)	50	56	47	
<b>Hayvenhurst Drain Reach 8</b>		<b>11/27/2019</b>		
LATITUDE (approx.)	34.163565	34.164211	34.164761	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1320 to performed post water monitoring and sampling at upstream, internal, and downstream points at the Hayvenhurst Drain Reach 8. All field work of vegetation cleanout was completed and the two (2) BMPs at the downstream end were removed. Between 1337 and 1405, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.492143	118.49154	118.491026	
ELEVATION (approx.)	703	702	702	
TIME	13:37	13:50	14:05	
SAMPLE NO.	HRAINR8-1	HRAINR8-2	HRAINR8-3	
TEMPERATURE (°C)	17.21	16.86	16.77	
pH	8.37	8.24	8.2	
TURBIDITY (NTUs)	8.63	5.61	2.4	
DISSOLVED O <sub>2</sub> (mg/L)	9.6	9.35	10.02	
TOTAL SUSPENDED SOLIDS (mg/L)	12	1	ND	
<b>Kagel Canyon Channel Reach 99</b>		<b>9/3/2019</b>		
LATITUDE (approx.)				Pre-Clearing/Baseline  Garo Avoyan arrived on site about 1000 and met with Maurilio Torres from Stormwater Maintenance Hansen Yard to evaluate surface water flow prior to initiating baseline monitoring and sampling. Baseline water quality monitoring and sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions From a water quality standpoint, project is "good to go" for start on Friday 09/06.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>Kagel Canyon Channel Reach 99</b>		<b>9/6/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0915 and met with Maurilio Torres from Stormwater Maintenance Hansen Yard to evaluate surface water flow prior to water sampling. Garo evaluated the upstream water flow with Mr. Torres and both noticed the water flow was not coming down the upstream point located at the small man-made waterfall from the three rock steps. The water flow (ground water) was actually coming from underneath the rock steps. Also the usual sampling point for the upstream was dry as well. Mr. Torres also took pictures of the upstream location for further evaluation. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions on a weekly basis.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Kagel Canyon Channel Reach 99</b>		<b>9/17/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1100 to perform water quality sampling during channel vegetation cleanout. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garo contacted Mr. Maurillio Torres of Stormwater Maintenance Hansen Yard via cell phone and informed him as well.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Kagel Canyon Channel Reach 99</b>		<b>10/25/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1230 to perform water quality sampling during channel vegetation cleanout. Hector Sanchez from Stormwater Maintenance Hansen yard was on-site. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Kagel Canyon Channel Reach 99</b>		<b>10/29/2019</b>		
LATITUDE (approx.)				Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1400 to perform post water quality sampling at upstream, internal, and downstream points at Kagel Canyon Channel. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB).
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>Los Angeles River Reach 114 West</b>		<b>11/18/2019</b>		
LATITUDE (approx.)	33.790323	33.787342	33.782763	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.206232	118.206238	118.206115	
ELEVATION (approx.)	6	6	5	
TIME	9:09	9:30	10:15	
SAMPLE NO.	LARWR114-1	LARWR114-2	LARWR114-3	
TEMPERATURE (°C)	17.11	18.88	20.04	
pH	8.31	8.38	9.6	
TURBIDITY (NTUs)	3.31	3.05	4.07	
DISSOLVED O <sub>2</sub> (mg/L)	9.98	10.03	9.6	
TOTAL SUSPENDED SOLIDS (mg/L)	9	13	14	
<b>Los Angeles River Reach 114 West</b>		<b>11/19/2019</b>		
LATITUDE (approx.)	33.790323	33.787342	33.782763	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.206232	118.206238	118.206115	
ELEVATION (approx.)	6	6	5	
TIME	10:40	10:25	9:58	
SAMPLE NO.	LARWR114-1	LARWR114-2	LARWR114-3	
TEMPERATURE (°C)	18.25	17.94	17.89	
pH	8.29	8.38	8.58	
TURBIDITY (NTUs)	3.76	3.02	2.99	
DISSOLVED O <sub>2</sub> (mg/L)	9.43	9.59	9.63	
TOTAL SUSPENDED SOLIDS (mg/L)	15	ND	13	
<b>Los Angeles River Reach 114 West</b>		<b>12/10/2019</b>		
LATITUDE (approx.)	33.790323	33.787342	33.782763	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.206232	118.206238	118.206115	
ELEVATION (approx.)	6	6	5	
TIME	8:40	8:25	8:10	
SAMPLE NO.	LARWR114-1	LARWR114-2	LARWR114-3	
TEMPERATURE (°C)	14.32	14.64	13.99	
pH	8.35	8.22	8.41	
TURBIDITY (NTUs)	24.73	26.43	26.45	
DISSOLVED O <sub>2</sub> (mg/L)	10	10.06	10.01	
TOTAL SUSPENDED SOLIDS (mg/L)	36	45	32	
<b>Los Angeles River Reach 114 West</b>		<b>12/13/2019</b>		
LATITUDE (approx.)	33.790323	33.787342	33.782763	Post-Work WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.206232	118.206238	118.206115	
ELEVATION (approx.)	6	6	5	
TIME	8:30	8:09	7:37	
SAMPLE NO.	LARWR114-1	LARWR114-2	LARWR114-3	
TEMPERATURE (°C)	14.44	14.55	14.24	
pH	8.39	8.4	8.54	
TURBIDITY (NTUs)	5.28	6.53	4.06	
DISSOLVED O <sub>2</sub> (mg/L)	9.89	8.4	8.54	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	7	ND	



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**Feasibility Studies Technical Assessments and Recommendations**  
**WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Los Angeles River Reach 25 East</b>		<b>10/21/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 930am met with Carlos Varela, Ruben Barajas, and Evan Tillett from Stormwater Maintenance Imperial Yard . Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Vegetation was cut at the internal point. Baseline monitoring and sampling was performed two days prior of the placement of the BMPs and proposed start of cleanout operations. Between 0938 and 1030, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Wednesday 10/22.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:38	10:10	10:30	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	19.62	21.11	21.65	
pH	8.79	6.89	7.48	
TURBIDITY (NTUs)	4.34	4.95	3.03	
DISSOLVED O <sub>2</sub> (mg/L)	9.77	10.12	9.8	
TOTAL SUSPENDED SOLIDS (mg/L)	11	10	5	
<b>Los Angeles River Reach 25 East</b>		<b>10/25/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 930am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. Two heavy equipment were on site for vegetation cleanup. Turbidity readings were high because water tide rise and vegetations flowing on water surface. Internal and downstream turbidity readings of 7.49 and 5.99 NTU was above the Daily Turbidity Limit of 4.68 NTU (3.9+20%). The internal and downstream TSS values of 16 and 16 are over the daily TSS limit (DTSSL) of 8.8 mg/L (8+10%). Between 0940 and 1034, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:40	10:10	10:34	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	20.64	20.69	20.79	
pH	8.93	8.09	8.31	
TURBIDITY (NTUs)	3.9	7.49	5.99	
DISSOLVED O <sub>2</sub> (mg/L)	9.96	9.94	9.91	
TOTAL SUSPENDED SOLIDS (mg/L)	8	16	16	
<b>Los Angeles River Reach 25 East</b>		<b>10/26/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1000am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. Water tide rose from previous day and water spilling towards the rip-rap slope and downstream sampling point sediment was very west. Turbidity readings were high at internal point because of vegetation and fishes in the water. Internal turbidity reading of 7.75NTU was above the Daily Turbidity Limit of 6.53 NTU (5.44+20%). Between 1010 and 1105, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	10:10	10:32	11:05	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	20.41	20.55	20.43	
pH	8.84	8.26	8.35	
TURBIDITY (NTUs)	5.44	7.75	3.34	
DISSOLVED O <sub>2</sub> (mg/L)	9.84	9.47	9.89	
TOTAL SUSPENDED SOLIDS (mg/L)	43	25	19	
<b>Los Angeles River Reach 25 East</b>		<b>10/28/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0935am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. For internal and downstream, points water level continued to rise and making it way to sides and because due to water level rising. Due to my original areas of water sampling being covered with water, I had to work around and find safe locations to perform water sampling. The downstream TSS value of 36 is over the daily TSS limit (DTSSL) of 20.9 mg/L (19+10%). Between 0940 and 1030, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:40	10:01	10:30	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	16.55	17.68	17.17	
pH	8.73	8.16	8.44	
TURBIDITY (NTUs)	3.97	3.7	3.58	
DISSOLVED O <sub>2</sub> (mg/L)	9.91	9.97	9.99	
TOTAL SUSPENDED SOLIDS (mg/L)	19	17	36	

**Los Angeles Basin Watershed - Soft-Bottom Channels  
Feasibility Studies Technical Assessments and Recommendations  
WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Los Angeles River Reach 25 East</b>		<b>10/29/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0920am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. For internal and downstream, points water level continued to rise and making it way to sides and because due to water level rising. Due to rise in water tide, I had to work around and find safe locations to perform water sampling for both internal and downstream points. Internal turbidity readings of 5.81NTU was above the Daily Turbidity Limit of 4.43 NTU (3.69+20%). The downstream TSS value of 21 is over the daily TSS limit (DTSSL) of 18.7 mg/L (17+10%). Between 0925 and 1015, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:25	9:40	10:15	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	15.56	16.58	16.61	
pH	8.75	8.13	8.46	
TURBIDITY (NTUs)	3.69	5.81	3.92	
DISSOLVED O <sub>2</sub> (mg/L)	9.97	9.88	9.39	
TOTAL SUSPENDED SOLIDS (mg/L)	17	16	21	
<b>Los Angeles River Reach 25 East</b>		<b>10/30/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0920am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. At the upstream point, the increase of debris are accumulating and also found two dead birds near the edge of the soft bottom channel. The downstream TSS value of 22 is over the daily TSS limit (DTSSL) of 19.8 mg/L (18+10%). Between 0935 and 1030, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:35	10:05	10:30	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	15.17	16.56	15.84	
pH	8.77	8.26	8.42	
TURBIDITY (NTUs)	4.43	4.13	3.89	
DISSOLVED O <sub>2</sub> (mg/L)	9.97	9.9	9.89	
TOTAL SUSPENDED SOLIDS (mg/L)	18	11	22	
<b>Los Angeles River Reach 25 East</b>		<b>10/31/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Crews were operating equipment to remove vegetation Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. The water level decreased at the internal and downstream points. Between 0815 and 0915, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	8:15	8:40	9:15	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	11.83	11.04	12.03	
pH	8.51	7.95	8.11	
TURBIDITY (NTUs)	6.32	6.02	3.2	
DISSOLVED O <sub>2</sub> (mg/L)	10.02	10	9.86	
TOTAL SUSPENDED SOLIDS (mg/L)	16	15	7	
<b>Los Angeles River Reach 25 East</b>		<b>11/1/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1100am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Crews were operating equipment to remove vegetation Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. The water level decreased at the internal and downstream points. Between 1105 and 1148, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	11:05	11:25	11:48	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	18.55	16.82	15.94	
pH	8.88	8.36	8.31	
TURBIDITY (NTUs)	5.92	3.19	3.26	
DISSOLVED O <sub>2</sub> (mg/L)	10.23	9.64	9.49	
TOTAL SUSPENDED SOLIDS (mg/L)	20	6	6	

**Los Angeles Basin Watershed - Soft-Bottom Channels  
Feasibility Studies Technical Assessments and Recommendations  
WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Los Angeles River Reach 25 East</b>		<b>11/6/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 09300am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. The internal and downstream TSS values of 9 and 10 are over the daily TSS limit (DTSSL) of 7.7 mg/L (7+10%). Between 0940 and 1010, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:40	9:25	10:10	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	16.71	16.87	17.03	
pH	8.49	7.82	8.17	
TURBIDITY (NTUs)	3.93	4.57	2.73	
DISSOLVED O <sub>2</sub> (mg/L)	9.69	10.04	9.89	
TOTAL SUSPENDED SOLIDS (mg/L)	7	9	10	
<b>Los Angeles River Reach 25 East</b>		<b>11/13/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 09300am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. Water level rose at the downstream point and had to sample at safe location for safety reasons. Downstream turbidity reading of 6.32NTU was above the Daily Turbidity Limit of 5.47 NTU (4.56+20%). The downstream TSS value of 23 is over the daily TSS limit (DTSSL) of 13.2 mg/L (12+10%). Between 0912 and 0955, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	9:12	9:28	9:55	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	17.59	17.52	17.74	
pH	8.79	8.21	8.26	
TURBIDITY (NTUs)	4.56	3.97	6.32	
DISSOLVED O <sub>2</sub> (mg/L)	10.07	10.04	10.02	
TOTAL SUSPENDED SOLIDS (mg/L)	12	9	23	
<b>Los Angeles River Reach 25 East</b>		<b>11/19/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1155am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Burms sediments were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point. Internal turbidity reading of 4.6NTU was above the Daily Turbidity Limit of 4.55 NTU (3.79+20%). The downstream TSS value of 17 is over the daily TSS limit (DTSSL) of 12.1 mg/L (11+10%). Between 1200 and 1238, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	12:00	12:20	12:38	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	20.95	20.57	20.01	
pH	9.45	9	8.42	
TURBIDITY (NTUs)	3.79	4.6	3.45	
DISSOLVED O <sub>2</sub> (mg/L)	9.94	9.72	10	
TOTAL SUSPENDED SOLIDS (mg/L)	11	11	17	
<b>Los Angeles River Reach 25 East</b>		<b>12/11/2019</b>		
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Cleanouts resumed after operations were put on hold due to the past weeks rains. Garo Avoyan arrived on the jobsite at 0750am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. The burms sediments that were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point were washed out from the heavy rains and the water current was flowing very fast while collecting samples. All three sampling points had a lots of dirt and debris flowing and this was also caused by the heavy rains. Internal turbidity reading of 36.41NTU was above the Daily Turbidity Limit of 35.6 NTU (29.67+20%). The internal and downstream TSS values of 44 and 48 are over the daily TSS limit (DTSSL) of 30.8 mg/L (28+10%). Between 0800 and 0835, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.204929	118.205477	118.20497	
ELEVATION (approx.)	7	3	3	
TIME	8:00	8:10	8:35	
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3	
TEMPERATURE (°C)	11.42	11.41	12.11	
pH	8.5	8.23	8.28	
TURBIDITY (NTUs)	29.67	36.41	35.58	
DISSOLVED O <sub>2</sub> (mg/L)	9.98	9.9	10.02	
TOTAL SUSPENDED SOLIDS (mg/L)	28	44	48	

**Los Angeles Basin Watershed - Soft-Bottom Channels  
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<b>Los Angeles River Reach 25 East</b>				<b>12/17/2019</b>	
LATITUDE (approx.)	33.803965	33.800976	33.79033	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0855am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. The burms sediments that were placed on the LA River channel north side of Willow Street Bridge to divert water flow at upstream point were washed out from the heavy rains and the water current was flowing moderate while collecting samples. Lots of dirt and debris flowing and this was also caused by the strong winds. Internal and downstream turbidity readings of 7 and 6.26NTU were above the Daily Turbidity Limit of 2.62 NTU (2.18+20%). The internal and downstream TSS values of 19 and 31 are over the daily TSS limit (DTSSL) of 13.2 mg/L (12+10%). Between 0910 and 0955, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.	
LONGITUDE (approx.)	118.204929	118.205477	118.20497		
ELEVATION (approx.)	7	3	3		
TIME	9:10	9:25	9:55		
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3		
TEMPERATURE (°C)	11.29	11.07	11.54		
pH	9.01	8.45	8.28		
TURBIDITY (NTUs)	2.18	7	6.26		
DISSOLVED O <sub>2</sub> (mg/L)	10.07	9.89	10		
TOTAL SUSPENDED SOLIDS (mg/L)	12	19	31		
<b>Los Angeles River Reach 25 East</b>				<b>1/14/2020</b>	
LATITUDE (approx.)	33.803965	33.800976	33.79033	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0700am to perform post water monitoring and sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 East. Field crews finished hand removal vegetation and water level were normal. Between 0712 and 0755, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.	
LONGITUDE (approx.)	118.204929	118.205477	118.20497		
ELEVATION (approx.)	7	3	3		
TIME	7:12	7:30	7:55		
SAMPLE NO.	LARR25E-1	LARR25E-2	LARR25E-3		
TEMPERATURE (°C)	10.82	10.28	10.78		
pH	7.99	8.03	9.58		
TURBIDITY (NTUs)	2.43	2.36	1.92		
DISSOLVED O <sub>2</sub> (mg/L)	9.7	9.9	9.8		
TOTAL SUSPENDED SOLIDS (mg/L)	13	12	ND		
<b>Los Angeles River Reach 25 West</b>				<b>10/21/2019</b>	
LATITUDE (approx.)	33.803967	33.800967	33.790279	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 0730am met with Carlos Varela, Ruben Barajas, and Evan Tillett from Stormwater Maintenance Imperial Yard . Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Vegetation was cut at the internal point. Baseline monitoring and sampling was performed two days prior of the placement of the BMPs and proposed start of cleanout operations. The metal ladder to get down the rip-rap slope for the west side of the downstream had a bee hive with large amounts of bees swarming around. Between 0805 and 0918, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Wednesday 10/22.	
LONGITUDE (approx.)	118.206081	118.206024	118.206093		
ELEVATION (approx.)	6	3	3		
TIME	9:18	8:54	8:05		
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3		
TEMPERATURE (°C)	21.43	21.09	19.35		
pH	7.54	6.41	8.26		
TURBIDITY (NTUs)	5.62	5.87	3.13		
DISSOLVED O <sub>2</sub> (mg/L)	10.13	10.12	9.86		
TOTAL SUSPENDED SOLIDS (mg/L)	15	14	6		
<b>Los Angeles River Reach 25 West</b>				<b>10/23/2019</b>	
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0810am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. Turbidity readings were slightly high for both internal and downstream points. Internal and downstream turbidity readings of 7.49 and 5.57NTU were above the Daily Turbidity Limit of 5.1 NTU (4.25+20%). The internal TSS value of 26 is over the daily TSS limit (DTSSL) of 18.7 mg/L (17+10%). Between 0830 and 0936, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.	
LONGITUDE (approx.)	118.206081	118.206024	118.206093		
ELEVATION (approx.)	6	3	3		
TIME	9:36	9:05	8:30		
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3		
TEMPERATURE (°C)	21.82	21.3	19.6		
pH	9.17	8.46	8.6		
TURBIDITY (NTUs)	4.25	7.49	5.57		
DISSOLVED O <sub>2</sub> (mg/L)	9.8	9.94	9.97		
TOTAL SUSPENDED SOLIDS (mg/L)	17	26	18		



**Los Angeles Basin Watershed - Soft-Bottom Channels**  
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**WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Los Angeles River Reach 25 West</b>		<b>10/24/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1000am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. The downstream TSS value of 30 is over the daily TSS limit (DTSSL) of 18.7 mg/L (17+10%). Between 1012 and 1118, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	11:18	10:36	10:12	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	24.75	24.31	21.31	
pH	9.19	8.57	8.28	
TURBIDITY (NTUs)	5.26	5.61	6.08	
DISSOLVED O <sub>2</sub> (mg/L)	9.9	9.52	9.95	
TOTAL SUSPENDED SOLIDS (mg/L)	17	14	30	
<b>Los Angeles River Reach 25 West</b>		<b>10/25/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. For all three (3) sampling points, the water tide rose and there were some vegetations flowing on water surface. Between 0815 and 0920, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:20	9:00	8:15	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	20.07	20.08	19.28	
pH	8.68	8.16	8.36	
TURBIDITY (NTUs)	8.65	8.61	4.68	
DISSOLVED O <sub>2</sub> (mg/L)	9.92	9.88	10.01	
TOTAL SUSPENDED SOLIDS (mg/L)	28	15	16	
<b>Los Angeles River Reach 25 West</b>		<b>10/26/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. For the internal and downstream points, the water flow rose more and excess water now is moving towards the rip-rap slope. Between 0820 and 0925, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:25	9:10	8:20	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	19.93	19.6	18.19	
pH	8.63	8.22	8.44	
TURBIDITY (NTUs)	16.71	5.12	3.87	
DISSOLVED O <sub>2</sub> (mg/L)	9.78	9.95	10	
TOTAL SUSPENDED SOLIDS (mg/L)	66	22	11	
<b>Los Angeles River Reach 25 West</b>		<b>10/28/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew were out hand removing vegetation. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. For the upstream points lots of excess debris items and wildlife animals in the area were noticed. For the internal points, the water continues to rise more and excess water now is moving towards the rip-rap slope. For internal point, I sampled in an area that was not deep for safety reasons. Between 0820 and 0920, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:20	8:58	8:20	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	16.52	16.96	16.51	
pH	8.81	8.18	8.63	
TURBIDITY (NTUs)	4.91	4.29	3.34	
DISSOLVED O <sub>2</sub> (mg/L)	10	9.97	9.72	
TOTAL SUSPENDED SOLIDS (mg/L)	13	8	13	

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<b>Los Angeles River Reach 25 West</b>		<b>10/29/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew were out hand removing vegetation. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. For the internal point, there was no change in water rise and water remains by the rip-rap slope. Internal turbidity readings of 7.54NTU was above the Daily Turbidity Limit of 3.6 NTU (3+20%). The internal TSS value of 28 is over the daily TSS limit (DTSSL) of 8.8 mg/L (8+10%). Between 0810 and 0915, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:15	8:40	8:10	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	15.25	15.95	14.14	
pH	8.81	8.21	8.62	
TURBIDITY (NTUs)	3	7.54	3.07	
DISSOLVED O <sub>2</sub> (mg/L)	9.58	9.75	9.91	
TOTAL SUSPENDED SOLIDS (mg/L)	8	28	9	
<b>Los Angeles River Reach 25 West</b>		<b>10/30/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew were out hand removing vegetation. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. For the internal point, there was no change in water rise and water remains by the rip-rap slope. The internal TSS value of 28 is over the daily TSS limit (DTSSL) of 27.5 mg/L (25+10%). Between 0813 and 0910, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:10	8:45	8:13	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	15.18	15.5	16.06	
pH	8.89	8.52	8.51	
TURBIDITY (NTUs)	6.08	1.66	3.14	
DISSOLVED O <sub>2</sub> (mg/L)	9.65	9.31	9.34	
TOTAL SUSPENDED SOLIDS (mg/L)	25	28	15	
<b>Los Angeles River Reach 25 West</b>		<b>11/6/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew were out hand removing vegetation. Sediment burms were placed at the internal point to divert water flow into the center of the LA River. All water levels were normal. Between 0825 and 0915, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:15	8:50	8:25	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	16.52	16.23	17.06	
pH	8.51	8.39	8.27	
TURBIDITY (NTUs)	7.66	3.67	3.13	
DISSOLVED O <sub>2</sub> (mg/L)	9.99	9.65	9.69	
TOTAL SUSPENDED SOLIDS (mg/L)	29	15	18	
<b>Los Angeles River Reach 25 West</b>		<b>11/13/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0800am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew were out hand removing vegetation at the top of the slope. Sediment burms were placed at the upstream point to divert water flow into the center of the LA River. Water rose at the internal point and was flowing in some parts of the rip-rap slope area. I had to sample at safe location because of water level covering some rocks and dirt area. The internal TSS value of 18 is over the daily TSS limit (DTSSL) of 14.3 mg/L (13+10%). Between 0810 and 0850, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	8:50	8:35	8:10	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	17.44	17.4	17.06	
pH	8.78	8.21	8.33	
TURBIDITY (NTUs)	4.71	4.51	2.63	
DISSOLVED O <sub>2</sub> (mg/L)	9.77	9.45	10	
TOTAL SUSPENDED SOLIDS (mg/L)	13	18	9	

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<b>Los Angeles River Reach 25 West</b>		<b>11/19/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1040am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew were out hand removing vegetation at the top of the slope. Sediment burms were placed at the upstream point to divert water flow into the center of the LA River. The internal TSS value of 32 is over the daily TSS limit (DTSSL) of 17.6 mg/L (13+10%). Between 1040 and 1130, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	11:30	11:08	10:40	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	19.38	18.85	17.86	
pH	9.32	8.96	7.94	
TURBIDITY (NTUs)	6.02	5.9	3.76	
DISSOLVED O <sub>2</sub> (mg/L)	9.91	9.85	7.94	
TOTAL SUSPENDED SOLIDS (mg/L)	16	32	8	
<b>Los Angeles River Reach 25 West</b>		<b>12/10/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0840am to performed water monitoring sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field maintenance crew cutting last parts of vegetation by the Pacific Coast Highway bridge. Water flow was coming in fast at the upstream and due to the rains parts of the channel was filled with water. Also lots of debris and dirt were hauled from the rain which made the water not clear. The downstream TSS value of 34 is over the daily TSS limit (DTSSL) of 27.5 mg/L (25+10%). Between 0840 and 0919, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:19	9:05	8:40	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	14.24	13.73	13.43	
pH	8.53	8.07	8.28	
TURBIDITY (NTUs)	22.75	17.25	24.73	
DISSOLVED O <sub>2</sub> (mg/L)	9.98	10.03	10	
TOTAL SUSPENDED SOLIDS (mg/L)	25	24	34	
<b>Los Angeles River Reach 25 West</b>		<b>12/13/2019</b>		
LATITUDE (approx.)	33.803967	33.800967	33.790279	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0830am to performed post water monitoring and sampling at upstream, internal, and downstream points at the Los Angeles River Reach 25 West. Field crew completed hand removing vegetation at the top of the slope. Sediment burms were placed at the upstream point to divert water flow into the center of the LA River. The water level rose due to the rain from previous week. Water flow was also coming fast. Turbidity reading was slightly high at internal and downstream points because there were lots of dirt and debris flowing with the water flow. Between 0835 and 0910, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.206081	118.206024	118.206093	
ELEVATION (approx.)	6	3	3	
TIME	9:10	8:50	8:35	
SAMPLE NO.	LARR25W-1	LARR25W-2	LARR25W-3	
TEMPERATURE (°C)	14.54	14.89	14.48	
pH	8.54	8.23	8.24	
TURBIDITY (NTUs)	4.23	7.77	5.3	
DISSOLVED O <sub>2</sub> (mg/L)	10.02	10	9.8	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	12	10	
<b>Lindero Canyon Reach 38</b>		<b>10/8/2020</b>		
LATITUDE (approx.)	34.1431478	34.1432373	34.1425351	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 1030 met with Ryan Murillo from Stormwater Maintenance Hansen Yard . Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Lindero Canyon Channel. Baseline monitoring and sampling was performed two days prior of the placement of the BMPs and proposed start of cleanout operations. There were a lot of vegetations including mini branches floating at the downstream point Between 1039 and 1105, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Thursday 10/10.
LONGITUDE (approx.)	118.7639936	118.7639881	118.7640896	
ELEVATION (approx.)	819	835	836	
TIME	10:39	10:52	11:05	
SAMPLE NO.	LCYN-1	LCYN-2	LCYN-3	
TEMPERATURE (°C)	21.99	21.74	21.12	
pH	6.82	6.53	5.16	
TURBIDITY (NTUs)	1.1	1.57	2.72	
DISSOLVED O <sub>2</sub> (mg/L)	10.65	10.22	10.06	
TOTAL SUSPENDED SOLIDS (mg/L)	9	ND	55	

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<b>Lindero Canyon Reach 38</b>				<b>10/12/2020</b>
LATITUDE (approx.)	34.1431478	34.1432373	34.1425351	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0820 met with Ryan Murillo from Stormwater Maintenance Hansen Yard . Performed water quality sampling at upstream, internal, and downstream points at the Lindero Canyon Channel. The crew placed one BMP with sand bags at the downstream prior to clean out. During work operations there were a great amount vegetations floating were observed which was caused by dust from the cutting machines used to cut vegetations near the water area. For both internal and downstream, I conducted two turbidity readings because each of the points were above the twenty percent turbidity limit allowance on the first test. Garo spoke with Ryan Murillo and Baltazar Moreno, Flood Control Construction Supervisor from Stormwater Maintenance Hansen Yard and it was agreed another BMP was going to be placed around the internal point. The internal and downstream TSS values of 48 and 55 are over the daily TSS limit (DTSSL) of 46.2 mg/L (42+10%). Between 0859 and 0950, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.7639936	118.7639881	118.7640896	
ELEVATION (approx.)	819	835	836	
TIME	8:59	9:15	9:50	
SAMPLE NO.	LCYN-1	LCYN-2	LCYN-3	
TEMPERATURE (°C)	15.94	16.8	19.5	
pH	14	7.19	7.77	
TURBIDITY (NTUs)	2.19	2.1	2.34	
DISSOLVED O <sub>2</sub> (mg/L)	10.22	10.19	10.75	
TOTAL SUSPENDED SOLIDS (mg/L)	42	48	55	
<b>Lindero Canyon Reach 38</b>				<b>10/15/2020</b>
LATITUDE (approx.)	34.1431478	34.1432373	34.1425351	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0835 met with Ryan Murillo from Stormwater Maintenance Hansen Yard . I performed water quality sampling at upstream, internal, and downstream points at the Lindero Canyon Channel. The crew placed two BMPs with sand bags: One few feet past the internal point and the other at the downstream point. There were large amounts of vegetations floating on the water surface as well as larva floating under water. For both internal and downstream, I conducted two turbidity readings tests on the downstream and it was slightly high. I spoke with Ryan and he informed me of bringing a net to remove the vegetation from the water surface. Downstream turbidity reading of 4.85NTU was above the Daily Turbidity Limit of 2.14 NTU (1.78+20%). The internal and downstream TSS values of 16 and 15 are over the daily TSS limit (DTSSL) of 12.1 mg/L (11+10%). Between 0924 and 0954, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.7639936	118.7639881	118.7640896	
ELEVATION (approx.)	819	835	836	
TIME	9:24	9:39	9:54	
SAMPLE NO.	LCYN-1	LCYN-2	LCYN-3	
TEMPERATURE (°C)	19.2	21.99	21.13	
pH	7.7	7.62	5.92	
TURBIDITY (NTUs)	1.78	1.22	4.85	
DISSOLVED O <sub>2</sub> (mg/L)	10.02	10.88	10.19	
TOTAL SUSPENDED SOLIDS (mg/L)	11	16	15	
<b>Lindero Canyon Reach 38</b>				<b>10/16/2020</b>
LATITUDE (approx.)	34.1431478	34.1432373	34.1425351	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1015 met with Ryan Murillo from Stormwater Maintenance Hansen Yard . Performed water quality sampling at upstream, internal, and downstream points at the Lindero Canyon Channel. Both internal and downstream had BMPs placed however a portion of the BMPs were submerged into the water due to water absorption. Turbidity readings tests were slightly high for both internal and downstream points due to the submerged BMPs in the water, lots of vegetation, larva and some fishes. I spoke with Ryan and showed him the results. Internal and downstream turbidity reading of 2.46 and 4.69NTU were above the Daily Turbidity Limit of 1.79 NTU (1.49+20%). Between 1037 and 1107, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.7639936	118.7639881	118.7640896	
ELEVATION (approx.)	819	835	836	
TIME	10:37	10:55	11:07	
SAMPLE NO.	LCYN-1	LCYN-2	LCYN-3	
TEMPERATURE (°C)	20.99	20.05	19.78	
pH	7.2	7.3	7.6	
TURBIDITY (NTUs)	1.49	2.46	4.69	
DISSOLVED O <sub>2</sub> (mg/L)	10.37	10.18	10.2	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	ND	
<b>Lindero Canyon Reach 38</b>				<b>10/22/2020</b>
LATITUDE (approx.)	34.1431478	34.1432373	34.1425351	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 0745 to perform post water quality sampling at upstream, internal, and downstream points at the Lindero Canyon Channel. BMPs were removed from the internal and downstream points. Downstream had lots of vegetation on water surface. Between 0805 and 0825, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen.
LONGITUDE (approx.)	118.7639936	118.7639881	118.7640896	
ELEVATION (approx.)	819	835	836	
TIME	8:05	8:15	8:25	
SAMPLE NO.	LCYN-1	LCYN-2	LCYN-3	
TEMPERATURE (°C)	19.79	17.99	17	
pH	14	7.44	5.76	
TURBIDITY (NTUs)	6.97	6.18	7.06	
DISSOLVED O <sub>2</sub> (mg/L)	10.44	10.01	9.94	
TOTAL SUSPENDED SOLIDS (mg/L)	21	21	22	



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<b>Lower Shields Debris Basin</b>		<b>3/5/2020</b>		
LATITUDE (approx.)	34.241533	34.239938	34.238923	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.240272	118.240496	118.240006	Chris Cunningham performed monitoring and sampling for Lower Shields DB, on 3/5/20 . Upstream, downstream, and internal sampling was conducted between 0700 and 0730.
ELEVATION (approx.)	2134	2049	2009	
TIME	7:30	7:00	7:15	
SAMPLE NO.	LSDB-1	LSDB-2	LSDB-3	
TEMPERATURE (°C)	9.1	9.93	9.02	
pH	8.31	8.07	8.52	
TURBIDITY (NTUs)	0.42	0.42	0.37	
DISSOLVED O <sub>2</sub> (mg/L)	7.82	6.59	5.07	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	ND	
<b>Lower Shields Debris Basin</b>		<b>3/9/2020</b>		
LATITUDE (approx.)	34.241533	34.239938	34.238923	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.240272	118.240496	118.240006	Chris Cunningham performed monitoring and sampling for Lower Shields DB, on 3/9/20 . Internal and downstream turbidity readings of 2.76 and 3.1NTU were above the Daily Turbidity Limit of 0.11 NTU (0.09+20%). The internal TSS value of 14 is over the daily TSS limit (DTSSL) of ND mg/L. Upstream, downstream, and internal sampling was conducted between 0945 and 1015.
ELEVATION (approx.)	2134	2049	2009	
TIME	9:45	10:00	10:15	
SAMPLE NO.	LSDB-1	LSDB-2	LSDB-3	
TEMPERATURE (°C)	10.42	10.02	11.27	
pH	9.31	8.76	9.48	
TURBIDITY (NTUs)	0.09	2.76	3.1	
DISSOLVED O <sub>2</sub> (mg/L)	7.49	3.46	5.59	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	14	ND	
<b>Lower Shields Debris Basin</b>		<b>3/12/2020</b>		
LATITUDE (approx.)	34.241533	34.239938	34.238923	Post-Work WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.240272	118.240496	118.240006	Chris Cunningham performed post work monitoring and sampling was performed for Lower Shields DB, on 3/12/20 . Upstream, downstream, and internal sampling was conducted between 0830 and 0855.
ELEVATION (approx.)	2134	2049	2009	
TIME	8:30	8:45	8:55	
SAMPLE NO.	LSDB-1	LSDB-2	LSDB-3	
TEMPERATURE (°C)	11.48	10.37	10.46	
pH	9.47	8.88	9.51	
TURBIDITY (NTUs)	0.26	0.69	0.67	
DISSOLVED O <sub>2</sub> (mg/L)	7.65	2.31	3.99	
TOTAL SUSPENDED SOLIDS (mg/L)	9	ND	7	
<b>Pacoima Wash Reach 15</b>		<b>9/24/2019</b>		
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	Garo Avoyan arrived on the jobsite at 12:20pm met with Maurillio Torres from Stormwater Maintenance Hansen Yard . Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Pacoima Wash Reach 15. Upstream sampling point had lots of vegetation flowing on the surface of the water. The downstream had water flow on the right hand side facing north of the channel flowing along the east side slope wall. Baseline monitoring and sampling was performed two days prior of the placement of the BMPs and proposed start of cleanout operations. Between 1238 and 1310, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Thursday 09/25.
ELEVATION (approx.)	773	795	819	
TIME	13:10	12:49	12:38	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	27.56	25.15	26.86	
pH	7.89	7.96	7.43	
TURBIDITY (NTUs)	13.48	4.82	2.82	
DISSOLVED O <sub>2</sub> (mg/L)	9.91	9.4	9.57	
TOTAL SUSPENDED SOLIDS (mg/L)	31	10	5	

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<b>Pacoima Wash Reach 15</b>				<b>9/27/2019</b>
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Pacoima wash reach 15, on 09/27/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0930 and 01000. Internal and downstream turbidity readings of 5.72 and 3.85NTU were above the Daily Turbidity Limit of 3.35 NTU (2.79+20%). The internal TSS value of 7 is over the daily TSS limit (DTSSL) of 5.5 mg/L (5+10%).
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	
ELEVATION (approx.)	773	795	819	
TIME	9:30	9:15	10:00	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	20.13	20.02	20.42	
pH	9.15	8.32	8.79	
TURBIDITY (NTUs)	2.79	5.72	3.85	
DISSOLVED O <sub>2</sub> (mg/L)	4.33	2.32	7.34	
TOTAL SUSPENDED SOLIDS (mg/L)	5	7	ND	
<b>Pacoima Wash Reach 15</b>				<b>10/2/2019</b>
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Pacoima Wash, on 10/2/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 0745 and 0815. Internal turbidity readings of 74.8 NTU was above the Daily Turbidity Limit of 2.36 NTU (1.79+20%). The internal TSS value of 136 is over the daily TSS limit (DTSSL) of 5.5 mg/L (5+10%).
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	
ELEVATION (approx.)	773	795	819	
TIME	7:45	8:00	8:15	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	12.29	14.1	13.22	
pH	8.62	8.77	8.45	
TURBIDITY (NTUs)	1.97	74.8	4.64	
DISSOLVED O <sub>2</sub> (mg/L)	1.97	7.48	4.64	
TOTAL SUSPENDED SOLIDS (mg/L)	5	136	5	
<b>Pacoima Wash Reach 15</b>				<b>10/3/2019</b>
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Pacoima Wash, on 10/3/19 (Thursday). Upstream, downstream, and internal sampling was conducted between 0800 and 0830. Internal and downstream turbidity readings of 11.4 and 5.84 NTU were above the Daily Turbidity Limit of 3.42 NTU (2.85+20%). The internal TSS value of 11 is over the daily TSS limit (DTSSL) of 8.8 mg/L (8+10%).
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	
ELEVATION (approx.)	773	795	819	
TIME	8:00	8:15	8:30	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	13.22	14.72	14.15	
pH	8.51	8.39	8.5	
TURBIDITY (NTUs)	2.85	11.4	5.84	
DISSOLVED O <sub>2</sub> (mg/L)	8.11	7.42	3.77	
TOTAL SUSPENDED SOLIDS (mg/L)	8	11	6	
<b>Pacoima Wash Reach 15</b>				<b>10/4/2019</b>
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Pacoima Wash, on 10/4/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0730 and 0800. Internal and downstream turbidity readings of 5.56 and 4.55 NTU were above the Daily Turbidity Limit of 2.18 NTU (1.82+20%).
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	
ELEVATION (approx.)	773	795	819	
TIME	7:30	7:45	8:00	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	12.78	14.14	13.44	
pH	8.49	8.31	8.3	
TURBIDITY (NTUs)	1.82	5.56	4.55	
DISSOLVED O <sub>2</sub> (mg/L)	7.55	5.73	7.62	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	ND	

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<b>Pacoima Wash Reach 15</b>		<b>10/10/2019</b>		
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Pacoima Wash, on 10/10/19 (Thursday). Upstream, downstream, and internal sampling was conducted between 0730 and 0800. Internal and downstream turbidity readings of 3.49 and 2.63 NTU were above the Daily Turbidity Limit of 2.60 NTU (2.17+20%). The internal TSS value of 6 is over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	
ELEVATION (approx.)	773	795	819	
TIME	7:30	7:45	8:00	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	15.89	16.21	15.66	
pH	8.38	9.65	7.65	
TURBIDITY (NTUs)	2.17	3.49	2.63	
DISSOLVED O <sub>2</sub> (mg/L)	3.67	7.39	7.58	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	6	ND	

<b>Pacoima Wash Reach 15</b>		<b>10/15/2019</b>		
LATITUDE (approx.)	34.2146316	34.2177344	34.2274846	Post-Work WQ Monitoring & Sampling Results  Chris Cunningham performed post work monitoring and sampling for Pacoima Wash, on 10/15/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0900 and 0930. Internal turbidity reading of 11.3 NTU was above the Daily Turbidity Limit of 5.83 NTU (4.86+20%).
LONGITUDE (approx.)	118.4582929	118.4589919	118.4594398	
ELEVATION (approx.)	773	795	819	
TIME	9:00	9:15	9:30	
SAMPLE NO.	PWR15-1	PWR15-2	PWR15-3	
TEMPERATURE (°C)	13.46	12.91	13.69	
pH	6.25	4.88	8.58	
TURBIDITY (NTUs)	4.86	11.3	1.7	
DISSOLVED O <sub>2</sub> (mg/L)	8.2	7.81	5.94	
TOTAL SUSPENDED SOLIDS (mg/L)	14	15	ND	

<b>Project 74 Reach 26</b>		<b>9/10/2019</b>		
LATITUDE (approx.)				Pre-Clearing/Baseline  Chris Cunningham arrived on site to perform water quality sampling during channel cleanout. No water flow through downstream location. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>Project 74 Reach 26</b>		<b>9/13/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham arrived on site to perform water quality sampling during channel cleanout. No water flow through downstream location. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>Project 74 Reach 26</b>				<b>9/16/2019</b>
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham arrived on site to perform water quality sampling during channel cleanout. No water flow through downstream location. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Project 74 Reach 26</b>				<b>9/17/2019</b>
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham arrived on site to perform water quality sampling during channel cleanout. No water flow through downstream location. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Project 74 Reach 26</b>				<b>9/19/2019</b>
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1010 to perform water quality sampling during channel vegetation cleanout. He entered through the gate opening from the roadway 100 feet e/o Vermont Ave. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garo contacted Mr. Anthony Dickerson of Stormwater Maintenance Westchester Yard via cell phone and informed him.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Project 74 Reach 26</b>				<b>9/20/2019</b>
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0950 to perform water quality sampling during channel vegetation cleanout. He entered through the gate opening from the roadway 100 feet e/o Vermont Ave. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garo contacted Mr. Anthony Dickerson of Stormwater Maintenance Westchester Yard via cell phone and informed him.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Project 74 Reach 26</b>				<b>9/21/2019</b>
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1000 to perform water quality sampling during channel vegetation cleanout. He entered through the gate opening from the roadway 100 feet
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				



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TEMPERATURE (°C)				e/o Vermont Ave. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garo contacted Mr. Anthony Dickerson of Stormwater Maintenance Westchester Yard via cell phone and informed him.
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>Project 74 Reach 26</b>		<b>9/21/2019</b>		
LATITUDE (approx.)				Post-Work WQ Monitoring & Sampling Results
LONGITUDE (approx.)				Chris Cunningham arrived on site to perform post work water quality sampling during channel cleanout. No water flow through downstream location. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>Rustic Canyon</b>		<b>9/30/2019</b>		
LATITUDE (approx.)	34.044243	34.039082	34.035511	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.512676	118.516277	118.517723	Chris Cunningham performed baseline monitoring and sampling for Rustic Canyon, on 09/30/19 (Monday). Upstream, downstream, and internal sampling was conducted between 1230 and 1300
ELEVATION (approx.)	170	115	75	
TIME	12:45	9:38	10:00	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	18.94	19.38	18.5	
pH	8.25	8.36	8.81	
TURBIDITY (NTUs)	1.33	1.22	1.15	
DISSOLVED O <sub>2</sub> (mg/L)	7.36	8.03	4.53	
TOTAL SUSPENDED SOLIDS (mg/L)	28	29	ND	

<b>Rustic Canyon</b>		<b>11/7/2019</b>		
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.512676	118.516277	118.517723	Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 11/7/19 (Thursday). Upstream, downstream, and internal sampling was conducted between 1015 and 1100. Internal and downstream turbidity readings of 4.01 and 7.04 NTU were above the Daily Turbidity Limit of 2.65 NTU (2.21+20%). The internal TSS value of 74 is over the daily TSS limit (DTSSL) of 38.5 mg/L (35+10%).
ELEVATION (approx.)	170	115	75	
TIME	10:15	10:30	11:00	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	16.33	17.37	16.65	
pH	9.04	8.11	9.19	
TURBIDITY (NTUs)	2.21	4.01	7.04	
DISSOLVED O <sub>2</sub> (mg/L)	4.76	7.51	7.28	
TOTAL SUSPENDED SOLIDS (mg/L)	35	74	6	

<b>Rustic Canyon</b>		<b>11/12/2019</b>		
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.512676	118.516277	118.517723	Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 11/12/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0945 and 1030. Internal turbidity reading of 4.09 NTU was above the Daily Turbidity Limit of 0.43 NTU (0.36+20%). The internal TSS value of 724 is over the daily TSS limit (DTSSL) of 28.6 mg/L (26+10%).
ELEVATION (approx.)	170	115	75	
TIME	9:45	10:00	10:30	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	15.8	16.71	16.02	
pH	8.78	7.71	9.29	
TURBIDITY (NTUs)	0.36	4.09	0.15	
DISSOLVED O <sub>2</sub> (mg/L)	7.47	7.33	6.83	
TOTAL SUSPENDED SOLIDS (mg/L)	26	724	ND	

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<b>Rustic Canyon</b>				<b>11/13/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 11/13/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 0800 and 0900. Internal turbidity reading of 4.07 NTU was above the Daily Turbidity Limit of 0.47 NTU (0.39+20%). The internal TSS value of 624 is over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	8:00	8:15	9:00	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	14.97	15.6	14.99	
pH	8.96	7.5	9.12	
TURBIDITY (NTUs)	0.39	4.07	0.43	
DISSOLVED O <sub>2</sub> (mg/L)	8.16	3.42	7.87	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	624	ND	
<b>Rustic Canyon</b>				<b>11/18/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 11/18/19. Upstream, downstream, and internal sampling was conducted between 0800 and 0845. Internal turbidity reading of 7.83 NTU was above the Daily Turbidity Limit of 0.82 NTU (0.68+20%). The internal TSS value of 2480 is over the daily TSS limit (DTSSL) of 6.6 mg/L (6+10%).
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	8:45	8:30	8:00	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	15.1	15.3	15.86	
pH	8.73	7.72	9.06	
TURBIDITY (NTUs)	0.68	7.83	0.05	
DISSOLVED O <sub>2</sub> (mg/L)	3.47	0.87	4.11	
TOTAL SUSPENDED SOLIDS (mg/L)	6	2480	ND	
<b>Rustic Canyon</b>				<b>11/19/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 11/19/19. Upstream, downstream, and internal sampling was conducted between 0730 and 0810. Internal turbidity reading of 20.7 NTU was above the Daily Turbidity Limit of 0.78 NTU (0.65+20%). The internal and downstream TSS values of 462 and 5 are over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	8:10	8:00	7:30	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	14.12	14.24	14.74	
pH	8.75	7.71	9.01	
TURBIDITY (NTUs)	0.65	20.7	0.4	
DISSOLVED O <sub>2</sub> (mg/L)	7.37	0.94	5.59	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	462	5	
<b>Rustic Canyon</b>				<b>11/21/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 11/21/19. Upstream, downstream, and internal sampling was conducted between 0730 and 0810.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	8:15	8:30	8:00	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	12.3	12.02	13.39	
pH	8.53	8.4	8.91	
TURBIDITY (NTUs)	0.32	0.08	0.1	
DISSOLVED O <sub>2</sub> (mg/L)	2.76	4.88	3.64	
TOTAL SUSPENDED SOLIDS (mg/L)	8	ND	ND	

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<b>Rustic Canyon</b>				<b>12/2/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 12/2/19. Upstream, downstream, and internal sampling was conducted between 1140 and 1215. Internal and downstream turbidity readings of 3.18 and 3.26 NTU were above the Daily Turbidity Limit of 0.26 NTU (0.22+20%).
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	11:40	12:00	12:15	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	13.53	14.77	14.42	
pH	8.69	8.61	9.02	
TURBIDITY (NTUs)	0.22	3.18	3.26	
DISSOLVED O <sub>2</sub> (mg/L)	4.37	4.17	4.36	
TOTAL SUSPENDED SOLIDS (mg/L)	8	7	5	
<b>Rustic Canyon</b>				<b>12/10/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 12/10/19. Upstream, downstream, and internal sampling was conducted between 0730 and 0800.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	7:45	7:30	8:00	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	10.34	10.73	11.53	
pH	8.58	8.49	8.91	
TURBIDITY (NTUs)	0.66	0.54	0.72	
DISSOLVED O <sub>2</sub> (mg/L)	7.67	3.78	4.93	
TOTAL SUSPENDED SOLIDS (mg/L)	5	ND	ND	
<b>Rustic Canyon</b>				<b>12/16/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 12/16/19. Upstream, downstream, and internal sampling was conducted between 0800 and 0845.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	8:00	8:15	8:45	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	9.17	9.36	10.45	
pH	8.63	8.57	8.95	
TURBIDITY (NTUs)	0.66	0.44	0.49	
DISSOLVED O <sub>2</sub> (mg/L)	7.81	7.2	4.75	
TOTAL SUSPENDED SOLIDS (mg/L)	5	9	5	
<b>Rustic Canyon</b>				<b>12/24/2019</b>
LATITUDE (approx.)	34.044243	34.039082	34.035511	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Rustic Canyon, on 12/24/19. Upstream, downstream, and internal sampling was conducted between 0730 and 0815.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	7:30	7:45	8:15	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	8.72	9.12	9.96	
pH	8.59	8.49	8.92	
TURBIDITY (NTUs)	0.56	0.39	0.66	
DISSOLVED O <sub>2</sub> (mg/L)	7.39	4.37	5.64	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	ND	

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<b>Rustic Canyon</b>		<b>12/31/2019</b>		
LATITUDE (approx.)	34.04243	34.039082	34.035511	Post-Work WQ Monitoring & Sampling Results  Chris Cunningham performed post work monitoring and sampling for Rustic Canyon, on 12/31/19. Upstream, downstream, and internal sampling was conducted between 0715 and 0745.
LONGITUDE (approx.)	118.512676	118.516277	118.517723	
ELEVATION (approx.)	170	115	75	
TIME	7:15	7:30	7:45	
SAMPLE NO.	RCYNC-1	RCYNC-2	RCYNC-3	
TEMPERATURE (°C)	10.34	10.42	11.47	
pH	8.73	8.75	9.02	
TURBIDITY (NTUs)	0.86	0.35	0.6	
DISSOLVED O <sub>2</sub> (mg/L)	3.62	4.45	4.6	
TOTAL SUSPENDED SOLIDS (mg/L)	6	ND	6	

<b>San Gabriel River Reach 115</b>		<b>10/2/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	Pre-Clearing/Baseline  Chris Cunningham performed baseline monitoring and sampling for San Gabriel River Reach 115, on 10/2/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 1115 and 1145.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	11:15	11:30	11:45	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	22.81	22.92	23.09	
pH	7.99	8.12	8.18	
TURBIDITY (NTUs)	4.14	3.18	3.48	
DISSOLVED O <sub>2</sub> (mg/L)	2.65	2.88	2.52	
TOTAL SUSPENDED SOLIDS (mg/L)	7	12	6	

<b>San Gabriel River Reach 115</b>		<b>10/4/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 10/4/19 (Friday). Upstream, downstream, and internal sampling was conducted between 1000 and 1030.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	10:00	10:15	10:30	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	20.78	20.75	20.88	
pH	8.07	8.21	8.24	
TURBIDITY (NTUs)	7.22	3.21	2.72	
DISSOLVED O <sub>2</sub> (mg/L)	6.25	2.85	2.29	
TOTAL SUSPENDED SOLIDS (mg/L)	35	ND	34	

<b>San Gabriel River Reach 115</b>		<b>10/23/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 10/23/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 0900 and 0945.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	9:00	9:20	9:45	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	19.95	20.46	20.36	
pH	7.75	8.19	9.03	
TURBIDITY (NTUs)	3.05	2.89	2.5	
DISSOLVED O <sub>2</sub> (mg/L)	3	2.94	5.13	
TOTAL SUSPENDED SOLIDS (mg/L)	39	29	30	



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<b>San Gabriel River Reach 115</b>		<b>11/5/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 11/5/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 1000 and 1100. Internal turbidity reading of 13.2 NTU was above the Daily Turbidity Limit of 3.49 NTU (2.91+20%). The internal and downstream TSS values of 55 and 26 were over the daily TSS limit (DTSSL) of 20.9 mg/L (19+10%).
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	10:00	10:30	11:00	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	17.71	18.72	19.3	
pH	8.56	8.38	8.98	
TURBIDITY (NTUs)	2.91	13.2	3.15	
DISSOLVED O <sub>2</sub> (mg/L)	2.91	2.53	3.06	
TOTAL SUSPENDED SOLIDS (mg/L)	19	55	26	
<b>San Gabriel River Reach 115</b>		<b>11/13/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 11/13/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 1045 and 1200.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	10:45	11:30	12:00	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	20.62	20.52	20.3	
pH	9.21	8.51	8.6	
TURBIDITY (NTUs)	1.78	1.18	0.92	
DISSOLVED O <sub>2</sub> (mg/L)	4.92	3.56	2.78	
TOTAL SUSPENDED SOLIDS (mg/L)	42	18	11	
<b>San Gabriel River Reach 115</b>		<b>11/22/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 11/22/19. Upstream, downstream, and internal sampling was conducted between 845 and 915. Internal and downstream turbidity readings of 1.3 and 0.79 NTU were above the Daily Turbidity Limit of 0.74 NTU (0.62+20%). The internal and downstream TSS values of 54 and 50 are over the daily TSS limit (DTSSL) of 16.5 mg/L (15+10%).
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	8:45	9:00	9:15	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	15.92	16.55	16.85	
pH	8.41	8.36	8.61	
TURBIDITY (NTUs)	0.62	1.3	0.79	
DISSOLVED O <sub>2</sub> (mg/L)	2.53	1.69	3.81	
TOTAL SUSPENDED SOLIDS (mg/L)	15	54	50	
<b>San Gabriel River Reach 115</b>		<b>11/25/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 11/25/19. Upstream, downstream, and internal sampling was conducted between 1000 and 1045.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	10:00	10:30	10:45	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	17.62	17.79	18.13	
pH	8.48	8.38	8.55	
TURBIDITY (NTUs)	0.7	0.8	0.36	
DISSOLVED O <sub>2</sub> (mg/L)	3.43	2.13	2.82	
TOTAL SUSPENDED SOLIDS (mg/L)	37	26	20	

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<b>San Gabriel River Reach 115</b>		<b>12/3/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 12/3/19. Upstream, downstream, and internal sampling was conducted between 0915 and 1000. The internal and downstream TSS values of 13 and 19 are over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	9:15	9:30	10:00	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	15.25	15.69	16.12	
pH	8.61	8.57	8.52	
TURBIDITY (NTUs)	0.58	0.62	0.7	
DISSOLVED O <sub>2</sub> (mg/L)	6.41	2.8	2.33	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	13	19	

<b>San Gabriel River Reach 115</b>		<b>12/9/2019</b>		
LATITUDE (approx.)	33.77496	33.75991	33.74725	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Gabriel River Reach 115, on 12/9/19. Upstream, downstream, and internal sampling was conducted between 1100 and 1145.
LONGITUDE (approx.)	118.09812	118.09857	118.11368	
ELEVATION (approx.)	-4	-6	-7	
TIME	11:00	11:45	11:20	
SAMPLE NO.	SGRR115W-1	SGRR115W-2	SGRR115W-3	
TEMPERATURE (°C)	17.33	18.03	17.78	
pH	8.44	8.5	8.48	
TURBIDITY (NTUs)	9.02	8.55	10.08	
DISSOLVED O <sub>2</sub> (mg/L)	3.88	7.17	3.4	
TOTAL SUSPENDED SOLIDS (mg/L)	39	14	33	

<b>San Gabriel River Reach 43</b>		<b>9/14/2019</b>		
LATITUDE (approx.)				Pre-Clearing/Baseline  Garo Avoyan arrived on site about 0950 and met with Jorge Gudino and Stormwater Maintenance Rio Hondo and San Gabriel Spreading Grounds Yard to evaluate surface water flow prior to initiating baseline monitoring and sampling. Reach extends south to Beverly Blvd. This location was dry. Baseline water quality monitoring and sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. From a water quality standpoint, project is "good to go" for start on Monday 09/16.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>San Gabriel River Reach 43</b>		<b>9/20/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1250 and met with Jorge Gudino and Stormwater Maintenance Rio Hondo and San Gabriel Spreading Grounds Yard to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>San Gabriel River Reach 43</b>		<b>9/26/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0844 to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 43</b>		<b>10/4/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1015 to evaluate surface water flow prior water sampling and monitoring. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). I notified you via phone call. GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 43</b>		<b>10/10/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0910 to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 43</b>		<b>10/17/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0825 to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>San Gabriel River Reach 43</b>		<b>10/24/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0215pm to evaluate surface water flow prior water sampling and monitoring. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 43</b>		<b>10/31/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1043am to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 43</b>		<b>11/7/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0907am to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 43</b>		<b>11/14/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0800am to evaluate surface water flow prior water sampling and monitoring. Reach extends south to Beverly Blvd. This location was dry. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				



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<b>San Gabriel River Reach 43</b>		<b>12/2/2019</b>		
LATITUDE (approx.)				Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0817am to perform post monitoring and water sampling at the San Gabriel River Reach 43 Channel. This location had water flow however the flow was very thin which made it impossible to sample for testing. Water sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB).
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>San Gabriel River Reach 44</b>		<b>9/14/2019</b>		
LATITUDE (approx.)				Pre-Clearing/Baseline  Garo Avoyan arrived on site about 0930 and met Jorge Gudino and Stormwater Maintenance Rio Hondo and San Gabriel Spreading Grounds Yard to evaluate surface water flow prior to initiating baseline monitoring and sampling. This location was dry. Baseline water quality monitoring and sampling not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. From a water quality standpoint, project is "good to go" for start on Monday 09/16.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>San Gabriel River Reach 44</b>		<b>9/20/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1305 and met Jorge Gudino and Stormwater Maintenance Rio Hondo and San Gabriel Spreading Grounds Yard to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

<b>San Gabriel River Reach 44</b>		<b>9/26/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 910 to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

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<b>San Gabriel River Reach 44</b>		<b>10/4/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 1033 to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). I notified you via phone call. GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 44</b>		<b>10/10/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0845 to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 44</b>		<b>10/17/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0840 to evaluate surface water flow prior to Water quality sampling. This location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				
<b>San Gabriel River Reach 44</b>		<b>10/24/2019</b>		
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on site about 0146pm to evaluate surface water flow prior to Water quality sampling. This location had water flow however this was from the pump station opening and outlet and releasing water. This does not constitute grounds for water sampling. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions.
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				



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<b>San Jose Creek Concrete Lined Channel 10/25/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	Pre-Clearing/Baseline
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 10/25/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0800 and 0900.
ELEVATION (approx.)	344	269	244	
TIME	8:00	8:30	9:00	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	16.49	15.71	15.15	
pH	8.42	9.66	9.22	
TURBIDITY (NTUs)	5.24	4.16	11.6	
DISSOLVED O <sub>2</sub> (mg/L)	2.96	6.24	3.78	
TOTAL SUSPENDED SOLIDS (mg/L)	17	15	26	
<b>San Jose Creek Concrete Lined Channel 10/26/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 10/26/19 (Saturday). Upstream, downstream, and internal sampling was conducted between 0800 and 0900.
ELEVATION (approx.)	344	269	244	
TIME	8:00	8:30	9:00	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	15.19	14.46	14.58	
pH	8.27	10.3	9.27	
TURBIDITY (NTUs)	4.06	3.98	3.71	
DISSOLVED O <sub>2</sub> (mg/L)	4.05	3.98	3.71	
TOTAL SUSPENDED SOLIDS (mg/L)	75	49	60	
<b>San Jose Creek Concrete Lined Channel 10/28/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 10/28/19 (Monday). Upstream, downstream, and internal sampling was conducted between 0900 and 0945.
ELEVATION (approx.)	344	269	244	
TIME	9:00	9:30	9:45	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	13.05	13.05	12.93	
pH	8.77	10.21	10	
TURBIDITY (NTUs)	6.19	5.55	4.49	
DISSOLVED O <sub>2</sub> (mg/L)	5.3	7.3	5.76	
TOTAL SUSPENDED SOLIDS (mg/L)	29	17	8	
<b>San Jose Creek Concrete Lined Channel 10/29/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 10/29/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0800 and 0900. Internal and downstream turbidity readings of 7.83 and 8.64 NTU were above the Daily Turbidity Limit of 6.02 NTU (5.02+20%). The downstream TSS value of 25 was over the daily TSS limit (DTSSL) of 22 mg/L (20+10%).
ELEVATION (approx.)	344	269	244	
TIME	8:00	8:30	8:45	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	10.45	10.34	10.51	
pH	9.57	9.96	9.04	
TURBIDITY (NTUs)	5.02	7.83	8.64	
DISSOLVED O <sub>2</sub> (mg/L)	3.97	5	8.02	
TOTAL SUSPENDED SOLIDS (mg/L)	20	16	25	



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<b>San Jose Creek Concrete Lined Channel</b>				
<b>10/31/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 10/31/19 (Thursday). Upstream, downstream, and internal sampling was conducted between 0800 and 0930. The internal and downstream TSS values of 17 and 37 were over the daily TSS limit (DTSSL) of 13.2 mg/L (12+10%).
LONGITUDE (approx.)	117.926368	117.979166	118.005701	
ELEVATION (approx.)	344	269	244	
TIME	8:00	8:30	9:00	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	7.27	6.2	6.32	
pH	4.9	10.11	9.35	
TURBIDITY (NTUs)	5.66	6.04	5.16	
DISSOLVED O <sub>2</sub> (mg/L)	3.47	3.65	3.53	
TOTAL SUSPENDED SOLIDS (mg/L)	12	17	37	
<b>San Jose Creek Concrete Lined Channel</b>				
<b>11/4/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 11/4/19 (Monday). Upstream, downstream, and internal sampling was conducted between 0730 and 0830. Internal and downstream turbidity readings of 21 and 4.51 NTU were above the Daily Turbidity Limit of 2.47 NTU (2.06+20%). The internal and downstream TSS values of 152 and 15 were over the daily TSS limit (DTSSL) of 7.7 mg/L (7+10%).
LONGITUDE (approx.)	117.926368	117.979166	118.005701	
ELEVATION (approx.)	344	269	244	
TIME	7:30	8:00	8:30	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	11.14	10.83	10.7	
pH	8.67	9.84	8.98	
TURBIDITY (NTUs)	2.06	21	4.51	
DISSOLVED O <sub>2</sub> (mg/L)	6.43	8.09	5.39	
TOTAL SUSPENDED SOLIDS (mg/L)	7	152	15	
<b>San Jose Creek Concrete Lined Channel</b>				
<b>11/5/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 11/5/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 0800 and 0900. Internal and downstream turbidity readings of 3.98 and 5.89 NTU were above the Daily Turbidity Limit of 2.66 NTU (2.22+20%). The internal and downstream TSS values of 15 and 20 were over the daily TSS limit (DTSSL) of 5.5 mg/L (5+10%).
LONGITUDE (approx.)	117.926368	117.979166	118.005701	
ELEVATION (approx.)	344	269	244	
TIME	8:00	8:30	9:00	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	11.95	12.25	12.65	
pH	10.15	9.63	9.65	
TURBIDITY (NTUs)	2.22	3.98	5.89	
DISSOLVED O <sub>2</sub> (mg/L)	8.85	7.5	7.57	
TOTAL SUSPENDED SOLIDS (mg/L)	5	15	20	
<b>San Jose Creek Concrete Lined Channel</b>				
<b>11/6/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 11/6/19 (Wednesday). Upstream, downstream, and internal sampling was conducted between 0845 and 0930.
LONGITUDE (approx.)	117.926368	117.979166	118.005701	
ELEVATION (approx.)	344	269	244	
TIME	8:45	9:15	9:30	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	14.95	15.57	15.47	
pH	10.76	10	9.46	
TURBIDITY (NTUs)	2.75	3.22	2.79	
DISSOLVED O <sub>2</sub> (mg/L)	7.68	8.28	7.28	
TOTAL SUSPENDED SOLIDS (mg/L)	12	8	12	

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<b>San Jose Creek Concrete Lined Channel</b>				
<b>11/7/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 11/7/19 (Thursday). Upstream, downstream, and internal sampling was conducted between 0630 and 0730.
ELEVATION (approx.)	344	269	244	
TIME	6:30	7:00	7:30	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	15.04	15.05	14.9	
pH	8.86	9.18	9.22	
TURBIDITY (NTUs)	3.37	3.09	3.5	
DISSOLVED O <sub>2</sub> (mg/L)	3.1	3.01	2.55	
TOTAL SUSPENDED SOLIDS (mg/L)	10	10	10	
<b>San Jose Creek Concrete Lined Channel</b>				
<b>11/8/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 11/8/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0630 and 0730.
ELEVATION (approx.)	344	269	244	
TIME	6:30	7:00	7:30	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	12.51	12.45	12.46	
pH	8.94	9.09	8.84	
TURBIDITY (NTUs)	2.79	3.34	3.32	
DISSOLVED O <sub>2</sub> (mg/L)	3.42	3.29	2.64	
TOTAL SUSPENDED SOLIDS (mg/L)	13	ND	ND	
<b>San Jose Creek Concrete Lined Channel</b>				
<b>11/19/2019</b>				
LATITUDE (approx.)	34.008152	34.025069	34.032439	Post-Work WQ Monitoring & Sampling Results
LONGITUDE (approx.)	117.926368	117.979166	118.005701	Chris Cunningham performed post work monitoring and sampling for SAN JOSE CREEK CONC. LINED CHANNEL, on 11/8/19 (Friday). Upstream, downstream, and internal sampling was conducted between 0630 and 0730.
ELEVATION (approx.)	344	269	244	
TIME	10:00	10:30	10:45	
SAMPLE NO.	SJCLC-1	SJCLC-2	SJCLC-3	
TEMPERATURE (°C)	17.4	17.93	17.76	
pH	9.59	9.87	9.78	
TURBIDITY (NTUs)	3.96	9.44	3.29	
DISSOLVED O <sub>2</sub> (mg/L)	10.08	8.06	7.41	
TOTAL SUSPENDED SOLIDS (mg/L)	27	26	15	
<b>San Jose Creek Reach 42</b>				
<b>1/3/2020</b>				
LATITUDE (approx.)	34.0325436	34.032474	34.032311	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.005706	118.007214	118.00824	Chris Cunningham performed baseline monitoring and sampling for San Jose Creek, on 1/3/20 . Upstream, downstream, and internal sampling was conducted between 0700 and 0745.
ELEVATION (approx.)	243	242	238	
TIME	7:00	7:20	7:45	
SAMPLE NO.	SJCR42-1	SJCR42-2	SJCR42-3	
TEMPERATURE (°C)	7.93	7.72	7.87	
pH	9.59	9.87	9.78	
TURBIDITY (NTUs)	0.26	0.05	0.27	
DISSOLVED O <sub>2</sub> (mg/L)	3.38	3.15	3.31	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	ND	

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<b>San Jose Creek Reach 42</b>				<b>1/7/2020</b>
LATITUDE (approx.)	34.0325436	34.032474	34.032311	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Jose Creek, on 1/7/20 . Upstream, downstream, and internal sampling was conducted between 0700 and 0745. The internal and downstream TSS values of 6 and 5 were over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.005706	118.007214	118.00824	
ELEVATION (approx.)	243	242	238	
TIME	7:00	7:20	7:45	
SAMPLE NO.	SJCR42-1	SJCR42-2	SJCR42-3	
TEMPERATURE (°C)	6.93	6.51	6.46	
pH	8.97	8.95	8.93	
TURBIDITY (NTUs)	0.19	0.03	0	
DISSOLVED O <sub>2</sub> (mg/L)	3.03	7.37	3.01	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	6	5	
<b>San Jose Creek Reach 42</b>				<b>1/8/2020</b>
LATITUDE (approx.)	34.0325436	34.032474	34.032311	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Jose Creek, on 1/7/20 . Upstream, downstream, and internal sampling was conducted between 0700 and 0745. The downstream TSS value of 9 was over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.005706	118.007214	118.00824	
ELEVATION (approx.)	243	242	238	
TIME	7:00	7:20	7:45	
SAMPLE NO.	SJCR42-1	SJCR42-2	SJCR42-3	
TEMPERATURE (°C)	7.83	7.37	7.32	
pH	9.04	8.99	8.96	
TURBIDITY (NTUs)	0.14	0.15	0.12	
DISSOLVED O <sub>2</sub> (mg/L)	3.09	3.79	2.49	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	9	
<b>San Jose Creek Reach 42</b>				<b>1/9/2020</b>
LATITUDE (approx.)	34.0325436	34.032474	34.032311	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Jose Creek, on 1/9/20 . Upstream, downstream, and internal sampling was conducted between 0700 and 0745. The internal TSS value of 3 was over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.005706	118.007214	118.00824	
ELEVATION (approx.)	243	242	238	
TIME	7:30	7:15	7:00	
SAMPLE NO.	SJCR42-1	SJCR42-2	SJCR42-3	
TEMPERATURE (°C)	9.03	8.97	8.99	
pH	9.03	8.92	8.87	
TURBIDITY (NTUs)	0.27	0.04	0.15	
DISSOLVED O <sub>2</sub> (mg/L)	4.1	3.71	3.01	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	3	ND	
<b>San Jose Creek Reach 42</b>				<b>1/10/2020</b>
LATITUDE (approx.)	34.0325436	34.032474	34.032311	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for San Jose Creek, on 1/10/20 . Upstream, downstream, and internal sampling was conducted between 0630 and 0700.
LONGITUDE (approx.)	118.005706	118.007214	118.00824	
ELEVATION (approx.)	243	242	238	
TIME	7:00	6:45	6:30	
SAMPLE NO.	SJCR42-1	SJCR42-2	SJCR42-3	
TEMPERATURE (°C)	6.16	6.06	6.12	
pH	9.04	9	8.96	
TURBIDITY (NTUs)	0.19	0.07	0.12	
DISSOLVED O <sub>2</sub> (mg/L)	3.63	4.07	2.98	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	ND	ND	

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<b>San Jose Creek Reach 42</b>		<b>1/15/2020</b>		
LATITUDE (approx.)	34.0325436	34.032474	34.032311	Post-Work WQ Monitoring & Sampling Results  Chris Cunningham performed post work monitoring and sampling for San Jose Creek, on 1/15/20 . Upstream, downstream, and internal sampling was conducted between 1200 and 1230.
LONGITUDE (approx.)	118.005706	118.007214	118.00824	
ELEVATION (approx.)	243	242	238	
TIME	12:00	12:15	12:30	
SAMPLE NO.	SJCR42-1	SJCR42-2	SJCR42-3	
TEMPERATURE (°C)	14.4	15.51	15.3	
pH	10.07	10.01	9.99	
TURBIDITY (NTUs)	1.67	0.17	1.6	
DISSOLVED O <sub>2</sub> (mg/L)	10.31	6.19	8.9	
TOTAL SUSPENDED SOLIDS (mg/L)	11	9	7	

<b>Walnut Creek Reach 98</b>		<b>10/9/2019</b>		
LATITUDE (approx.)	34.079783	34.079688	34.074596	Pre-Clearing/Baseline  Garo Avoyan arrived on the jobsite at 0130 met with Lloyd Sanchez from Stormwater Maintenance San Dimas Yard . Performed pre-work baseline monitoring and sampling at upstream, internal, and downstream points at the Walnut Creek Reach 98. Baseline monitoring and sampling was performed one day prior of the placement of the BMPs and proposed start of cleanout operations. There were a lot of vegetations floating and larva swimming in all three sampling points. Between 0140 and 0210, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. From a water quality standpoint, project is "good to go" for start on Thursday 10/10.
LONGITUDE (approx.)	117.860395	117.860648	117.873093	
ELEVATION (approx.)	530	530	488	
TIME	1:40	1:50	2:10	
SAMPLE NO.	WCRKR98-1	WCRKR98-2	WCRKR98-3	
TEMPERATURE (°C)	22.79	21.57	23.38	
pH	9.02	7.25	7.75	
TURBIDITY (NTUs)	1.48	1.5	2.3	
DISSOLVED O <sub>2</sub> (mg/L)	11.8	9.93	9.95	
TOTAL SUSPENDED SOLIDS (mg/L)	10	8	8	

<b>Walnut Creek Reach 98</b>		<b>10/10/2019</b>		
LATITUDE (approx.)	34.079783	34.079688	34.074596	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1000 to performed during maintenance water quality sampling at upstream, internal, and downstream points at the Walnut Creek Reach 98. The downstream sampling point had large amounts of vegetations floating and larva swimming causing turbidity reading to go up slightly. Also three (3) BMPs were placed several hundred feet further down from the internal point. Downstream sampling point was taken on the lower left corner side of the rubber dam. Between 1010 and 1050, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Downstream turbidity reading of 2.34 NTU was above the Daily Turbidity Limit of 1.68 NTU (1.4+20%).
LONGITUDE (approx.)	117.860395	117.860648	117.873093	
ELEVATION (approx.)	530	530	488	
TIME	10:10	10:20	10:50	
SAMPLE NO.	WCRKR98-1	WCRKR98-2	WCRKR98-3	
TEMPERATURE (°C)	21.67	20.33	20.08	
pH	5.33	7.37	7.25	
TURBIDITY (NTUs)	1.4	1.55	2.34	
DISSOLVED O <sub>2</sub> (mg/L)	10.68	10.24	10.43	
TOTAL SUSPENDED SOLIDS (mg/L)	7	6	6	

<b>Walnut Creek Reach 98</b>		<b>10/17/2019</b>		
LATITUDE (approx.)	34.079783	34.079688	34.074596	Post-Work WQ Monitoring & Sampling Results  Garo Avoyan arrived on the jobsite at 1000 to perform post water quality monitoring sampling at upstream, internal, and downstream points at the Walnut Creek Reach 98. BMPs were removed on 10/10. Between 0931 and 1006, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Downstream turbidity reading of 1.97 NTU was above the Daily Turbidity Limit of 1.55 NTU (1.29+20%).
LONGITUDE (approx.)	117.860395	117.860648	117.873093	
ELEVATION (approx.)	530	530	488	
TIME	9:31	9:41	10:06	
SAMPLE NO.	WCRKR98-1	WCRKR98-2	WCRKR98-3	
TEMPERATURE (°C)	17.84	16.86	18.19	
pH	8.34	7.95	8.52	
TURBIDITY (NTUs)	1.29	1.16	1.97	
DISSOLVED O <sub>2</sub> (mg/L)	9.71	10.01	9.9	
TOTAL SUSPENDED SOLIDS (mg/L)	7	ND	6	



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<b>Wilmington Drain 9/10/2019</b>				
LATITUDE (approx.)	33.798844	33.795315	33.791222	Pre-Clearing/Baseline
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	11:00	10:45	10:30	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	25.14	23.47	22.93	
pH	9	8.47	8	
TURBIDITY (NTUs)	3.35	10.33	4.3	
DISSOLVED O <sub>2</sub> (mg/L)	7.01	5.51	3.14	
TOTAL SUSPENDED SOLIDS (mg/L)	12	127	23	
<b>Wilmington Drain 9/16/2019</b>				
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	10:35	10:15	10:00	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	22.57	20.32	21.15	
pH	9.09	7.29	7.88	
TURBIDITY (NTUs)	3.12	7.63	2.13	
DISSOLVED O <sub>2</sub> (mg/L)	7.59	7.74	2.09	
TOTAL SUSPENDED SOLIDS (mg/L)	8	114	9	
<b>Wilmington Drain 9/17/2019</b>				
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	10:35	10:00	10:15	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	23.24	19.47	21.08	
pH	9.73	7.72	7.97	
TURBIDITY (NTUs)	4.86	10.39	8.08	
DISSOLVED O <sub>2</sub> (mg/L)	7.37	8.05	2.92	
TOTAL SUSPENDED SOLIDS (mg/L)	75	120	12	
<b>Wilmington Drain 9/19/2019</b>				
LATITUDE (approx.)				During Maintenance WQ Monitoring & Sampling Results
LONGITUDE (approx.)				
ELEVATION (approx.)				
TIME				
SAMPLE NO.				
TEMPERATURE (°C)				
pH				
TURBIDITY (NTUs)				
DISSOLVED O <sub>2</sub> (mg/L)				
TOTAL SUSPENDED SOLIDS (mg/L)				

Chris Cunningham performed monitoring and sampling Wilmington Drain, on 09/10/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 1030 and 1100. Collected and recorded field readings of temperature (22.93 to 25.14°C), pH (8.00 to 9.00), turbidity ( 3.35 to 10.33 NTUs), and dissolved oxygen (3.14 to 7.01mg/L).

Chris Cunningham performed monitoring and sampling Wilmington Drain, on 09/16/19 (Monday). Upstream, downstream, and internal sampling was conducted between 1000 and 1100. Internal turbidity reading of 7.63 NTU was above the Daily Turbidity Limit of 3.74 NTU (3.12+20%). The internal and downstream TSS values of 114 and 9 were over the daily TSS limit (DTSSL) of 8.8 mg/L (8+10%).

Chris Cunningham performed monitoring and sampling Wilmington Drain, on 09/17/19 (Tuesday). Upstream, downstream, and internal sampling was conducted between 1000 and 1100. Internal and downstream turbidity readings of 10.39 and 8.08 NTU were above the Daily Turbidity Limit of 5.83 NTU (4.86+20%). The internal TSS value of 120 was over the daily TSS limit (DTSSL) of 82.5 mg/L (75+10%).

Garo Avoyan arrived on site about 1040 and met with Ricardo Duarte from Stormwater Maintenance Westchester Yard to perform water quality sampling. Internal sampling point, located next to the concrete ramp of the east levee had no water flow. Access is 825 feet south of Lomita Blvd with access through driveway on the south side of east-bound Lomita Blvd. I noticed water flow coming from the east side outlet into the channel from the east access concrete east levee towards the end. The maintenance crew were mainly cleaning the drainage at the downstream point of the channel. Water sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB). GMED will continue to monitor the area to re-confirm conditions. Garo contacted Mr. Paul Lopez of Stormwater Maintenance Westchester Yard via cell phone and informed him.

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<b>Wilmington Drain</b>				<b>9/20/2019</b>
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 0800 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. He met with Ricardo Duarte of Stormwater Maintenance Imperial Yard . For the internal sampling point, water sample was taken on the west side of the channel being on the opposite of previous sampling point. Two BMPs were placed at downstream. Between 0830 and 0920, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	9:20	8:30	8:55	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	20.28	19.81	20.22	
pH	7.61	6.88	7.39	
TURBIDITY (NTUs)	4	2.37	2.32	
DISSOLVED O <sub>2</sub> (mg/L)	10.07	9.98	9.82	
TOTAL SUSPENDED SOLIDS (mg/L)	8	7	6	
<b>Wilmington Drain</b>				<b>9/21/2019</b>
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results  Garo Avoyan arrived on-site about 0815 to perform during maintenance water quality monitoring and sampling at the upstream, internal, and downstream points. He met with Ricardo Duarte of Stormwater Maintenance Imperial Yard . For the internal sampling point, sample was taken at original location from previous sampling years (east side). Entrance was cleared by the City of Los Angeles after homeless items and yellow tape was removed. Turbidity readings were higher for both Internal and Downstream points. Two BMPs were placed at downstream. Between 0830 and 0933, collected and recorded water quality parameters of temperature, pH, turbidity, and dissolved oxygen. Internal and downstream turbidity readings of 8.83 and 3.74 NTU were above the Daily Turbidity Limit of 2.44 NTU (2.03+20%). The internal TSS value of 23 was over the daily TSS limit (DTSSL) of 11 mg/L (10+10%).
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	9:06	8:30	9:33	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	20.27	18.32	21.32	
pH	8.32	8.05	8.12	
TURBIDITY (NTUs)	2.03	8.83	3.74	
DISSOLVED O <sub>2</sub> (mg/L)	9.59	9.99	10.14	
TOTAL SUSPENDED SOLIDS (mg/L)	10	23	11	
<b>Wilmington Drain</b>				<b>9/23/2019</b>
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Wilmington Drain Reach 27, on 09/23/19 (Monday). Upstream, downstream, and internal sampling was conducted between 0938 and 1030. Downstream turbidity reading of 8.55 NTU was above the Daily Turbidity Limit of 3.72 NTU (3.1+20%). The internal and downstream TSS values of 108 and 36 were over the daily TSS limit (DTSSL) of ND.
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	10:30	9:38	10:00	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	20.5	19.2	20.28	
pH	9.25	7.84	7.99	
TURBIDITY (NTUs)	3.1	2.4	8.55	
DISSOLVED O <sub>2</sub> (mg/L)	5.86	1.5	2.7	
TOTAL SUSPENDED SOLIDS (mg/L)	ND	108	36	
<b>Wilmington Drain</b>				<b>9/30/2019</b>
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results  Chris Cunningham performed monitoring and sampling for Wilmington Drain Reach 27, on 09/30/19 (Monday). Upstream, downstream, and internal sampling was conducted between 1000 and 1030. The internal TSS value of 41 was over the daily TSS limit (DTSSL) of 33 mg/L (30+10%).
LONGITUDE (approx.)	118.288449	118.288423	118.287808	
ELEVATION (approx.)	14	13	13	
TIME	10:30	10:00	10:15	
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3	
TEMPERATURE (°C)	19.43	17.1	16.85	
pH	9.5	7.83	8.09	
TURBIDITY (NTUs)	3	2.76	3.37	
DISSOLVED O <sub>2</sub> (mg/L)	6.5	3.23	7.96	
TOTAL SUSPENDED SOLIDS (mg/L)	30	41	8	

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<b>Wilmington Drain</b>				<b>10/10/2019</b>					
LATITUDE (approx.)					During Maintenance WQ Monitoring & Sampling Results				
LONGITUDE (approx.)					Chris Cunningham arrived on site and found location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB).				
ELEVATION (approx.)									
TIME									
SAMPLE NO.									
TEMPERATURE (°C)									
pH									
TURBIDITY (NTUs)									
DISSOLVED O <sub>2</sub> (mg/L)									
TOTAL SUSPENDED SOLIDS (mg/L)									
<b>Wilmington Drain</b>				<b>10/15/2019</b>					
LATITUDE (approx.)					During Maintenance WQ Monitoring & Sampling Results				
LONGITUDE (approx.)					Chris Cunningham arrived on site and found location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB).				
ELEVATION (approx.)									
TIME									
SAMPLE NO.									
TEMPERATURE (°C)									
pH									
TURBIDITY (NTUs)									
DISSOLVED O <sub>2</sub> (mg/L)									
TOTAL SUSPENDED SOLIDS (mg/L)									
<b>Wilmington Drain</b>				<b>10/23/2019</b>					
LATITUDE (approx.)					During Maintenance WQ Monitoring & Sampling Results				
LONGITUDE (approx.)					Chris Cunningham arrived on site and found location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB).				
ELEVATION (approx.)									
TIME									
SAMPLE NO.									
TEMPERATURE (°C)									
pH									
TURBIDITY (NTUs)									
DISSOLVED O <sub>2</sub> (mg/L)									
TOTAL SUSPENDED SOLIDS (mg/L)									
<b>Wilmington Drain</b>				<b>10/30/2019</b>					
LATITUDE (approx.)					During Maintenance WQ Monitoring & Sampling Results				
LONGITUDE (approx.)					Chris Cunningham arrived on site and found location was dry. Water quality sampling was not performed because the site did not meet Regional Water Quality Control Board (RWQCB).				
ELEVATION (approx.)									
TIME									
SAMPLE NO.									
TEMPERATURE (°C)									
pH									
TURBIDITY (NTUs)									
DISSOLVED O <sub>2</sub> (mg/L)									
TOTAL SUSPENDED SOLIDS (mg/L)									

**Los Angeles Basin Watershed - Soft-Bottom Channels**  
**Feasibility Studies Technical Assessments and Recommendations**  
**WATER QUALITY SAMPLING TESTING AND MONITORING RESULTS (2019)**

<b>Wilmington Drain</b>				<b>11/25/2019</b>	
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.288449	118.288423	118.287808	Chris Cunningham performed monitoring and sampling for Wilmington Drain, on 11/25/19 . Upstream, downstream, and internal sampling was conducted between 1200 and 1230. Internal and downstream turbidity readings of 4.66 and 63.9 NTU were above the Daily Turbidity Limit of 5.59 NTU (4.66+20%). The internal and downstream TSS values of 122 and 551 were over the daily TSS limit (DTSSL) of 34.1 mg/L (31+10%).	
ELEVATION (approx.)	14	13	13		
TIME	12:00	12:15	12:30		
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3		
TEMPERATURE (°C)	18	17.68	17.97		
pH	8.1	7.88	7.43		
TURBIDITY (NTUs)	4.66	63.9	19.1		
DISSOLVED O <sub>2</sub> (mg/L)	2.58	0	7		
TOTAL SUSPENDED SOLIDS (mg/L)	31	122	551		
<b>Wilmington Drain</b>					
LATITUDE (approx.)	33.798844	33.795315	33.791222	During Maintenance WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.288449	118.288423	118.287808	Chris Cunningham performed monitoring and sampling for Wilmington Drain, on 12/3/19 . Upstream, downstream, and internal sampling was conducted between 1045 and 1240. Internal and downstream turbidity readings of 10.96 and 5.39 NTU were above the Daily Turbidity Limit of 3.83 NTU (3.19+20%). The internal TSS value of 19 was over the daily TSS limit (DTSSL) of 17.6 mg/L (16+10%).	
ELEVATION (approx.)	14	13	13		
TIME	12:40	10:45	12:20		
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3		
TEMPERATURE (°C)	14.52	13.66	13.94		
pH	8.22	8.3	8.39		
TURBIDITY (NTUs)	3.19	10.96	5.39		
DISSOLVED O <sub>2</sub> (mg/L)	0	7.66	0		
TOTAL SUSPENDED SOLIDS (mg/L)	16	19	7		
<b>Wilmington Drain</b>					
LATITUDE (approx.)	33.798844	33.795315	33.791222	Post-Work WQ Monitoring & Sampling Results	
LONGITUDE (approx.)	118.288449	118.288423	118.287808	Chris Cunningham performed post work monitoring and sampling for Wilmington Drain, on 12/9/19 . Upstream, downstream, and internal sampling was conducted between 1230 and 1300. Internal turbidity reading of 29.2 NTU was above the Daily Turbidity Limit of 27.36 NTU (22.8+20%). The internal TSS value of 33 was over the daily TSS limit (DTSSL) of 23.1 mg/L (21+10%).	
ELEVATION (approx.)	14	13	13		
TIME	13:00	12:30	12:45		
SAMPLE NO.	WDRAIN27-1	WDRAIN27-2	WDRAIN27-3		
TEMPERATURE (°C)	17.55	18.17	17.44		
pH	8.47	8.5	8.24		
TURBIDITY (NTUs)	22.8	29.2	13.2		
DISSOLVED O <sub>2</sub> (mg/L)	1.35	0.17	0		
TOTAL SUSPENDED SOLIDS (mg/L)	21	33	11		



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## **ATTACHMENT NO. 7**

CURRENT WASTE DISCHARGE REQUIREMENTS AND  
CLEAN WATER ACT SECTION 401 WATER QUALITY  
CERTIFICATIONS, ORDER NO. RE-2018-0099, FILE  
NO. 99-011

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**Los Angeles Regional Water Quality Control Board**

July 31, 2018

Daniel J. Lafferty  
Assistant Deputy Director  
Los Angeles County Dept. of Public Works  
900 S. Fremont Ave, Annex 2nd Floor  
Alhambra, CA 91803

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
No. 7008 1140 0002 8672 0727

Dear Mr. Lafferty,

**TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS AND CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION FOR LOS ANGELES COUNTY FLOOD CONTROL DISTRICT MAINTENANCE CLEARING OF ENGINEERED EARTH-BOTTOM CHANNELS FOR FLOOD CONTROL, LOS ANGELES COUNTY, ORDER No. R4-2018-0099 (FILE No. 99-011)**

In accordance with the California Water Code, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board), at a public meeting held on July 12, 2018, reviewed the revised, tentative Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certification for the subject project, considered all factors in the case and adopted Order No. R4-2018-0099. Order No. R4-2018-0099 is issued to the Los Angeles County Flood Control District (LACFCD).

Order No. R4-2018-0099 (without attachments) is attached. Order No. R4-2018-0099 and all of its attachments may also be accessed on the Los Angeles Water Board's website at:

[http://www.waterboards.ca.gov/losangeles/water\\_issues/programs/401\\_water\\_quality\\_certification/FloodControl.shtml](http://www.waterboards.ca.gov/losangeles/water_issues/programs/401_water_quality_certification/FloodControl.shtml)

July 31, 2018

Should you have questions concerning Order No. R4-2018-0099, or to schedule a meeting with us, please contact Valerie CarrilloZara, P.G., at (213) 576-6759 or Dr. LB Nye at (213) 576-6785.

Sincerely,



for Deborah J. Smith  
Executive Officer

Attachment: Final WDR

cc: [via email only]

Jennifer Fordyce, State Water Resources Control Board  
Elizabeth Payne, State Water Resources Control Board  
Nandini Moran, Los Angeles County Flood Control District  
Sree Kumar, Los Angeles County Flood Control District  
Dan Sharp, Los Angeles County Flood Control District  
Tracy J. Egoscue, Egoscue Law Group, Inc.  
Erinn Wilson, California Department of Fish and Wildlife  
Matt Chirdon, California Department of Fish and Wildlife  
Bonnie Rodgers, US Army Corps of Engineers  
Elizabeth Goldmann,, U.S. Environmental Protection Agency, Region 9



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Los Angeles Regional Water Quality Control Board

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**ORDER NO. R4-2018-0099**  
**WASTE DISCHARGE REQUIREMENTS AND**  
**CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION**

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**Effective Date:** July 12, 2018  
**Program Type:** Fill/Excavation

Reg. Meas. ID:	401529
Place ID:	815900
WDID:	4WQC40199011
NWP	31
USACOE#:	SPL-2013-00723-BLR

**Project Type:** Channel Construction and Maintenance<sup>1</sup>

**Project:** Maintenance Clearing of Engineered Earth-Bottom Channels for Flood Control (Project)

**Applicant:** Los Angeles County Flood Control District

**Applicant Contacts:** Mr. Sree Kumar, Asst. Deputy Director  
Los Angeles County Flood Control District  
900 S. Fremont Avenue  
Alhambra, CA 91803  
Phone: (626) 458-4145

Ms. Nandini Moran  
Los Angeles County Flood Control District  
900 S. Fremont Avenue  
Alhambra, CA 91803  
Phone: (626) 458-7810  
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**Water Board Contact:** Valerie CarrilloZara  
Lead, 401 Certification Unit  
320 W. 4th Street, Suite 200  
Los Angeles, CA 90013  
Phone: (213) 576-6759  
Email: Valerie.Carrillozara@waterboards.ca.gov

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<sup>1</sup> Project type is selected from a preset list of project types to allow for calculation of statewide summary statistics. While this project is most appropriately categorized as "Channel Construction and Maintenance," note that these waste discharge requirements (WDRs) and Clean Water Act section 401 water quality certification does not authorize any new channel construction.

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**Attachment A** Master Maintenance Plan (June 2018)  
**Attachment B** Summary of Revisions to Maintenance Manual  
**Attachment C** Reporting Requirements  
**Attachment D** 2016 Water Diversion Manual (Attachment D is Attachment H of the Master  
Maintenance Plan, included here as a separate document)  
**Attachment E** 2016 Water Quality Monitoring Guide (Attachment E is Attachment G of the Master  
Maintenance Plan, included here as a separate document)

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

#### **I. Order**

This Order for Waste Discharge Requirements and Clean Water Act section 401 Certification (Order) is issued at the request of Los Angeles County Flood Control District (LACFCD) for the Project. This Order is for the purpose described in the application and supplemental information submitted by the LACFCD.

The application was received on March 21, 2018. On March 30, 2018, Los Angeles Water Board staff issued a notice of incomplete application and the LACFCD responded to the request for application information on April 10, 2018. The application was deemed complete on April 13, 2018.

#### **II. Public Notice**

The Los Angeles Water Board has notified the LACFCD and other interested agencies and persons of its intent to prescribe waste discharge requirements (WDRs) and issue a Clean Water Act Section 401 Water Quality Certification for this discharge and has provided an opportunity to submit comments. The Los Angeles Water Board provided public notice of the draft order pursuant to California Code of Regulations, title 23, section 3858 and Water Code section 13167.5. A tentative order was released for public comment on April 18, 2018. Written comments were accepted until 5:00 p.m. on May 18, 2018. The Los Angeles Water Board, in a public meeting on June 14, 2018, heard and considered all comments pertaining to this Order.

#### **III. Project Purpose**

The purpose of the Project is to maintain adequate capacity in engineered earth-bottom channels (also referred to as engineered soft-bottom channels), which are a critical part of the LACFCD's flood control facilities in order to reduce the risk of loss of life or property that could result from flooding during large storm events, while simultaneously protecting water quality and beneficial uses of these channels.

#### **IV. Project Description and Background**

##### **a. General Background**

1. LACFCD (Discharger) is responsible for providing flood control throughout Los Angeles County to enhance public safety. LACFCD is responsible for more than 2,700 square miles and approximately 2.1 million land parcels within 6 major watersheds. This includes flood control facilities consisting of 3,380 miles of underground storm drains; an estimated 173 debris basins; an estimated 82,000 catch basins; 14 major dams and reservoirs; and 483 miles of open channel including natural, earthen-bottom (i.e., concrete or riprap sides with a natural bottom that may support vegetation), and concrete channels.
2. In order to reduce the risk of loss of life or property that could result from flooding during large storm events, LACFCD conducts activities to maintain adequate capacity in flood control facilities. LACFCD is authorized to perform such maintenance pursuant to the Los Angeles County Flood Control Act (Water Code Appendix § 28-2).
3. Many of the channels, basins and reservoirs maintained by LACFCD as flood control facilities are Waters of the United States (U.S.) and Waters of the State of California.



4. Maintaining the flood control system in Waters of the U.S. and Waters of the State of California requires discharge permits for these dredge and fill activities from the Army Corps of Engineers (ACOE), California Department of Fish and Wildlife (CDFW) and the Los Angeles Water Board. For dredge and fill activities such as channel clearing, the Clean Water Act (CWA) requires permitting from ACOE under CWA section 404 (404 permit) and Water Quality Certification by the State under CWA section 401 (401 Certification). In addition, under California Fish and Game Code section 1600, such activities are also regulated by a Streambed Alteration Agreement (SAA) issued by the CDFW.
5. WDRs and 401 Certifications issued by the Los Angeles Water Board to LACFCD for maintenance of its flood control facilities are designed to allow maintenance of established flood control function through removal of recent accumulated sediment or vegetation and routine minor structural repairs. The WDRs and 401 Certifications do not allow for any alteration of channel design. WDRs and 401 Certifications issued by the Los Angeles Water Board to LACFCD for maintenance of flood control facilities do not authorize additional hardscape, concrete, or rock in Waters of the U.S. and Waters of the State of California.
6. The Los Angeles Water Board regulates the following dredge and fill activities associated with LACFCD's maintenance of its flood control facilities: maintenance of 172 debris basins (File No. 02-144), maintenance of concrete channels (File No. 13-029), maintenance of earthen-bottom channels (this WDR and 401 Certification), and individual project Water Quality Certifications for major repairs or renovations to flood control facilities and emergency projects.
7. LACFCD maintains 96 earthen-bottom channels through this WDR and 401 Certification. The 96 channels include a total of approximately 43 miles of waterways throughout Los Angeles County and approximately 1,276 acres of jurisdictional waters of the United States. The acreage authorized to be impacted by this Order is 734 acres.
8. Development of natural areas and redevelopment projects in Los Angeles County may alter or add to or subtract from the number of required flood control facilities and may alter the hydrology of waters. Plans and new goals for water use in Los Angeles County (as detailed in Findings 70-75) may contribute to changes in hydrology and the need for more or less flood control capacity and the need for altered or more or fewer flood control facilities. Through the requirements of WDRs and 401 Certifications issued by the Los Angeles Water Board to LACFCD for maintenance of its flood control facilities, the Los Angeles Water Board has taken into account changes of the nature described above, and will continue to do so where appropriate in its future permitting actions regarding LACFCD's maintenance of earthen-bottom channels.
9. LACFCD maintains flood control facilities to meet a number of different requirements, depending on when the flood control facility was built and which agency built it; in some cases, LACFCD must protect for a 100-year storm.
10. Many of the flood control channels maintained by LACFCD were built with federal funds and turned over to LACFCD for maintenance. As such, LACFCD is required to maintain the channel as designed and without debris and vegetative growth. In order to change a maintenance requirement, LACFCD must apply under section 14 of the Rivers and Harbors Act of 1899, codified at 33 U.S.C. section 408 (commonly referred to as "Section 408"), for modification of federally required maintenance requirements with the ACOE.

11. Post-Hurricane Katrina, the ACOE instituted Risk and Uncertainty analysis requirements for changes to federal flood control facilities. Alteration of federally-required maintenance may trigger the need for a ACOE Risk and Uncertainty analysis. A Risk and Uncertainty analysis is a statistical analysis that takes into account the uncertainty of the hydrology and hydraulics and related consequences.
12. LACFCD maintains levees in accordance with the Federal Emergency Management Agency (FEMA). FEMA administers the National Flood Insurance Program (NFIP). In order to obtain FEMA accreditation for the levees, LACFCD is required to demonstrate that maintenance of the levees will ensure their stability, height, and overall integrity in order to continue providing protection to the adjacent residents.
13. While FEMA accredits levees as meeting requirements set forth by the NFIP, the ACOE addresses operation and maintenance, risk management, and risk reduction levee needs as part of its responsibilities under the ACOE's Levee Safety Program. The ACOE inspects levees in Los Angeles County and may require risk reduction improvements to the levees by LACFCD.
14. LACFCD maintains various stations throughout the County to monitor flow and water quality. These stations consist of temporary and/or permanent houses with attached gauges, conduits, pumps, sensors, and probes typically placed in the invert of the channel. The houses may be mounted on bridges and/or other structures along several watercourses in the County. In order to obtain accurate data, the flow adjacent to the gauges, conduits, pumps, sensors, and probes must be laminar (i.e., non-turbulent). Routine maintenance, inspection and calibration, including clearance of accumulated sediment and/or vegetation within three feet of the water quality monitoring equipment may need to be conducted during dry weather to ensure proper operation.
15. During the storm season (October 15 to April 15), LACFCD personnel continually monitor flow conditions in channels and inspect facilities.
16. Urgent work conducted during and immediately after storm events is usually not routine maintenance, but instead, may be an emergency. Emergency is defined as, "a sudden, unexpected, occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movement, as well as such occurrences as riot, accident, or sabotage." Any project that is necessitated due to imminent threat to life or property is subject to ACOE Regional General Permit 63 (RGP 63) as certified by the State Water Resources Control Board (State Water Board) on November 25, 2013.
17. LACFCD has developed and complies with a Hazard Analysis and Critical Control Points (HACCP) for Malibu and Santa Monica Canyon watersheds to limit the spread of invasive New Zealand mudsnail and giant reed (*Arundo donax*), dated April 1, 2010.
18. LACFCD has developed and published watershed maps, which indicate types of vegetation present in the channel reaches and approximate schedules (including baseline biological surveys, post-surveys and maintenance activity descriptions). This information has been made publicly available on the LACFCD website since 2010. For each reach, the information includes: (a) the proposed schedule; (b) a description of the reach's existing condition; (c) the area of proposed impact; and (d) a description of any existing aquatic resources (e.g.,

wetland/riparian vegetation based on readily available information and pre-clearing biological surveys).

19. Los Angeles County maintains a GIS Data Portal where LACFCD facilities information is available to the public in GIS (geographic information system) mapping format.

**b. Regulatory Authorities**

20. The Project is located within the jurisdiction of the Los Angeles Water Board. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the applicable water quality control plan (Basin Plan) for the region and other plans and policies which may be accessed online at: [http://www.waterboards.ca.gov/plans\\_policies/](http://www.waterboards.ca.gov/plans_policies/). The Basin Plan establishes water quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies.
21. The State of California regulates most dredge and fill discharges through 401 Certifications and may also regulate such discharges through WDRs as authorized by the California Water Code (CWC). Pursuant to CWC section 13263, the Los Angeles Water Board is authorized to prescribe WDRs for any proposed or existing discharge unless WDRs are waived pursuant to Water Code section 13269.
22. The Los Angeles Water Board has determined to regulate the subject discharge of dredge and fill materials into waters of the State by issuance of WDRs in this Order pursuant to CWC section 13263. The Los Angeles Water Board considers WDRs necessary to adequately control potential impacts to beneficial uses of waters of the U.S. and waters of the State from these maintenance activities, which primarily involve clearing, to meet the objectives of the California Wetlands Conservation Policy (Executive Order W-59-93) and to accommodate and require appropriate changes over the life of the project.
23. The goals of the California Wetlands Conservation Policy (Executive Order W-59-93, signed August 23, 1993) include ensuring “no overall loss” and achieving a “...long-term net gain in the quantity, quality, and permanence of wetland acreage and values...” Senate Concurrent Resolution No. 28 states that “[i]t is the intent of the legislature to preserve, protect, restore, and enhance California’s wetlands and the multiple resources which depend on them for benefit of the people of the State.” Section 13142.5 of the CWC requires that the “[h]ighest priority shall be given to improving or eliminating discharges that adversely affect...wetlands, estuaries, and other biologically sensitive areas.”
24. CWC section 13263 authorizes the Los Angeles Water Board, after any necessary hearing, to prescribe requirements as to the nature of any proposed discharge with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements must implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of CWC section 13241. In accordance with subdivision (g) of section 13263, all discharges of waste into the waters of the State are privileges, not rights, and the WDRs in this Order shall not create a vested right to continue to discharge and are subject to rescission or modification.

25. Pursuant to CWC section 13267, the Los Angeles Water Board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by Division 7 of the CWC, may investigate the quality of any waters of the state within its region. In conducting such an investigation, the Los Angeles Water Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, shall furnish, under penalty of perjury, technical or monitoring program reports which the regional water board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. The WDRs contained in this Order incorporate requirements for water quality monitoring, and project reporting, which are necessary to ensure that the discharge of waste complies with WDRs and is protective of the environment.
26. The Los Angeles Water Board, on June 13, 1994, adopted, in accordance with section 13240 et seq. of the CWC, a revised Water Quality Control Plan for the Los Angeles Region (Basin Plan). This updated and consolidated revised Basin Plan was approved by the State Water Board and the Office of Administrative Law on November 17, 1994, and February 23, 1995, respectively. A summary of regulatory provisions is contained in California Code of Regulations, title 23, section 3930. The Basin Plan designates beneficial uses for surface and ground waters in Chapter 2, establishes water quality objectives that must be attained or maintained to protect the designated beneficial uses in Chapter 3, and sets forth implementation programs to attain the water quality objectives. The Basin Plan has been amended occasionally since 1994. This Order is in compliance with the Basin Plan, and amendments thereto.
27. The WDRs in this Order are adopted pursuant to CWC sections 13263 and 13267. It sets forth requirements, prohibitions, and other conditions to implement the Basin Plan, and LACFCD's responsibilities for monitoring and reporting. LACFCD is responsible for ensuring compliance with the WDRs.
28. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

**c. Regulatory History**

29. The Los Angeles County Flood Control Act (Act) was adopted by the California State Legislature in 1915. The Act established the Los Angeles County Flood Control District and empowers it to provide flood protection, water conservation, recreation and aesthetic enhancement within its boundaries. LACFCD is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.
30. In 1997, LACFCD proposed complete clearing of 100 earthen-bottom channels in anticipation of the El Niño storm season, encompassing a total of 886 acres. Of this acreage, approximately 203 acres were vegetated.
31. LACFCD developed a Maintenance Plan for the Annual Clearing of Earth-Bottom Flood Control Channels in 1999 (1999 Maintenance Plan) in collaboration with the ACOE, CDFW (then California Department of Fish and Game (CDFG)) and the Los Angeles Water Board.



The 1999 Maintenance Plan has been published under later dates, but all versions of the Maintenance Plan define the scope of channel clearance by the 1997 pre-El Niño clearing levels.

32. The ACOE permitted LACFCD's vegetation and debris clearing maintenance activities under the CWA Section 404 Nationwide Permit 31 "Maintenance of Existing Flood Control Facilities" in 1998. The Los Angeles Water Board issued a CWA Section 401 Water Quality Certification for these activities in 1999 (File No. 99-011). Also in 1999, LACFCD and CDFW (then CDFG) entered into a Streambed Alteration Agreement, Memorandum of Understanding (MOU 5-076-99). When permitting these activities in 1998 and 1999, the ACOE and the Los Angeles Water Board developed the first programmatic permit and 401 Certification for the earth-bottom channel maintenance activities.
33. The ACOE and the Los Angeles Water Board utilized clearing limits developed for the 1997 pre-El Niño clearing. However, the Los Angeles Water Board recognized the need to ultimately develop a more comprehensive plan beyond direct use of the 1997 clearing limits that would allow vegetation and the associated habitat to be preserved within these earthen-bottom channels to the maximum extent feasible. At that time, the 404 permit and 401 Certification only authorized clearing activities in 48.2 acres of the approximately 203 vegetated acres.
34. To mitigate the 48.2 acres impacted by removal of vegetation, the Big Tujunga Wash Mitigation Area was established in accordance with the *Master Mitigation Plan for the Big Tujunga Wash Mitigation Bank* (Final Plan dated April 2000), which contains 62.7 acres (achieving a 1.3:1 mitigation ratio).
35. The success criteria for the Big Tujunga Wash Mitigation Area have been met. Field data collection for the functional analysis and success monitoring studies was conducted in August 2012 and reported in the 2012 Annual Report for the Big Tujunga Wash Mitigation Area.
36. LACFCD continues to maintain the Big Tujunga Wash Mitigation Area to ensure its long-term sustainability and that of the resident aquatic resources. The Big Tujunga Wash Mitigation Area's Long-Term Management Plan has been drafted but is not finalized. LACFCD is working with the CDFW to finalize the draft.
37. The ACOE, after evaluation of updated information, has reissued the 404 permit under Nationwide Permit 31 for these channel maintenance activities by the LACFCD every five years since 1998. The Nationwide Permit was re-issued on May 11, 2018.
38. The number of earth-bottom channel reaches authorized for maintenance under the ACOE 404 permit has changed during each permit cycle due to channels being combined, removed, or added. The ACOE divides channels into reaches that it considers to be sensitive and non-sensitive based on a Biological Opinion from the U.S. Fish and Wildlife Service. The ACOE normally incorporates special conditions such as avoidance of nesting seasons or hand clearing, for reaches it deems to be sensitive.
39. In 2003, the State Water Board issued Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification," which requires compliance with all conditions of Water Quality Certifications. The 2003 State Water Board Order included regulation of discharges from earthen-bottom channel maintenance.

40. The 401 Certification was renewed by the Los Angeles Water Board on October 17, 2003, conditionally authorizing maintenance of 99 earthen-bottom channels. The Los Angeles Water Board extended the October 17, 2003 Water Quality Certification by letter on September 10, 2007 until March 15, 2008, and extended it by letter again on August 29, 2008 until January 31, 2009.
41. On February 4, 2010, the Los Angeles Water Board issued WDRs (Order No. R4-2010-0021, 2010 WDRs) to the LACFCD. The 2010 WDRs included 10 new channel reaches authorized to be cleared in addition to the reaches included in the previous 401 Certification. The 2010 WDRs also acted as 401 Certification for those 10 reaches.
42. As an outgrowth of the original Maintenance Plan development and the incomplete effort in 2008 to further develop an understanding of the hydrology and biological functions for each reach in order to reform and improve the required channel clearing and to make the basis transparent to the Los Angeles Water Board and the public, the 2010 WDRs required "Feasibility Studies" for each watershed, stating "...LACFCD shall implement the Feasibility Study process with a schedule of one or more watersheds per year to be analyzed, with completion of all watersheds/studies within six (6) years. LACFCD shall solicit input from stakeholders during Work Plan development and prior to the finalizing the Technical Assessment Report and recommendations..."
43. The Feasibility Studies of the 2010 WDRs were to determine where a potential may exist for native vegetation to remain within the earth-bottom portion of the channel. The Feasibility Studies also required identification of any channels that could potentially provide restoration opportunities for riparian habitat.
44. The required analyses were split over multiple years to allow LACFCD flexibility in completing the required studies. The data and technical ability necessary to conduct the required analyses exists within LACFCD.
45. LACFCD completed three Feasibility Study Workplans, including the Los Angeles River watershed (July 2010), the San Gabriel River watershed (January 2013) and the Malibu and Dominguez Channel (April 2014) watersheds prior to the expiration of the 2010 WDRs in 2015.
46. LACFCD finalized the Los Angeles River Feasibility Study in August 2013 after public notice and a public meeting. Results of these analyses conducted during the Los Angeles River Feasibility Study were presented to stakeholders at a technical workshop on June 24, 2013.
47. On February 12, 2015, the Los Angeles Water Board renewed WDRs and 401 Certification for the discharges associated with channel clearing activities in Los Angeles County (2015 WDRs) by adopting Order No. R4-2015-0032. The term of the renewed 2015 WDRs was one year.
48. Los Angeles Water Board direction to Los Angeles Water Board staff, upon issuance of the renewed 2015 WDRs, included:
  - i. Ensure transparency and clarity with regards to the use and results of LACFCD and ACOE hydraulic models to determine channel capacities and reaches where more vegetation can remain;

- ii. Facilitate greater involvement of interested non-governmental stakeholder groups in discussions and, where possible, crafting of recommendations, regarding channel clearing activities, particularly in the Los Angeles River in light of river restoration and revitalization efforts; and
  - iii. Coordinate principles and discussions related to activities regulated under this WDR with other water resource management efforts such as efforts to increase stormwater retention, beneficial use protection and enhancement, and river restoration projects.
- 49. Los Angeles Water Board staff and LACFCD staff initiated a series of in-depth discussions, referred to as “WDR Working Group Meetings,” with interested stakeholder groups including Friends of the Los Angeles River, Arroyo Seco Foundation, Heal the Bay, The Nature Conservancy, Mountains Restoration Conservation Authority, San Fernando Valley Audubon, and Santa Clara Organization for Planning the Environment, which also included participation by ACOE, CDFW, and California Coastal Commission. Nine meetings were held between April 2, 2015 and December 15, 2015. Agendas, presentations, meeting notes and sign-in sheets are available at <https://dpw.lacounty.gov/lacfcd/WDR/workgroup.aspx>.
- 50. During these WDR Working Group Meetings, the group prioritized its discussions and pilot efforts on the lower reaches of the Los Angeles River and:
  - i. Discussed and raised the level of understanding of hydraulic models used in Feasibility Studies;
  - ii. Reviewed the channel maintenance obligations of the LACFCD, including ACOE requirements for ACOE-built channels, levee safety requirements, and FEMA requirements;
  - iii. Reviewed concerns of environmental and conservation organizations, including Friends of the Los Angeles River and Heal the Bay, especially pertaining to the lower Los Angeles River and Compton Creek;
  - iv. Discussed results of a new Risk and Uncertainty analysis required for ACOE-built channels, as applied to Reach 25 of the Los Angeles River. As requested by stakeholders at the WDR Working Group Meetings, a reanalysis of the Los Angeles River was conducted by LACFCD. The results of this analysis and a discussion of the methodology used were provided at the WDR Working Group Meetings over several sessions. LACFCD also performed the ACOE’s new Risk and Uncertainty analysis on Los Angeles River Reach 25 and results were provided at the WDR Working Group Meetings; and
  - v. Identified, and then reviewed, results of a pilot project employing an alternative clearing method of mowing instead of scraping to remove vegetation in the lower Los Angeles River (Reach 25) and Compton Creek.
- 51. In addition to the analyses conducted for the Los Angeles River Feasibility Study, and as part of the WDR Working Group Meetings held throughout 2015, the LACFCD conducted additional analyses on the reaches of the Los Angeles River and presented the preliminary results of this additional analysis to Los Angeles Water Board staff and stakeholders participating in the WDR Working Group. Of the 25 reaches in the Los Angeles River Watershed, the Los Angeles River Feasibility Study Report identified eight reaches where additional native vegetation or the replacement of non-native vegetation with native vegetation could occur. No change in current maintenance vegetation clearance practices was recommended for eleven reaches due to insufficient hydraulic capacity for additional vegetation. In six reaches, additional vegetation removal may be required.

52. The lower reaches of the Los Angeles River were a priority for the WDR Working Group, however, because the engineered aspects of the lower reaches of the Los Angeles River were constructed by the ACOE, there are additional federal requirements that must be met before changing the characteristics of the channel, and therefore, the level of flood protection. LACFCD hired WEST Consultants to perform an evaluation of the lower reach of Los Angeles River (Reach 25) using the Army Corps of Engineers' Risk and Uncertainty analysis. A Risk and Uncertainty analysis is a statistical analysis that takes into account the uncertainty of the hydrology, hydraulics, and consequences. The preliminary results of this analysis show there is an 80% probability that the 133-year flood's water surface elevation would be below the as-constructed top of levee elevation in Los Angeles River Reach 25. The 133-year flood is the federal standard for this reach.
53. As the ACOE continues to define the relatively new Risk and Uncertainty analysis requirements, LACFCD will look for opportunities to work with the ACOE and will be able to consider applying to the ACOE to modify channel clearing activities in this reach.
54. On December 10, 2015, Los Angeles Water Board staff, joined by staff from the LACFCD, ACOE, Friends of the Los Angeles River, Heal the Bay and Santa Clara Organization for Planning and the Environment, presented an information item to the Los Angeles Water Board to report on the progress of the WDR Working Group Meetings.
55. LACFCD finalized the San Gabriel River Feasibility Study in January 2016 after public notice. The San Gabriel River Feasibility Study was discussed at a WDR Working Group Meeting on February 12, 2016. All of the San Gabriel River maintained reaches are federally-built reaches and must be maintained to meet federal design standards. As such, the study concluded there was no opportunity to alter requirements without ACOE participation and likely the need for a Risk and Uncertainty analysis. Therefore, the consensus of the WDR Working Group was that further discussions at an additional public meeting was unnecessary.
56. On February 11, 2016, the Los Angeles Water Board amended the 2015 WDRs, Order No. R4-2015-0032 (Order No. R4-2015-0032-A1) for discharges associated with channel clearing activities in Los Angeles County (2016 WDRs). The amendment extended the WDRs for approximately two and a half years and continued the requirements for Feasibility Studies and WDR Working Group meetings. The term of the 2016 WDRs expired on July 20, 2018.
57. LACFCD and the Los Angeles Water Board staff continued the WDR Working Group meetings with interested stakeholder groups including Friends of the Los Angeles River, Arroyo Seco Foundation, Heal the Bay, and The Nature Conservancy, along with participation by CDFW. Nine more meetings were held between February 18, 2016 and July 20, 2017. Agendas, presentations, meeting notes and sign-in sheets are available at <https://dpw.lacounty.gov/lacfd/WDR/workgroup.aspx>.
58. During these continued WDR Working Group Meetings, the group has:
  - i. Discussed the Feasibility Studies and reviewed reaches where there was potential for additional vegetation (where there was additional flood capacity) based on LACFCD recommendations for those reaches;
  - ii. Reviewed the maps LACFCD has made available to the public, including GIS layers of LACFCD facilities;
  - iii. Discussed water quality sampling required in the WDR relative to other monitoring in these channels;



- iv. Further discussed results of a pilot project employing an alternative clearing method of mowing instead of scraping to remove vegetation in the lower Los Angeles River (Reach 25) and Compton Creek (Reach 24);
  - v. Reviewed pilot projects in Bull Creek (Reach 7) and Pickens Canyon (Reach 19) to let more native vegetation remain during clearing activities; and
  - vi. On September 15, 2016, held a field meeting adjacent to Compton Creek to observe clearing activities, equipment used, and Best Management Practices implemented to minimize impact during the maintenance activities. Questions by staff from Friends of the Los Angeles River and Heal the Bay regarding habitat and water quality monitoring during these activities were addressed.
59. LACFCD finalized the Malibu Creek and Dominguez Channel Feasibility Study in September 2016 after public notice and a public meeting on May 25, 2016.
60. LACFCD finalized the Santa Clara River and Antelope Valley Feasibility Study in August 2017 after public notice and a public meeting on February 1, 2018.
61. As of the finalization of the Santa Clara River and Antelope Valley Feasibility Study, all Feasibility Studies requirements are complete. A summary of all revisions for every reach is in Attachment B to this Order, Summary of Revisions to Maintenance Manual. Appropriate modifications to maintenance activities have been incorporated into the Master Maintenance Plan June 2018) included as Attachment A of this Order.
62. On March 21, 2018, the Los Angeles Water Board received the LACFCD's Report of Waste Discharge (ROWD), which served as application for reissuance of WDRs and 401 Certification for its maintenance activities, which primarily involve clearing, in earthen-bottom channels. The ROWD included a revised draft Master Maintenance Plan containing maps and the scope of work for each reach in one place. This Master Maintenance Plan incorporates revised scopes of work for previously authorized reaches, sensitive or non-sensitive status (per the U.S. Fish and Wildlife Service's Biological Opinion) and an updated list of reach numbers. This ROWD did not include previously authorized reaches 34, 74, 106 and 107. Reach 34 has been transferred to the City of Agora Hills. LACFCD does not have right-of-way for reaches 74, 106 and 107.

**d. Earth-bottom Channel Watersheds and Stormwater Plans**

63. The reaches for which maintenance activities, which primarily involve clearing, are covered by this Order are located in the Los Angeles River watershed, San Gabriel River watershed, Santa Clara River watershed, Malibu Creek watershed, and Dominguez Channel watershed. Maps and latitude/longitude coordinates of all included reaches are in the Master Maintenance Plan included as Attachment A of this Order.
64. The reaches for which maintenance activities, primarily clearing, are covered by this Order provide unique ecosystems and habitat for native vegetation and sensitive species.
65. The Los Angeles River flows 51 miles from the western end of the San Fernando Valley to the Pacific Ocean at Long Beach and includes several major tributaries including Tujunga Wash, Burbank Western Channel, Arroyo Seco, Rio Hondo, and Compton Creek. The Los Angeles River watershed comprises an area of about 834 square miles. Of this area, the incorporated

cities and unincorporated portion of Los Angeles County comprise 599 square miles. The remaining watershed consists of the Angeles National Forest.

66. The San Gabriel River watershed comprises a 682 square mile area of eastern Los Angeles County and has a main channel length of approximately 58 miles. It originates in the San Gabriel Mountains and flows through heavily developed areas before emptying into the Pacific Ocean in Long Beach. The main tributaries of the river are Walnut Creek, San Jose Creek, and Coyote Creek. In the middle of the watershed are large spreading grounds used for groundwater recharge. The watershed is hydraulically connected to the Los Angeles River through the Whittier Narrows Reservoir (occurring mostly during high storm flows).
67. The Santa Clara River is approximately 100 miles long and the watershed comprises approximately 1,200 square miles. The river originates on the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean halfway between the cities of San Buenaventura and Oxnard. Large tributaries include Sespe, Piru and Santa Paula Creeks and a lagoon exists at the mouth of the river. Land use is predominately open space with concentrations of residential, agriculture, and some industrial uses along the mainstem of the river. The Santa Clara River is the largest river system in southern California that remains in a relatively natural state; this is a high quality natural resource for much of its length.
68. The Malibu Creek watershed comprises 109 square miles. The watershed extends from the Santa Monica Mountains and adjacent Simi Hills to the Pacific Coast at Santa Monica Bay. Several creeks and lakes occur in the upper portions of the watershed, and these ultimately drain into Malibu Creek at the downstream end of the watershed. Malibu Creek drains into Malibu Lagoon, a 13-acre tidal lagoon.
69. The Dominguez Channel watershed is 133 square miles. This watershed includes the Los Angeles and Long Beach Harbors. The Dominguez Channel is 15 miles long. The watershed also includes Wilmington Drain, which empties into Machado Lake and other drainages, which drain directly or indirectly to the Los Angeles and Long Beach Harbors. Ninety-one percent of land in the watershed is developed.
70. There are a number of important Stormwater Management Plans and river plans that will shape the future of stormwater management in Los Angeles County. These Stormwater Management Plans, as implemented, may affect the volumes of stormwater that reach rivers and streams.
71. Two potentially significant drivers in terms of shaping the future of stormwater management are the 2006 Greater Los Angeles County Region, Integrated Regional Water Management Plan (GLAC IRWMP), which was updated in 2014, and the Watershed Management Programs (WMPs) and Enhanced Watershed Management Programs (EWMPs) developed under the Los Angeles County and City of Long Beach Municipal Separate Storm Sewer System (MS4) permits. The GLAC IRWMP is significant because it is very comprehensive and includes broad targets although it does not commit to specific projects. The EWMPs and WMPs are significant because they include specific projects with timelines or plans to develop specific projects with timelines. Considered as a group, the EWMPs and WMPs are comprehensive. The EWMPs and WMPs have generally been coordinated with the IRWMP.

72. The “Los Angeles Basin Study - The Future of Stormwater Conservation,” Bureau of Reclamation, November 2016 (Basin Study) may become a significant driver of change to stormwater management depending on its implementation.
73. The Lower LA River Revitalization Plan, per California State Assembly Bill 530 (2015), has identified specific project opportunities, a Community Stabilization Toolkit for river-adjacent communities, and a Watershed Education Program focused on the lower Los Angeles River.
74. LACFCD and Los Angeles County Public Works have initiated an effort to update the 1996 Los Angeles River Master Plan. The Los Angeles River Master Plan efforts will be led by the Los Angeles County Public Works and will include architect/design firms OLIN and Gehry Partners, and the nonprofit River LA. River LA will lead the community engagement and outreach.
75. The Stormwater Management Plans and the river plans are the drivers of change in Los Angeles County. The WDRs in this Order will respond to and reflect changes due to the implemented Stormwater Management Plans, as necessary.

**V. Description of Direct Impacts to Waters of the State**

Total Project fill/excavation quantities for all impacts are summarized in Table 1, below. These are not new or additional impacts but an accounting of areas which have been, and continue to be, impacted by yearly clearing. Permanent impacts are categorized as those resulting in a physical loss in area and also those degrading ecological condition only.

Table 1: Total Project Fill/Excavation Quantity									
Aquatic Resource Type	Temporary Impact <sup>2</sup>			Permanent Impact					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	CY <sup>3</sup>	miles	Acres	CY	LF	Acres	CY	LF
Stream Channel							734		

**VI. Avoidance and Minimization**

LACFCD conducted Feasibility Studies for the reaches in the Los Angeles River, San Gabriel River, Malibu Creek, Dominguez Channel, Antelope Valley, and Santa Clara River between 2013 and 2018 including every reach covered in this Order. The Feasibility Studies addressed capacity requirements for flood control; design criteria and anticipated limitations; and included an analysis of potential areas where vegetation could remain; areas with the potential for restoration of native vegetation; and/or where justification existed to clear additional vegetated area.

The Feasibility Studies also include an assessment of the biological functions and values for each reach and an assessment of water quality and consideration of whether the vegetation in the channel is native or an exotic and/or invasive species.

<sup>2</sup> Includes only temporary direct impacts to waters of the state and does not include upland areas of temporary disturbance which could result in a discharge to waters of the state.

<sup>3</sup> Cubic Yards (CY); Linear Feet (LF)



Based on these analyses, LACFCD was able to minimize impacts while achieving the required flood control. A summary of all revisions for every reach is in Attachment B to this Order, Summary of Revisions to Maintenance Manual.

## VII. Antidegradation Policies and California Environmental Quality Act (CEQA)

- a. **CEQA.** The Los Angeles Water Board finds that the Project is exempt from CEQA pursuant to California Code of Regulations, title 14, section 15061(b)(2). Specifically, the issuance of this Order and the activities described herein meet the exemption criteria under California Code of Regulations, title 14, section 15301 (Existing Facilities). Additionally, the Los Angeles Water Board concludes that no exceptions to the CEQA exemption apply to the activities approved by this Order.
- b. **Antidegradation Policies.** Federal regulation 40 C.F.R. section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintaining the Quality of the Waters of the State"). Resolution No. 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The activities and discharges permitted by this Order are consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. This Order includes discharge prohibitions, best management practices, monitoring requirements, and other conditions on the permitted activities and discharges to ensure that water quality standards are achieved and that beneficial uses are protected. Compliance with the requirements of this Order will ensure that the permitted activities and discharges will not cause degradation.

## VIII. Petition for Reconsideration and/or Review to the State Water Board

Any person aggrieved by the 401 Certification in this Order may petition the State Water Board to reconsider the 401 Certification in accordance with California Code of Regulations, title 23, section 3867. Any person aggrieved by the WDRs in this Order may petition the State Water Board to review the WDRs in accordance with California Water Code section 13320 and California Code of Regulations, Title 23, sections 2050 and following. A petition for reconsideration and/or review must be submitted in writing. 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 at [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

## IX. Fees Received

An application fee of \$1,500 was received on April 13, 2018. An additional fee of \$128,500 based on total Project impacts identified in Table 1 was received on June 8, 2018. The fee amount was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3), and was calculated as category A - Fill & Excavation Discharges (fee code 84) with the dredge and fill fee calculator.



**IT IS HEREBY ORDERED** that the Los Angeles County Flood Control District, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following requirements, pursuant to authority under California Water Code sections 13263 and 13267.

**X. Permitted Activities**

**a. Vegetation and Sediment Clearing**

1. Conduct maintenance of 96 earthen-bottom channel reaches in accordance with the 2018 Maintenance Plan. The Master Maintenance Plan is consistent with the Preliminary Jurisdictional Delineation Report prepared by LACFCD dated September 4, 2014. The Master Maintenance Plan includes the hydrologic code, beneficial uses, length, acreage, maps and maintenance methods for each reach.<sup>4</sup>
2. Conduct annual sediment and vegetation removal as authorized per the Master Maintenance Plan and per the schedule the LACFCD issues (Section XII, b. Reporting and Notification Requirements). Channel clearing shall not exceed the boundaries included for each reach in the Master Maintenance Plan as approved by the Los Angeles Water Board by this Order. Other changes to the Master Maintenance Plan shall be approved by the Executive Officer of the Los Angeles Water Board and other appropriate agencies including the ACOE and CDFW.
3. Conduct routine maintenance, inspection and calibration, including clearance of accumulated sediment and/or vegetation within three feet of the water quality monitoring equipment during dry weather as needed to ensure proper operation. Conduct periodic sediment and vegetation removal as authorized on an as-needed basis to provide continuous flow for water quality monitoring equipment.
4. Conduct periodic sediment and vegetation removal as authorized, on an as-needed basis, to ensure proper drainage to address vector issues.
5. In areas where there are sensitive species and native vegetation, clearing shall take place by hand as specified in the Master Maintenance Plan in order to selectively avoid protected resources. In other areas, clearing may be conducted with heavy equipment, including trucks, bulldozers, dump trucks, and front-end loaders, along with other specialized equipment. Equipment shall access the channels by existing access roads or by designated access paths.

**b. Maintenance of Existing Invert Access Ramps**

1. Conduct authorized maintenance activities for invert access ramps, which are critical structures for access to earthen-bottom channel reaches whether constructed with dirt, lined with concrete, or armored with riprap on the sides. Authorized maintenance activities include inspection, minor maintenance repairs, and storm damage repair and rehabilitation. Storm damage repair and rehabilitation includes restoring ramps that are damaged or washed out during a storm, back to pre-storm conditions.

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<sup>4</sup> While included in the Master Maintenance Plan, channel reaches identified as County Reach numbers 112–121 are not regulated by this Order. Any required maintenance in these channels will be permitted or certified by the Los Angeles Water Board separately.

**c. Outlets, minor repairs and equipment maintenance**

1. Notching and limited vegetation removal from drain channel outlets is authorized on reaches where mechanical removal of sediment and vegetation is allowed and it is consistent with the original channel designs. In stream reaches where mowing or hand removal of vegetation is required, work on installing notches at 45 degrees and clearing drain channel outlets is authorized to be conducted by hand and/or hand tools, and shall be consistent with all terms of the Master Maintenance Plan.
2. Conduct non-emergency minor repairs, which may include the following: regrading inverts to repair minor erosion and to remove ponded water; repair of minor storm damage; and in-kind structural repairs. These repairs may include, but are not limited to, minor in-kind riprap replacement, flap gate repair and/or replacement, invert and slope repairs, and erosion control structures.
3. Conduct urgent work that is small in scope and conducted during and immediately after storm events.
4. Conduct maintenance of monitoring equipment. In order to obtain accurate flow readings from all monitoring equipment mounted on bridges and/or other structures and prevent equipment damage, vegetation within monitored channels may be cleared to bank-full capacity upstream and downstream of the gauges, conduits, pumps, sensors, and probes or bridge. In addition, maintenance may include performing repair and in-kind replacement of existing monitoring equipment if inspections determine that such activities are required. Stream gauge maintenance shall occur between September 1 and March 15. Routine maintenance, inspection and calibration, including clearance of accumulated sediment and/or vegetation within three feet of the water quality monitoring equipment may be conducted, if needed, during dry weather to ensure proper operation.

**XI. Prohibitions**

- a. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall LACFCD use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.
- b. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity and storage of the materials shall be confined to these areas.
- c. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species beyond the permitted vegetation removal; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, or cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.

- d. This Order does not authorize application of pesticides. Any such application that may be necessary as part of the maintenance activities authorized by this Order must be separately permitted through the appropriate statewide general pesticide application permit.

**XII. Conditions**

The Los Angeles Water Board has independently reviewed the record of the Project to analyze impacts to water quality and designated beneficial uses within the watersheds of the Project. In accordance with this Order, LACFCD may proceed with the Project under the following conditions and requirements:

**a. Authorization**

Impacts to waters of the State shall not exceed quantities shown in Section V. Table 1. Impacts to individual reaches shall not exceed the limits specified in Attachment A to this Order, MasterMaintenance Plan.

**b. Reporting and Notification Requirements**

**1. All Reports and Notifications**

- i. Requirements for the content of these reporting and notification types are detailed in Attachment C, Reporting Requirements, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment C, which must be signed by LACFCD or an authorized representative as indicated in subpart iii., below.
- ii. Each and any report submitted in accordance with this Order shall contain the following completed declaration;

“I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.  
\_\_\_\_\_  
(Signature)  
\_\_\_\_\_  
(Title)”

- iii. All applications, reports, or information submitted to the Los Angeles Water Board shall be signed by either a principal executive officer, ranking elected official, or other duly authorized employee. A duly authorized representative may sign documents if:
  - A. The authorization is made in writing by an authorized person;
  - B. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity; and

- C. The written authorization is submitted to the Los Angeles Water Board Staff Contact prior to submitting any documents.
- iv. All communications regarding this project and submitted to the Los Angeles Water Board shall identify the Project File Number 99-011 2018 WDR. Submittals shall be sent to the Executive Officer where identified and to the 401 Certification Unit, Attention: Valerie Carrillo Zara.

## 2. Project Reporting

- i. **Annual Workplan and Thresholds for Additional Review.** Pursuant to California Water Code section 13267, LACFCD shall submit an Annual Workplan with a schedule of the upcoming reaches proposed for maintenance clearing. The Annual Workplan shall include, at a minimum, the following information: (a) proposed schedule; (b) acreage of areas to be impacted (vegetated and non-vegetated); (c) a description of any existing aquatic resources; (d) site-specific best management practices (BMPs) to be implemented; and (e) proposed application of pesticides. If LACFCD, or other County agency in support of LACFCD, plans to use any pesticide in these reaches, LACFCD shall also specify the pesticide permit (i.e. Vector Control or Weed Control) and submit the WDIR number and the Pesticide Action Plan or Aquatic Pesticides Application Plan with the Annual Workplan. LACFCD shall send the Annual Workplan not later than August 1 of each year to the Los Angeles Water Board Executive Officer and 401 Certification Unit staff, and send notices of additional routine maintenance work as the needs are discovered in the field. The Executive Officer may require additional time to review or add additional requirements or require separate permitting for certain activities proposed upon review of the Annual Workplan or notice of additional routine maintenance work; however, if the Executive Officer does not provide any comments, additional requirements or a request for additional time within 30 days for the Annual Workplan, or 15 days for the notice of additional routine maintenance work, LACFCD is authorized to proceed pursuant to the Annual Workplan or notice of additional routine maintenance work as proposed.
  - A. Routine maintenance may require additional review if the work exceeds certain thresholds of impact as defined below. For projects that exceed the following thresholds, LACFCD shall provide information similar to a pre-construction notification for a 401 Water Quality Certification for 60-day review.
  - B. **Project Exceeds Original Footprint**  
For any work resulting in temporary or permanent impacts within the ordinary high water mark outside the currently permitted project boundaries, LACFCD shall submit a new proposed scope of work to the Los Angeles Water Board Executive Officer with all pertinent information for consideration to support either confirmation that the project area(s) is within the scope of this Order or a determination that LACFCD must apply for supplemental WDRs or a separate CWA Section 401 Water Quality Certification for the work.
  - C. **Project Deviates from the Pre-Approved Surface Water Diversion Plan**  
If a water diversion is planned to occur in a manner which deviates from the Pre-Approved Water Diversion Plan, LACFCD shall submit the new plan to the Los Angeles Water Board Executive Officer for review and approval. The Executive Officer is authorized to approve changes to the Surface Water Diversion Plan provided that it is consistent with this Order.



- ii. **Schedules.** Prior to any maintenance activities within the subject reaches, LACFCD shall publish approximate schedules (including baseline biological surveys and maintenance activity descriptions). This information shall be made publicly available on the LACFCD website and via email notification or other direct notification to watershed councils and other interested persons prior to any routine maintenance activities. For each reach, the information shall include: (a) the proposed schedule; (b) a description of the reach's existing condition; (c) the area of proposed impact; and (d) a description of any existing aquatic resources (e.g., wetland/riparian vegetation based on readily available information and pre-clearing biological surveys).
- iii. **Annual Reports.** To demonstrate compliance with this Order, pursuant to CWC section 13267, LACFCD shall submit to the Los Angeles Water Board Executive Officer an Annual Project and Mitigation Monitoring Report (Annual Report) by May 1<sup>st</sup> of each year for each year this Order is in effect. Any revisions to the previous Annual Reporting outline and/or technical or field checklists shall be submitted to the Executive Officer for approval within 60 days of the issuance of this Order.

After submission to the Los Angeles Water Board Executive Officer, LACFCD will post the Annual Report to the LACFCD website.

The Annual Report shall describe in detail all of the project/maintenance activities performed during the previous year and all restoration and mitigation efforts. At a minimum, the Annual Reports shall include the following documentation, as set forth in the Annual Report Outline dated April 5, 2010:

- A. Annual Report Summary
- B. List of attached documentation
- C. Description of all project/maintenance activities performed during the previous year
- D. Discussion of all restoration efforts and continued maintenance of the Big Tujunga mitigation site
- E. Status of other agreements (e.g., ACOE permits or CDFW SAAs)
- F. Status of review of hydraulic analyses or new hydraulic analyses for reaches 28, 67, 69, 70, 75, 90, 100, and 110
- G. Summary of compliance with all requirements of this Order
- H. A certified statement (Declaration) from LACFCD that all information reported in the annual report is complete and accurate
- I. Documentation/Attachments
  - Color photo documentation (pre-, during, and post-project site conditions)
  - Narrative and photo documentation of any BMP installations during and post-project maintenance activities
  - Evaluation of the effectiveness of BMPs utilized based on field observations and water quality monitoring data required
  - Photo documentation of any vegetation left within maintenance areas immediately following maintenance clearing (including acreage)
  - Documentation of estimates of volumes of vegetation removed from the project areas including an analysis of inter-annual trends in vegetation loads
  - Documentation of estimates of volumes of trash removed from the project areas including an analysis of inter-annual trends in trash loads

- Documentation of estimates of volumes of sediment removed from the project areas including an analysis of inter-annual trends in sediment loads
- Biological information including baseline biological surveys and post-project surveys
- The overall status of the project including a detailed schedule of work
- Copies of all revised permits related to this project
- All water quality monitoring results by reach in a tabular format containing results of each parameter for each channel reach
- A certified statement of "No Net Loss" of Wetlands Associated with this project
- Discussion of all monitoring activities and exotic plant control efforts
- Description of all outreach activities in the previous year

**iv. Conditional Notifications and Reports for Accidental Discharges of Hazardous Materials<sup>5</sup>:** The following notifications and reports are required for Accidental Discharges of Hazardous Materials:

Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Wat. Code, § 13271):

- A.** As soon as (a) LACFCD has knowledge of the discharge or noncompliance, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures then LACFCD shall:
- 1) first call – 911 (to notify local response agency)
  - 2) then call – Office of Emergency Services (OES) State Warning Center at: (800) 852-7550 or (916) 845-8911
  - 3) Lastly follow the required OES procedures as set forth in:  
[http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill\\_Booklet\\_Feb2014\\_FINAL\\_BW\\_Acc.pdf](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf)
- B.** Following notification to OES, LACFCD shall notify the Los Angeles Water Board, as soon as practicable (within 24 hours if feasible). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
- C.** Within five (5) working days of notification to the Los Angeles Water Board, LACFCD must submit an Accidental Discharge of Hazardous Material Report to the Los Angeles Water Board.
- v. Violation of Compliance with Water Quality Standards:** LACFCD shall notify the Los Angeles Water Board within 24 hours of any event causing noncompliance with water quality standards. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

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<sup>5</sup> "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Saf. Code, § 25501.)

- A. Examples of noncompliance events include: lack of storm water treatment following a rain event, discharges causing a visible plume in a water of the State, and water contact with uncured concrete.
  - B. This notification must be followed within three (3) working days by submission of a written report to the Los Angeles Water Board describing the noncompliance and actions taken to correct the condition.
- vi. **Modifications to Project.** Project modifications may require an amendment to this Order. LACFCD shall give advance notice to Los Angeles Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. LACFCD shall inform Los Angeles Water Board staff of any Project modifications that will interfere with LACFCD's compliance with this Order.

**c. Pilot Projects**

1. Continuing LACFCD's efforts begun in 2015, LACFCD may identify pilot projects to investigate alternative vegetation management methods that may be more protective of beneficial uses, especially wildlife and habitat uses. Examples of pilot projects may include but are not limited to: mowing as opposed to scraping for vegetation clearing; clearing just one bank of a particular reach each year; replacing an invasive plant species such as *Arundo donax* with slower-growing native species; exploring different combinations of plant species in a given reach; or study and review of land use in the vicinity of a reach to determine if a level of infrequent flooding could be tolerated.
2. LACFCD shall explore pilot projects to investigate alternative vegetation management methods after consultation with the Los Angeles Water Board Executive Officer, ACOE, and stakeholders.
3. LACFCD shall include any pilot projects in the Annual Workplan.
4. For any pilot project conducted, LACFCD shall evaluate the project in terms of: a) ecological impact, impact to beneficial uses, and impact to local communities; b) positive or negative effects on downstream water quality; c) identification of conditions or requirements in permits or other requirements that would need to be modified for the pilot project to be required as routine maintenance; and d) impacts to LACFCD operations in terms of costs, schedule, resources, etc. LACFCD shall provide a technical report evaluating the pilot project within six months of completion of the pilot project with interim recommendations or, when possible, final recommendations.
5. With Los Angeles Water Board Executive Officer approval, and subject to approval by other agencies including ACOE and CDFW, as necessary, LACFCD shall implement new channel maintenance practices based on the outcomes of the pilot projects during term of this Order, as feasible.

**d. Continued Avoidance and Minimization**

1. LACFCD shall continue to assess and review, as appropriate, the hydraulic capacity and existing conditions of all reaches covered by this Order to identify any channels which may

potentially provide restoration opportunities for riparian habitat/vegetation growth and support modifications to channel clearing activities to achieve greater levels of avoidance and minimization.

2. For the reaches identified by the Feasibility Studies as not meeting required flood capacity requirements where additional vegetation may be removed (reaches 28, 67, 69, 70, 75, 90, 100, and 110), LACFCD shall review hydraulic analyses or conduct new hydraulic analyses to identify possible methods to minimize additional potential impacts in those reaches and report results to the Los Angeles Water Board. The Master Maintenance Manual may be updated in the future with reductions to allowed impact.
3. If LACFCD identifies a revised channel clearing or restoration opportunity based on changes to the contributing drainage area or other significant change since completion of the applicable feasibility study, LACFCD shall submit any identified channel clearing or restoration opportunity recommendations to the Los Angeles Water Board Executive Officer. Recommendations shall also include suggested schedules of vegetation removal frequency in order to ensure the maximum habitat preservation is achieved, consistent with necessary flood control. For recommendations approved by the Executive Officer and by other appropriate regulatory agencies including the ACOE and CDFW, LACFCD shall make the necessary changes to the Master Maintenance Plan, including proposals for additional BMPs as may be appropriate.
4. LACFCD shall conduct Risk and Uncertainty analyses or other appropriate analyses, working with the ACOE, as warranted, in order to identify those reaches with federally required maintenance requirements that may be candidates for revised maintenance procedures that would allow more vegetation to remain in the channel, or that would allow alternative channel clearing approaches/methods potentially more protective of beneficial uses. LACFCD may apply under section 14 of the Rivers and Harbors Act of 1899, codified at 33 U.S.C. section 408 (commonly referred to as "Section 408"), or may pursue alternative approaches as determined by the ACOE for modification of federally required maintenance requirements with the ACOE, if appropriate.

**e. Continued Outreach to stakeholders**

LACFCD shall continue the meaningful dialogue with interested stakeholders started under the WDR Working Group through long-term planning efforts, such as Lower Los Angeles River Revitalization Plan and Los Angeles River Master Plan Update. LACFCD will host stakeholder meetings on an as-needed basis when there are topics/issues related to the earth-bottom channels' maintenance.

**f. Water Quality Monitoring**

1. Water quality shall be monitored in compliance with the *Water Quality Monitoring Guide for Maintenance and Repair Projects Involving Water Diversion*, April 2016 (Water Quality Guide) in Attachment D.

The Water Quality Guide requires upstream and downstream monitoring when surface flows are present for the following constituents:

- pH
- temperature
- dissolved oxygen



- turbidity
- total suspended solids (TSS)

Analyses must be performed using approved U.S. Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to diversion and then monitored on a daily basis during the first week of diversion and/or dewatering activities, and then on a weekly basis, thereafter, until the in-stream work is complete.

LACFCD shall submit results of the analyses as part of the Annual Report to the Los Angeles Water Board in a tabular format containing results of each parameter for each channel reach. Diversion activities shall not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

2. LACFCD shall visually inspect the reaches after maintenance during the rainy season to ensure excessive erosion, stream instability, or other water quality pollution is not occurring in or downstream of the Project site. If water quality pollution is occurring, LACFCD shall contact the Los Angeles Water Board staff within three (3) working days. The Los Angeles Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.

**g. Standard**

1. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, title 23, sections 2050-2068 and sections 3867-3869, inclusive. Additionally, the Los Angeles Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to LACFCD, if the Los Angeles Water Board determines that: the Project fails to comply with any of the requirements or conditions of this Order; or, when necessary to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. § 1313). For purposes of Clean Water Act section 401(d), the condition constitutes a limitation necessary to assure compliance with water quality standards and appropriate requirements of state law.
2. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This Order is conditioned upon total payment of any fee required under title 23 of the California Code of Regulations and owed by LACFCD.
4. In the event of any violation or threatened violation of the requirements or conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties,

process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

#### **h. General Compliance and Enforcement**

1. Failure to comply with any requirement or condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. LACFCD may then be subject to administrative and/or civil liability pursuant to Water Code sections 13268, 13350, or 13385.
2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses, for receiving waters as adopted by the Los Angeles Water Board or State Water Board (collectively Water Boards) in any applicable water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any requirement or condition of this Order, the Los Angeles Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provide that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. LACFCD or their agents shall report any noncompliance with this Order. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time LACFCD becomes aware of the circumstances. A written submission shall also be provided within three days of the time LACFCD becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
5. In response to any violation of the requirements or conditions of this Order, the State Water Board or Los Angeles Water Board may add to or modify the requirements or conditions of this Order as appropriate to ensure compliance.
6. After notice and opportunity for a hearing, this Order may be modified, revoked and reissued, or terminated or modified for cause, including, but not limited to:
  - i. Failure to comply with any term or condition contained in this Order;
  - ii. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
  - iii. A change in any condition or acquisition of newly-obtained information that would have justified the application of different terms or conditions if known at the time of Order adoption;

- iv. Endangerment to human health or the environment resulting from the permitted activity.
- 7. LACFCD must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order and all subsequent submittals required as part of this Order. However, the requirements and conditions within this Order and Attachments supersede any conflicting provisions within LACFCD submittals.
- 8. This Order and all of its conditions and requirements contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.

**i. Administrative**

- 1. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & Game Code, §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). If a “take” will result from any act authorized under this Order held by LACFCD, LACFCD must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. LACFCD is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.
- 2. LACFCD shall grant Los Angeles Water Board and State Water Board staff, or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:
  - i. Enter the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
  - ii. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.
  - iii. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
  - iv. Sample or monitor for the purposes of assuring Order compliance.
- 3. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall be available at the Project sites during clearing activities. LACFCD shall be responsible for work conducted by its consultants, contractors, and any subcontractors.
- 4. A copy of this Order must be available at the Project site(s) during maintenance activities for review by site personnel and agencies. All personnel performing work on the Project shall be familiar with the content of this Order and its location at the Project site.
- 5. LACFCD shall submit copies of any other final permits and agreements required for this project, including, but not limited to, the ACOE CWA Section 404 permit and the CDFW’s Streambed Alteration Agreement to the Los Angeles Water Board 401 Certification Unit. These documents shall be submitted prior to any discharge to waters of the State.

**j. Mitigation for Temporary Impacts**



1. LACFCD shall restore all areas of temporary impacts to waters of the State and all other areas of temporary disturbance outside of areas of maintenance, which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include returning areas to pre-project contours and planting with native vegetation, if feasible.

**k. Compensatory Mitigation for Permanent Impacts<sup>6</sup>**

1. To mitigate the 48.2 acres impacted by removal of vegetation, LACFCD established the Big Tujunga Wash Mitigation Area in accordance with the *Master Mitigation Plan for the Big Tujunga Wash Mitigation Bank* (Final Plan dated April 2000), which contains 62.7 acres (achieving a 1.3:1 mitigation ratio) (Table 2).

Table 2: Required Project Compensatory Mitigation Quantity		
Aquatic Resource Type	Comp Mit. Type <sup>7</sup>	Rehabilitation <sup>8</sup>
Stream Channel	Permittee Responsible	62.7 acres

2. LACFCD shall continue to maintain the 62.7-acre Big Tujunga Wash Mitigation Area to ensure its long-term sustainability and that of the resident aquatic resources.

**l. Best Management Practices**

1. All appropriate Best Management Practices (BMPs) shall be implemented in order to avoid any impacts to water quality. LACFCD shall follow the “BMP Manual for Soft Bottom Clearing” developed by LACFCD in 2003 and all other necessary BMPs. The maintenance clearing activities shall not result in indirect impacts to water quality or beneficial uses of downstream waterbodies. The maintenance clearing activities shall not result in changes in the quantity or quality of water in downstream waterbodies as a result of maintenance activity, or during operation subsequent to the maintenance activities. The maintenance clearing activities shall not result in changes in water quality in the channel that would cause or contribute to water quality exceedances during periods between maintenance activities, or upon their annual completion.
2. LACFCD shall comply with the specifications of its Master Maintenance Plan, or any subsequently approved plans that follow.
3. LACFCD shall implement the Plan for Hazard Analysis and Critical Control Points dated April 1, 2010 (HACCP) in all reaches in the Malibu and Santa Monica watersheds or any subsequently Executive Officer-approved HACCP to limit the spread of invasive species.
4. LACFCD shall comply with all water quality objectives, prohibitions, and policies set forth in the Basin Plan, as amended.

<sup>6</sup> Compensatory Mitigation is for permanent physical loss and permanent ecological degradation of a water of the state.

<sup>7</sup> Compensatory mitigation type may be: In-Lieu-Fee (ILF); Mitigation Bank (MB); Permittee-Responsible (PR)

<sup>8</sup> Methods: establishment, reestablishment, rehabilitation, enhancement, preservation.



5. LACFCD shall implement all Best Management Practices as outlined in the Master Maintenance Plan.
6. Prior to start of any annual maintenance clearing, qualified biologists shall perform pre-clearing biological resource surveys and photo documentation. Sensitive/endangered species focused surveys shall be conducted per the Master Maintenance Plan. No work shall commence without confirmation of findings or no findings of sensitive/endangered species from the biologists. These surveys are also meant to minimize impact on any resources that may potentially use or benefit from the channel.
7. During construction, biologists shall be available for consultation for any issues that may arise.
8. If maintenance activities on monitoring equipment are necessary during the nesting season, appropriate nesting bird surveys will be conducted prior to starting work.
9. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses. Dust control activities shall be conducted in such a manner that will not produce downstream runoff.
10. All waste and/or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which WDRs have been established by a California Regional Water Quality Control Board, and is in full compliance therewith. Please contact the Land Disposal Unit, at (213) 620-6600 for further information.
11. LACFCD shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of sections 301, 302, 303, 306, and 307 of the CWA. This Order does not authorize the discharge by LACFCD for any other activity than specifically described in the current CWA Section 404 permit for this project.
12. Application of pesticides must be supervised by a certified applicator and be in conformance with manufacturer's specifications for use. Compounds used must be appropriate to the target species and habitat. Pesticide utilization shall be in accordance with State Water Board pesticide permits including: Water Quality Order Nos. 2011-0003-DWQ, for Aquatic Animal Invasive Species Control; 2011-0004-DWQ, for Spray Applications; 2011-0002-DWQ, for Vector Control; and 2013-0002-DWQ, for Weed Control. If LACFCD, or other County agency in support of LACFCD, plans to use any pesticides in these reaches, LACFCD shall also specify the General NPDES permit (i.e. Vector Control or Weed Control) and submit the WDID number and the Pesticide Action Plan or Aquatic Pesticides Application Plan with the Annual Workplan. If LACFCD or other County agency in support of LACFCD, enrolls in one of the abovementioned permits during the year for use in a reach included in this Order due to an emerging issue such as an emerging vector control issue, LACFCD shall submit the WDID number and the Pesticide Action Plan or Aquatic Pesticides Application Plan as soon as available.
13. LACFCD shall not conduct any routine maintenance activities within waters of the State during a rainfall event. LACFCD shall maintain a one-day (1-day) clear weather forecast before conducting any operations within waters of the State. If rain is predicted within 12

hours after operations have begun, activities shall cease temporarily, protective measures to prevent siltation/erosion shall be implemented and maintained and all material and equipment will be removed from the earth-bottom reach.

14. LACFCD shall utilize the services of a qualified biologist with expertise in riparian assessments during all construction activities where maintenance involves partially clearing areas (i.e., some vegetation is to remain in the same reach or in an adjacent reach). The biologist shall be available if necessary during maintenance activities to ensure that all protected areas are marked properly and ensure that no vegetation outside the specified areas is removed. The biologist shall have the authority to stop the work, as necessary, if instructions are not followed. The biologist shall be available upon request from the Los Angeles Water Board for consultation within 24 hours of request of consultation.
15. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum 5-foot buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, LACFCD shall file a Report of Waste Discharge with the Los Angeles Water Board and obtain any necessary NPDES permits/WDRs prior to discharging waste. Sufficient time should be allowed to obtain any such permits (generally 180 days). If groundwater is encountered without the benefit of appropriate permits, LACFCD shall cease all activities in the areas where groundwater is present, file a Report of Waste Discharge to the Los Angeles Water Board, and obtain any necessary permits prior to discharging waste.
16. All maintenance activities not included in this Order, and which may require a permit, must be reported to the Los Angeles Water Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional WDR action.
17. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water.
18. LACFCD shall follow the 2016 Water Diversion Manual, Attachment E to this Order, or, for circumstances which require a deviation from the Surface Water Diversion Plan, may submit to the Los Angeles Water Board an individual plan for the surface water diversion prior to the surface water diversion.
19. Diversion activities shall not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.
20. If ongoing maintenance activities on a new channel reach were covered by previous certifications with mitigation, additional mitigation will not be required. Prior to clearing of the new reaches, or where additional clearing has been authorized by the Los Angeles Water Board, LACFCD will document and provide to the Los Angeles Water Board the amount of riparian vegetation to be removed for maintenance in these reaches.
21. All mitigation areas shall be preserved and maintained as habitat in perpetuity.

22. Any modifications of the proposed project may require submittal of a new CWA Section 401 Water Quality Certification application or Report of Waste Discharge and appropriate filing fee.

### **XIII. Water Quality Certification**

The Los Angeles Water Board hereby issues this Order for the Maintenance Clearing of Engineered Earth-Bottom Channels for Flood Control, 4WQC40199011, certifying that as long as all of the conditions and requirements listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

Except insofar as may be modified by any preceding conditions or requirements, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions and requirements of this Order and the attachments to this Order; and (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and Policies and the Los Angeles Water Boards' Water Quality Control Plan and Policies.

### **XIV. Effective Date and Term**

- a. This Order takes effect upon its issuance by the Los Angeles Water Board.
- b. Term: This Order expires on July 20, 2023 or upon such time it is replaced coincident with a renewed ACOE CWA Section 404 permit, whichever is earlier. If an ACOE CWA Section 404 permit is renewed, LACFCD must file a Report of Waste Discharge with the Los Angeles Water Board no later than 120 days before of the expected date of the renewed ACOE CWA Section 404 permit for consideration of issuance of new or revised requirements. If no such ACOE CWA Section 404 permit is renewed and LACFCD wishes to continue maintenance activities after this Order expires, LACFCD must file a Report of Waste Discharge with the Los Angeles Water Board no later than 120 days before the expiration date of this Order for consideration of issuance of new or revised requirements. Any discharge of waste after the expiration date of this Order is a violation of Water Code section 13264. The Los Angeles Water Board is authorized to take appropriate enforcement action for any noncompliance with this provision including assessment of penalties.
- c. Los Angeles Water Board Order No. R4-2015-0032, adopted by the Board on February 12, 2015 and amended on February 11, 2016, is hereby terminated, except for enforcement purposes.

**CERTIFICATION**

I, Deborah J. Smith, do hereby certify that the foregoing is a full, true, and correct copy of Waste Discharge Requirements and Clean Water Act section 401 Water Quality Certification for the Maintenance Clearing of Engineered Earthen-Bottom Channels for Flood Control, 4WQC40199011, issued on July 12, 2018.

*for*   
\_\_\_\_\_  
Deborah J. Smith  
Executive Officer  
Los Angeles Water Quality Control Board



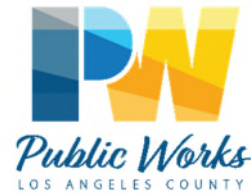
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**ATTACHMENT NO. 8**  
2019 MAINTENANCE METHODOLOGY PILOT PROJECTS

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# **2019 MAINTENANCE METHODOLOGY PILOT PROJECT**

## **Soft-Bottom Channel Reach 7 (Bull Creek Main Channel Outlet) and Reach 19 (Pickens Canyon)**



Prepared by:

**Los Angeles County Flood Control District  
Los Angeles County Public Works  
900 S. Fremont Avenue, Alhambra, CA 91803**

**May 2020**



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**2019 MAINTENANCE METHODOLOGY PILOT PROJECT**  
**At**  
**Soft-Bottom Channel Reach 7 (Bull Creek Main Channel Outlet) and**  
**Reach 19 (Pickens Canyon)**

**1.0 INTRODUCTION**

Los Angeles County Flood Control District (LACFCD) is responsible for providing flood protection to County residents through the maintenance of its network of flood control channels. On an annual basis, adequate channel capacity is maintained by clearing vegetation and debris within the flood channels to reduce the risk of loss of life and/or property damages from flooding during large storm events. All soft-bottom channel (SBC) clearing activities are typically started after Bird Nesting Season, from September 1 through March 15, and are performed in accordance with all applicable environmental/regulatory permits. If work is needed during Bird Nesting Season, a qualified biologist conducts nesting bird surveys prior to the start of the any maintenance activities.

LACFCD, in cooperation with stakeholders; the Regional Water Quality Control Board, Los Angeles Region (Regional Board); and other regulatory agencies, continues its efforts to conduct the Maintenance Methodology Pilot Project (MMPP) at Soft-Bottom Channel (SBC) Reaches 7 (Bull Creek Main Channel Outlet) and 19 (Pickens Canyon). Past vegetation maintenance methodology for these SBC reaches were altered as part of the MMPP. The intent was to investigate whether an alternative vegetation maintenance method can be used for these two SBC reaches that will minimize impact on existing vegetation and associated habitat while maintaining adequate channel capacity. Leaving additional vegetation within these SBC reaches requires further approval from all regulatory agencies, particularly the U. S. Army Corps of Engineers (USACE).

The MMPP for SBC Reaches 7 and 19 is on its third year. In this report, LACFCD will go over the 2019 maintenance activities for these reaches and its findings.

**1.1 Channel Assessment**

SBC Reaches 7 and 19 are located within the Los Angeles River (LAR) watershed.

Reach 7, Bull Creek Main Channel Outlet (MCO), originates at Bull Creek Retention Basin and discharges to the Sepulveda Dam. It is an engineered channel for approximately 9.5 miles, then transitions into a natural soft-bottom channel. It is this soft bottom portion of the channel that is being investigated in this MMPP. For SBC Reach 7, work is performed only in the first 275 feet and extends from the concrete reach outlet to the pedestrian bridge (see Figure 1). Based on the permit conditions, SBC Reach 7 has been identified as having habitat for the least Bell's vireo. This reach is considered a sensitive reach.

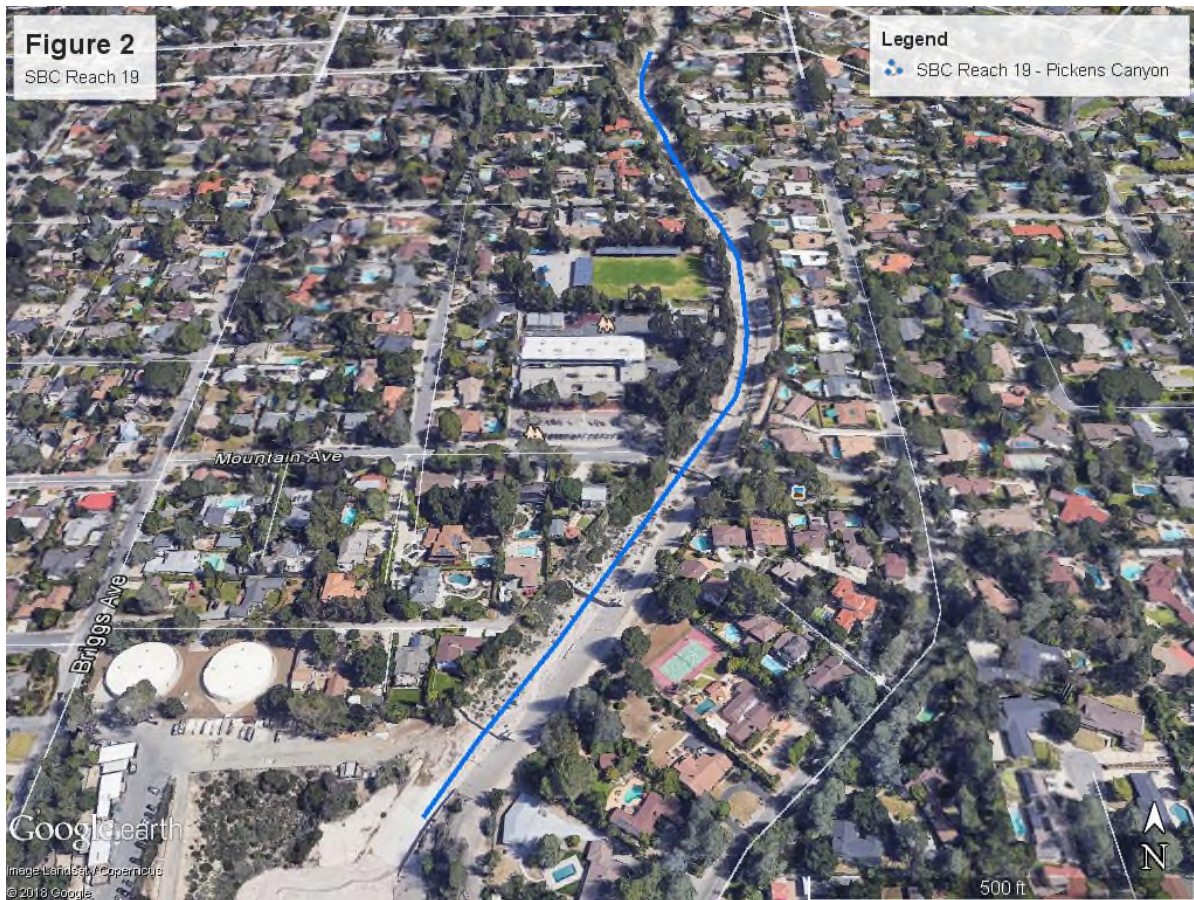


Reach 19 - Pickens Canyon, originates in the Angeles National Forest and discharges into the Verdugo Wash. It is an engineered storm drain for approximately 0.4 miles then transitions into a natural soft-bottom channel. This soft-bottom portion of the channel is being investigated in this MMPP. SBC Reach 19 is approximately 25 feet upstream of Crib Dam #7 to the start of the concrete spillway inlet to Pickens Debris Basin (see Figure 2). Based on surveys performed by BonTerra's biologist, Mr. Brian E. Daniels, no potential habitat is present in the channel for least Bell's vireo. This reach is considered a non-sensitive reach.



**Figure 1: SBC Reach 7 – Bull Creek MCO**





**Figure 2: SBC Reach 19 – Pickens Canyon**

## **2.0 VEGETATION MAINTENANCE**

Before the implementation of the MMPP, SBC Reach 7 maintenance activities included hand clearing of vegetation and debris along the invert. This method was last utilized during the November 2015 maintenance. During the 2016 to 2019 implementation of the MMPP, the maintenance of this channel was slightly modified. Hand clearing is still being used to clear vegetation and debris along the invert of the channel but additional willow growth is being allowed in a single line (no more than 1 tree every 10 feet) at the toe of the slope on the right (west) side bank of the channel.

In 2015, SBC Reach 19 maintenance activities included hand clearing of vegetation adjacent to or growing out of the crib structures. During the 2016 to 2019 implementation of the MMPP, the same maintenance activities were conducted with some minor amendments. For example, more native shrubs were allowed to grow on the invert of the channel except on the crib structures. Additionally, native shrubs were protected by removing non-native and ornamental vegetation.

All cuttings generated from the removal of the invasive vegetation from Reaches 7 and 19 were placed in tarps to ensure seedlings or cuttings did not fall on the ground that could result in future growth of invasive vegetation in the channels.

As part of LACFCD's standard practice for SBC clearing activities, a qualified biologist was available for consultation prior to start of work to ensure proper removal of invasive vegetation. Best Management Practices (BMPs) were implemented in accordance with the facilities' regulatory permits. All the removed vegetation and incidental sediment were placed in dump trucks and properly transported to an approved off-site disposal/landfill facility.

The 2019 MMPP for SBC Reach 7 was performed on October 16, 2019 while SBC Reach 19 was done on January 24, 2020. The equipment used during the 2019 MMPP included hand tools and a stakebed dump truck (see Attachment A).

### **3.0 WATER QUALITY MONITORING - MMPP**

No Water Quality (WQ) monitoring was performed during the 2019 MMPP for Reaches 7 and 19. Reach 19 was devoid of water, while Reach 7 only had nonflowing, ponded water. Since Reach 7 did not have continuous flow of water that continued beyond the reach's downstream limit, no WQ monitoring was required. Field personnel were not permitted to enter the ponded water for this reach in the 2019 MMPP.

### **4.0 BIOLOGICAL RESOURCES REPORT - MMPP**

#### **4.1 Biological Resources**

The preclearing biological site visit was conducted by a qualified biologist at SBC Reach 7 on August 26, 2019. Standard data were recorded, and photos were taken from photo stations established in 2015 after completion of the Bull Creek Restoration Project. Construction began in 2008 for this project managed by the City of Los Angeles and USACE. The project footprint was within Lake Balboa Park and included this SBC reach managed by the LACFCD. The project changes to Reach 7 included lining the earthen banks with riprap and construction of a pedestrian bridge near the downstream terminus of the reach. In addition, the project created more extensive riparian habitat that became seasonally occupied by the State and federally Endangered least Bell's vireo (*Vireo bellii pusillus*). Attachment D includes the Pre- and Post-clearing Form for the 2018-2019 SBC maintenance clearing season. Photos associated with these visits are included in Attachment C.

During the August 26, 2019, preclearing survey of Reach 7, mature willow dominated riparian vegetation was present on the earthen tops of both banks. The banks were covered with riprap and concrete. A trash rack crosses the invert where the riprap and concrete portions of the reach meet. The concrete at the upper end of the reach existed prior to the restoration project. In this concrete portion of the reach, one mature willow tree was present at the toe of the right (west) bank. This mature willow was present prior to the start of project construction in 2008. The invert was unvegetated and covered by flowing water in previous years. During this survey, however, young willows and cattails

have become established on the invert along the left (or east) bank between the trash rack and the pedestrian bridge. As in previous surveys, young willows and ornamental saplings have emerged in the riprap of both banks, especially at the water's edge.

The post-clearing survey was performed on November 19, 2019. As required by the LACFCD's regulatory permits, all maintenance activities in this SBC reach are performed after September 15, the end of the least Bell's vireo breeding season. These migratory birds have departed the area by mid-September to spend the winter season south of the region. Maintenance activities are then allowed by the permits to proceed while being monitored by qualified biologists that have identified and protected habitat seasonally occupied by the least Bell's vireo. The location and extent of this occupied habitat was determined during focused surveys conducted for this species on a regular basis by qualified biologists for the LACFCD. Vegetation removed included trimmings of the mature willow on the right bank toe and the young willow growth on the riprap of both banks and on the newly formed sediment "island" that has appeared on the invert between the pedestrian bridge and the trash rack.

The pre-clearing biological site visit for SBC Reach 19 was conducted by a qualified biologist on August 19, 2019. Standard data were recorded and photos were taken from previously established photo stations. Attachment D includes the Pre- and Post-clearing Form from the 2018-2019 SBC maintenance clearing season. Photos associated with these visits are included in Attachment C.

During the August 19, 2019, pre-clearing survey of Reach 19, the vegetation on the invert consisted of sparse growth of alluvial sage scrub vegetation. The left (east) bank was concrete but the right (west) bank was earthen, supporting a dense growth of primarily ornamental vegetation. The alluvial sage scrub species were mostly native such as mule fat (*Baccharis salicifolia*), deerweed (*Acmispon glaber*), scale broom (*Lepidospartum squamatum*), California buckwheat (*Eriogonum fasciculatum*), and white sage (*Salvia apiana*). Nonnative invasive species, including castor bean and Spanish broom (*Spartium junceum*), are also present on the invert. The nonnative ornamental vegetation on the west bank includes trees such as Aleppo pine (*Pinus halepensis*), Canary Island pine (*Pinus canariensis*), and ash (*Fraxinus* sp.). This bank vegetation also includes natives such as laurel sumac (*Malosma laurina*).

The post-clearing survey was performed on January 16, 2020. The biologist reported that the modified maintenance plan for this SBC reach was fully implemented. Accordingly, only vegetation growing on the crib structures is removed during annual maintenance activities. All other vegetation on the invert and on the earthen west bank was allowed to remain. This clearing pattern is consistent with previous maintenance activities for Reach 19.

The modified maintenance method for Reach 19 was intended to facilitate growth and spread of native alluvial scrub species on the invert by removal of invasive species including castor bean and Spanish broom. Over multiple years, the new method would result in higher quality alluvial sage scrub habitat that is expected to provide greater habitat value for wildlife in the region.



## **4.2 MMPP's Biological Assessment**

Proposed modified maintenance methods at SBC Reach 7 include allowing additional vegetation (i.e. willows) to grow at the toe of the west bank. In time, these willows would be pruned to allow canopy only above approximately six feet so that storm flows are not impeded. The goal would be to have more than one "old" willow now established on the toe of the west bank of this reach. This would provide additional habitat for riparian species already using this reach including the endangered least Bell's vireo. Establishment and growth of these willows would take a minimum of several years to occur.

Proposed modified maintenance methods at SBC Reach 19 include removal of invasive species such as castor bean and Spanish broom in order to facilitate growth and spread of native alluvial scrub species on the invert. Over multiple years, the new method would result in higher quality alluvial sage scrub habitat that is expected to provide greater habitat value for wildlife in the region. The vegetation on the invert currently receives relatively little wildlife use because of its isolation from other native open spaces in the region. It is expected that the greater habitat values in the future will allow the occupation of this reach by regional wildlife species such as the western whiptail (*Cnemidophorus tigris*). It should be noted that measurable increases in quantity and quality of native alluvial sage scrub vegetation are long-term prospects and expected to occur over many years.

The modified maintenance methodology for Reaches 7 and 19 were intended to facilitate growth and spread of native willow and alluvial sage scrub species, respectively, on the invert of the reaches. Over multiple years, the new method would result in higher quality willows and alluvial sage scrub habitat that are expected to provide greater habitat value for wildlife.

## **5.0 COMPARISON**

LACFCD's initial observation of the 2019 MMPP is as follows:

### **5.1 Maintenance Observation**

During the 2019 MMPP for SBC Reaches 7 and 19, by allowing more vegetation to grow within these reaches, we observed the following:

- 1) No significant change was observed regarding the time it took to maintain Reaches 7 and 19.
- 2) There was a slight increase in the cost for the maintenance of Reaches 7 and 19.
- 3) There was no detectable change in the equipment used for the new maintenance methodology since the vegetation and debris clearance were all done by hand, even prior to the implementation of the MMPP.

## **6.0 NEXT STEP**

The MMPP for SBC Reaches 7 and 19 will continue to be monitored and evaluated over the next few years to determine if the proposed maintenance practices are proven to be

effective and beneficial. As part of this Pilot Study, biological monitoring will continue to be conducted, in addition to Water Quality Sampling (if conditions allow it). LACFCD will continue to prepare the MMPP Reports to submit to Regional Board and other involved stakeholders until the end of this Pilot Project.

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# **ATTACHMENT A**

## **EQUIPMENT UTILIZED FOR MAINTENANCE METHODOLOGY PILOT PROJECT**



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## EQUIPMENT USED IN MMPP

### TOOLS USED FOR CLEARING REACHES



Hand Tools



Stakebed Dump Truck

# **ATTACHMENT B**

**DURING MMPP CLEARING PHOTOS  
SBC REACHES 7 AND 19**



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# DURING MMPP CLEARING PHOTOS SBC REACH 7 - BULL CREEK M.C.O.



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# DURING MMPP CLEARING PHOTOS SBC REACH 19 - PICKENS CANYON





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**ATTACHMENT C**  
**PRE- AND POST-CLEARING PHOTOS**

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# PRE- AND POST-CLEARING PHOTOS

## SBC Reach 7 - Bull Creek M.C.O

Before Photos 10/16/2019

After Photos 11/07/2019





# PRE- AND POST-CLEARING PHOTOS

## SBC Reach 19 - Pickens Canyon

Before Photos 01/24/2020

After Photos 01/24/2020



# PRE- AND POST-CLEARING PHOTOS

## SBC Reach 19 - Pickens Canyon

Before Photos 01/24/2020



After Photos 01/24/2020



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# **ATTACHMENT D**

## **PRE – AND POST-CLEARING FORMS**



# PRE- AND POST-CLEARING FORMS

## SBC Reach 7 - Bull Creek M.C.O

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

### Biological Resources Monitoring Form

Reach Number: 7

Special Permit Conditions (list):

Special permit conditions for least Bell's vine (LAV) apply.  
Note that the ACOB/City of L.A. restoration project  
in 2008 changed existing conditions at this reach.

Observation of Special Status Species: None detected during Aug 26, 2019 visit

#### Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 1, 2, 3; willow and cottonwood saplings at toe of  
both riprap covered slopes – note cattails and Nipa  
scrub growing on sediment bar forming on invert;  
invasives not a problem (fire damaged vegetation  
on top of banks resulting from unregulated fires  
in homeless encampments).

Name of Biological Monitor: Brian Daniels Date: Aug 26, 2019

#### Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3; Four young cottonwoods at toe of  
right (or west) bank selected for protection.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Brian Daniels Date: Nov. 19, 2019

Revised 2016

# PRE- AND POST-CLEARING FORMS

## SBC Reach 19 - Pickens Canyon

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

### Biological Resources Monitoring Form

Reach Number: 19

Special Permit Conditions (list):

*Hard Clearing only. (Note that the current ACOE permit continues to include this reach on but for east Bell's Wires and Santa Ana wickets despite experts determining no potential for either of these two species.)*

Observation of Special Status Species: None observed.

#### Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

*Photos 12, 13; Riparian herb and ruderal vegetation in area maintained; some Castor Bean present.*

Name of Biological Monitor: Steve Morris Date: August 19, 2019

#### Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

*Photos 6, 7; Ornamental vegetation and some chaparral and/or alluvial sage scrub.*

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve North Date: January 16, 2020

Revised 2016

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# 2019 MAINTENANCE METHODOLOGY PILOT PROJECT

## Soft-Bottom Channel Reaches 20 (Webber Channel Private Bridge) and 21 (Webber Channel Main Inlet)



Prepared by:

**Los Angeles County Flood Control District  
County of Los Angeles Public Works  
900 S. Fremont Avenue, Alhambra, CA 91803**

May 2020



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# **2019 MAINTENANCE METHODOLOGY PILOT PROJECT**

## **At**

### **Reaches 20 (Webber Channel Private Bridge) and 21 (Webber Channel Main Inlet)**

#### **1.0 INTRODUCTION**

Los Angeles County Flood Control District (LACFCD) is responsible for providing flood protection to County residents through the maintenance of its network of flood control channels. On an annual basis, channel capacity is maintained by clearing vegetation and debris within the flood control channels to reduce the risk of loss of life and/or property damages from flooding during large storm events. All soft-bottom channel (SBC) clearing activities are typically started after the bird-nesting season from September 1 through March 15 and are performed in accordance with all applicable environmental/regulatory permits. If work is needed during the bird nesting season, a qualified biologist conducts nesting bird surveys prior to the start of any maintenance activities.

During the 2017 SBC clearing, in cooperation with stakeholders and regulatory agencies, LACFCD volunteered to conduct a Maintenance Methodology Pilot Project (MMPP) at Soft-Bottom Channel (SBC) Reaches 20 (Webber Channel Private Bridge) and 21 (Webber Channel Main Inlet). Past vegetation maintenance methodology for these two SBC reaches were altered as part of the MMPP. The intent was to investigate whether an alternative vegetation maintenance method can be used that will minimize impact on channel vegetation and associated habitat while maintaining the existing channel capacity. Leaving additional vegetation within these SBC reaches requires further approval from all regulatory agencies, especially the U. S. Army Corps of Engineers (USACE).

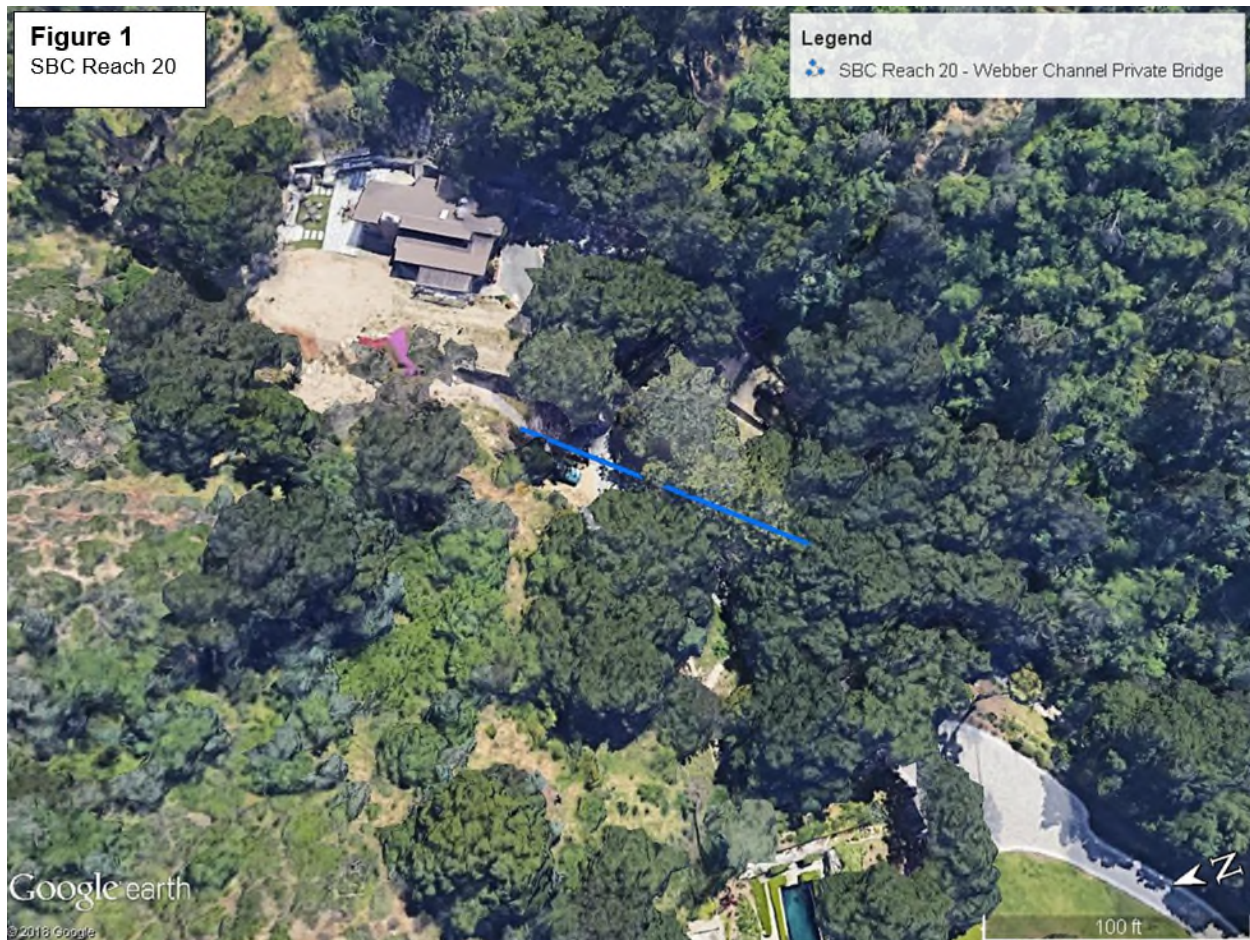
The MMPP for SBC Reaches 20 and 21 is on its third year. In this report, LACFCD will go over the 2019 maintenance activities for these reaches and its findings.

#### **1.1 Channel Assessment**

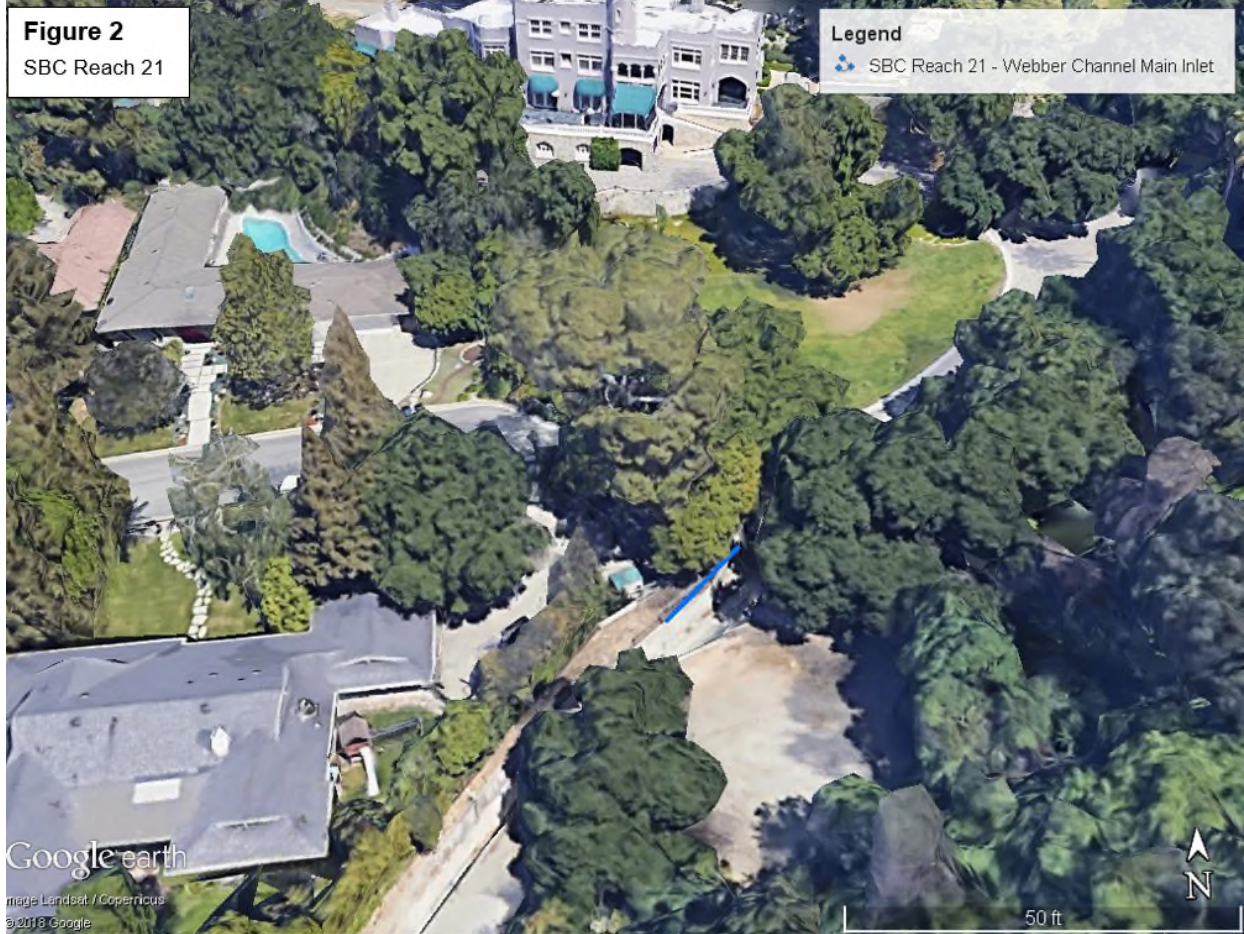
SBC Reaches 20 and 21 are located within the Los Angeles River (LAR) watershed.

Webber Channel is in the Angeles National Forest and discharges into the Verdugo Wash. Two soft-bottom sections of the channel are being investigated in this MMPP. Reach 20 is a stream at a private bridge that is about 115 feet in length and 25 feet in width (0.13 acres). Reach 20 spans from 861 feet upstream of Los Amigos Street to 746 feet upstream of Los Amigos Street (see Figure 1). Reach 21 is a stream that is 25 feet in length and 25 feet in width (0.03 acres). It serves as the main channel inlet downstream of the private bridge. Reach 21 spans from 496 feet upstream of Los Amigos Street to 471 feet upstream of Los Amigos Street (see Figure 2).





**Figure 1: SBC Reach 20 – Webber Channel Private Bridge**



**Figure 2: SBC Reach 21 - Webber Channel Main Inlet**



## **2.0 VEGETATION MAINTENANCE**

### **2.1 2019 MMPP Vegetation Maintenance**

Prior to the implementation of the MMPP, SBC Reach 20 was permitted to remove all vegetation from the channel by mechanical means while SBC Reach 21 was allowed to remove all vegetation by hand.

On January 27, 2020, with guidance from a qualified biologist, Reach 20 was maintained with the use of hand-held equipment. Non-native vegetation was selectively removed, and native vegetation/shrubs were allowed to grow in the invert and on the channel banks. No additional oaks or other trees were allowed to grow on the banks/invert. Trash, debris, and invasive vegetation were removed by hand within the easement boundaries.

On the same day, a similar maintenance methodology was used for the maintenance of SBC Reach 21. Hand-held equipment was used to selectively remove non-native vegetation from this reach. Under the guidance of the qualified biologist, native herbaceous plants and shrub species were allowed to grow on the left bank looking downstream underneath the coast live oak woodland. Non-native species, including groundcover species such as ivy, were selectively removed from the left bank. Additional trees were not allowed to grow on the banks. Trash, debris, and non-native vegetation were removed by hand within the easement boundaries.

The hand tools used for the MMPP maintenance operation are shown in Attachment A. All cuttings generated from the removal of the invasive vegetation from Reaches 20 and 21 were placed in tarps to ensure seedlings or cuttings were properly contained and transported to an approved off-site disposal/landfill facility by the use of stakebed dump trucks.

A qualified biologist was onsite or available for consultation prior to start of the maintenance work to ensure proper removal of vegetation. WQ monitoring was not performed during the 2019 MMPP due to lack of adequate flowing water in the reaches. Best Management Practices (BMPs) were implemented in accordance with the LACFCD's Water Diversion and Best Management Practices Manual, dated October 2015 (as needed). Removed invasive vegetation, debris, trash, and incidental sediment were properly transported to an approved disposal/landfill facility.

## **3.0 WATER QUALITY MONITORING - MMPP**

Since Reaches 20 and 21 were devoid of flowing water during the implementation of the 2019 MMPP, Water Quality (WQ) Monitoring was not performed.

#### **4.0 BIOLOGICAL RESOURCES REPORT**

Pre-clearing biological site visits were conducted by a qualified biologist at SBC Reaches 20 and 21 on August 19, 2019. Standard data were recorded and photos were taken from previously established photo stations. Attachment C includes the associated photos from the 2019-20 SBC maintenance-clearing season, while Attachment D includes the 2019-20 Pre- and Post-clearing forms.

Reaches 20 and 21 are nearly contiguous and contain almost identical conditions. Both are situated on a large estate at the base of the San Gabriel Mountains. Oak woodland and chaparral are the dominant natural vegetation types on the adjacent slopes. Mature coast live oak (*Quercus agrifolia*) trees follow the course of both SBC reaches. Chaparral species such as California bay (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*), laurel sumac, and western poison oak (*Toxicodendron diversilobum*) are present on the channel banks forming an understory layer to the coast live oak woodland. Non-native invasive species, such as broom (*Cystisus scoparius*) are present in this watershed.

The post-clearing survey was performed on March 9, 2020. The qualified biologist reported that the maintenance plan for both these SBC reaches was fully implemented. The maintenance plan prior to the implementation of the MMPP allowed for hand equipment clearing of the reach, but ornamental vegetation planted by the resident on the banks adjacent to existing structures (i.e., main and secondary residences) was avoided during the maintenance activities.

The MMPP's modified maintenance method for Reaches 20 and 21 allows for full clearing of the invert, but native vegetation on the earthen east bank (opposite the main residence) of Reach 21 and the earthen west bank (opposite the secondary residence) of Reach 20 will be allowed to mature. Furthermore, non-native invasive species, such as the broom, will be removed from these banks during these clearing activities. In time this would create higher quality understory vegetation to the oak woodlands that overshadow these two SBC reaches.

#### **4.1 MMPP's Biological Assessment**

With an expected increase in native dominated vegetation, wildlife species utilizing SBC reaches 20 and 21 in the MMPP are expected to change. This change in methodology may result in increased use of the additional vegetation by wildlife species already present in the area.

In time, this is expected to result in growth and persistence of higher quality understory vegetation to the oak woodlands that overshadow these two SBC reaches. Although herbaceous species expected to colonize these areas can grow quickly in some conditions, the shading and non-native seed bank for these two reaches are expected to slow this type of growth.



Several years of the revised maintenance would be required prior to detecting measurable changes. In this MMPP study, LACFCD will continue to evaluate the potential short- and long- term effects these alternative clearing methods may have on local and regional species and habitat impact and growth.

## **5.0 COMPARISON**

LACFCD's initial observation of the 2019-20 MMPP is as follows:

### **5.1 Maintenance Observation**

During the 2019 MMPP for SBC Reaches 20 and 21, by implementing hand clearing and allowing more vegetation to grow within both reaches, we observed the following:

- 1) There was no detectable change in the maintenance duration for both Reaches 20 and 21.
- 2) It was observed that there was a slight overall increase in maintenance cost.
- 3) There was no change in the number of staff required to perform the maintenance.
- 4) With hand clearing maintenance methodology, there was less impact on the earthen bottom of the reaches.

## **6.0 NEXT STEP**

Both SBC reaches will continue to be monitored and evaluated over the next few years to determine if maintenance practices proposed by the MMPP are proven to be effective in both SBC Reaches. Biological monitoring will continue to be conducted in addition to WQ Sampling (if conditions allow). LACFCD will continue to prepare the MMPP Report to submit to Regional Board and other involved stakeholders.

# **ATTACHMENT A**

## **EQUIPMENT UTILIZED FOR MAINTENANCE METHODOLOGY PILOT PROJECT (MMPP)**

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**EQUIPMENT USED IN MMPP**  
**Tools Used For Clearing Reaches 20 and 21**



Handheld Tools



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**EQUIPMENT USED IN MMPP**  
**Equipment Used For Clearing Reaches 20 and 21**



Stakebed/Dump Truck

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**ATTACHMENT B**  
**DURING MMPP CLEARING PHOTOS**  
**SBC REACHES 20 AND 21**



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**DURING MMPP CLEARING PHOTOS  
SBC Reach 20 - Webber Channel Private Bridge**



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**DURING MMPP CLEARING PHOTOS  
SBC Reach 21 - Webber Channel Main Inlet**





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**ATTACHMENT C**

**PRE- AND POST-CLEARING PHOTOS**  
**SBC REACHES 20 AND 21**

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# PRE- AND POST-CLEARING PHOTOS SBC Reach 20 - Webber Channel Private Bridge

*Before Photos 01/27/2020*



*After Photos 01/27/2020*





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# PRE- AND POST-CLEARING PHOTOS SBC Reach 21- Webber Channel Main Inlet

*Before Photos 01/27/2020*



*After Photos 01/27/2020*



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**ATTACHMENT D**  
**PRE- AND POST-CLEARING FORMS**



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# PRE- AND POST-CLEARING FORMS

## SBC Reach 20 - Webber Channel Private Bridge

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

### Biological Resources Monitoring Form

Reach Number: 20

Special Permit Conditions (list):

Clearing shall not exceed 0.13 acre (115 FT linear by 50 FT wide).

Observation of Special Status Species: None observed.

#### Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 12, 13; sparse Medial Vegetation in area maintained; Castor Bean present upstream of bridge.

Name of Biological Monitor: Steve Morin Date: August 22, 2018

#### Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 5, 6; oak woodland and ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Castor Bean present at upper end of reach above bridge.

Name of Biological Monitor: Steve Morin Date: December 14, 2018

Revised 2016

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# PRE- AND POST-CLEARING FORMS

## SBC Reach 21 - Webber Channel Main Inlet

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

### Biological Resources Monitoring Form

Reach Number: 21

Special Permit Conditions (list):

Hand clearing only; impacts shall not exceed 0.03 acre.

Observation of Special Status Species: None observed.

#### Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 10, 11; Primarily unvegetated in area maintained; cholla not a problem.

Name of Biological Monitor: Steve Morin Date: August 22, 2018

#### Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 3, 4; Oak woodland and ornamental vegetation.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Morin Date: December 14, 2018

Revised 2016



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# **2019-20 MAINTENANCE METHODOLOGY PILOT PROJECT**

## **Soft-Bottom Channel Reach 24 (Compton Creek) & Reach 25 (Lower Los Angeles River)**



Prepared by:

**Los Angeles County Flood Control District  
County of Los Angeles Public Works  
900 S. Fremont Avenue, Alhambra, CA 91803**

March 2021

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# **2019-2020 MAINTENANCE METHODOLOGY PILOT PROJECT**

## **At**

### **Soft-Bottom Channel Reach 24 (Compton Creek) & Reach 25 (Lower Los Angeles River)**

#### **1.0 INTRODUCTION**

The Los Angeles County Flood Control District (LACFCD) is responsible for providing flood protection to County residents through the maintenance of its network of flood channels. On an annual basis, adequate channel capacity is maintained by clearing vegetation and debris within the flood channels to reduce the risk of loss of life and/or property damages from flooding during large storm events. All soft-bottom channel (SBC) clearing activities typically begin after the bird nesting season, from September 1st through March 15, and are performed in accordance with all applicable environmental/regulatory permits. If vegetation clearing work is needed during the bird nesting season, a qualified biologist conducts nesting bird surveys (within 72 hours) prior to starting work. The biologist will identify and mark any nesting birds within the work area that are protected under the Migratory Bird Treaty Act and provide recommendations and modifications to the LACFCD maintenance procedures to protect and minimize disturbance of the nesting birds.

LACFCD, in cooperation with stakeholders, the Regional Water Quality Control Board, Los Angeles Region (Regional Board), and other regulatory agencies, continues its efforts to conduct the Maintenance Methodology Pilot Project (MMPP) at SBC Reaches 24 (Compton Creek) and 25 (Lower Los Angeles River). The intent of the study is to investigate alternative vegetation maintenance methodology which leaves more vegetation and root systems in the channel while maintaining the channel's designed flood flow capacity.

This MMPP is currently on its fifth and final year. In this report, LACFCD will discuss the 2019-2020 maintenance of SBC Reaches 24 and 25 and the pilot study findings.

#### **2.0 VEGETATION MAINTENANCE**

##### **2.1 Vegetation Maintenance – MMPP**

In the 2019-2020 maintenance season, LACFCD continued to use the same alternative maintenance methodology for SBC Reaches 24 and 25. The method included mowing the vegetation along the invert of the channels to approximately 6 to 12 inches above grade using a skidsteer or a long-reach excavator with an attached mower. As done in the previous years of the MMPP, vegetation clippings were left in place. The vegetation along the water line were mowed using a long-reach excavator with attached flail mower that gently mowed the overgrown vegetation back and away from the waterline to prevent increased turbidity in the water. An excavator with flail mower was also used to mow

vegetation on the side slope. All invasive species such as castor beans were removed by hand, while Arundos were removed using a long-reach excavator with a grapple attachment. The excavator was used to carefully grapple and pulled the Arundo root system out of the ground and then placed them into on tarps for proper containment and disposal using a front loader and a 10-cubic yard dump truck. See Attachment B for photos taken during the 2019-2020 MMPP.

To reduce environmental impact during the MMPP study, smaller and lighter rubber-tire/-track equipment were used. Equipment such as a rubber-track excavator and skidsteer with mower attachment, rubber-track/equivalent excavator with bucket and grapple attachment, rubber-tired 10-cubic-yard dump trucks, and a 2,000-gallon water truck were used (see Attachment A). No steel track equipment was used during the 2019-2020 maintenance of these reaches.

During the 2019-2020 maintenance of Reaches 24 and 25, a qualified biologist was available for consultation prior to mowing the vegetation to ensure proper removal of invasive/non-native vegetation. Water Quality (WQ) was monitored and BMPs were implemented to ensure that the maintenance activities did not impact the water quality in the channel. Invasive vegetation and sediment were placed in dump trucks and properly transported to an approved disposal/landfill facility.

The MMPP for SBC Reach 24 started on September 16, 2019 and was completed on December 18, 2019, while the pilot project for SBC Reach 25 was performed from October 24, 2019 to November 14, 2019.

### **3.0 WATER QUALITY MONITORING – MMPP**

LACFCD monitored the WQ for SBC Reaches 24 and 25 in accordance with the Pilot Study Work Plan approved by the Regional Board and as required in the flood control facility's permits. The results of the monitoring events are shown in Attachment C including, but not limited to, WQ sampling parameters, sampling locations, sample results, observations, and comments.

#### **3.1 Water Quality Monitoring Methodology**

During the 2018 MMPP, three WQ sampling stations were established for each reach (see Figure 1 and 2): one upstream, within (internal) the work area, and downstream of the reach. WQ testing was performed for pH, temperature, dissolved oxygen, turbidity, and total suspended solids (TSS) where flowing water is present in/adjacent to the work area. The parameters mentioned above were measured at least once within 7 days prior to the maintenance activities without BMPs being installed to establish preclearing baseline conditions. WQ was monitored on a daily basis during the first week of the maintenance activities, then once a week thereafter until the MMPP was completed. BMPs were placed

downstream of the maintenance reach during clearing activities. A post clearing WQ test was also conducted after the completion of the maintenance of the reach (without any BMPs being installed) downstream of the maintenance area for post clearing baseline condition.



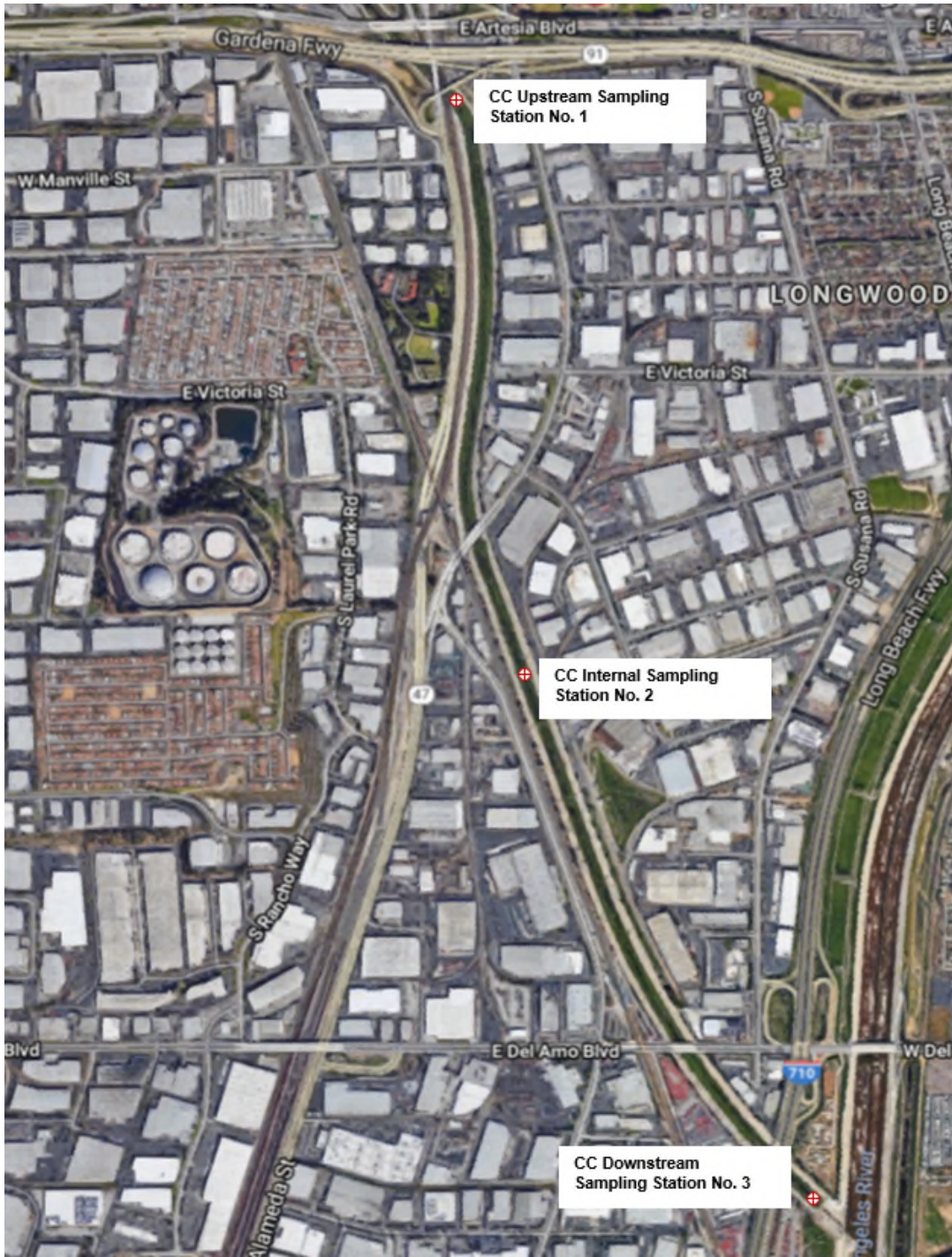


Figure 1: Sampling Location for SBC Reach 24



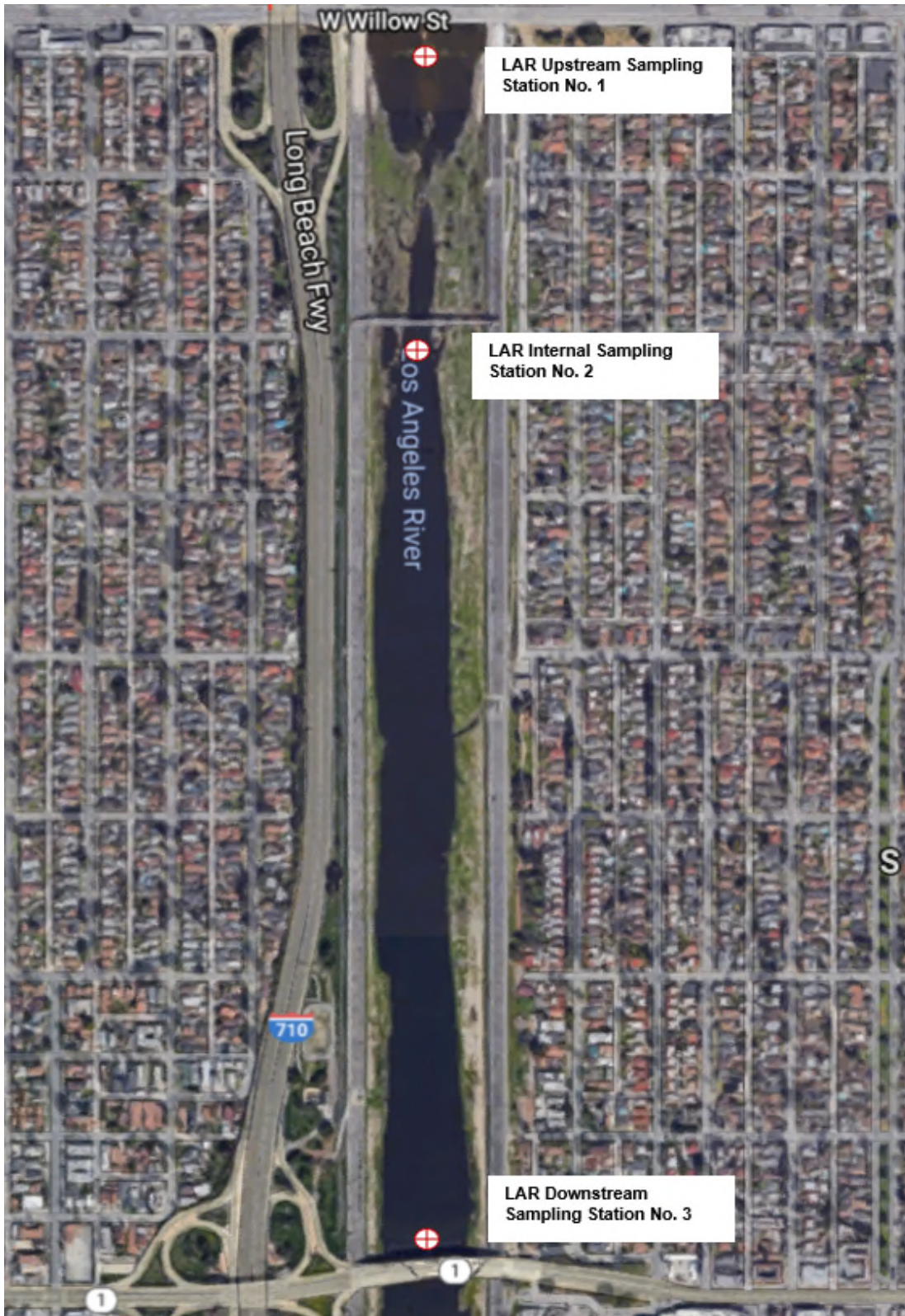


Figure 2: Sampling Location for SBC Reach 25

Onsite LACFCD staff, including the project manager, were notified each time a sampling event indicated an exceedance of downstream WQ standard limits (see Table 1). LACFCD staff immediately stop all maintenance activities once informed of the exceedance. During the 2018 maintenance of SBC Reaches 24 and 25, there were no evidence of exceedances observed that were caused by the maintenance activities. Additional steps were taken including, but not limited to, cleaning the downstream site BMPs or installation of additional BMPs, to ensure WQ is not impacted by the maintenance activities.

Table 1: Water Quality Objectives

Parameter	Sampling Technique	Analysis Technique <sup>1</sup>	Analysis Location	Method Detection Limit	Duplicate precision (RPD)	Exceedance Criteria <sup>2</sup>
DO	Multi-meter	Field Measurement	Monitoring Points	0.01 mg/L	± 0.5 mg/L	< 5 mg/L (Warm) < 6 mg/L (Cold) > 7 mg/L
T	Multi-meter	Field Measurement	Monitoring Points	-10 °C	± 0.01 °C	Shall not be altered by more than 5 F above the natural temperature (Warm) <sup>3</sup>
pH <sup>4,5</sup>	Multi-meter	Field Measurement	Monitoring Points	0.01 pH	± 0.1 pH	< 6.5 > 8.5
Tr	Turbidimeter	Field Measurement	Monitoring Points	0.05 NTU	± 3%	20% (≤ 50 NTU) 10% (< 50 NTU)
TSS	Grab Sample	Method 2540D	Contract Laboratory	2.0 mg/L	± 10%	10%

**Notes and abbreviations:**

- 1 "Method" refers to Standard Methods for the Examination of Water and Wastewater (19th ed., APHA et al. 1995)
- 2 An increase in a measured TSS or turbidity reading at the downstream location, above the ambient or natural reading.
- DO Dissolved oxygen
- DQO Data quality objectives
- RPD Relative percent difference
- T Temperature
- TSS Total suspended solids
- Tr Turbidity
- 3 At no time shall these Warm-designated waters be raised above 80 F as a result of water discharges
- 4 For inland surface waters ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge
- 5 For bays or estuaries shall not be changed more than 0.2 units from natural conditions as a result of waste discharge

The LACFCD's WQ Monitoring Methodology is discussed in detail in the WQ Monitoring Guide for Maintenance and Repair Projects Involving Water Diversion, dated October 2015.

### **3.2 General Observations and Comments**

In evaluating the results of the 2018 WQ monitoring events for Reaches 24 and 25, LACFCD made the following observations:

BMPs used during the 2018 maintenance activities included fiber rolls, sandbags, etc., which were placed perpendicular to and across the channel downstream from active maintenance activities. Steps were also taken to minimize contact with water flowing within the reach and to reduce unnecessary sediment disturbance. BMPs are generally effective in addressing the impacts of the maintenance activities in the earth-bottom channel reach, and there is no evidence that the maintenance activities caused any of the observed exceedances. Despite this lack of evidence, upon noticing elevated turbidity, LACFCD field personnel stopped maintenance operation and acted to modify BMPs in response to the identified exceedances.

#### **3.2.1 SBC Reach 24 (Compton Creek)**

It has been noted in the past and during the 2018 maintenance of the Reach 24, with no maintenance activities, that the water in this reach tends to be murky with floatables present on the surface of the water. This is the natural condition of this reach as it is a main outflow for rain and debris from upstream of the channel.

LACFCD also observed that one or a combination of the following sources contributed to the increase in some of the WQ effluent limit sampling results: (1) presence of stagnant nutrient-rich water ponding in the reach due to the lack of constant flow (only two successful WQ sampling were taken during the maintenance of this reach), so when it rains or water flow into this reach there is an increase in the turbidity detected in the WQ samples; (2) additional inflow of water between upstream and midpoint locations; (3) bird feeding activities in close proximity to the sampling points; and (4) natural variance of the reach.

BMPs downstream were implemented and adjusted as-needed (such as straw waddles/rolls, sandbags, etc.). During the maintenance of the reach, careful vegetation removal practices were implemented so that no vegetation or debris fell into the water. No further action was taken for any exceedances not related to the maintenance activities.

#### **3.2.2 SBC Reach 25 (Lower Los Angeles River)**

Reach 25 is heavily influenced by tidal flow due to its close proximity to the Pacific Ocean, which normally causes the water at the downstream end of the reach to be murky. It was also observed that in the past and



during the 2018 maintenance period, the sampling results for Tr and TSS had the tendency to be high at the upstream end with no maintenance being performed. Since this reach is very wide (115 feet), BMPs were not implemented and WQ monitoring had to be performed on either the eastern or western side, since it was impossible to obtain water samples from the center of this reach. During this 2018 WQ sampling for Reach 25, it was noted that significant amounts of floating and suspended debris was present in the water upstream sampling point which affected both the turbidity and TSS values of the water samples.

LACFCD also observed that effluent limit exceedances were a result of one or a combination of the following factors: (1) bird feeding activities near the sampling points; and (2) natural variable conditions in the reach. LACFCD staff took great care when removing vegetation from this reach so that no vegetation or debris fell into the water of the reach. No further action was taken for any exceedances not related to the maintenance activities during this maintenance period.

#### **4.0 BIOLOGICAL RESOURCES**

Pre-clearing biological site visits were conducted by a qualified biologist at SBC Reaches 24 and 25 on August 17, 2019. Standard data were recorded and photos were taken from previously established photo stations. Attachment E includes the Pre- and Post-clearing Forms from the 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, and 2019-2020 SBC maintenance seasons. Photos associated with these visits are included in Attachment F.

The August 2019 pre-clearing survey of Reach 24 indicated that the vegetation on the invert consisted of riparian herb species and common non-native annual (weedy) herbaceous species. Riparian herb species were almost entirely confined to the low-flow channel and were dominated by cattails (*Typha* spp.). Non-native annual (weedy) herbaceous species were abundant on either side of the low-flow channel outward to the levee toe. Spanish sunflower (*Pulicaria paludosa*) was one of the most widespread non-native annuals in the channel. Invasive plant species present in the channel included arundo (*Arundo donax*) and castor bean (*Ricinus communis*). Arundo was limited to the upper end of the reach where small amounts have persisted since the start of this Pilot Project. The amount of castor bean in the reach continues to decline, but it is still present at scattered locations throughout the reach.

Reach 25 vegetation is more complex than at Reach 24 due, in large part, to the greater width of the channel, but also the extensive open water of Reach 25 that is tidally influenced. Mature willows (*Salix* sp.) are present in Reach 25 but absent in Reach 24. These willows are scattered on the left (east) bank of the Reach 25 channel, and are not present on the right (west) bank. Riparian herb vegetation is confined to the water's edge and is more complex than in Reach 24. In Reach 25, riparian herb species are not dominated by one species, but consist of multiple species including cattails, southern bulrush (*Scirpus californicus*), and sedges (*Cyperus* spp.). The onsite vegetation descriptions for each reach were consistent with previous years as well. As described in the applicable regulatory permits, no biological

monitoring was required during the maintenance activities at either of these reaches because they are not sensitive (i.e., no special status species to monitor). Post-clearing biological site visits were conducted on November 23, 2019, for Reach 24 and January 7, 2020, for Reach 25. The biologist reported that all vegetation was mowed this year in Reach 24 as it was last year. In previous years, access to some areas of riparian herb vegetation (i.e., cattails) was limited due to wet conditions. The arundo at the upper end of Reach 24 was removed by hand as required. In Reach 25, all vegetation was mowed this year except for the mature willows and some small patches of riparian herb vegetation at the water's edge of the west bank. This was consistent with previous maintenance activities conducted since initiation of the Pilot Study for these two SBC reaches in 2015-2016. It appears that mowing allows the roots of most species to remain intact after completion of clearing maintenance activities. To evaluate the effects of clearing maintenance, post-clearing visits are conducted as soon as possible after these activities are finished. Relatively little new growth was evident during the post-clearing surveys; however, based on monitoring results of previous years, the vegetation regrowth will occur within subsequent months and throughout the 2020 growing season. In the wettest areas of these two SBC reaches, low growing and bright green vegetation can be seen in the 2019 and 2020 post-clearing photos provided in Attachment F. In wet years such as 2018-2019, vegetation regrowth is robust; however, it is expected that over time that mowing will provide a competitive edge to native perennial species over non-native (weedy) annual species following wet or dry years.

The overall species composition and ecological effects of the modified maintenance over the past five years is difficult to discern. Both reaches are affected by a multitude of factors such as seasonal rain fall amount, seasonal flooding (e.g. depth, duration, and timing), daytime ambient temperatures during critical periods associated with growth, flowering and seed maturation of plant species, various wildlife species breeding periods, and many more. The changes in maintenance practices have not been isolated to allow direct comparison between years. As a result, the observations made during short periods of time each year are an indication of the modified methods combined with many other factors. When accounting for the variety of environmental factors, the time required to see changes based on averages across time can be much longer than 5 years.

An additional factor to consider when reviewing annual site visit information is the dominance of particular habitat types. In Reach 25, the most dominant habitat feature, open water, has remained quite consistent throughout the Pilot Study period. Substantial changes in acreage of open water has not changed considerably since approximately 2005. Tidally influenced habitat with shallow brackish water and mud flat patches with constant flushing of the water (non-stagnant) is rare in Southern California. Although occurring within a built flood control structure, this habitat is the dominant influence on the wildlife species composition, particularly avian species, within Reach 25. This habitat is largely untouched by the maintenance practices both before and during the Pilot Study period. Consequently, the species composition of the Reach is largely unchanged based on annual visit observations. It is likely that subtle transitions of more upland species may have occurred during the Pilot Study period, however based on the dominance of water associated species and the time required

to detect such changes in a multivariable scenario, it may take considerably longer than 5 years for quantifiable changes in species composition averages. Reach 24 is less effected by open water habitat dominance but instead a dominance of freshwater (cattail) marsh habitat which is only temporarily reduced before quickly re-growing. The modified methods are likely to allow the re-growth to occur more quickly and consistently throughout the Reach. Similar to open water, freshwater marsh is a wetland habitat that dominates the local species composition of the Reach. This habitat has been consistent in extent throughout the Pilot Study period. In addition to freshwater marsh habitat, Reach 24 is also affected by a multitude of environmental factors influencing conditions and species composition in any given year. Similar to Reach 25, it is expected that some more subtle transitions of upland species may have occurred at Reach 24 during the Pilot Study period. However, based on the dominance of freshwater marsh associated species, and the length of time required to detect such changes in a multivariable scenario, a considerably longer period may be required to allow for quantifiable average changes. Regardless of the many factors effecting the Pilot Study within Reaches 24 and 25, the projected eventual shift of some species dependent on large bare ground habitat to species adapted to low annual growth is expected to have occurred and continue to occur over time.

#### **4.1 MMPP's Biological Assessment**

With an expected increase in native dominated vegetation, wildlife species utilizing the SBC reaches are also expected to change. Species that prefer patches of bare ground with weedy/annual grass vegetation will likely diminish in numbers within these reaches while species preferring denser, shrubbier vegetation may begin to use these channels or increase in numbers if currently present. Although some native species may diminish in numbers, in general, native species' diversity and quantity is expected to increase to some degree. The shifting of the plant and wildlife composition of these two SBC reaches may continue over the course of many years but is eventually expected to stabilize if the pilot study's modified maintenance method was implemented on a permanent basis.

Of particular interest in tidally influenced reach is the occurrence of species that are adapted to utilizing mudflat or mudflat-like habitats that are typically extensive following the traditional maintenance method for these SBC reaches. The soil disturbance associated with the scraping action to remove vegetation in the traditional maintenance method appears to mimic natural scouring that occurs during flooding events. This clearing method leaves behind habitat conditions that are more similar to post-flood conditions than the alternative clearing method. The ephemeral habitat conditions that follow flooding events or, in this case, traditional clearing activities, can be very productive for many species adapted to utilize resources that may be abundant at these times. For example, the Los Angeles River Watershed Feasibility Study included pre- and post-clearing bird surveys of SBC Reach 24 in 2010. At that time, the traditional clearing method was employed and created a substantial amount of mudflat-like habitat.

The bird survey of this post clearing habitat in SBC Reach 24 was conducted on December 1, 2010, and identified a total of 26 species totaling 307 individual birds. Among the birds present included three shorebird species that prefer open mudflat-like habitats: killdeer (*Charadrius vociferus*), greater yellowlegs (*Tringa melanoleuca*), and Wilson's snipe (*Gallinago delicata*). This survey tallied to 26 killdeers, 1 greater yellowlegs, and 22 Wilson's snipe. None of these shorebird species were present during the preclearing survey of SBC Reach 24 conducted on September 15, 2010. Implementation of the alternative clearing methods is not expected to eliminate the use of SBC Reach 24 by these three species, but they may diminish over time.

Implementation of the modified maintenance methods is expected to increase use of these two SBC reaches by other bird species, including land birds that require shrubbier vegetation. The following four common species in the region are likely candidates for increased use of these two SBC reaches during the winter season if the alternative clearing methods become permanent: house wren (*Troglodytes aedon*), blue-gray gnatcatcher (*Polioptila caerulea*), hermit thrush (*Catharus guttatus*), and white-crowned sparrow (*Zonotrichia leucophrys*). Two other common species in the region that would likely use these two SBC reaches more frequently during the winter and summer season are the bushtit (*Psaltriparus minimus*) and California towhee (*Melospiza crissalis*).

Subsequent annual visits to pilot study areas will document resources and will continue to determine if such shifts are occurring and to what extent. Pilot studies will continue to include an evaluation of the special status species involved, if any, and the potential short- and long-term effects these alternative clearing methods may have on local and regional populations.

## **5.0 COMPARISON**

LACFCD's initial findings regarding the 2018 MMPP is as follows:

### **5.1 Methodology Comparison**

During the 2019 and 2020 maintenance of SBC Reaches 24 and 25, switching from scraping to mowing resulted in reduced amount of vegetation and incidental sediment getting removed from both reaches. During the methodology comparison, LACFCD has the following general observations and comments:

- 1) There was no detectable change in the maintenance time during the 2018 MMPP.
- 2) No detectable change in the overall maintenance cost for both reaches due to Stormwater Maintenance Division performing work along with the contractor, similar to the previous year. For Reach 24, there was an increase in nonrental equipment, labor, and water usage. While for Reach 25, there was an increase in rental equipment, and water usage.



- 3) Due to drought conditions in 2019, the reaches exhibited lower water presence, which exposed more area to maintain.
- 4) Increase in water usage fees due to unscheduled pauses in work during storm, leading to extended use of the water meter.
- 5) Removal of invasive species by hand and excavator with grapple attachment worked well and helped ensure proper handling and disposal.
- 6) The use of excavator with flail mower near the waterline minimized/prevented high turbidity readings to preserve WQ.
- 7) Mowing process left more vegetation in place and promoted faster regrowth and more robust habitat

## **5.2 Water Quality**

Due to the naturally variable conditions in SBC Reaches 24 and 25, there were no discernible WQ changes that resulted from switching the maintenance methodology. Most of the exceedances that were observed during the 2018 maintenance was related to: (1) presence of stagnant nutrient-rich ponded water due to the lack of constant water flow resulted in the increase in the turbidity detected in the WQ results when water sampling was performed; (2) additional inflow of water between upstream and midpoint locations; (3) bird feeding activities in close proximity to the sampling points; (4) natural variance in the reaches; and (5) tidal influence on SBC Reach 25 due to its close proximity to the Pacific Ocean.

## **6.0 NEXT STEP**

LACFCD will continue to implement the MMPP for Reaches 24 and 25 and observe its impact. As indicated previously, this will require approval from the USACE and other regulatory agencies.

# **ATTACHMENT A**

## **EQUIPMENT UTILIZED FOR MAINTENANCE METHODOLOGY PILOT PROJECT (MMPP)**

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## EQUIPMENT USED IN MMPP

PHOTO 1: RUBBER TRCK EXCAVATOR WITH FLAIL MOWER



PHOTO 2: SKIDSTEER WITH MOWER





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## EQUIPMENT USED IN MMPP

PHOTO 3: EXCAVATOR WITH BUCKET & GRAPPLE



PHOTO 4: WATER TRUCK



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**ATTACHMENT B**  
**DURING MMPP CLEARING PHOTOS**  
**SBC REACHES 24 AND 25**



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**DURING MMPP CLEARING PHOTOS  
SBC REACH 24 - COMPTON CREEK**



## DURING MMPP CLEARING PHOTOS SBC REACH 24 - COMPTON CREEK





**DURING MMPP CLEARING PHOTOS  
SBC REACH 25 – LOWER LOS ANGELES RIVER**





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**ATTACHMENT C**  
**PRE- AND POST-CLEARING PHOTOS**  
**SBC REACHES 24 & 25**

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# 2019-2020 Soft Bottom Channels

Reach 24

Compton Creek

Before Photos 8/17/19

After Photos 11/23/19





# 2019-2020 Soft Bottom Channels

Reach 25a

Los Angeles River — Willow to PCH (East/Left Bank)

Before Photos 8/17/19

After Photos 1/7/20



**ATTACHMENT D**  
**PRE- AND POST-CLEARING FORMS**

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# PRE- AND POST-CLEARING FORMS

## SBC Reach 24 – Compton Creek

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

### Biological Resources Monitoring Form

Reach Number: 24

Special Permit Conditions (list):

No special permit conditions pertain to this reach, but the general terms and conditions of the permits apply.

Observation of Special Status Species: None observed.

#### Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 7, 8, 9, 10, 11; Riparian herb and subalpine vegetation in area maintained; Castor Bean present.

Name of Biological Monitor: Steve Moulis Date: August 17, 2019

#### Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5; some reed beds in middle of low-flow channel, but otherwise all vegetation removed.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Steve Moulis Date: November 23, 2019

Revised 2018



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# PRE- AND POST-CLEARING FORMS

## SBC Reach 24 – Compton Creek

County of Los Angeles Department of Public Works  
Flood Maintenance Division  
Earth Bottom Channel Program

### Biological Resources Monitoring Form

Reach Number: 25

Special Permit Conditions (list):

Operator shall re-plant the 9.37 acres of vegetation allowed to remain in 1997. (NOTE: The ACOE removed much of this vegetation in 2000.)

Observation of Special Status Species: None observed.

#### Pre-Clearing Documentation

Pre-Monitoring Conditions – (briefly describe: Vegetation type, height of trees, Invasive present & cover estimate. Attach photograph): List invasives present (Arundo, Castor Bean, Trash, etc.)

Photos 12, 13, 14, 15, 16 (EAST BANK) & 17, 18, 19, 20, 21 (WEST BANK); Primarily reduced growth in area maintained; Arundo and Castor Bean present.

Name of Biological Monitor: Alan Morin Date: August 17, 2019

#### Post-Clearing Documentation

Type of vegetation remaining adjacent to removal area (briefly describe, attach photograph, include arrows to indicate important features). Estimate amount of invasives removed.

Photos 1, 2, 3, 4, 5 (EAST BANK) & 6, 7, 8, 9, 10 (WEST BANK); Large Willows on east bank, otherwise all vegetation removed. A few small patches of Arundo on east bank.

Compliance with Permit Conditions: Full  Partial

If partial compliance is apparent, describe circumstances:

Problems or Recommendations (if more space is needed continue on the back of this form):

Name of Biological Monitor: Alan Morin Date: January 7, 2020

Revised 2016

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