

# Devil's Gate Reservoir Restoration Project Fourth Quarter Compliance Report Activities Occurring Between October 2021 and December 2021

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**LIST OF ACRONYMS AND ABBREVIATIONS**

<b>Term</b>	<b>Description</b>
CDFW	California Department of Fish and Wildlife
CNDDB	California Natural Diversity Database
ESA	Environmentally Sensitive Area
ITP	Incidental Take Permit
LACFCD	Los Angeles County Flood Control District
LACPW	Los Angeles County Department of Public Works
MMRP	Mitigation Monitoring and Reporting Program
USFWS	U.S. Fish and Wildlife Service

## **1.0 INTRODUCTION**

### **1.1 Purpose**

This Quarterly Compliance Report was prepared to document the activities that occurred at the Devil's Gate Reservoir Restoration Project (Project) site located in the city of Pasadena, Los Angeles County, California during the fourth quarter of 2021 (October through December). This Quarterly Compliance Report satisfies Condition 6.7 in the Incidental Take Permit (ITP) No. 2081-2016-031-05 that was issued for the Project from the California Department of Fish and Wildlife (CDFW), dated July 16, 2018.

Condition 6.7 in the ITP states:

"The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 6.6 into a Quarterly Compliance Report during time periods when Initial Sediment Removal and Habitat Restoration activities have occurred. Quarterly Compliance Reports and a copy of the MMRP table with notes showing the current implementation status of each mitigation measure shall be submitted to CDFW's Regional Representative and Headquarters CESA Program."

This is the thirteenth report (Quarterly Compliance Report Number 13) submitted in accordance with ITP Condition number 6.7. This report covers activities that were conducted at the Project site between October 1 and December 31, 2021.

## **2.0 COVERED ACTIVITIES**

### **2.1 Biological Monitoring**

Per Condition 6.6 in the ITP, "The Designated Biologist shall be on site daily when Covered Activities occur and when Covered Species are present, and weekly when Covered Species have potential to be present."

Per Condition 2.10a of the Streambed Alteration Agreement "...the Permittee shall have the Designated Biologist on site daily when protected species may be present to ensure that no impacts occur to protected species that are not authorized."

Daily monitoring of construction activities by a Designated Biologist occurred when ground-disturbing activities were taking place at the Project site. Daily monitoring of restoration activities was ongoing during the fourth quarter. Table 1 shows Project working dates and the biological monitors that were present on each date.

Devil's Gate Reservoir Restoration Project  
Fourth Quarter 2021 Compliance Report

<b>Table 1. Monitors Onsite During Work Days.</b>				
<b>Date</b>	<b>Construction Monitors</b>	<b>Restoration Monitors (Stillwater)</b>	<b>Restoration Monitors (ICF)</b>	
10/1/2021	Adam Schroeder	Michael Walsh	N/A	
10/4/2021		Michael Walsh		
10/5/2021		Michael Walsh		
10/6/2021		Scott Werner		
10/7/2021		Michael Walsh		
10/8/2021		Michael Walsh		
10/11/2021		Michael Walsh		
10/12/2021		Michael Walsh		
10/13/2021		Amy Plesetz		
10/14/2021		Michael Walsh		
10/15/2021		Michael Walsh		
10/18/2021		Michael Walsh		Lela Updegrave
10/19/2021		Michael Walsh		Lela Updegrave
10/20/2021		Scott Werner		Lela Updegrave
10/21/2021		Michael Walsh		Lela Updegrave
10/22/2021		Michael Walsh		Lela Updegrave
10/25/2021		Michael Walsh		No Work
10/26/2021		Michael Walsh		Lela Updegrave
10/27/2021		Amy Plesetz		Lela Updegrave
10/28/2021		Michael Walsh		Lela Updegrave
10/29/2021		Michael Walsh	Lela Updegrave	
11/1/2021		Michael Walsh	Lela Updegrave	
11/2/2021		Michael Walsh	Lela Updegrave	
11/3/2021		Scott Werner	Lela Updegrave	
11/4/2021		Michael Walsh	Lela Updegrave	
11/5/2021		Michael Walsh	Lela Updegrave, Kristen Klinefelter	
11/8/2021	<b>Sediment Removal Activities Complete – Routine Annual Maintenance to Begin in 2022</b>	Michael Walsh	Lela Updegrave	
11/9/2021		Michael Walsh	Kristen Klinefelter	
11/10/2021		Amy Plesetz	Kristen Klinefelter	
11/11/2021		Michael Walsh	Lela Updegrave	
11/12/2021		Michael Walsh	Lela Updegrave	
11/15/2021		Michael Walsh	Lela Updegrave	
11/16/2021		Michael Walsh	Lela Updegrave	
11/17/2021		Scott Werner	Lela Updegrave	
11/18/2021		Michael Walsh	Kristen Klinefelter	
11/19/2021		Michael Walsh	Lela Updegrave	
11/22/2021		Michael Walsh	Lela Updegrave	
11/23/2021		Michael Walsh	Lela Updegrave	
11/24/2021		Amy Plesetz	Kristen Klinefelter	
11/25/2021			<b>No Work – Thanksgiving</b>	<b>No Work – Thanksgiving</b>
11/26/2021			<b>No Work – Day After Thanksgiving</b>	<b>No Work – Day After Thanksgiving</b>
11/29/2021			Dawn Garcia	Lela Updegrave
11/30/2021			Dawn Garcia	Lela Updegrave
12/1/2021			Amy Plesetz	Lela Updegrave
12/2/2021			Michael Walsh	Lela Updegrave
12/3/2021			Michael Walsh	Lela Updegrave
12/6/2021			Dawn Garcia	Lela Updegrave
12/7/2021			Dawn Garcia	Lela Updegrave
12/8/2021			Amy Plesetz	Lela Updegrave
12/9/2021			No Work	No Work
12/10/2021			Michael Walsh	Lela Updegrave
12/13/2021			Michael Walsh	Lela Updegrave
12/14/2021			No Work	No Work

**Table 1. Monitors Onsite During Work Days.**

Date	Construction Monitors	Restoration Monitors (Stillwater)	Restoration Monitors (ICF)
12/15/2021		Scott Werner	Kristen Klinefelter
12/16/2021		Michael Walsh	Kristen Klinefelter
12/17/2021		Michael Walsh	Kristen Klinefelter
12/20/2021		Michael Walsh	Lela Updegrave
12/21/2021		Michael Walsh	Lela Updegrave
12/22/2021		Amy Plesetz	Lela Updegrave
12/23/2021		Scott Werner	No Work
12/24/2021		<b>No Work – Christmas Eve</b>	<b>No Work – Christmas Eve</b>
12/27/2021		Scott Werner	No Work
12/28/2021		Michael Walsh	Lela Updegrave
12/29/2021		No Monitor Needed	No Work
12/30/2021		No Work	No Work
12/31/2021		No Work	Lela Updegrave

## 2.2 Project Construction Activities

The final day of project demobilization activities occurred during this reporting period (October 1, 2021). A Designated Biologist monitored the final fence installation on this day. The construction monitoring log from this quarter is included in Appendix A.

## 2.3 Habitat Restoration Activities

The following habitat restoration activities were conducted onsite during this reporting period:

- Restoration activities continued from October 1, 2021 through December 31, 2021.
- Non-native plants including perennial pepperweed (*Lepidium latifolium*), black mustard (*Brassica nigra*), lamb's quarters (*Chenopodium album*), giant reed (*Arundo donax*), annual ragweed (*Ambrosia artemisiifolia*), brome grass (*Bromus* sp.), rigpgut brome (*Bromus diandrus*), red brome (*Bromus madritensis ssp. ruberns*), puncturevine (*Tribulus terrestris*), curly dock (*Rumex crispus*), smilgrass (*Piptatherum miliaceum*), red stemmed filaree (*Erodium cicutarium*), common passion flower (*Passiflora caerulea*), wild radish (*Raphanus sativus*), poison hemlock (*Conium maculatum*), petty surge (*Euphorbia peplus*), sedge sp. (*Carex* sp.), tall flatsedge (*Cyperus eragrostis*), eucalyptus (*Eucalyptus* sp.) sprouts, short podded mustard (*Hirschfeldia incana*), pineapple weed (*Matricaria discoidea*), Indian plantain (*Plantago arenaria*), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), tree of heaven (*Ailanthus altissima*), fig (*Ficus carica*), lesser swine cress (*Lepidium didymum*), tocalote (*Centaurea melitensis*), star thistle (*Centaurea solstitialis*), Shamel ash (*Fraxinus uhdei*), Jerusalem thorn (*Parkinsonia aculeata*), pigweed (*Amaranthus albus*), tamarisk (*Tamarix* sp.), Himalayan blackberry (*Rubus armeniacus*), annual stinging nettle (*Urtica urens*), sow thistle (*Sonchus oleraceus*), Russian thistle (*Salsola tragus*), Italian thistle (*Carduus pycnocephalus*), scarlet pimpernel (*Anagallis arvensis*), dodder sp. (*Cuscuta* sp.), Jerusalem thorn (*Parkinsonia aculeata*), hounds tongue (*Cynoglossum officinale*), burclover (*Medicago polymorpha*), and cheese weed (*Malva neglecta*), were removed from DG-1, DG-W-1, DG-W-2, DG-W-2 Mining Pit and Mining Pit Outlet DG-2, DG-2 New Channels, DG-2-WOUS, DG-2B, DG-3A, DG-3B, DG-4,

DG-4-WOUS, DG-4A, DG-4B, DG-4 Drainage, DG-4 Sheet flow, DG-5 and DG-8 onsite restoration areas by hand pulling and using small hand tools. Pulled plants were removed from restoration sites daily and placed into onsite dumpsters that were emptied regularly.

- Silt fencing was removed from around DG-3A at Alta Dena drain after hauling operations were complete.

Habitat restoration monitoring logs for this quarter detailing daily activities are included in Appendix B.

### **3.0 SATISFACTION OF ITP CONDITIONS**

All provisions in the ITP were adhered to during Project activities conducted during this reporting period. No non-compliances were documented during this reported period. No direct or indirect take to listed species or Covered Species occurred during this reporting period. The next Quarterly Compliance Report will cover the next reporting period from January 1 to March 31, 2022.

### **4.0 MITIGATION MONITORING AND REPORTING PROGRAM**

Per Condition 6.7 of the ITP, Table 3 presents the Mitigation Monitoring and Reporting Program table that was prepared for the Recirculated Portions of the Final Environmental Impact Report with notes showing the current implementation status of each mitigation measure.

**Table 2. Devil's Gate Mitigation Monitoring and Reporting Program**

MITIGATION MONITORING AND REPORTING PROGRAM Devil's Gate Reservoir Sediment Removal and Management Project							
Mitigation Measure	Implementation Phase*	Monitoring Phase*	Enforcement Agency	Level of Significance After Mitigation	Verification of Compliance		
					Initial	Date	Remarks
<b>BIOLOGICAL RESOURCES</b>							
<b>MM BIO – 1:</b> A qualified biological monitor shall be present during initial ground- or vegetation-disturbing project-related activities to provide measures and monitor for wildlife in harm's way. This includes initial ground- or vegetation-disturbing project-related activities at the annual start of each year of sediment removal or maintenance activities. Following initial project-related activities, a qualified monitoring biologist shall be present as necessary to maintain the implemented protection measures and monitor for additional species in harm's way. These protection measures shall include, as appropriate: redirecting wildlife, identifying areas that may require exclusionary devices (e.g., fencing), or capturing and relocating wildlife outside the work area. Any captured species shall be relocated to adjacent appropriate habitat that is contiguous to adjacent habitat and not impacted by project-related disturbance activities.	Pre-Sediment Removal; Sediment Removal; Reservoir Management	Pre-Sediment Removal; Sediment Removal; Reservoir Management	Los Angeles County Flood Control District	Less than significant		11/28/18 - ongoing	A qualified biologist was present during all initial ground- or vegetation-disturbing construction related activities occurred during the 2021 fourth quarter reporting period. A qualified biologist continued to be present during restoration activities requiring vegetation removal during the 2021 fourth quarter reporting period. See Table 1 for details.
<b>MM BIO – 2:</b> Within 90 days prior to ground-disturbing activities, a sensitive species educational briefing shall be conducted by a qualified biologist for construction personnel. The biologist will identify all sensitive resources that may be encountered onsite, and construction personnel will be instructed to avoid and report any sightings of sensitive species to the Los Angeles County Flood Control District (LACFCD) or the monitoring biologist. Educational briefings shall be repeated annually for the duration of the sediment removal.	Final Plans and Specifications; Pre-Sediment Removal; Sediment Removal; Reservoir Management	Pre-Sediment Removal; Sediment Removal; Reservoir Management	Los Angeles County Flood Control District	Less than significant		11/28/18 - ongoing	Due to the COVID-19 pandemic, the initial 2021 worker education training was provided for project personnel to view electronically prior to the start of Project activities on April 19, 2021. Personnel were required to certify under penalty of perjury that they had viewed and understood the training materials in their entirety. Additional trainings were provided on an as-needed basis to new project personnel afterwards during the 2021 fourth quarter reporting period.
<b>MM BIO – 3:</b> Within 90 days prior to ground-disturbing activities, a preconstruction survey shall be conducted by a qualified biologist for the presence of any sensitive species in harm's way, including coast range newt, southwestern pond turtle, and two-striped garter snake. If sensitive species are observed in harm's way, the qualified biologist will develop and implement appropriate protection measures for that species. These protection measures shall include, as appropriate: redirecting the species, constructing exclusionary devices (e.g., fencing), or capturing and relocating wildlife outside the work area. Preconstruction surveys shall be repeated annually for the duration of the sediment removal. Observations of special status species made during these surveys shall be recorded onto a California Natural Diversity Database (CNDDDB) field data sheet and submitted to CDFW for inclusion into the CNDDDB.	Pre-Sediment Removal; Sediment Removal; Reservoir Management	Pre-Sediment Removal; Sediment Removal; Reservoir Management	Los Angeles County Flood Control District	Less than significant		11/01/18 - 11/27/18, 3/15/19 - 4/14/19, 3/1/20 – 5/19/20, 3/17/21-3/29/21	Preconstruction surveys for sensitive species were conducted by qualified biologists on March 17, 24, 25, 26, and 29, 2021. Preconstruction least Bell's vireo surveys were completed during the second quarter of 2021 and a preconstruction breeding season least Bell's vireo survey report was submitted to LACPW and included as an appendix to the second quarter compliance report for 2021. No preconstruction surveys took place during the fourth quarter of 2021.
<b>MM BIO – 4:</b> LACFCD, in consultation with a qualified biologist, will employ bird exclusionary measures (e.g., mylar flagging) prior to the start of bird breeding season to prevent birds nesting within established	Final Plans and Specifications; Pre-	Pre-Sediment Removal; Sediment Removal;	Los Angeles County Flood Control District	Less than significant		3/15/19 - 4/14/19, 3/16/20 - 5/19/20,	Preconstruction surveys for nesting birds were completed

**Table 2. Devil's Gate Mitigation Monitoring and Reporting Program**

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					Initial	Date	Remarks
<p>boundaries of the project.</p> <p>Prior to commencement of sediment removal activities within bird breeding season (March 1-August 31), a preconstruction bird nesting survey shall be conducted by a qualified biologist for the presence of any nesting bird within 300 feet of the construction work area. The surveys shall be conducted 30 days prior to the disturbance of suitable nesting habitat by a qualified biologist with experience in conducting nesting bird surveys. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days prior to the initiation of clearance/construction work. Preconstruction surveys shall be repeated annually for the duration of the sediment removal.</p> <p>If an active nest is found, the qualified biologist will develop and implement appropriate protection measures for that nest. These protection measures shall include, as appropriate, construction of exclusionary devices (e.g., netting) or avoidance buffers. The biologist shall have the discretion to adjust the buffer area as appropriate based on the proposed construction activity, the bird species involved, and the status of the nest and nesting activity; but shall be no less than 30 feet. Work in the buffer area can resume once the nest is determined to be inactive by the monitoring biologist.</p>	<p>Sediment Removal; Sediment Removal; Reservoir Management</p>	<p>Reservoir Management</p>				<p>3/1/21 – 4/16/21</p>	<p>during the second quarter of 2021. Active bird nests within 500 feet of the Project site were documented and appropriate no-work buffers were established. Designated Biologists monitored Project and restoration activities daily during the nesting season in 2021. The fourth quarter reporting period is outside of the nesting bird season.</p>
<p><b>MM BIO – 5:</b> Within 30 days prior to commencement of vegetation or structure removal activities, a preconstruction bat survey shall be conducted by a qualified biologist for the presence of any roosting bats. Acoustic recognition technology shall be used if feasible and appropriate. If either a bat maternity roost or hibernacula (structures used by bats for hibernation) are present, a qualified biologist will develop and implement appropriate protection measures for that maternity roost or hibernacula. These protection measures shall include, as appropriate: safely evicting non-breeding bat hibernacula, establishment of avoidance buffers, or replacement of roosts at a suitable location. These measures shall also include as appropriate:</p> <ul style="list-style-type: none"> <li>• To the extent feasible, trees that have been identified as roosting sites shall be removed or relocated between October 1 and February 28.</li> <li>• When trees must be removed during the maternity roost season (March 1 to September 30), a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat for bats.</li> <li>• Trees identified as potentially supporting an active nursery roost shall be inspected by a qualified biologist no greater than seven days prior to tree disturbance to determine presence or absence of roosting bats.</li> <li>• Trees determined to support active maternity roosts will be left in place until the end of the maternity season (September 30).</li> <li>• If bats are not detected in a tree, but the qualified biologist determined that roosting bats may still be present, trees shall be removed as follows: <ul style="list-style-type: none"> <li>○ Pushing the tree down with heavy machinery instead of felling the tree with a chainsaw.</li> <li>○ First pushing the tree lightly two to three times with a pause of 30 seconds in between each nudge to allow bats to become active, and then pushing the tree to the ground slowly.</li> <li>○ Allowing the tree to remain in place for 24 to 48 hours until inspected by the qualified biologist for presence or absence of roosting bats.</li> </ul> </li> </ul> <p>The qualified biologist shall document all bat survey, monitoring, and protection measure activities and prepare a summary report for LACFCD.</p>	<p>Final Plans and Specifications; Pre-Sediment Removal; Sediment Removal; Reservoir Management</p>	<p>Pre-Sediment Removal; Sediment Removal; Reservoir Management</p>	<p>Los Angeles County Flood Control District</p>	<p>Less than significant</p>		<p>11/06/2018 – 11/08/2018</p>	<p>Preconstruction bat surveys were conducted prior to the initiation of project activities in the fourth quarter of 2018. No surveys related to this measure were required during the 2021 fourth quarter reporting period.</p>
<p><b>MM BIO – 6:</b> Riversidean Alluvial Fan Sage Scrub habitat shall be restored and/or enhanced at a 1:1 ratio by acreage. LACFCD, with the help of professional restoration ecologists, will develop the means and methods of successful restoration and enhancement of this sensitive habitat. Measures to achieve not less than a 1:1 replacement, or no net loss, of Riversidean Alluvial Fan Sage Scrub shall include but not be limited to the following:</p> <ul style="list-style-type: none"> <li>• Conduct a vegetation survey within the impact area prior to commencement of vegetation removal activities to verify the impact acreage of Riversidean Alluvial Fan Sage Scrub.</li> <li>• Identify and map the selected mitigation areas where Riversidean Alluvial Fan Sage Scrub will</li> </ul>	<p>Reservoir Management</p> <ul style="list-style-type: none"> <li>• Prepare Habitat Restoration Plan</li> <li>• Identify/Map Mitigation Sites</li> <li>• Install Plant Materials</li> <li>• Monitor Installation</li> </ul>	<p>Reservoir Management</p> <ul style="list-style-type: none"> <li>• Identify Reference Sites</li> <li>• Conduct Qualitative and Quantitative Monitoring</li> <li>• Conduct Maintenance</li> <li>• Implement Adaptive Management Measures, if</li> </ul>	<p>Los Angeles County Flood Control District</p>	<p>Less than significant</p>		<p>11/19/18 - ongoing</p>	<p>Restoration activities were continued during the 2021 fourth quarter reporting period.</p>



**Table 2. Devil's Gate Mitigation Monitoring and Reporting Program**

MITIGATION MONITORING AND REPORTING PROGRAM Devil's Gate Reservoir Sediment Removal and Management Project							
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<p>be enhanced or restored using aerial photographs. Priority for mitigation site locations shall be onsite, offsite within Arroyo Seco subwatershed, and offsite within the greater Los Angeles River watershed.</p> <ul style="list-style-type: none"> <li>Select offsite reference sites where Riversidean Alluvial Fan Sage Scrub is the established plant community. The reference sites will be used to establish the necessary performance standards to which the mitigation site will be measured. Performance standard parameters will include percent cover of native plant species, percent cover of nonnative and invasive plant species, and native plant species richness (number of different plant species).</li> <li>Prepare and implement a site-specific Habitat Restoration Plan that will result in the successful restoration and enhancement at the selected mitigation sites. The Habitat Restoration Plan, at a minimum, shall include guidelines and specifications for the following: <ul style="list-style-type: none"> <li>Site-specific container plant (if applicable) and seed palettes,</li> <li>Irrigation plan,</li> <li>Nonnative and invasive plant species removal,</li> <li>Maintenance and monitoring schedule,</li> <li>Qualitative and quantitative monitoring methodologies,</li> <li>Selection criteria of reference sites,</li> <li>Performance standards of the mitigation sites,</li> <li>Monitoring reports and annual reports schedule,</li> <li>Mitigation long-term management plan, and</li> <li>Funding description for implementation and long-term management.</li> </ul> </li> <li>Prepare an as-built plan after the installation of the plant and seed materials has been completed to document the acreage of each restored or enhanced plant community on the mitigation sites and to show that not less than a 1:1 replacement of sensitive habitats has been achieved.</li> <li>Quantitatively monitor the mitigation sites until the performance standards have been met and restoration and enhancement of not less than 1:1 replacement of Riversidean Alluvial Fan Sage Scrub has been achieved.</li> </ul> <p>Implement adaptive management measures if, during monitoring, the mitigation sites do not demonstrate measurable progress toward achieving the necessary performance standards or if unforeseen circumstances damage the mitigation sites. Adaptive management measures will include but not be limited to:</p> <ul style="list-style-type: none"> <li>Correctively re-grade areas if hydrologic or other conditions negatively affect the mitigation sites,</li> <li>Add soil amendments if problem soils may be inhibiting plant growth,</li> <li>Replant if plant survival is low or to increase plant species cover or diversity,</li> <li>Install different plant species for plant species that are not surviving, and</li> <li>Close trails or install barriers if human-caused impacts are damaging the mitigation sites.</li> </ul> <ul style="list-style-type: none"> <li>Implement and monitor the required mitigation at alternative sites, chosen based on same priority methodology, if the mitigation sites do not achieve the performance standards after the implementation of adaptive management measures. LACFCD shall conduct qualitative and annual quantitative monitoring and prepare annual monitoring reports until the established performance standards are achieved.</li> <li>Ensure the allocation and encumbrance of the funding necessary to implement the Habitat Restoration Plan, adaptive management measures, alternative mitigation sites (if necessary), and long-term management and protection of the mitigation sites.</li> </ul>	<ul style="list-style-type: none"> <li>Install Irrigation, if Necessary</li> <li>Prepare As-Built Report</li> <li>Conduct Maintenance</li> <li>Prepare Monitoring Reports</li> </ul>	<p>Necessary</p> <ul style="list-style-type: none"> <li>Prepare Monitoring Reports</li> <li>Prepare Annual Reports</li> <li>Achieve Mitigation Site Sign- Off</li> </ul>					
<p><b>MM BIO – 7:</b> Within 90 days prior to ground-disturbing activities, a qualified biologist shall conduct a tree survey within the project footprint to identify native city- protected trees that would be removed or potentially affected by the Proposed Project, native city-protected trees that can be avoided, and native city-protected trees that will require root zone protection. LACFCD would replace native city-protected trees that cannot be avoided. The replacement is expected to be at a 1:1 ratio by canopy acreage. The biological</p>	<p>Pre-Sediment Removal; Sediment Removal; Reservoir Management</p> <ul style="list-style-type: none"> <li>Conduct Tree Survey</li> </ul>	<p>Pre-Sediment Removal; Sediment Removal; Reservoir Management</p> <ul style="list-style-type: none"> <li>Identify Reference Sites</li> </ul>	Los Angeles County Flood Control District	Less than significant		10/02/2018 – 10/05/2018	Preconstruction tree surveys were conducted prior to the initiation of project activities in the fourth quarter of 2018. No surveys related to this

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					Initial	Date	Remarks
<p>monitor shall implement measures to protect the root zone of oak trees that may be impacted immediately adjacent to the project site and along access roads. The acreage occupied by the canopies of the native city-protected trees to be removed will determine the appropriate level of tree replacement. LACFCD shall identify tree replacement areas that are no less than the acreage of the native city-protected tree canopies to be removed. Priority for tree replacement locations shall be onsite, offsite within Arroyo Seco subwatershed, and offsite within the greater Los Angeles River watershed. The number of replacement trees installed by LACFCD will be greater than the number of trees to be removed should the replacement tree be smaller and younger than the tree to be removed. LACFCD shall monitor the survival of the replacement trees for five years and replace those that do not survive within the monitoring period, ensuring that not less than 1:1 ratio of replacement, or no net loss, has been achieved.</p>	<ul style="list-style-type: none"> <li>Identify and Protect Oak Tree Root Zones</li> <li>Identify/Map Mitigation Sites</li> <li>Prepare Habitat Restoration Plan</li> <li>Install Plant Materials</li> <li>Monitor Installation</li> <li>Install Irrigation, if Necessary</li> <li>Prepare As-Built Report</li> <li>Conduct Maintenance</li> <li>Prepare Monitoring Reports</li> </ul>	<ul style="list-style-type: none"> <li>Conduct Qualitative and Quantitative Monitoring</li> <li>Conduct Maintenance</li> <li>Implement Adaptive Management Measures, if Necessary</li> <li>Prepare Monitoring Reports</li> <li>Prepare Annual Reports</li> <li>Achieve Mitigation Site Sign-Off</li> </ul>					<p>measure were required during the 2021 fourth quarter reporting period. Restoration activities were continued during the 2021 fourth quarter reporting period.</p>
<p><b>MM BIO – 8:</b> A combination of onsite and offsite habitat restoration, enhancement, and exotic plant removal shall be implemented by LACFCD at a 1:1 ratio for impacted riparian habitat, sensitive natural communities, and jurisdictional waters. Habitat restoration/enhancement shall include use of willow cuttings and exotic plant species removal. Non-native, weedy habitats within the basin shall be utilized whenever possible as mitigation sites. LACFCD, with the help of professional restoration ecologists, will develop the means and methods of successful restoration and enhancement of riparian habitat, sensitive natural communities, and jurisdictional waters. Measures to achieve not less than a 1:1 replacement, or no net loss, of riparian habitat, sensitive natural communities, and jurisdictional waters shall include but not be limited to the following:</p> <ul style="list-style-type: none"> <li>Conduct a vegetation survey within the impact area prior to commencement of vegetation removal activities to verify the impact acreages of riparian habitat (Riparian Woodland and Mule Fat Thickets), sensitive natural communities (Coastal Sage Scrub), and jurisdictional waters (federally protected wetlands).</li> <li>Identify and map the selected mitigation areas where riparian habitat, sensitive natural communities, and federally protected wetlands will be enhanced or restored. Priority for mitigation site locations shall be onsite, offsite within Arroyo Seco subwatershed, and offsite within the greater Los Angeles River watershed.</li> <li>Select offsite reference sites where riparian habitats (Riparian Woodland and Mule Fat Thickets) and sensitive natural communities (coastal sage scrub) are the established plant communities and where federally protected wetlands are present. The reference sites will be used to establish the necessary performance standards to which the mitigation site will be measured. Performance standard parameters will include percent cover of native plant species, percent cover of nonnative and invasive plant species, native plant species richness (number of different plant species), structural patch richness, and wildlife use.</li> <li>Prepare and implement a site-specific Habitat Restoration Plan that will result in the successful restoration and enhancement at the selected mitigation sites. The Habitat Restoration Plan, at a minimum, shall include guidelines and specifications for the following: <ul style="list-style-type: none"> <li>Site-specific container plant and seed palettes,</li> <li>Irrigation plan,</li> <li>Nonnative and invasive plant species removal,</li> <li>Maintenance and monitoring schedule,</li> <li>Qualitative and quantitative monitoring methodologies,</li> <li>Selection criteria of reference sites,</li> <li>Performance standards of the mitigation sites,</li> <li>Monitoring reports and annual reports schedule,</li> <li>Mitigation long-term management plan, and</li> <li>Funding description for implementation and long-term management.</li> </ul> </li> <li>Prepare an as-built plan after the installation of the plant and seed materials has been completed to document the acreage of each restored or enhanced plant community on the mitigation sites to show</li> </ul>	<p>Reservoir Management</p> <ul style="list-style-type: none"> <li>Prepare Habitat Restoration Plan</li> <li>Identify/Map Mitigation Sites</li> <li>Install Plant Materials</li> <li>Monitor Installation</li> <li>Install Irrigation, if Necessary</li> <li>Prepare As-Built Report</li> <li>Conduct Maintenance</li> <li>Prepare Monitoring Reports</li> </ul>	<p>Reservoir Management</p> <ul style="list-style-type: none"> <li>Identify Reference Sites</li> <li>Conduct Qualitative and Quantitative Monitoring</li> <li>Conduct Maintenance</li> <li>Implement Adaptive Management Measures, if Necessary</li> <li>Prepare Monitoring Reports</li> <li>Prepare Annual Reports</li> <li>Achieve Mitigation Site Sign- Off</li> </ul>	Los Angeles County Flood Control District	Less than significant		11/19/18 - ongoing	<p>Restoration activities were continued during the 2021 fourth quarter reporting period.</p>

**Table 2. Devil's Gate Mitigation Monitoring and Reporting Program**

MITIGATION MONITORING AND REPORTING PROGRAM Devil's Gate Reservoir Sediment Removal and Management Project							
Mitigation Measure	Implementation Phase*	Monitoring Phase*	Enforcement Agency	Level of Significance After Mitigation	Verification of Compliance		
					Initial	Date	Remarks
<p>that the sites contain not less than a 1:1 replacement of riparian habitats, sensitive natural communities, and federally protected wetlands has been achieved.</p> <ul style="list-style-type: none"> <li>• Quantitatively monitor the mitigation sites until the performance standards have been met and restoration and enhancement of not less than 1:1 replacement of riparian habitats, sensitive natural communities, and federally protected wetlands has been achieved.</li> <li>• Implement adaptive management measures if, during monitoring, the mitigation sites do not demonstrate measurable progress achieving the necessary performance standards or if unforeseen circumstances damage the mitigation sites. Adaptive management measures will include but not be limited to:                             <ul style="list-style-type: none"> <li>○ Correctively re-grade areas if hydrologic or other conditions negatively affect the mitigation sites,</li> <li>○ Add soil amendments if problem soils may be inhibiting plant growth,</li> <li>○ Replant if plant survival is low or to increase plant species cover or diversity,</li> <li>○ Install different plant species for plant species that are not surviving, and</li> <li>○ Close trails or install barriers if human-caused impacts are damaging the mitigation sites.</li> </ul> </li> <li>• Implement and monitor the required mitigation at alternative sites if the mitigation sites do not achieve the performance standards after the implementation of adaptive management measures. LACFCD shall conduct qualitative and annual quantitative monitoring and prepare annual monitoring reports until the established performance standards are achieved.</li> <li>• Ensure the allocation and encumbrance of the funding necessary to implement the Habitat Restoration Plan, adaptive management measures, alternative mitigation sites (if necessary), and long-term management and protection of the mitigation sites.</li> <li>• Submit a report of the monitoring results annually following implementation of the restoration and enhancement activities at the mitigation sites, to resource agencies as required by the Section 401 Certification, Section 404 permit, and a Streambed Alteration Agreement until the mitigation sites have met the performance standards.</li> </ul>							

\*The Implementation and Monitoring phases are broken down into four categories: Final Plans and Specifications; Pre- Sediment Removal; Sediment Removal; and Reservoir Management. "Final Plans and Specifications" indicates that the mitigation measure must be incorporated into the final approved design, plans, and specifications for the project. "Pre- Sediment Removal" refers to measures that are required prior to the start of the sediment removal phase. "Sediment Removal" refers to all aspects of the Sediment Removal phase. "Reservoir Management" refers to all aspects of the Reservoir Management phase.

## **LIST OF APPENDICES**

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Appendix A: Construction Monitoring Logs

Appendix B: Habitat Restoration Monitoring Logs

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**APPENDIX A**

Construction Monitoring Logs

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**APPENDIX B**

Habitat Restoration Monitoring Logs