



# **Mitigation Monitoring and Reporting Program**

## **Basin Maintenance for Water Recharge**

Waterman Spreading Grounds

San Bernardino Valley Municipal Water District

San Bernardino County, California

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Prepared for:

**San Bernardino Valley Municipal Water District**

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## 1.0 INTRODUCTION

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Basin Maintenance for Water Recharge – Waterman Spreading Grounds (Proposed Project). An MMRP is required for the Proposed Project because the Initial Study Mitigated Negative Declaration (IS MND) identified potentially significant adverse impacts, and measures have been identified to mitigate those impacts. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.”

## 2.0 MITIGATION MONITORING AND REPORTING PROGRAM

As the lead agency, the San Bernardino Valley Municipal Water District (Valley District) will be responsible for monitoring compliance with all mitigation measures. The MMRP identifies the agency with the responsibility for ensuring the measure is completed; however, it is expected that agencies will coordinate efforts to ensure implementation and compliance.

The MMRP is presented in tabular form as **Table 1, Mitigation Monitoring and Reporting Program Matrix**. The components of the MMRP are described briefly below.

- Mitigation Measure: The mitigation measures are taken from the IS MND, in the same order they appear in the IS MND.
- Timing: Identifies at which stage of the Project the mitigation must be completed.
- Monitoring Responsibility: Identifies the agency with responsibility for mitigation monitoring.
- Verification (Date and Initials): Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

Appropriate specialists will perform or monitor specific mitigation activities. Valley District and the San Bernardino County Flood Control District (SBCFCD) may modify the means by which a mitigation measure will be implemented, so long as the alternative means ensure compliance during project implementation.

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<b>Biological Resources</b>			
<p><i>BIO-1:</i></p> <p>Prior to the initiation of maintenance activities, a pre-construction nesting bird clearance survey shall be conducted to document the presence/absence of LBV on the project site. If least Bell's vireo (LBV) are documented within the Environmentally Sensitive Area appropriate avoidance buffers shall be installed around the occupied habitat to ensure no indirect impacts to LBV occur.</p>	Prior to initiation of Maintenance activities.	Valley District and SBCFCD	
<p><i>BIO-2: Option 1 – Off-site Permittee Responsible Mitigation</i></p> <p>The Valley District will create, rehabilitate, and/or enhance a total of 40 acres of wetland/riparian/streambed habitat which will include freshwater marsh and willow scrub habitat similar to the pre-2017 emergency Project conditions in the Waterman Spreading Grounds. The Valley District will also rehabilitate and/or enhance 20 acres of alluvial fan scalebroom scrub habitat similar to that which will be removed by the proposed Project.</p> <p>Prior to initiation of the Project activities, a complete description of the proposed mitigation project(s) will be presented to the regulatory permitting agencies (CDFW, RWQCB, and USACE) for review and approval. The mitigation proposal will identify the current condition of habitat, proposed methods of restoration, goals and objectives for the restored areas, and will include measurable success criteria based on the suggestions and requirements of the regulatory agencies. The Valley District will fund the preparation of Habitat Mitigation and Monitoring Plans and an Adaptive Monitoring Management Plans that will include Annual Reports presenting</p>	Prior to initiation of Maintenance activities.	Valley District, with approvals from CDFW, RWQCB, and USACE	

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<p>the previous year's monitoring results and recommended future management activities in order to sustain or surpass the habitat quality of the mitigation site in perpetuity. If desired by the permitting agencies, the Valley District will host an annual work-plan meeting attended by technical experts and staff from the permitting agencies in order to consider the most appropriate adaptive management activities to implement in the following year. The Valley District will secure long-term conservation of the restoration site and establish financial assurances approved by the permitting agencies. This mitigation measure is intended to satisfy the Valley District's CEQA requirements in addition to all mitigation requirements associated with the issuance of a CDFW Lakes and Streams Alteration Agreement, the U.S. Army Corps of Engineers Nationwide-3 Permit, and the Regional Water Quality Control Board 401 Water Quality Certification. Specific requirements associated with this mitigation option will be included in the above-mentioned permits.</p>			
<p><i>BIO-2: Option 2 - Purchase Credits from Mitigation Bank or Approved In-Lieu-Fee Program</i></p> <p>The Valley District will purchase 40 wetland/riparian rehabilitation and streambed enhancement credits and 20 credits of alluvial fan habitat credits from approved mitigation bank(s) or In-lieu-fee (ILF) program. The Valley District will obtain approval in the choice of mitigation bank or ILF program prior to the credit purchase and provide proof of purchase to the regulatory agencies.</p>	<p>Prior to initiation of Maintenance activities.</p>	<p>CDFW, RWQCB, and USACE</p>	
<p><i>BIO-3:</i></p> <p>Bird nesting season generally extends from approximately February 1 through September 15 in southern California and specifically, April 15 through August 31 for</p>	<p>Prior to initiating Maintenance activities, between April 15 and August 31, during</p>	<p>Valley District</p>	

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migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to project-related disturbance to nestable vegetation to identify any active nests. A nest shall be defined as active if it contains eggs or young, or potentially contains eggs or young if presence cannot be reasonably be determined. An inactive nest is defined as a nest that has been abandoned by the adult bird or once fledglings are no longer dependent on the nest site or parental care. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.	nesting season of each year.		
<b>Cultural Resources</b>			
<i>CUL-1:</i> In the event that evidence of historical resources are unearthed during construction activities, work in the immediate vicinity of the find will be stopped and a qualified archaeologist will be contacted to assess the find and recommend appropriate mitigation. No disturbance shall occur in the vicinity of the find until the site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist.	Ongoing during Proposed Project activities.	Valley District and SBCFCD	

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<p><i>CUL-2:</i></p> <p>In the event that evidence of non-Native American archaeological resources are unearthed during construction activities, work in the immediate vicinity of the find will be stopped and a qualified archaeologist will be contacted to assess the find and recommend appropriate mitigation. No disturbance shall occur in the vicinity of the find until the site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist.</p> <p>In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, pursuant to consultation with the San Manuel Band of Mission Indians (SMBMI), the SMBMI will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the archaeologist makes his/her assessment, so as to provide Tribal input. The archaeologist shall complete an isolate record for the find and submit this document to the applicant and Lead Agency for dissemination to the San Manuel Band of Mission Indians.</p> <p>If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, an archaeologist qualified by the Secretary of the Interior (SOI) shall be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to San Manuel Band of Mission Indians for review and comment. All in-field investigations, assessments, and/or data recovery enacted pursuant to the</p>	<p>Ongoing during Proposed Project activities.</p>	<p>Valley District and SBCFCD</p>	

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finalized Treatment Plan shall be monitored by a San Manuel Band of Mission Indians Tribal Participant(s). The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians on the disposition and treatment of any artifacts or other cultural materials encountered during the project. Protocol for the inadvertent discovery of Native American archaeological resources will be followed as detailed within the Tribal Consultation Agreement.			
<p><i>CUL-3:</i></p> <p>In the event that human remains are discovered, there shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. Excavation or disturbance may continue in other areas of the project site that are not reasonably suspected to overlie adjacent remains or archaeological resources.</p>	Ongoing during Proposed Project activities.	Valley District	
<b>Geology and Soils</b>			
<p><i>GEO-1:</i></p> <p>In the event paleontological resources are discovered, all work will stop, and a qualified paleontologist shall be retained to recover any fossils that are discovered. In the instance of an extended salvage period, the paleontologist shall work with the construction manager to temporarily direct, divert, or halt earthwork to allow</p>	Ongoing during Proposed Project activities.	Valley District and SBCFCD	

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recovery of fossil remains in a timely manner. A final summary report shall be completed that includes discussions of the methods used, stratigraphic section(s) exposed, fossils collected, photographs, and significance of recovered fossils.			
<b>Hazards and Hazardous Materials</b>			
<p><i>HAZ-1:</i></p> <p>The Department of Toxic Substances Control (DTSC) and San Bernardino County Fire Department Hazardous Materials Division shall be immediately notified in the event malodorous or discolored soils, liquids, containers, or other materials known or suspected to contain hazardous materials and/or contaminants are encountered during activities associated with the Proposed Project. Earthmoving activities in the vicinity of said material shall be halted until the extent and nature of the suspect material are determined by qualified personnel (as determined by the DTSC). The removal and/or disposal of any such contaminants shall be in accordance with all applicable local, State, and Federal standards.</p>	Ongoing during Proposed Project activities	Valley District and SBCFCD, reporting to DTSC and San Bernardino County Fire Department Hazardous Materials Division.	
<b>Hydrology and Water Quality</b>			
<p><i>HYD-BMP 1: Avoid Channel Work during the Rainy Season to the Greatest Extent Practicable</i></p> <p>The greatest potential to transport pollutants or debris/soil/sediment from work activity occurs while water is present in the channel. Within the County of San Bernardino's diverse watersheds, the rainy season is typically from October through April, with summer monsoons occurring in the desert during the summer months.</p>	Ongoing during maintenance activities	SBCFCD	



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The SBCFCD will prepare a water diversion plan should maintenance activities occur while flowing water is present.			
<p><i>HYD-BMP 2: Avoid Spills and Leaks</i></p> <p>The SBCFCD will ensure that equipment operating in and near the facility is in good working condition and free of leaks. No equipment maintenance and/or refueling will occur within District Facilities. Equipment used during routine maintenance activities will be parked outside of channels and/or washes on the road tops and/or adjacent roadway. All operations staff working with heavy equipment have been trained in the use of the equipment, and in spill containment and response for any unforeseeable accidents that may occur; further, a spill kit will be kept on site at all times. Special care will be taken to prevent liquid paint from entering aquatic resources while painting associated with graffiti removal is conducted. Any spills that occur shall be reported to California State Warning Center (Cal OES) at (800) 852-7550. Additionally, a copy of the Cal OES California Hazardous Materials Spill/Release Notification Guidance will be kept on-site while all maintenance activities take place. Further, if necessary, operations staff will need to follow up with the appropriate agencies as outlined in the Cal OES guidelines, which can be located on the Cal OES website at <a href="http://www.calema.ca.gov">www.calema.ca.gov</a>.</p>	Ongoing during maintenance activities.	SBCFCD	
<p><i>HYD-BMP 3: Avoid Road Base Discharge</i></p> <p>The SBCFCD will implement measures in order to prevent the discharge of road base, fill, sediment, concrete, and/or asphalt beyond the previously established roadbed when maintaining existing driveways and dirt access roads within the maintenance activity area.</p>	Ongoing during maintenance activities.	SBCFCD	

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<p><i>HYD-BMP 4: Concrete Washout Protocols</i></p> <p>The SBCFCD will implement the appropriate waste management practices during on-site concrete repair operations. Waste management practices shall be applied to the stockpiling of concrete, curing, and finishing of concrete as well as concrete washout operations. Waste management practices shall be adequate to ensure that all fluids associated with the curing, finishing, and washout of concrete shall not be discharged into any area with the potential to enter an aquatic resource. Further, all concrete waste will be stockpiled separately from sediment and protected with erosion control measures to ensure that concrete dust and/or debris is not discharged into an aquatic resource. The SBCFCD will determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of stockpile locations, availability of erosion control materials, construction costs, and other requirements that may be outlined within the SBCFCD's MS4 permits.</p>	Ongoing during maintenance activities.	SBCFCD	
<p><i>HYD-BMP 5: Location of Temporary Stockpiles and Staging Areas</i></p> <p>Stockpile locations and staging areas will be located within the disturbed/graded areas outside of the facility bottom and at the tops of the levees/banks to the greatest feasible extent. Silt fences, berms, or other methods of erosion control may be used if stockpiles are to remain in designated areas for greater than 10 days. Materials may be stored temporarily within the facilities during excavation activities if placed outside of watercourses and storm drain inlets. Additionally, heavy equipment may be staged on the access roads within the maintenance activity area, but will be confined to those locations where potential pollutants cannot enter into</p>	Ongoing during maintenance activities.	SBCFCD	

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an aquatic resource; this will be conducted in combination with HYD-BMP-1			
<p><i>HYD-BMP 6: Location of Permanent Stockpiles</i></p> <p>This project will include permanent or long-term stockpiles onsite that will be located outside of streambed areas identified as Waters of the State and Waters of the U.S. Any material not placed onsite will be removed offsite by a SBCFCD contractor or placed at the nearest Operations yards.</p>	Ongoing during maintenance activities.	SBCFCD	
<p><i>HYD-BMP 7: Application of Pesticides, Herbicides, and Fertilizers</i></p> <p>The District Aquatic Pesticides permit outlines a schedule of monitoring requirements, BMPs, and conditions designed to promote the reduction of pollutants in stormwater discharges. This permit (Order Number 2013-0002-DWQ) requires the SBCFCD to manage pesticides and herbicide applications under specific criteria.</p> <p><u>General Requirements</u></p> <p>Apply pesticides and herbicides in accordance with California Department of Pesticide Regulation requirements: (1) Read and follow manufacturers' label requirements before each application; (2) Check sprinkler system for overflows into the streets and storm drain; (3) As much as possible, utilize safer alternatives such as insecticidal soaps and horticultural oils.</p> <p><u>Herbicide Applicator Training Requirement</u></p> <p>The San Bernardino County Department of Agriculture/Weights and Measures (Ag) is contracted by the SBCFCD to spray various flood control facilities throughout the County for vegetation control. Many times the Ag spray rigs are not able to spray</p>	Prior to and during maintenance activities.	SBCFCD	

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<p>close to fence lines and in tight areas. Spotty re-growth also occurs and is required to be re-sprayed.</p> <p>The SBCFCD consulted with Ag to develop a plan for weed abatement that is an extension of Ag’s current weed abatement program; using the same herbicide (Monsanto Roundup Pro Concentrate or similar glyphosate product). The application process has been approved by Ag and is determined not to require a California State Qualified Applicator License (QAL) or Certificate (CAC) per 3CCR section 6504. The District application of herbicide will be under the constant monitoring of Ag, who will be dispensing the herbicide and conducting random monitoring inspections in the field. SBCFCD staff will complete daily records of herbicide use by amount and location. These logs will be turned in to Ag monthly, to ensure no overuse of herbicides occurs.</p> <p>At least annually, Ag will provide training to SBCFCD staff consisting of:</p> <ol style="list-style-type: none"> <li>1. Classroom instruction on the laws and regulations governing the application of herbicides in the State of California.</li> <li>2. Review of the functions of the Department of Agriculture/Weights and Measures Pest Management Division Written Employee Training Program for Pesticide Applicators, Herbicide Applications; including: <ol style="list-style-type: none"> <li>a. Safety Procedures;</li> <li>b. MSDS for Monsanto Roundup Pro Concentrate (or similar glyphosate product), signs, symptoms &amp; effects of exposure;</li> <li>c. Pesticide Safety Series N1, N2, N4, N5, N7, N8;</li> <li>d. Review of the Dept of Ag Pesticide Monitoring Inspection form;</li> <li>e. Instruction on completing and submission of the required daily use log;</li> <li>f. Practical demonstration of identification and proper use of items required for safe transport, mixing, pouring, application, clean up,</li> </ol> </li> </ol>			

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<p>storage, disposal of wastes, and emergency procedures associated with the Roundup Pro Concentrate (or similar glyphosate product) herbicide application procedure;</p> <p>g. The required personal protective equipment and hygiene practices.</p> <p>3. Employee will perform a proficiency demonstration of knowledge of the above training items.</p> <p>4. Employee will successfully complete a verbal/written post test on the above training. Herbicides shall be applied by the District on a limited basis. Licensing standards and procedures are established by DPR and are described in:</p> <ul style="list-style-type: none"> <li>o 1998 California Code of Regulations, Title 3 (Food and Agriculture); and</li> <li>o 1997 California Food and Agriculture Code (Divisions 6, 7, and 13).</li> </ul>			
<p><i>HYD-BMP 8: Invasive Plant Removal Protocols</i></p> <p>Invasive plant species shall be removed in a manner that prevents propagation of those species in the same location and/or in other locations throughout the facility and/or County. Where maintenance activities are required, Operations staff will spray and/or mow invasive plant species before seeds ripen. All cut/removed invasive vegetation shall be taken to an approved refuse facility as a load designated for destruction. Operations staff shall prevent cut stems and/or seed material from being transported downstream and/or being left behind to allow the seed to propagate. In the case of giant reed (<i>Arundo donax</i>) removal, the SBCFCD shall minimize ground disturbance and use foliar glyphosate treatment on smaller infestations (see HYD-BMP-7 Aquatic Pesticide Applications, above). Stems shall be removed only when the plants are determined to be dead and unable to re-sprout and/or propagate.</p>	Ongoing during maintenance activities.	SBCFCD	

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<p><i>HYD-BMP 9: Remove Debris</i></p> <p>Remove litter and debris from facility as necessary.</p>	<p>Ongoing during all Proposed Project activities.</p>	<p>Valley District and SBCFCD</p>	