

NOTICE INVITING BIDS
AND
CONTRACT DOCUMENTS

FOR CONSTRUCTION ON
**PLUNGE CREEK CONSERVATION
PROJECT**

Project No. SBVWCD – 001C



**San Bernardino Valley
Water Conservation District**
Helping Nature Store Our Water

Filing Deadline:
February 27, 2020 – 4:00 p.m.

San Bernardino Valley Water Conservation District
Attn: Erwin Fogerson (909) 793-2503

Mailing Address/Street Address:
1630 W. Redlands Blvd., Ste. A Redlands, CA 92373-0581

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NOTICE INVITING BIDS

- A- 1. The San Bernardino Valley Water Conservation District (District) is soliciting sealed bids for construction of the Plunge Creek Conservation Project (Project). The project site encompasses about a 1.7-mile long reach of Plunge Creek in Highland, California. Attachments to this notice provide details on the project components to be constructed, constraints on construction, schedules, and the information to be submitted as part of the bid.

The work consists of constructing channel restoration features along a segment of Plunge Creek in Highland, California, to provide suitable habitat for San Bernardino kangaroo rat and increased opportunities for groundwater recharge while maintaining the current level of flood protection on the adjacent lands that are not owned or managed by the District. The Project will include the construction of pilot channels that are designed to direct portions of the Plunge Creek flow southwest across the existing terrace until they connect with existing remnant channels on the floodplain. The Project will also include the construction of splitter mounds to guide the main channel flow into the pilot channels, and a berm along the northern boundary of the quarry made of material from the pilot channel excavation to prevent the flow from leaving the channel at that location.

The District at a minimum shall contract for the construction of Phase 1 as shown on the plans. Phase 2 is currently awaiting environmental clearances and as a result the District may elect to delete Phase 2 of the project from the awarded contract if those clearances are not obtained prior to the Phase 1 work being completed or if the District feels the work cannot be completed before the next rainy season.

- A- 2. Proposals are requested that include both a bid proposal and documentation on the Contractor's qualifications. The contract may or may not be awarded to the lowest bidder. Details regarding proposal requirements and method to award are included in the attachments. The final construction documents will be developed after selection of the Contractor and may include revisions to the design to reduce cost, construction time, or uncertainty. Field changes may be necessary to adjust to unforeseen field conditions and minimize impacts to sensitive habitat.
- A- 3. A non-mandatory pre-proposal conference will be held at the project site at 1:00 P.M., on February 19, 2020 (see A-8 for location). Attendance is highly recommended. Questions regarding the pre-proposal meeting, the Invitation to Provide Bid Proposals, or the attachments may be addressed to Erwin Fogerson, by phone (909) 793-2503, email efogerson@sbvwcd.org or mail to the address below.
- A- 4. Proposals will be received until 4:00 p.m., February 27, 2020. Proposals may be delivered in person or transmitted to Erwin Fogerson, PE via mail to the address below.

**1630 W. Redlands Blvd., Ste. A
Redlands, CA 92373-0581**

- A- 5. Proposals received after the time above will not be accepted. Proposals will be opened after the closing time and evaluated by the District based on the criteria in the Instructions to Bidders.
- A- 6. A bid security in the amount of 10% of the bid price, made payable to the District, is required with each proposal. The security should be in the form of a cashier's check, certified check or a bid bond. Further details are in the Instructions to Bidders.
- A- 7. Any Contractor submitting a proposal shall possess a valid State of California Class A Contractor's License at the time of proposal submission and during the course of the work. The license number, type and expiration date shall be provided with the bid forms. The Contractor is also required to meet minimum experience requirements, as described in the Instructions to Bidders. Note that the Project is subject to both California labor standards.

Department of Industrial Relations (DIR) prevailing wage rates shall apply to this Project. The District reserves the right to reject any and all proposals or to waive any irregularities or informalities in the proposals or the proposal process.

A- 8. The following schedule applies to the proposal process and construction for this Project:

- Non- mandatory pre-bid meeting on be held on February 19, 2020 at 1:00 pm at Cone Camp Road Gate, approximately located at 8015 Cone Camp Road Highland, CA 92346. See plans for the location.
- Proposals due February 27, 2020 at 4:00 pm.
- Questions or requests for Information received after February 24, 2020 may not be answered.
- Expected Notice of Selection is March 4, 2020 via email or telephone.
- The work is tentatively scheduled to begin as early as May 4, 2020 but no later than July 5, 2020.

A- 9. In accordance with the provisions of sections 1770, 1773 and 1773.1 of the California labor code, the director of industrial relations has determined that the general prevailing rates of wages, including employer payments for health and welfare, pension, vacation, travel time and subsistence pay as provided in section 1773.8 of the California Labor code, apprenticeships and other training programs authorized by section 3093 of the California labor code, for the crafts, classifications, or types of workers required for any work, in the locality of the project are available from the California director of industrial relations. The successful bidder will be required to pay not less than the rates set forth by the director of industrial relations. More information on prevailing rates may be obtained from:

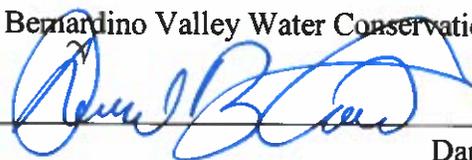
Division of Labor Statistics and Research
Prevailing wage unit
P.O. Box 420603
San Francisco, ca 94142
(415) 703-4774
[Http://www.dir.ca.gov/dlsr/pwd/](http://www.dir.ca.gov/dlsr/pwd/)

A- 10. The District hereby affirmatively ensures that minority business enterprises will be afforded full opportunity to submit bids in response to this notice and will not be discriminated against on the basis of race, color, national origin, ancestry, sex, or religion in any consideration leading to the award of contract. Affirmative action to ensure against discrimination in employment practices on the basis of race, color, national origin, ancestry, sex, or religion will also be required.

A- 11. All questions regarding the project must be submitted on company letterhead and transmitted by email to Erwin Fogerson no later than 5:00 p.m. February 24, 2020

San Bernardino Valley Water Conservation District

By: _____



Daniel Cozad
General Manager

Dated: _____

2/4/2020

SPECIAL PROVISIONS

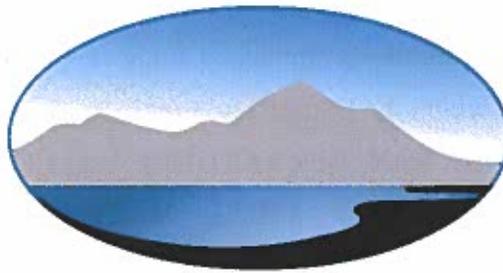
CONSTRUCTION OF

PLUNGE CREEK CONSERVATION PROJECT

at

East of Boulder Avenue
In the City of Highland, CA

Project No. SBVWCD – 001C



San Bernardino Valley Water Conservation District

Helping Nature Store Our Water

The following General Provisions supplement and amend the 2009 Edition of (“Greenbook”) Standard Specifications for Public Works Construction. As a reference convenience, these Special Provisions have been arranged into a format that parallels the Standard Specifications.



Prepared by:


Erwin Fogerson, PE


Date

SPECIAL PROVISIONS

GENERAL PROVISIONS

SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

1-3.2 Common Usage.

Add the following

Bid Item – Unit and Lump Sum amounts to be paid for the Items listed in the Proposal and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced under the Contract, in accordance with the Plans and Specifications, and no separate or additional payment shall be allowed therefore.

Bond – ADD warranty after payment.

CALTRANS – Refers to the State of California Department of Transportation.

Contract Documents – The Agreement or Contract, Addenda, notice inviting bids, instructions to bidders, Bid Proposal (including documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Contract, the Bonds, permits from jurisdictional regulatory agencies, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Change Orders, Supplemental Agreements, and the Summary of Work.

Disputed Work – Work which the District and the Contractor are unable to reach agreement.

District – refers to The SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

Engineer – *DELETE the definition in its entirety and replace with the following:*

Refers to the District General Manager, acting personally or through authorized agents or assistants responsible for the project implementation.

Final Inspection – Performed by the Engineer prior to the Final Acceptance of the Project the by Council.

The Greenbook – Refers to and conforms to the 2009 edition of “The GREENBOOK”

Inspector – The engineering or technical personnel authorized to act as agents for the Engineer in the supervision of work covered by these Specifications.

Laboratory – The designated laboratory approved by the Engineer to test materials and work involved in the contract

SECTION 2 - SCOPE AND CONTROL OF WORK

2-5.3.1 Submittals.

Insert the following Subsection

Contractor shall submit a health and safety plan and construction schedule within the time necessary to allow the District to review, to allow resubmittal and second review, if necessary, and to avoid delays in the work. Contractor shall make any corrections or additions to the submittals and shall provide the District with corrected or supplemented submittal in the number, with the content and at the times specified by the District.

The original submittals shall be assigned a numeric submittal number. Resubmittals shall bear an alphanumeric system which consists of the number assigned to the original submittal for that item followed by a letter of the alphabet to represent that it is a subsequent of the original. For example, if Submittal 1 requires a resubmittal, the first resubmittal will bear the designation "1-A", the second resubmittal will bear the designation "1-B", and so on.

SECTION 6 – PROSECUTION, PROGRESS, AND ACCEPTANCE OF THE WORK

6-7.1 Time of Completion.

Add the following:

The Contractor shall begin work within 15 days after the Notice to Proceed. The First Working day Designation will be the date of The Notice to Proceed or the date of the beginning of work, whichever is later. In no case shall the First Working Day Designation be greater than 15 days after the Notice to Proceed. The Contractor shall diligently prosecute the work to completion before the expiration of

For PHASE 1 (Bid Schedule A) only:

FIFTEEN (15) WORKING DAYS

For PHASE 1 and PHASE 2 (Bid Schedule B):

THIRTY (30) WORKING DAYS

6-9 Liquidated Damages.

Replace the third sentence of the first paragraph with the following:

For each Day in excess of the time specified for the completion of the Work in 6-3.1, as adjusted in accordance with 6-4, the Contractor shall pay to the District, or have withheld from monies due it, the sum of money as follows

After the First Working Day Designation.

The Contractor shall pay the San Bernardino Valley Water Conservation District the sum of

One Thousand Dollars (\$1,000.00) PER DAY

For each day and every calendar day's delay in the finishing the work in excess of the number of working days prescribed above.

SECTION 7 – RESPONSIBILITIES OF THE CONTRACTOR

7-5 Permits.

Add the following:

The Contractor shall obtain a CITY OF HIGHLAND IMPORT / EXPORT OPERATIONS PERMIT. Inspection and City fees shall be reimbursed to the Contractor upon request and paid for outside of the contract pay items. All cost to obtain the permit and comply with the permit requirements shall be included in the various items of work and no additional compensation will be considered. A copy of the permit form is included in these Special Provisions.

Add the following Section:

7-15 On-Site Environmental Mitigation

This work shall consist of furnishing all labor, materials, tools, equipment and incidentals; and performing all work necessary to comply with existing laws, codes, regulations, and/or permits related to Environmental Mitigation Measures and these special provisions. Contractor must comply with the requirements of the permits from the California Department of Fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), United States Department of the Interior Fish & Wildlife Service, and the United States Army Corps of Engineers which pertain to construction activities only (as included in these Special Provisions).

Environmental Mitigation Measures must comply with sections 7-5 "Permits", 7-8 "Work Site Maintenance", and 7-9 "Protection and Restoration of Existing Improvements" of the Standard Specifications.

The following requirements, which pertain to construction activities, have been extracted from the environmental permits for the project and listed here for clear definition of the Contractor's responsibilities for compliance. This project may proceed subject to the following conditions:

1. Copies of all environmental permits, certifications, SWPPP, etc., including any amendments, must be made readily available on site at all times for the duration of work. Permits must be presented to any environmental agency personnel upon request.
2. Environmental agency personnel must be allowed to enter the Project site at any time to verify compliance with Permits/Agreements.
3. The District shall employ a Designated Biologist/Biological Monitor and a Paleontological Monitor responsible for monitoring construction activities in conformance with the various environmental permits for the Project to ensure compliance with the measures of the Permits/Agreements. The Designated Biologist/Biological Monitor and the Paleontological Monitor shall have the authority to immediately halt any activity that does not comply with the Permits/Agreements, and/or to order any reasonable measure to avoid the violation of any measure of the Permits/Agreements. The Designated Biologist / Biological Monitor shall halt construction activities if threatened or endangered species are identified and notify the appropriate agencies immediately.
4. The biological monitor will develop and implement a contractor education program to be provided to all personnel over the life of the Project. Prior to conducting any work on the site, personnel will be instructed regarding the purpose of resource protection, a description of federally listed wildlife which may occur on the Project site and their appropriate habitats, the conservation measures that will be implemented in conjunction with project construction, and an overview of the Act.
5. The Contractor shall comply with any requirements arising from Bird Nesting Surveys including work stoppages and notification of planned work.
6. Areas to remain undisturbed will be clearly flagged or otherwise delineated prior to any construction activities. A Biological Monitor will be on site to monitor all activities that result in the removal of sediment or vegetation and ensure that these activities do not encroach into the delineated areas. The Biological Monitor will have the authority to halt Project activities if work occurs inside delineated areas.
7. All materials generated from construction activities associated with this project must be managed appropriately. This must include identifying all potential pollution sources within the scope of work of this project, and incorporating all necessary pollution prevention BMPs as they relate to each potential pollution source identified.

8. The Contractor must utilize BMPs during project construction to minimize erosion and discharges of sediment, pollutants, and other wastes to drainage systems or other waters of the State and of the United States. BMPs must be monitored and repaired if necessary to ensure maximum erosion, sediment, and pollution control. Permittee must prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to jurisdictional areas. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the project site must be free of nonnative plant materials. Fiber rolls or erosion control mesh must be made of loose-weave mesh that is not fused at the Intersections of the weave, such as jute, or coconut (coir) fiber or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread. Best management practices to stabilize disturbed soils must include the use of native plant species whenever feasible.
9. Substances resulting from project-related activities that could be harmful to aquatic life, including, but not limited to, debris, petroleum products and fuels, cured and uncured cements, epoxies, paints and other protective coating materials, portland cement concrete or asphalt concrete, and washings and cuttings thereof, soil, sand, silt, bark, sawdust, slash, or any other materials must not be discharged to jurisdictional waters nor be placed where they may be washed from the Project site by rainfall or runoff into jurisdictional waters. All waste concrete must be removed from the Project site.
10. Motorized equipment must not be maintained or parked within or near any stream crossing, channel or lake margin in such a manner that petroleum products or other pollutants from the equipment may enter these areas under any flow conditions. Vehicles must not be driven or equipment operated in waters of the state on-site, except as necessary to complete the proposed project. No equipment shall be operated in areas of flowing water.
11. All work, including equipment staging, will remain on disturbed areas. No new work outside disturbed areas will be performed without further environmental evaluations. Standard best management practices must be implemented during construction activities, especially those pertaining to dust control, erosion control, and stormwater pollution prevention. If the staging area for the construction equipment is located outside of the disturbed project area please contact the EMD, at (909) 387-7897, to schedule a site visit for review of staging area location.
12. Contractor must monitor construction vehicles and equipment for leaks and proper BMPs must be implemented should leaks be detected or the vehicles/equipment must be removed from service, if necessary, to protect water quality.
13. Contractor must conduct project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. Prevention BMPs and guidelines for invasive plants can be found on the California Invasive Plant Council's website at: <http://www.cal-ipc.org/ip/prevention/index.php> and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: <http://www.protectyourwaters.net/> .
14. Contractor must inspect all vehicles, watercraft, tools, waders and boots, and other project-related equipment and remove all visible soil, mud, plant materials, and animal remnants prior to entering and exiting the project site and/or between each use in different waterbodies.

15. The Biological Monitor will inspect the equipment and staging area each day prior to start of work. No equipment shall be started until authorization is provided by the Biological Monitor.
16. Any uncapped pipes with an inside diameter of 1.5 inches or greater stored overnight within the construction site will be thoroughly inspected by a Biological Monitor for the presence of SBKR before the pipe is used or moved in any way. If SBKR are discovered the biological monitor will relocate the animal(s) to an appropriate location outside of the construction area. Unburied pipe laid in trenches overnight will be capped at the end of the work day.
17. Prior to and during operation of all heavy equipment, a spill prevention and contingency plan will be prepared and implemented by the Contractor. The plan will include measures to prevent or avoid an incidental leak or spill, including identification of materials necessary for containment and clean up. Vehicles and other equipment will be fueled, cleaned, and maintained in designated areas, located away from Rialto Channel to eliminate risk of pollution from fuel spills and contamination.
18. Contractor must decontaminate all tools, boots, and other equipment that will enter the water prior to entering and exiting the project site and/or between each use in different waterbodies to avoid the introduction and transfer of organisms between waterbodies. Contractor must decontaminate project gear and equipment utilizing one of three methods: drying, using a hot water soak, or freezing, as appropriate to the type of gear or equipment. For all methods, Contractor must begin the decontamination process by thoroughly scrubbing equipment, paying close attention to small crevices such as boot laces, seams, net comers, etc., with a stiff-bristled brush to remove all organisms. To decontaminate by drying, Contractor must allow equipment to dry thoroughly (i.e., until there is a complete absence of water), preferably in the sun, for a minimum of 48 hours. To decontaminate using a hot water soak, Contractor must immerse equipment in 140°F or hotter water and soak for a minimum of 5 minutes. To decontaminate by freezing, Contractor must place equipment in a freezer 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used within a different waterbody, and returned to the project site.
19. Contractor must perform decontamination of vehicles, watercraft, and other project gear and equipment in a designated location where runoff can be contained and not allowed to pass into jurisdictional areas and other sensitive habitat areas.
20. Contractor must not knowingly plant, seed, or otherwise introduce invasive nonnative plant species to the Project area, adjacent areas, or adjacent to stream channels (minimum 100 foot setback from open space areas and 150 foot setback from stream channels and wetland/riparian mitigation sites). Invasive nonnative plant species not to be used include those species listed on the California Invasive Plant Council's Invasive Plant Inventory: <http://www.cal-ipc.org/ip/inventory/index.php> in the areas within or adjacent to the project site.
21. Contractor must comply with all litter and pollution laws. All subcontractors, and employees must also obey these laws and it will be the responsibility of Contractor to ensure compliance.
22. Spoil or stockpile sites must not be located within a lake, streambed, or flowing stream or to the extent practicable locations that may be subjected to high storm flows, where spoil may be washed back into a lake, streambed, or flowing stream where it will impact streambed habitat and aquatic or riparian vegetation. If potential for stream flows to occur adjacent to spoil or stockpile sites exists the Contractor must employ measures designed to prevent materials from washing into jurisdictional waters.

23. No pets will be allowed in or adjacent to the Project site.
24. Rodenticides, herbicides, insecticides, or other chemicals that could potentially harm SBKR will not be used during construction or during the operations and maintenance phase of the Project.
25. Trash will be stored so that it is inaccessible to scavengers (e.g., crows and raccoons) and will be removed from the construction site on a daily basis so as not to attract potential SBKR predators.
26. Project-related vehicle traffic will be restricted to established roads and areas used for construction, storage, staging, or parking.
27. Contractor must provide certification stating all equipment must be tuned and maintained for maximum fuel burning efficiency.

Work stoppage or delays caused by Contractor's failure to comply with the above mentioned environmental agency regulations shall not be subject to delay costs.

Full compensation for complying with the conditions of this section including furnishing all labor, materials, tools, equipment and incidentals necessary to complete the work as described herein, and as directed by the Engineer, or his authorized representative, shall be considered as included in the lump sum contract price paid for "On-Site Environmental Mitigation" and no additional compensation will be allowed therefor.

SECTION 9 MEASUREMENT AND PAYMENT

9-1.2 Methods of Measure.

Add the following:

Where a Bid Item provides for payment on a lump sum price basis, no measurement of quantity will be made and no adjustment in price will be made for any deviation between estimated quantities provided as information and actual quantities. Where a Bid Item provides for payment on a unit price basis, the quantities of work performed will be computed by the District on the basis of measurements taken by the District, and these measurements shall be final and conclusive. All quantities of work computed under the Contract Documents shall be based upon measurements by the District according to United States Measurements and Weights or upon accepted measurements of delivered materials provided by suppliers.

9-3.4 Mobilization

Add the following:

The maximum allowed bid about is 10 percent of the total bid. Mobilization will be paid as a percentage of the actual work completed. The four (4) percent of Bid Item for Mobilization will be paid upon one (1) percent of the work being completed and accepted.

Bid Item 2 includes, but not limited to: obtaining of bonds, insurance and financing, movement of equipment, materials and personnel to and from the job site, supervision, certificates, permits, submittals and RFIs, utilities, site maintenance, cleanup, dust control and work incidentals to the contract not specifically identified under the remaining items or costs incurred prior to beginning of work and after completion of work on the various contract items. The cost for this item shall not exceed 10 percent (10%) of the total bid without documented justification, nor shall the Contractor submit for payment of all of the funds under this item until demobilization has been completed.

The Contractor's payment for this item shall be by the lump sum.

CONSTRUCTION MATERIALS

SECTION 200 ROCK MATERIALS

Add the following:

200-3.1 Splitter Mound Keystone Boulder

200-3.1.1 General. Boulder shall be between 36 inches and 48 inches in size (1 to 3 tons). Boulders shall be furnished by the District or be excavated and salvaged during other items of work and re-used per the details shown on the plans. Cost to excavate beyond the limits of excavation shown on the plans, load, haul and place salvaged rock shall be included in the unit item payment.

200-4.1 Splitter Mound Native Rock

200-4.1.1 General. Native rock shall conform to the gradation as shown on Sheet D1. Boulders shall be furnished by the District or shall be harvested from excavated (salvaged) materials from other items of work and re-used per the details shown on the plans. Cost to excavate beyond the limits of excavation shown on the plans, load, haul and place salvaged rock shall be included in the unit item payment.

200-5.1 Splitter Mound Coarse Streambed Fill

200-5.1.1 General. Coarse Streambed Fill shall conform to the gradation as shown on the plans. Fill material shall be furnished by the District or shall be harvested from excavated materials from other items of work and re-used per the details shown on the plans. Rock materials salvaged on site shall be clean, durable rock free of fractures and inclusions. Imported material, if used for filter layer, shall conform with Section 68 of the Standard Specifications for Class 1 Type B permeable material. Cost to excavate beyond the limits of excavation shown on the plans, load, haul and place salvaged rock shall be included in the unit item payment.

200-6.1 Splitter Mound Filter Material

200-6.1.1 General. Filter Material shall conform to the gradation as shown on the plans. Filter Material shall be furnished by the District or shall be harvested from excavated materials from other items of work and re-used per the details shown on the plans. Cost to excavate beyond the limits of excavation shown on the plans, load, haul and place salvaged rock shall be included in the unit item payment.

200-7.1 Boulder Stockpile Mound

200-7.1.1 General. Boulders used for the Boulder Stockpile be a minimum of 24 inches to 48 inches in diameter. Boulders material shall be furnished by the District or shall be harvested from excavated materials from other items of work and re-used per the details shown on the plans. Cost to excavate beyond the limits of excavation shown on the plans, load, haul and place salvaged rock shall be included in the unit item payment.

SECTION 204 LUMBER AND TREATMENT WITH PRESERVATIVES

Add the following:

204-5.1 Splitter Mound LWM (Large Woody Material)

204-5.1.1 General. LWM shall be furnished by the District or shall be salvaged from the project area as directed by the District. The diameter and length shall conform to the table shown on the plans.

204-5.1.2 Wood Preservatives. LWM shall be handled so that it is not contaminated from any preservatives or solutions as fuel or grease.

CONSTRUCTION METHODS

SECTION 300 EARTHWORK

300-1 CLEARING AND GRUBBING

Replace the entire Section with following:

300.1.1 General. Clearing and grubbing shall consist of removing all natural and artificial objectionable materials including trash and rubbish from the project footprint. All natural materials will be salvaged and re-used for the various items of work or shall be chipped as needed and stockpiled for use by the District in restoring access roads or applied to the Berm bid item as directed in the field.

Trees shall not be removed and shall be protected in place.

No grading or material delivery shall occur prior to installation of approved soil and erosion control BMPs.

300.1.3 Removal and Disposal of Materials

Replace the entire Section with following:

300.1.1.1 General. All artificial objectionable materials including trash and rubbish shall be removed and disposed of per local jurisdiction requirements.

300-2 CLEARING UNCLASSIFIED EXCAVATION

Add the following:

300.2.6 Surplus Material.

If only Phase 1 (Bid Schedule A) is awarded the contract shall include removal of excess excavated material and shall be paid as "Export Excess Material". Excess Material shall be free of all rock that meets gradation requirements for any and all other bid items. The material shall become the property of the Contractor and shall be exported and placed outside District property. The Contractor shall provide documentation on where the material is being exported to and proof that placement meets local code requirements. The unit price shall include all costs associated with the loading, hauling (including City permit and haul fees), transportation, unloading, coordination, meeting permit and ordinance requirements and permitting including meeting required BMP's. Quantities shall be confirmed through pre and post condition field surveys and shall not include any other factors such as settlement, expansion, moisture or any other factors that may alter the material actually exported. Quantities are considered existing in-place quantities and if Phase 1 and 2 are awarded then all excavated material is to remain on-site and the bid item is eliminated from the contract.

Add the following:

300-12 LOWER PILOT CHANNEL EXCAVATION AND UPPER PILOT CHANNEL EXCAVATION

300-12.1 General. Excavation and payment shall conform to Section 300-7 of the Standard Specifications for Public Works Construction with the following requirements:

1. All work shall be restricted to the top of slope shown on the plans. Haul trucks shall be restricted to reaches of excavated channel. Access to the work shall occur within the construction footprint of the pilot channels
2. The Contractor shall verify utility locations prior to construction.

3. The completed surface, after hauling of materials is completed, shall be decompacted to a depth of 6 inches and roughened. Decompaction shall be achieved through ripping or other approved methods.
4. No grading or material delivery shall occur prior to installation of approved soil and erosion control BMPs.
5. Final pay quantities shall be determined using pre and post condition field surveys. Monthly progress payments shall be estimated based upon cross sections.

Add the following:

300-13 BERM (SOIL DISPOSAL AREA)

300-13.1 General. Fill and payment shall conform to Section 300-4 of the Standard Specifications for Public Works Construction with the following requirements:

1. All work shall be restricted to the footprint of the berm area. Access to the work shall occur within the construction footprint of the pilot channels and access roads shown on plans.
2. Existing vegetation shall be cleared prior to placement of fill, chipped, and applied by the Contractor as mulch after completion of grading.
3. Embankment fill shall be excavated native material, placed in lifts not to exceed 12 inches loose thickness, and compacted to a relative compaction not less than 85% per ASTM D 1557. Placement shall be in a maximum of 12 (twelve) inch lifts.
6. No grading or material delivery shall occur prior to installation of approved soil and erosion control BMPs.
7. Fill material shall be free of all rock that meets gradation requirements for any bid items of work.

Payment: In addition to Section 300-4 of the Standard Specifications for Public Works Construction the unit price paid per cubic yard includes the hauling and placement of the material and all work listed above.

Add the following:

SECTION 313 MISCELLANEOUS CONSTRUCTION

313-1. Splitter Mound Keystone Boulder

313-1.1 General and Payment. Boulders shall conform to Section 200-3.1. Placement shall conform to Section 300.11.2 of the Standard Specifications for Public Works Construction. The price paid for each shall include furnishing all labor, materials, tools, equipment, and incidentals for the following items of work:

1. Site preparation
2. Excavation and embankment as required in the field
3. Loading and hauling of material from the listed stockpile area
4. Placement of the boulders as shown on the plans

313-2 Splitter Mound Native Rock

313-2.1 General. Native Rock shall conform to Section 200-4.1. The price paid by cubic yard shall include furnishing all labor, materials, tools, equipment, and incidentals for the following items of work:

1. Site preparation
2. Excavation and embankment to meet the finished dimensions shown on the plans and as required in the field

3. Loading and hauling of material from the listed stockpile area
4. Processing or screening required to meet the gradation shown on the plans
5. Placement as shown on the plans

313-3 Splitter Mound Coarse Streambed Fill

313-3.1 General. Coarse Streambed Fill shall conform to Section 200-5.1. The price paid by cubic yard shall include furnishing all labor, materials, tools, equipment, and incidentals for the following items of work:

1. Site preparation
2. Excavation and embankment to meet the finished dimensions shown on the plans as required in the field
3. Loading and hauling of material from the listed stockpile area
4. Processing or screening required to meet the gradation shown on the plans
5. Placement as shown on the plans

313-4 Splitter Mound Filter Material

313-4.1 General. Filter Material shall conform to Section 200-6.1. The price paid by cubic yard shall include furnishing all labor, materials, tools, equipment, and incidentals for the following items of work:

1. Site preparation
2. Excavation and embankment to meet the finished dimensions shown on the plans as required in the field
3. Loading and hauling of material from the listed stockpile area
4. Processing or screening required to meet the gradation shown on the plans
5. Placement of the rock as shown on the plans

313-5 Boulder Stockpile Mound

313-5.1 General. Boulders shall conform to Section 200-3.1. Placement shall conform to Section 300.11.2 of the Standard Specifications for Public Works Construction. The price paid for each shall include furnishing all labor, materials, tools, equipment, and incidentals for the following items of work:

1. Site preparation
2. Excavation and embankment as required in the field
3. Loading, placement and hauling of material from the listed stockpile area
4. Placement of the boulders as shown on the plans

313-6 Splitter Mound Large Woody Material (LWM)

313-6.1 General. LWM shall conform to Section 204-5.1. The price paid by lineal foot shall include furnishing all labor, materials, tools, equipment, and incidentals for the following items of work:

1. Site preparation
2. Excavation and embankment as required in the field
3. Loading, placement and hauling of material from the listed stockpile area
4. Any required trimming or pruning

313-7 Boulder Anchor Assembly

313-7.1 General. Hardware shall conform to Section 210-3 (Galvanizing) of the Standard Specifications for Public Works Construction. The price paid for each includes all work with supplying the materials, preparing the materials to be anchored and all work as shown on the plans.

313-8 Storm Water Pollution Prevention Plan (SWPPP)

313-7.1 General. The Contractor shall conform to Section 7-8.6 of the Standard Specifications and to the requirements of the San Bernardino County Municipal Separate Storm Sewer System (MS4) Waste Discharge Permit, Order No. R8-2010- 0036 issued by the Santa Ana Regional Water Board. The Permit, hereinafter referred to as the “MS4 Permit” regulates all municipal activities. In conjunction with the MS4 Permit, all activities associated with construction must also comply with the Statewide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Orders. 2009-09-DWQ, (NPDES No. CAS000002), herein referred to as the General Construction Activity Permit, or latest version.

The Contractor shall become fully informed of and comply with the applicable provisions of the above referenced Permits and federal, state and local regulations that govern the Contractor’s operations and storm water discharges from both the Project site and areas of disturbance outside the Project limits during construction. The Contractor shall maintain a copy of the Storm Water Pollution Prevention Plan/Monitoring Program (SWPPP/MP) at the Project site and shall make the SWPPP/Monitoring Program available during construction activities.

Where a Monitoring Program is required it shall be included with the SWPPP. If a SWPPP / MP is required but not provided by the Agency, then the Contractor shall prepare the SWPPP / MP and submit to the Agency for approval per Section 2-5.3 Submittals. The SWPPP shall include both work for both Phases.

Unless arrangements for disturbance of areas outside the Project limits are made by the District and made part of the contract, it is expressly agreed that the District assumes no responsibility to the Contractor or property owner whatsoever with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the Project limits.

The Contractor shall be responsible for the costs and for any liability imposed by law as a result of the Contractor’s failure to comply with the requirements set forth in this section, including but not limited to, compliance with the applicable provisions of the Standard Specifications, Greenbook, permits and federal, state and local regulations. For the purposes of this paragraph, costs and liabilities include, but are not limited to, fines, penalties and damages whether assessed against the District or the Contractor, including those levied under the Federal Clean Water Act and the Porter Cologne Water Quality Act.

The Contractor shall ensure that all applicable employee’s and Subcontractor’s employees are provided the required training per the current General Construction Activity Permit. Failure to provide the required training is a violation of the General Construction Activity Permit for each day of which such failure occurs, and shall in addition, be a breach of the Contract with the District. Contractor understands and agrees that NPDES Permit violations are grounds for enforcement action by the US Environmental Protection Agency, the Regional Water Quality Control Board, and the Agency, and may result in permit termination (stop work order), civil and criminal fines, and termination of the Contract. By submitting a Bid, the Contractor certifies to the Agency that the Contractor has trained its’ employees and Subcontractors employees, if any, for Stormwater Pollution Prevention and has included sufficient sums in the base bid price to cover such costs of said training.

The Contractor shall allow authorized agents of the District, State or Regional Water Quality Control Board, U.S. Environmental Protection Agency and local storm water/urban runoff management agency, upon the presentation of credentials and other documents as may be required by law, to:

- 1) Enter upon the construction site and the Contractor's facilities pertinent to the work;
Have access to review any records that must be kept as specified in the Permits;
- 3) Inspect the construction site and related soil stabilization practices and sediment control measures; and
- 4) Sample or monitor for the purpose of ensuring compliance with the Permits.

The Contractor shall notify the District immediately upon request from regulatory agencies to enter, inspect, sample, monitor or otherwise access the Project site or the Contractor's records.

Payment. The lump sum contract bid price shall be considered to include full compensation for the preparation and implementation of the SWPPP/MP for furnishing all labor, materials, tools, equipment, and incidentals for installing, maintaining, removing and disposing of BMPs as required. This contract does not include a separate pay item for complying with water pollution control requirements. Cost to prepare the SWPPP shall be the same for either Bid Schedule and cover planned work in both phases.

313-9 Site Restoration

313-9.1 General. Site Restoration includes but not limited to the removal of BMPs and restoration of areas disturbed by the installation of access routes, temporary vehicle turnout/parking area, and staging and storage area. Restoration requirements for the access routes vary according to types but include the following at a minimum:

- Type 1) regrading any ruts, potholes, or depressions caused by construction;
- Type 2) decompacting, roughening, and blending the surface to match adjacent ground; and mulching with chippings
- Type 3) decompacting, roughening, and blending the surface to match adjacent ground and restoring pre-project drainage paths; and
- Type 4) no restoration required.
- Type 5) Installation and removable of any required temporary fencing required to secure the staging areas. Fencing shall conform to the detail shown on Sheet D-3.

Locations and types of access routes, staging and storage area, and turnout and parking areas are shown on Sheet G1 of the Construction Plans. The unit price shall include all labor, equipment, material and incidentals necessary to complete the work.

Payment. The lump sum contract bid price shall be considered to include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for installing, and maintaining all work listed above and the removal of all excess material from the site as listed above.

REGULATORY PERMITS



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



In Reply Refer to:
FWS-SB-19B0182-19F1160

December 17, 2019
Sent by Email

Colonel Aaron C. Barta
Commanding Officer
U.S. Army Corps of Engineers, Los Angeles District
915 Wilshire Boulevard, Suite 930
Los Angeles, California 90017-3409
Attention: Ms. Pamela Kostka

Subject: Formal Section 7 Consultation for the Plunge Creek Habitat and Water
Conservation Project, City of Highland, San Bernardino County, California

Dear Colonel Barta:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the proposed Plunge Creek Habitat and Water Conservation project (Project) and its effects on the federally endangered Santa Ana River woolly-star (*Eriastrum densifolium* subsp. *sanctorum*, woolly-star), and San Bernardino kangaroo rat (*Dipodomys merriami parvus*, SBKR) and designated SBKR critical habitat, in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Your request to initiate formal consultation is dated November 21, 2018. We initiated formal consultation on November 21, 2018, the day we received the request. You requested consultation on the SBKR, woolly-star and impacts to designated SBKR critical habitat.

This biological opinion is based on information provided in the Plunge Creek Conservation Project Overview (ICF 2018a), Public Review Draft of the Upper Santa Ana River Wash Habitat Conservation Plan (ICF 2018b), and other sources of information. The San Bernardino Valley Water Conservation District (Applicant) and the Service attended a field visit to the Project area on April 18, 2019. During this field visit the upstream pilot channel was walked and no sign of SBKR was observed. Ecological process areas (active channel of Plunge Creek), mature scalebroom scrub vegetation, and high-density nonnative annual grass vegetation were observed. Based on the observed site conditions and information provided by the Applicant the likelihood of occupation by SBKR is discountable over a majority of the areas that will be directly affected by Project construction and habitat creation (ICF 2018a). Changes in water flow pattern are expected for approximately 1 mile downstream; SBKR in this area may be affected by the re-directed stream flows. The current Project is proposed as an overall benefit to native alluvial species of the Santa Ana River wash, including woolly-star and SBKR, and will contribute to the conservation associated with the proposed Upper Santa Ana River Wash Habitat Conservation Plan (Wash Plan HCP).

This biological opinion has been prepared consistent with the Service policy on *Streamlined Consultation Guidance for Restoration/Recovery Projects* (2016) and the agreement between our agencies regarding for actions where the Corps' involvement is limited to a permitting decision for a component of a larger project (Service 2017, Corps 2017). Per the agreement regarding larger projects where the Corps involvement is limited:

“The ESA and our interagency implementing regulations require that Federal agencies consult on the potential effects of projects they intend to fund, authorize, or otherwise carry out that may affect federally listed species or designated critical habitat. The Service must then consider the direct, indirect, and cumulative effects of the federal action (including effects of any interrelated or interdependent actions) in this consultation.” In this instance, the Clean Water Act permit action that triggered this consultation is smaller in scope than the overall project, so the biological opinion and associated incidental take statement consider effects that occur outside the jurisdiction of the action agency.

The agreement between our two agencies provides an approach on how to address projects where the Corps' scope is smaller than the area of effect to listed species in a manner that respects the limits of the Corps' jurisdiction, adheres to the Service's consultation regulations, and provides a path forward for the Service, Corps, and applicants to address compliance with the Act.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on October 28, 2019 [84 FR 44976]. This consultation was pending at that time, and we are applying the updated regulations to the consultation. As the preamble to the final rule adopting the regulations noted, “[t]his final rule does not lower or raise the bar on section 7 consultations, and it does not alter what is required or analyzed during a consultation. Instead, it improves clarity and consistency, streamlines consultations, and codifies existing practice.” We have reviewed the information and analyses relied upon to complete this biological opinion in light of the updated regulations and conclude the opinion is fully consistent with the updated regulations.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The 2.91-acre Project area is located inside the Santa Ana River floodplain, south of Greenspot Road, in the City of Highland, San Bernardino County, California. The San Bernardino Valley Water Conservation District (Applicant) proposes to restore historic flows to approximately 56 acres in the floodplain of Plunge Creek through the installation of water splitters in the primary channel and the excavation of pilot channels in the historic floodplain. Within the larger 203-acre Plunge Creek area, the proposed restoration areas comprise approximately 56 acres of upland wash vegetated by mature scalebroom scrub vegetation and nonnative annual grassland along the southern and eastern margins of the active portion of Plunge Creek. Project impacts will extend over a distance of approximately one mile along the Plunge Creek floodplain, beginning one-third of a mile south of the Greenspot road crossing to a point approximately half a mile upstream of Orange Street. Abbey Way runs north of the Project site and would serve as the Project access road. Project construction will affect approximately 2.91 acres of designated

SBKR critical habitat and all woolly-star plants that occur within that area (approximately 275 plants). All construction-related impacts to SBKR and woolly-star habitat would be temporary as access roads, staging areas and water diversion structures will be allowed to re-vegetate and/or will be restored upon completion of Project construction.

The ecological goal of the Project is to re-establish pioneer scalebroom scrub vegetation in areas that are no longer hydrologically active due to channel avulsion to expand suitable habitat for the SBKR and woolly-star. The ecological goal will be accomplished with a project design that will return fluvial processes to historic floodplain and remnant distributary channels. The hydraulic conditions must be sufficient to flush very fine sediments (*i.e.* clay and silt particles) and organic matter away from underlying coarser sediment, as well as deposit new alluvium to enable growth and establishment of native alluvial fan vegetation.

Proposed Action within the Corps' Jurisdiction

The Corps has identified its scope to include 1.496 acres of non-wetland Waters of the United States. This area includes the water splitters and rock sills (0.615 acres), pilot channels (0.335 acres), and a 100-foot buffer to account for temporary access roads and staging areas (0.545 acres) and any indirect effects to woolly-star plants caused by fugitive dust.

Proposed Action outside of the Corps' Jurisdiction

Project activities that occur outside of the Corps' jurisdiction are contingent upon the Corps' proposed action. Per the agreement evidenced by the Service's and Corps' letters (Service, 2017; Corps 2017), these activities will be considered in this Biological Opinion. The activities include any areas where water is going to flow that is not currently Corps jurisdiction (approximately 56 acre habitat restoration area) and non-jurisdictional portions of the pilot channel, 4-foot-high berm along the northern (upstream) boundary of an existing quarry, and access roads (approximately 1.4 acres).

Construction Methods

The proposed Project consists of the excavation of two pilot channels (upper and lower) from the active channel of Plunge Creek, through the historic floodplain, and back to the active channel. These design elements will enable flood flows to be conveyed onto the historic floodplain and into remnant distributary channels currently separated from the main channel by higher elevation terrace topography. The pilot channels are envisioned as lightly engineered features, with dimensions that would initially be much smaller than the existing active channel (average 2 to 3-foot-depth and 10-foot-wide channel bottoms). Over time, the pilot channels would naturally enlarge through fluvial scour. The upper pilot channel would be approximately 3,600 feet long and would reconverge with the active Plunge Creek channel immediately downstream of the Weaver Street Drain. The lower pilot channel would begin approximately 500 linear feet downstream of the point where the upper pilot channel re-converges with the main channel, and would be approximately 4,200 feet long. The lower pilot channel also includes an additional 600-foot-long south branch. Native substrate derived from pilot channel excavation, conservatively estimated at 8,900 cubic yards, would be repurposed for other project elements.

An excavator would be used to excavate a channel with a 10-foot bottom width. The banks would be excavated at a side slope of 1.5H:1W and match the topography until positive drainage can be achieved. The resultant height of the bank would vary depending on existing ground elevations, but are typically 2-3 feet tall through most of the pilot channel sections. Bank heights up to 7 feet high would be constructed in the upper portion of the upstream pilot channel since relatively deep excavation is needed to cut through the high terrace elevations prior to connecting with the lower elevation remnant channel features. Side slopes steeper than 1.5:1, but no steeper than 1:1, may be used where the cut depth is less than 3 feet and the cut slope is stable. The 10-foot bottom width accommodates the width needed for equipment to both excavate and dump trucks to travel within the pilot channels as part of the haul road system to dispose of fill material. Since the side slopes are set at the approximate angle of repose of the coarse, unconsolidated material, as the channel is excavated material will slough into the channel and the final bank side slope will largely be achieved without the need for fine-grading. This sloughed material can immediately be transported to the fill disposal areas.

The required gradient in the pilot channels is affected by several factors including the elevation of the existing Plunge Creek channel and depth required in the pilot channel to draw water in and maintain sediment transport to avoid backwatering and sediment deposition. The target gradient also accounts for the existing topography. The pilot channels need to tie into the fixed elevations of the remnant channel features on the floodplain. The upper pilot channel will join the existing Plunge Creek streambed just downstream of the Metropolitan Water District pipeline / Plunge Creek crossing. Pilot channel gradient typically varies from 1.5 percent to 1.75 percent.

In addition to the excavation of pilot channels, the proposed project includes the following elements:

- Installation of flow deflectors (“splitter mounds”), composed of large, native boulders (Type 1 splitter) and large, native boulders combined with logs with intact root wads (Type 2 splitter). The splitter mounds would be located at the heads of the two pilot channels and at three additional locations in the floodplain portion of the lower pilot channel. All materials will be sourced from the 203-acre Project area. Native boulders will be excavated from the creation of the pilot channels and adjacent terraces.
- Construction of native rock sills at the heads of the two pilot channels to create roughness and resist channel bed degradation within the active channel.
- Construction of an approximately 4-foot-high berm along the northern (upstream) boundary of an existing quarry located adjacent to the proposed upper pilot channel using compacted native material derived from the pilot channel excavation, in order to prevent redirected flows from entering the quarry.
- Construction of temporary access routes across floodplain areas and in the existing primary channel. Additional access routes would consist of existing access roads as well as traveling through the constructed pilot channels.
- Maintenance of splitter mounds and pilot channels may be necessary following the first series of larger storm events to recontour sediment within the pilot channels.

Construction Route

Construction equipment will travel primarily east on Abbey Way, where it dead ends onto an unpaved road that will serve as the main access to points in the wash that provide a natural pathway to the main channel of Plunge Creek and the various historic braids. The creek is located approximately 780 feet south of Abbey Way.

Equipment and Material Staging

The following is a list of general equipment that could be used for construction.

- Track mounted hydraulic excavators
- Wheel mounted front end loaders
- Backhoe
- Bulldozer
- Haul trucks
- Personnel

Construction Timing

Installation of the diversion features and cutting the diversion channels are expected to take approximately one month. Work would likely occur between 7 am and 4 pm on Mondays through Fridays. Due to other permitting and grant requirements, project implementation may be phased and may occur in the wet and/or dry season.

The Project benefits will contribute to the conservation strategy of the proposed Wash Plan HCP. The Project will be monitored to assess the viability of this method to enhance habitat for SBKR and woolly-star, as well as to determine its value in offsetting future impacts to these species and their habitats associated with the proposed covered activities in the Wash Plan HCP.

Conservation Measures

The Corps and Applicant have included the following conservation measures (CMs) in the project description to minimize adverse effects to SBKR, woolly-star, and designated SBKR critical habitat:

General Measures

- CM 1. All persons involved in conducting Project activities will receive environmental awareness training. The training will be developed in consultation with a qualified biologist. Training will provide information about federally listed species and their habitat that may occur in the Project area and an explanation of the purpose and function of these measures and potential penalties for not adhering to them.
- CM 2. The area of Project disturbance will be confined to the smallest practical area, considering topography, placement of water management facilities, location of

suitable and occupied habitats, public health and safety, and other limiting factors, and will be located in previously disturbed areas to the extent possible.

- CM 3. Areas affected during construction and operation and maintenance activities which contain native vegetation will be restored after Project completion (This statement does not include the pilot channels).
- a. Temporarily impacted areas will be replanted with a plant palette composed of the species found on-site prior to the disturbance. Seed will be collected on site and in adjacent areas to the extent feasible under the direction of a qualified botanist. If additional seed is needed commercial available seed sourced from as close as possible to the project site will be obtained.
 - b. Within habitat restoration areas nonnative plants will be managed to account for less than 20 percent relative cover during the spring growing season. These areas will be managed in perpetuity for the benefit of SBKR and woolly-star.
 - c. Restoration performance standards, and remediation measures, if necessary, will be developed by the Applicant and reviewed and approved by the Service.
- CM 4. Equipment (e.g., passenger vehicles, trucks, and heavy equipment) will be cleaned prior to entering the worksite and between worksites to prevent the importation and spread of nonnative plant species.
- CM 5. Adequate fire suppression capability will be maintained in active construction areas including having a water tender on site in active construction areas during periods of high fire danger.
- CM 6. No pets will be allowed at the work areas.
- CM 7. Litter control measures will be implemented. Trash and food items will be contained in closed containers and removed daily to reduce the attractiveness of the area to opportunistic predators.
- CM 8. Dust will be controlled with sprinkled water.
- CM 9. If construction-related activities are to occur during the nesting season (February 1 through September 15), a qualified biologist will conduct a preconstruction survey of the proposed construction area. This preconstruction survey will commence no more than 72 hours prior to the onset of construction. If an active nest is observed, an appropriate buffer, to be determined by the qualified biologist in consultation with the Service, will be established until nesting is completed.

- CM 10. Equipment storage, fueling, and staging areas will be located outside of the Project area on upland sites with minimal risks of direct drainage into natural areas. Staging areas will be located in such a manner as to prevent any runoff from entering sensitive habitat including riparian areas. Precautions will be taken to prevent the release of toxic substance into surface waters. Project related spills of hazardous materials will be reported to appropriate entities and will be cleaned up immediately and contaminated soils removed to approved disposal areas.

Species Specific Measures for Santa Ana River Woolly-star

- CM 11. To minimize effects to the woolly-star population in the action area, seeds will be collected from the individual woolly-star that cannot be avoided.
- a. Seed collection will be conducted at the appropriate time (usually fall) prior to ground disturbance. Seed collection and storage will be carried out by an entity approved by the Service.
 - b. The seed will be replanted in the temporarily disturbed area. The timing and location of seed distribution in the temporary impact areas will be determined by the land manager in consultation with a qualified botanist or restoration biologist with woolly-star experience. The cost of seed collection, up to 2 years of storage, and planting will be borne by the Applicant.

Species Specific Measures for San Bernardino Kangaroo Rat

- CM 12. All Project construction activities will take place during daylight hours.
- CM 13. The disturbance area will be inspected for kangaroo rat burrows by a qualified biologist prior to soil disturbance. Where active burrow entrances are detected, a 50-foot buffer will be established to avoid impacts to underground burrow systems and adjustments to Project components (*e.g.* - access roads, staging areas, sediment stockpile areas, pilot channels, splitter mounds, rock sills, etc.) will be made to avoid impacts to active kangaroo rat burrows to the extent feasible.
- a. If the qualified biologist determines that one or more active kangaroo rat burrows cannot be avoided, a temporary barrier fence will be erected and the area inside the fence will be trapped by a qualified biologist during the 5 nights preceding construction. The design of the temporary barrier fence should minimize ground disturbance and will be approved by the Service prior to installation. If the area to be trapped is along an access road that will be graded, 50-feet on either side of the road will be trapped for 5-nights preceding grading activities.
 - b. Live trapping will follow the standard 10(a)(1)(A) protocol for SBKR and a plan for holding captive animals will be approved by the Service prior to initiating trapping.

- c. All SBKR trapped will be held during Project construction and released near to each of their capture locations once all Project ground disturbing activities have ceased.
- d. No soil will be stockpiled within 50 feet of kangaroo rat sign. Stockpiled soils will be surrounded by a barrier fence to minimize access by SBKR.
- e. A qualified biologist or biological monitor with SBKR expertise will be present when ground disturbing activities occurs in the Project area. These activities include grading of access roads and the construction of staging areas, sediment stockpile areas, pilot channels, splitter mounds, or rock sills.
- f. If lower backfill is to be compacted within areas of native soil the top 20 inches of topsoil would be left uncompacted and as suitable for SBKR burrow excavation as possible. Preferred soil for SBKR burrow formation is generally composed of unconsolidated sand with a component of gravel (Shier *et al.* 2019).
- g. If significant (over 30 percent) nonnative weed cover is found in proposed impact areas the topsoil with weed seed would not be replaced in the top uncompacted fill but would be used for lower compacted backfill.

CM 14. The Applicant will carry out needed post-flood maintenance of Project features in ways to minimize and avoid effects to SBKR and woolly-star.

- a. Needed work will be carried out as soon as possible after flood waters recede.
- b. To the extent feasible equipment will be confined to existing dirt roads and the scoured channel.
- c. Maintenance activities will be carried out in daylight hours.
- d. If maintenance activities are delayed or SBKR sign is present in work areas, SBKR will be captured and held and released as described in CM13.

ANALYTICAL FRAMEWORK FOR THE JEOPARDY AND ADVERSE MODIFICATION DETERMINATION

Jeopardy Determination

Section 7(a)(2) of the Endangered Species Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion considers the effects of the proposed Federal action, and any cumulative effects, on the rangewide survival and recovery of the listed species. It relies on four components: (1) the *Status of the Species*, which describes the rangewide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which analyzes the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the *Effects of the Action*, which are all consequences to listed species caused by the proposed action that are reasonably certain to occur; and (4) the *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the SBKR and woolly-star.

For the section 7(a)(2) determination regarding jeopardizing the continued existence of the species, the Service begins by evaluating the effects of the proposed Federal action and the cumulative effects. The Service then examines those effects against current status of the species to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the species in the wild.

The Service will issue a biological opinion that evaluates all components of the larger project, including the effects of the larger project on listed species and critical habitat. This means that our jeopardy analysis will determine whether implementation of the larger action (combining the Corps' actions and those of the Applicant) is likely to reduce appreciably the likelihood of both the survival and recovery of the SBKR or woolly-star in the wild by reducing the reproduction, numbers, and distribution of these species.

Adverse Modification Determination

Section 7(a)(2) of the ESA requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to destroy or to adversely modify designated critical habitat. "Destruction or adverse modification" means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (50 CFR 402.02).

The "destruction or adverse modification" analysis in this biological opinion relies on four components: (1) the Status of Critical Habitat, which describes the range-wide condition of the critical habitat in terms of the key components (i.e., essential physical or biological features) that provide for the conservation of the listed species, the factors responsible for that condition, and the intended value of the critical habitat overall for the conservation of the listed species; (2) the Environmental Baseline, which analyzes the condition of the critical habitat in the action area, the factors responsible for that condition, and the value of the critical habitat in the action area for the conservation of the listed species; (3) the Effects of the Action, which are all consequences to critical habitat caused by the proposed action that are reasonably certain to occur; and (4) Cumulative Effects, which evaluate the effects of future non-Federal activities that are reasonably certain to occur in the action area on the key components of critical habitat that provide for the conservation of the listed species and how those impacts are likely to influence the conservation value of the affected critical habitat.

For the section 7(a)(2) determination regarding the destruction or adverse modification of critical habitat, the Service begins by evaluating the effects of the proposed Federal action and the cumulative effects. The Service then examines those effects against current status of the critical habitat to determine if implementation of the proposed action appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.

In accordance with the agreement (Service 2017), “the Service will issue a biological opinion that evaluates all components of the larger project, including the effects of the larger project on listed species and critical habitat.” This means that our destruction or adverse modification analysis will determine whether implementation of the larger action (combining the Corps’ actions and those of the Applicant) is likely to impair or preclude the capacity of critical habitat in the action area to serve its intended conservation function to an extent that appreciably diminishes the range wide value of critical habitat for the conservation of the listed species. The key to making that finding is understanding the value (*i.e.*, the role) of the critical habitat in the action area for the conservation/recovery of the listed species based on the Environmental Baseline analysis.

STATUS OF THE SPECIES

Santa Ana River Woolly-star

The Service listed the Santa Ana River woolly-star as endangered on September 28, 1987 (52 FR 36265). We evaluated the subspecies’ current status and threats in our [5-year review](#) (Service 2010) and recommended no change in listing status. We have not designated critical habitat for woolly-star because we determined at the time of listing that designation was not prudent. A recovery plan for woolly-star has not been completed.

Conservation areas in both the Lytle-Cajon and Santa Ana River drainages have been established for the benefit of woolly-star. These include the 1,373-acre Cajon Creek Habitat Conservation Management Area and the 182-acre Wildlands Bank in Lytle and Cajon Creeks, as well as the 804-acre Santa Ana River Woolly-star Preserve Area in the Santa Ana River.

The woolly-star is subject to the following threats: habitat destruction, degradation, and fragmentation resulting from aggregate mining and urban development; lack of flooding which is needed to allow seeds to germinate and establish plants; and competition from non-native grasses (Zembal and Kramer 1984; Burk *et al.* 1989). Many occurrences continue to be threatened by the aging of vegetation communities into mature seral stages due to the engineered narrowing of floodplains. Flood control and water channeling structures alter the hydrologic regime by decreasing the magnitude and distribution of flooding, scouring, and sediment deposition. Without these processes, eventually, the accumulation of fine sediments and growth of nonnative and native plants eliminate the early successional niche required by the woolly-star.

To maintain or improve the status of the woolly-star, occupied areas should be protected and managed to maintain the subspecies’ distribution and increase its abundance. Fluvial processes are necessary to maintain viable, dynamic alluvial floodplain habitat for woolly-star. Alternatively, management should be provided to mimic natural scour, sand transport and

deposition, and plant community responses. In some areas, maintenance of appropriate habitat conditions may require active management, such as periodic removal of invasive weeds, particularly annual grasses, and thinning of shrubs/overall vegetation cover.

San Bernardino Kangaroo Rat

SBKR was emergency listed as endangered on January 27, 1998 (63 FR 3835), and listed as endangered on September 24, 1998 (63 FR 51002). Critical habitat for SBKR was first proposed on December 8, 2000 (65 FR 77178), and designated on April 22, 2002 (67 FR 19812). Critical habitat for SBKR was subsequently re-proposed on June 19, 2007 (72 FR 33808), and a revised designation of the critical habitat was made final on October 17, 2008 (73 FR 61936). Following a 2009 lawsuit challenging the 2008 critical habitat designation, the court vacated the 2008 designation and reinstated the 2002 critical habitat designation on January 8, 2011. We completed a [5-year review](#) of the status of SBKR in August 2009 (Service 2009). The 5-year review recommended no change in the listing status of SBKR. Please see the 5-year review for more specific information on the subspecies description, habitat affinities, life history, status and distribution, threats, and conservation needs of SBKR across its current range (Service 2009). Additional information is also available in the 2002 final rule to designate critical habitat (67 FR 19812).

SBKR historically ranged from the San Bernardino Valley in San Bernardino County, to southwest Perris, Bautista Canyon, and Murrieta Hot Springs in Riverside County, with at least 25 separate localities identified (Service 2009). Currently, substantial populations of the SBKR are limited to three widely separated locations in San Bernardino and Riverside Counties including the Santa Ana River, Lytle-Cajon Creek, and San Jacinto River. Few SBKR are currently found outside of the 100-year floodplain, anywhere in the subspecies' extant range.

The SBKR is found primarily on loose alluvial soils where they can readily excavate simple, shallow burrows (Service 2009). These soils are typically associated with the scalebroom scrub plant community (also called Riverside Alluvial Fan Sage Scrub), a relatively uncommon desert-influenced plant community in southern California that develops on alluvial fans and floodplains subjected to scouring and deposition. SBKR prefer open, early and intermediate successional scalebroom scrub habitat, which corresponds to an infrequent flood disturbance regime (Service 2009).

Flood disturbance must be infrequent enough to allow establishment of vegetation and re-colonization of the SBKR but not so rare to allow the shrub community to mature into high-density stands. Occupied habitats are generally confined to flood terraces that receive infrequent flood disturbance several times per century, but occupied habitats that fall outside of this broad range do exist (Shier *et al.* 2019). A recent analysis of SBKR capture locations by the San Diego Zoo Institute for Conservation Research, for the purpose of developing a model, indicates that the SBKR generally is confined to areas with low shrub cover (less than 20 percent), low annual grass cover (less than 30 percent), appropriate soil openness and texture (greater than 50 percent bare ground with exposed sand and a gravel component greater than 25 percent), and low cover of woody debris (6-13 percent) (Shier *et al.* 2019).

Status of San Bernardino Kangaroo Rat Critical Habitat

We designated 33,295 acres of critical habitat for SBKR in four critical habitat units (CHU): CHU 1 (Santa Ana River), CHU 2 (Lytle and Cajon Creeks), CHU 3 (San Jacinto River and Bautista Creek), and CHU 4 (Etiwanda Alluvial Fan and Wash) (67 FR 19812). Currently, three widely separated populations remain in CHUs 1, 2, and 3.

The critical habitat designation identified 4 physical and biological features (PBFs), previously referred to as primary constituent elements, necessary for habitat to support this subspecies (67 FR 19812). PBFs for SBKR critical habitat are: (1) Soil series consisting predominantly of sand, loamy sand, sandy loam, or loam; (2) Alluvial sage scrub and associated vegetation, such as coastal sage scrub and chamise chaparral, with a moderately open canopy; (3) River, creek, stream, and wash channels; alluvial fans; floodplains; floodplain benches and terraces; and historically braided channels that are subject to dynamic geomorphological and hydrological processes typical of fluvial systems within the historic range of the SBKR. These areas may include a mosaic of suitable and unsuitable soils and vegetation that either (a) occurs at a scale smaller than the home range of the animal, or (b) forms a series of core areas and linkages between them; and (4) Upland areas proximal to floodplains with suitable habitat [e.g., floodplains that support the soils, vegetation, geomorphological, and hydrological and aeolian (wind-driven) processes essential to this subspecies (67 FR 19812)]. At minimum, suitable habitat contains suitable soil for SBKR use (burrow excavation) or is proximal to suitable soil and provides foraging habitat. Suitable soil consists of “sand, loam, sandy loam, or gravelly soils (McKernan 1997; Braden and McKernan 2000) that are associated with fluvial processes (i.e., the scour and deposition of clay, silt, sand, gravel, or similar material by running water such as rivers and streams; debris flows)” (67 FR 19812). Without functioning fluvial processes scalebroom scrub generally ages to an increasingly closed canopy of shrubs and annual grasses with reduced habitat values for both SBKR and woolly-star as bare ground decreases beyond approximately 50 percent (Shier *et al.* 2019).

Each CHU provides varying degrees of conservation value to the subspecies. As described above, the model developed by the San Diego Zoo Institute for Conservation Research indicates that the SBKR generally is found in areas with low shrub cover (less than 20 percent), low annual grass cover (less than 30 percent), appropriate soil openness and texture (greater than 50 percent bare ground with exposed sand with a gravel component greater than 25 percent), and low cover of woody debris (6-13 percent) (Shier *et al.* 2019). In order to preserve the function of the habitat in each CHU, protection and/or active management may be necessary and should focus on improving those degraded physical and biological features where intervention may provide significant benefit.

GENERAL ENVIROMENTAL BASELINE

The implementing regulations for section 7(a)(2) define the environmental baseline as “the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private

actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CF 402.02)".

Action Area

According to 50 CFR § 402.02 pursuant to section 7 of the Act, the "action area" means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area. For this Project, we have defined the action area as a 203-acre area which encompasses the active channel of Plunge Creek, 2.91 acres of temporary impacts to designated SBKR critical habitat associated with the construction of the habitat restoration Project and approximately 56 acres of habitat that will be rejuvenated (restored) through fluvial processes during future flood events. The Corps' scope includes a total of 1.496 acres of non-wetland Waters of the United States that is encompassed within the 2.91 acres of temporary impacts described for the larger restoration Project.

STATUS OF THE SPECIES IN THE ACTION AREA

A majority of the Project construction footprint (2.91 acres) and habitat restoration areas (approximately 56 acres) are degraded habitat for both SBKR and woolly-star due to the channelization of Plunge Creek by flood control levees, bridge crossings, and pipeline crossings which limit the natural lateral movement and braiding of flows (ICF 2018a, ICF 2018b). This channelization has increased the flow conveyance capacity and scour within the active channel, deepening the channel, and increasing the magnitude of a flood event required to overtop the primary channel banks (avulsion). Many remnant, hydrologically disconnected channels exist in the Project restoration areas where fluvial geomorphic processes of erosion, sediment transport, and sediment deposition that maintain the early stage scalebroom scrub plant community which provide and support SBKR and woolly-star habitat, have been reduced or removed completely.

Santa Ana River Woolly-star

The subspecies has many occurrences within the action area based upon historic and recent surveys throughout the alignment of the Project (ICF 2018a, ICF 2018b). Approximately 275 woolly-star plants were identified during recent surveys in areas that may be affected during Project construction (ICF 2018b). In areas with early to mid-successional scalebroom scrub vegetation (pioneer to intermediate), woolly-star is likely to occur at some density.

San Bernardino Kangaroo Rat

The current distribution of SBKR within the action area is unknown. Data provided by the Applicant (ICF 2018a, ICF 2018b) and our internal database show that trapping surveys generally capture SBKR where appropriate habitat conditions exist within the action area.

Habitat suitability mapping provided by the Applicant (ICF 2018a, ICF 2018b) suggest that along the alignment of the Project area SBKR habitat quality is highly variable. SBKR are expected to be absent from ecological process areas, like within the active channel of Plunge Creek, but they are expected in areas with suitable habitat at moderate to high density. Although a thorough survey was not completed, the Applicant anticipates that SBKR may occur at various locations within the Project area. This portion of Plunge Creek generally has appropriate soil for SBKR use; therefore, the primary factors affecting occupation are vegetation composition and density. SBKR habitat mapping conducted for the proposed Wash Plan HCP suggest that approximately half of the action area is occupied at some density (ICF 2018a).

Status of San Bernardino Kangaroo Rat Critical Habitat in the action area

The Project site is located within designated SBKR Critical Habitat Unit 1 (CHU1), the Santa Ana River. Flood control alterations to Plunge Creek and to the upper Santa Ana River upstream of the action area have hydrologically disconnected most of the historic alluvial fan from fluvial processes. These areas currently function as upland or refugia habitat (PBF 4) and generally consist of dense vegetation composed of native shrubs and nonnative annual grasses. High quality SBKR habitat is present along the perimeter of the active Plunge Creek channel where fluvial processes scour and deposit alluvium during flood events. Occupation tends to decrease with distance from the active channel. Restoration of these upland areas, through the reconnection of fluvial processes (PBF 3), will provide improvement of soil texture (PBF 1) and native habitats (PBF 2) for the SBKR.

Past Consultations in the Action Area

Inland Feeder Pipeline – Metropolitan Water District

The Inland Feeder is a 12-foot-diameter water pipeline that runs for 43.3 miles from western San Bernardino to Riverside County. The original consultation occurred in 1999 with two subsequent amendments (1-6-99-F-18, 1-6-99-F-18-R1, and FWS-SB-08B0348-14F0036). Permanent (5.7 acres) and temporary (167.7 acres) impacts occurred to scalebroom scrub habitats within the San Bernardino and San Jacinto basins, of which 91.7 acres were occupied by SBKR and 76 acres were unoccupied by SBKR. These areas as well as the other temporary impact areas were revegetated. Impacts to SBKR and woolly-star were offset by purchasing approximately 103.1 acres of scalebroom scrub habitat, now known as the Judson-Brown Preserve, along the southern terrace of the Santa Ana River adjacent to Opal Avenue near Redlands, California. Conservation measures were completed for the original consultation in 2011 (FWS-SB/WRIV-08B0348-11TA0521). Impacts from the 2000 and 2015 amendments were located outside of the current Project action area.

This project had temporary impacts to species (SBKR and woolly-star) and to designated SBKR critical habitat (less than 5 acres) at or near the top end of the current Project action area. The conservation measures that were implemented within or immediately upstream of the current Project action area in 2011 appear to have been effective, as evidenced by the presence of these species in the restoration areas.

EFFECTS OF THE ACTION

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Effects within the Corps' Scope

Santa Ana River Woolly-star

Of the 275 total woolly-star plants identified in the Project impact area, approximately 20 plants in the Corps' identified scope would be affected by the installation of Project features. The precise number of plants within the Corps' jurisdictional area is unknown and changes seasonally. Direct impacts to individual plants include seed harvest from plants within the proposed Project impact area (1.496 acres = restoration and buffer areas) and/or whole plant removal of plants that occur within the Project construction footprint (0.950 acres = restoration areas). To offset the loss of individual woolly-star plants, a portion of the temporary impact areas will be replanted with woolly-star seed collected from plants prior to ground disturbance and managed in perpetuity by the Applicant (CM 11).

The Project was designed to maximize avoidance of this subspecies, but is anticipated to indirectly impact approximately 93 plants that occur in buffer areas during Project construction due to the generation of fugitive dust (ICF 2018a, ICF 2018b). Since the Project is relatively linear, any dust generated will be short-lived and within a small area relative to any individual plant. There is some potential for temporary adverse effects from fugitive dust in the form of reduced photosynthetic capacity (sucrose production) during construction. However, construction will be short-term and is not likely to generate enough dust to coat individual plants to the point where photosynthesis is inhibited or flower structures are damaged. Potential indirect effects from dust production were accounted for in the 100-foot buffer around impact areas including the non-wetland waters of the United States. Only a small portion of the 93 total plants occur within the Corps' jurisdictional buffer areas. The precise number of plants that fall within the Corps' jurisdictional area is unknown and changes seasonally. Temporary impact areas would be reseeded with woolly-star seed collected from proposed impact areas within the Project area prior to the start of construction (CM 11).

San Bernardino Kangaroo Rat

The Project will result in direct impacts to 0.950 acres of non-wetland Waters of the United States through the installation of water splitters and rock sills (0.615 acres) and creation of pilot channels (0.335 acres). These activities will require vegetation clearing, and topsoil removal and deposition. Due to the highly diverse landscape in the action area, we anticipate that SBKR may occur within portions of the proposed Project alignment. With avoidance and minimization measures in place, we anticipate that 75 percent of the Corps' jurisdictional acreage

(approximately 0.713 acres) will not contain SBKR since much of this area is within the active channel or has a very high cover of annual grasses (ICF 2018a, ICF 2018b). The remaining 25 percent (0.288 acres) contains habitat with roughly equal amounts of habitat with low (0.096 acres), medium (0.096 acres), and high (0.096 acres) suitability for SBKR. Using the range of SBKR population densities developed by McKernan (1997) (low 1-5, medium 5-15, and high 20-30 SBKR per hectare), the range of SBKR that may be impacted during Project construction within the Corps' scope is between 1 and 2 individuals.

To minimize take of SBKR, pre-construction trapping will be conducted when Project installation activities are within 50 feet of a kangaroo rat burrow (CM 13). We expect most animals (1-2 SBKR) in the Corps' identified scope to be captured, held, and released out of the construction footprint, whereas uncaptured individuals (0-1 SBKR) may be harmed or killed during ground disturbing activities.

San Bernardino Kangaroo Rat Critical Habitat

Approximately 0.950 acres of designated SBKR critical habitat will be temporarily affected during habitat restoration activities. All impacts to SBKR critical habitat are considered temporary. The distribution of the vegetation (PBF 2) in the project area will be temporarily affected. Access roads, staging areas, and water diversion structures will be either actively revegetated or allowed to passively revegetate after completion of Project construction. Affected SBKR critical habitat will be managed in perpetuity (CM 11). Habitat form and function (PBFs 1 and 3) will remain intact as long as soil compaction does not preclude use by SBKR. The highly porous soil (high relative component of coarse sand) that exists at this location make it resistant to compaction due to the nature of the substrate. We anticipate no long-lasting adverse effects to the function of designated SBKR critical habitat from temporary impact created during Project construction and an overall beneficial effect to designated SBKR critical habitat from long-term management, which will include weed control, in the Corps' scope.

Effects Outside of the Corps' Scope

Santa Ana River Woolly-star

Of the approximately 255 plants outside of the Corps' scope that may be affected, 182 are within the Project footprint and 93 are within the adjacent 100-foot buffer area. The precise number of plants is unknown and changes seasonally. Direct impacts to individual plants include seed harvest from plants within the proposed Project impact area (2.91 - 1.496 acres = 1.414 acres of restoration and buffer areas outside of the Corps' scope) and/or removal of plants that occur within the Project construction footprint (182 woolly-star on approximately 1 acre). To offset the loss of individual woolly-star plants, a portion of the temporary impact areas will be replanted with woolly-star seed collected from plants prior to ground disturbance and managed in perpetuity by the Applicant (CM 11).

The Project is expected to rejuvenate approximately 56 acres of mature scalebroom scrub vegetation, re-establishing the early successional stage of this vegetation type, which is habitat for the woolly-star. Additionally, future flood flows are anticipated to leave the pilot channels

and return to historic flow paths within the approximately 56 acres of Project restoration areas. An unquantifiable number of individual woolly-star may be affected by redirected flood flows. However, because this floodplain is closely associated with fluvial processes, we expect an increase in population numbers and an expansion of distribution due to the redirected fluvial activity associated with flood flows.

If maintenance activities are necessary after Project completion, the Applicant will collect seed from plants that cannot be avoided as described in Conservation Measure 11. Collected seed will be distributed in disturbance areas after the completion of maintenance activities.

San Bernardino Kangaroo Rat

Approximately 1 acre of SBKR habitat outside of the identified Corps scope will be affected by the installation of water splitters, rock sills, and berms and creation of pilot channels, including vegetation clearing, and topsoil removal and deposition during construction activities. Due to the highly diverse landscape and patchy distribution of SBKR in the action area, we anticipate that SBKR may occur within portions of the Project footprint. We anticipate that approximately 50 percent of temporary impact areas outside of the Corps' scope (approximately 0.5 acres) will not contain SBKR since it is densely vegetated by annual grasses (ICF 2018a, ICF 2018b). We expect the remaining 50 percent (0.5 acres) to provide roughly equal amounts of habitat with low (0.167 acres), medium (0.167 acres), and high (0.167 acres) suitability for SBKR. Using the range of SBKR population densities developed by McKernan (1997) as described above, we estimate that between 2 and 4 individual SBKR may be impacted during Project construction outside the Corps' identified scope.

The action of future flood flows is anticipated to inundate and scour areas adjacent to the pilot channels and may affect additional SBKR. This disturbance would not occur but for the restoration Project. Redirected future flood flow will impact an unquantifiable number of SBKR in the action area as soil disturbance associated with Project development may attract SBKR into the new area of inundation and increase the number of SBKR subjected to future flood disturbance. However, the future flows are a natural occurrence and the diversion of floodwaters or flows into the pilot channel will necessarily leave downstream areas dewatered. SBKR in the dewatered areas that would have otherwise been lost to inundation will survive the storm event.

To minimize take of SBKR outside of the Corps' scope, pre-construction trapping will be conducted when Project installation activities are within 50 feet of a kangaroo rat burrow (CM 13). We expect most animals (3-4 SBKR) in the to be captured, held, and released out of construction footprint, whereas uncaptured individuals (1-2 SBKR) may be harmed or killed during ground disturbing activities.

Project maintenance may be necessary after sizable flow events. Maintenance activities are expected to be localized and only necessary when flood flows have been large enough to disrupt or move project features. To minimize the likelihood that SBKR are killed by future maintenance activities, the Applicant will conduct maintenance activities as described in CM 14. Limiting equipment to scoured areas after flooding will avoid effects to SBKR. If SBKR are present in the

maintenance area, mortality will be avoided by implementation of CM 13. Due to the localized nature of the maintenance activities, we expect that SBKR that are captured and held will be released into their own territories and that those territories will be largely intact. Capture and release of up to 3 SBKR after storms larger than a 10-year frequency could result from maintenance activities.

San Bernardino Kangaroo Rat Critical Habitat

Approximately 1 acre of designated SBKR critical habitat will be affected by restoration activities outside of the Corps' identified scope. Habitat form and function (PBFs 1-4) will remain intact as long as soil compaction does not preclude use by SBKR. The highly porous soil (high relative component of coarse sand) that exists at this location make it resistant to compaction due to the nature of the soil type. All impacts to SBKR habitat are considered temporary and associated with a reduction in vegetation, seed supply, and existing network of burrows. Access roads, staging areas, berms, and water diversion structures will be allowed to passively and actively revegetate upon completion of Project construction and habitat will be managed in perpetuity (CM 3). Any maintenance associated with augmenting restoration structures are not likely to adversely affect designated SBKR critical habitat. We anticipate no long-lasting adverse effects to SBKR habitat from Project construction and an overall beneficial effect to designated SBKR critical habitat.

Future scour from redirected flow is anticipated to enhance designated SBKR critical habitat through the rejuvenation of the scale broom scrub plant community, soil sorting, scour, and deposition, and removal of dead organic matter, thatch, and fine soil particles. Flooding resulting from the restoration Project will improve the openness and suitability of the vegetation for SBKR (PBF2) and dynamic geomorphological and hydrological processes (PBF 3) to a portion of the action area.

Effects on Recovery

According to section 2(b), the primary purposes of the Act are to provide a means whereby the ecosystems upon which listed species depend may be conserved, and to provide a program for the recovery of listed species. Under section 2(c), Congress established a policy requiring all Federal agencies to use their authorities in seeking to recover listed species in furtherance of the purposes of the Act. Consistent with these purposes and Congressional policy, sections 3(5), 4(f), 7(a)(1), the implementing regulations to section 7(a)(2) at 50 CFR § 402.02 and related preamble at 51 FR 19926 (June 3, 1986) generally require Federal agencies to further the survival and recovery of listed species in the use of their authorities. According to these mandates, our analysis below assesses (1) whether the proposed action adequately offsets its adverse effects to the environmental baselines for woolly-star and SBKR and (2) the extent to which the proposed action would cause "significant impairment of recovery efforts" or adversely affect the "species" chances for survival to the point that recovery is not attainable" (51 FR 19926).

While the Service has not developed a recovery plan for either woolly-star or SBKR, our 5-year reviews contains recommendations for actions that should be implemented to assist in both

species' recovery. To support the recovery of these subspecies, as much of the remaining habitat as possible should be conserved and managed for their benefit. The 5-year review for SBKR recommends that the Service work with partners to identify opportunities for habitat management, restoration, and enhancement, and to protect additional SBKR habitat (Service 2009). Habitat protection must include upland refugia to support SBKR during floods, and occupied floodplains and adjacent upland habitats should be conserved to ensure protection of populations large enough to remain viable in the long term. However, owing to the lack of adequate demographic data, we do not know how large a sustainable SBKR population must be or how large a habitat area is needed to support a viable population. In general, conserved and managed lands to provide benefit for SBKR also provide benefit for woolly-star, as they have shared habitat preferences and typically co-occur.

Although much of the SBKR and woolly-star habitat in the action area is degraded due to high cover of shrubs and/or annual grasses, high quality substrate remains and supports SBKR and woolly-star in areas where vegetation is also suitable, as indicated by survey data (ICF 2018a, ICF 2018b). This restoration Project will provide habitat rejuvenation over a larger area than the proposed temporary impact areas for the purpose of supporting species' recovery goals. Long-term management and maintenance of the restoration Project will provide long-term persistence of both woolly-star and SBKR throughout the action area and increase the core area of occupation and use for both species in the Santa Ana Wash area.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. We are unaware of any future non-Federal actions within the action area that may affect SBKR or woolly-star.

CONCLUSION

After reviewing the current status of the woolly-star and SBKR, and the designated critical habitat for the SBKR, the environmental baseline for the action area, the effects of the proposed action and cumulative effects, it is the Service's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the woolly-star or SBKR, and is not likely to destroy or adversely modify designated critical habitat for the SBKR and will result in a net conservation benefit to both species.

The Service reached these conclusions because:

1. The primary purpose of the proposed action is to benefit federally listed species (woolly-star and SBKR) through creation and maintenance of approximately 56 acres of early successional scale broom scrub vegetation and planting woolly-star seeds in temporary impact areas (0.950 acres in the Corps' scope and approximately 1 acre outside of the Corps' scope);
2. The proposed action was developed in coordination with the Service for that purpose; The proposed action gives full consideration to, and is consistent with, the survival and

recovery needs of the woolly-star and SBKR, and the role of the action area in providing for those needs by creating approximately 56 acres of rejuvenated habitat through the re-establishment of fluvial processes in historic distributary channels of Plunge Creek in the Santa Ana River Wash area;

3. The proposed action gives full consideration to, and is consistent with, the recovery support function of critical habitat for the woolly-star and SBKR, and the role of the action area in providing for that function;
4. There is high level of certainty that the proposed action is likely to produce a beneficial impact for listed species and the recovery support function of its critical habitat as both woolly-star and SBKR occupy similar early successional scalebroom scrub vegetation that is created and maintained through the action of scour and sediment deposition caused by fluvial processes;
5. Adverse impacts are likely to be small in magnitude, temporary (meaning not continuous, recurring, or chronic), short-term and geographically local with respect to each local population being addressed.
6. Incidental take of SBKR is anticipated to occur at very low levels and not affect numbers, distribution, or reproduction to a degree that would create adverse population-level impacts.
7. The project is not likely to cause a permanent net loss of habitat, net loss of habitat function, net loss of critical habitat, or net loss of functional value of critical habitat.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that actually kills or injures listed wildlife by significantly impairing essential behavioral patterns such as breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and 7(o)(2) of the Act, such incidental take is not considered a prohibited taking under the Act, provided that such taking is in compliance with this incidental take statement.

In June 2015, the Service finalized new regulations implementing the incidental take provisions of section 7(a)(2) of the Act. The revised regulations also clarify the standard regarding when the Service formulates an Incidental Take Statement [50 CFR 402.14(g)(7)], from "...if such take may occur" to "...if such take is reasonably certain to occur." The standard does not require a guarantee that take will result, only that the Service establishes a rational basis for a finding of take. The Service continues to rely on the best available scientific and commercial data, as well as professional judgment, in reaching these determinations and resolving uncertainties or information gaps.

Take that is anticipated to result from the larger project that is not likely to jeopardize the continued existence of a species, or that results from implementing a reasonable and prudent

alternative in order to avoid the likelihood of jeopardy, will be addressed through an incidental take statement included with the biological opinion. To monitor the impact of the incidental take, the Corps and Applicant must report the progress of the action and its impact on the species to the Palm Spring Fish and Wildlife Office (PSFWO) as specified in the incidental take statement [50 CFR §402.14(i)(3)].

AMOUNT OR EXTENT OF TAKE

The exact distribution and population size of SBKR is difficult to estimate due to the dynamic conditions associated with their habitat and biology. Nevertheless, based on best available information we have established the following take exemptions for the SBKR.

Incidental Take within the Area of the Corps' Scope

The Corps has a continuing duty to regulate the activity that is covered by this incidental take statement. If the Corps or their applicant (1) fails to adhere to the terms and conditions of the incidental take statement or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse and any further take could be a violation of section 9.

1. Take in the form of harm or death of up to one (1) SBKR is expected due to direct effects of the Corps' action and the temporary impact of 0.950 acres of designated critical habitat or during trapping and relocation of animals. The take exemption will be exceeded if more than the specified amount of habitat is cleared or graded or more than one (1) SBKR is known to be injured or killed from ground disturbing activities or during trapping and relocation activities.
2. Take in the form of capture, hold, and release of all SBKR captured in the Corps' scope area (0.950 acres) prior to ground disturbing activities is anticipated. The take exemption will be exceeded if more than two (2) SBKR are captured within the 0.950 acres of the Corps' scope area.

Incidental Take Outside the Area of the Corps' Scope

The Applicant has a continuing duty to regulate the activity that is covered by this incidental take statement. If the Applicant (1) fails to adhere to the terms and conditions of the incidental take statement or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse and any additional take would not be exempt from the section 9 prohibitions.

1. Take in the form of harm or death of up to two (2) SBKR is expected due to direct effects of the Applicant and the temporary impact of approximately 1 acre of designated critical habitat or during trapping and relocation of animals. The take exemption will be exceeded if more than the specified amount of habitat is cleared or graded or more than two (2) SBKR are known to be injured or killed from ground disturbing activities or during trapping and relocation activities.
2. Take in the form of capture, hold, and release of all SBKR captured outside of the Corps' scope areas (approximately 1 acre) prior to ground disturbing activities is anticipated. The take exemption will be exceeded if more than four (4) SBKR are

captured prior to ground disturbing activities in the described Project area outside of the Corps' scope.

3. Take in the form of capture, hold, and release of SBKR due to maintenance activities following sizable flow events within the entire project area (2.91 acres) is anticipated. The take exemption will be exceeded if more than three (3) SBKR are captured prior to maintenance activities in the described Project area following a 10-year flood event.

Total Incidental Take for the Entire Project

The Service is providing the following take exemption for the proposed Project:

1. Up to three (3) SBKR in 1.95 acres (0.950 acres inside Corps' scope area and approximately 1 acre outside Corps' scope area) may be harmed or killed during ground disturbing activities;
2. And all SBKR captured may be held and released prior to ground disturbing activities associated with both construction and maintenance of Project features.
3. Up to one (1) SBKR may be harmed or killed during capture and release activities.

EFFECT OF THE TAKE

In this biological opinion, we have determined that the level of anticipated take is not likely to result in jeopardy to the SBKR or adversely modify designated SBKR critical habitat.

REASONABLE AND PRUDENT MEASURES

According to the agreement (Service 2017), "The Service will identify in the incidental take statement what reasonable and prudent measures (RPMs) address impacts of activities within the Corps' jurisdiction and thus which the Corps must implement through its permit. The Service will likewise identify those RPMs that address impacts of the larger project outside of the Corps' jurisdiction and will specify that they must be implemented directly by the applicant if the take exemption is to apply." To accommodate this part of the agreement, we have split the RPMs into measures to be implemented by the Corps and Applicant, respectively, following the format for earlier sections of the biological opinion.

RPMs to be Implemented by the Corps

The measures described below are non-discretionary, and must be undertaken by the Corps or made binding conditions of any permit issued to the Applicant, as appropriate, for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement within its jurisdiction. If the Corps (1) fails to assume and implement the terms and conditions or (2) fails to require the Applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the Corps must report the progress of the action and its impact on the species within the area of its jurisdiction to the Service as specified in the Reporting Requirements below [50 CFR 402.14(i)(3)].

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize the impacts of the incidental take of the SBKR:

1. The Corps must ensure the level of incidental take anticipated in this biological opinion is not exceeded.
2. The Corps will ensure the conservation measures and assurances as described in the Project description are fully implemented.

RPMs to be Implemented by the Applicant

The measures described below are non-discretionary and must be undertaken by the Applicant for the exemption in section 7(o)(2) to apply. If the Applicant (1) fails to assume and implement the terms and conditions or (2) fails to adhere to the terms and conditions of the incidental take statement, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the Applicant must report the progress of the action and its impact on the species to the Service as specified in the Reporting Requirements below [50 CFR 402.14(i)(3)].

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize the impacts of the incidental take of the SBKR:

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of the SBKR during the implementation of the Project:

1. The Applicant must ensure the level of incidental take anticipated in this biological opinion is not exceeded.
2. The Applicant will ensure the conservation measures and assurances as described in the Project description are fully implemented.

Our evaluation of the proposed action includes consideration of the protective measures proposed in the biological assessment and in this biological opinion. Consequently, any changes in these protective measures may constitute a modification of the proposed action that causes an effect to the SBKR or its designated critical habitat that was not considered in the biological opinion and require re- initiation of consultation, pursuant to the implementing regulations of the section 7(a)(2) of the Act (50 CFR 402.16).

TERMS AND CONDITIONS

Terms and Conditions to be Implemented by the Corps

To be exempt from the prohibitions of section 9 of the Act, the Corps must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline reporting and monitoring requirements. These terms and conditions are non-discretionary.

- 1.1 If any harmed or killed SBKR are observed during project construction activities, the qualified biologist will immediately notify the PSFWO.
- 1.2 The Corps will notify PSFWO within 30 days of completing removal of designated SBKR critical habitat. The Applicant will provide a final report, including a map, documenting the areas that were cleared for Project construction. The purpose of this notification is to ensure that impacts to SBKR habitat from the proposed Project did not exceed take exemptions.

Terms and Conditions to be Implemented by the Applicant

To be exempt from the prohibitions of section 9 of the Act, the Applicant must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline reporting and monitoring requirements. These terms and conditions are non-discretionary.

- 1.1 If any harmed or killed SBKR are observed during project construction activities, the qualified biologist will immediately notify the PSFWO.
- 1.2 The Applicant will notify PSWO within 30 days of completing removal of designated SBKR critical habitat. The Applicant will provide a final report, including a map, documenting the areas that were cleared for Project construction. The purpose of this notification is to ensure that impacts to SBKR habitat from the proposed Project did not exceed the take exemptions.

Consistent with the agreement (Service 2017), if the Corps never had or no longer retains discretionary Federal involvement or control over incidental take anticipated in the biological opinion, but the applicant is carrying out the action in full compliance with all of the terms and conditions required by this incidental take statement, the Service will exercise its enforcement discretion and not seek section 11(e) enforcement against the applicant in these situations for the take that was anticipated in this incidental take statement.

REPORTING REQUIREMENTS

Pursuant to 50 CFR 402.14(i)(3) and the agreement, the Corps and Applicant must report the progress of their respective actions and their impact on the species to the Service as specified in this incidental take statement (Service 2017; Corps 2017).

The Corps will oversee compliance with RPMs, including monitoring and reporting the impacts of incidental take, that apply to the activities within its scope. For RPMs that apply to activities outside of the Corps' scope, the Service will monitor the impacts of the incidental take through reports submitted by the applicant on the progress of the action and its impact on the listed species, as specified in the incidental take statement.

DISPOSITION OF SICK, INJURED, OR DEAD SPECIMENS

The Applicant shall notify the PSFWO (see contact information below) within 1 working day if any federally endangered or threatened species is found dead or injured as a direct or indirect result of Project implementation. Notification must include the date, time, and location of the injured animal or carcass, and any other pertinent information. In addition, the Applicant will mark dead animals appropriately, photograph, and collect the carcass for appropriate curation upon direction by the Service; transport injured animals to a qualified veterinarian; and contact the PSFWO regarding the final disposition of any treated animals that survive.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or CH, help implement recovery plans, or

to develop information. We have not identified any additional conservation recommendations that will further benefit the SBKR or woolly-star within the action area.

REINITIATION NOTICE

The Applicant cannot reinitiate formal consultation if any of the criteria listed above are met within the area outside the Corps' jurisdiction because it is not a federal agency with discretionary involvement or control over the action; however, the agreement (Service 2017) states that,

If the Corps never had or no longer retains discretionary Federal involvement or control over incidental take anticipated in the biological opinion, but the applicant is carrying out the action in full compliance with the associated incidental take statement, the Service will exercise its enforcement discretion and not seek section 11(e) enforcement against the applicant in these situations for the take that was anticipated in the incidental take statement. However, we recognize that the applicant in those situations will face some exposure to a citizen suit brought under section 11 (g).

Because we cannot reinitiate consultation solely with an Applicant, we encourage the Applicant to implement its proposed activities, including the conservation measures, as described in this biological opinion and comply with the incidental take statement. As stated above, in instances where the amount or extent of incidental take is exceeded, the exemption provided pursuant to section 7(o)(2) may lapse and any further take could be a violation of section 4(d) or 9.

If you have any questions regarding this biological opinion, please contact Rebecca Christensen of the PSFWO at 760-322-2070, Ext 416; or rebecca_christensen@fws.gov.

Sincerely,

Scott A. Sobiech
Field Supervisor

LITERATURE CITED

- Braden G.T. and R.L. McKernan 2000. A Data Based Survey Protocol and Quantitative Description of Suitable Habitat for the Endangered San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). San Bernardino County Museum. Final Report.
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- [Corps] U.S. Army Corps of Engineers. 2017. Letter to the U.S. Fish and Wildlife Service. Response to May 22, 2017, letter sent by the U.S. Fish and Wildlife Service regarding the process for section 7 consultation in small federal handle situations. October 2, 2017. 1p.
- [ICF] ICF International. 2018a. Plunge Creek Conservation Project Overview.
- [ICF] ICF International. 2018b. Public Review Draft: Upper Santa Ana River Wash Plan Habitat Conservation Plan. January 2018.
- McKernan, R.L. 1997. The status and known distribution of the San Bernardino kangaroo rat (*Dipodomys merriami parvus*): field surveys conducted between 1987 and 1996. Prepared for U.S. Fish and Wildlife Service.
- [Service] U.S. Fish and Wildlife Service. 2009. San Bernardino kangaroo rat (*Dipodomys merriami parvus*) 5-Year Review: Summary and Evaluation. August 14, 2009.
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- [Service] U.S. Fish and Wildlife Service. 2016. Memorandum to the Regional Directors from the Deputy Director. Streamlining Endangered Species Act Consultations for Certain Restoration and Recovery Projects. November 16, 2016. 5 pp
- [Service] U.S. Fish and Wildlife Service. 2017. Letter to the U.S. Army Corps of Engineers. Process for section 7 consultation in small federal handle situations. May 22, 2017. 4 pp.
- Shier, D.M., R.Y. Chock, S.M. Hennessy. 2019. Draft Landscape and Microhabitat Suitability Model for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). Unpublished draft report prepared by the San Diego Institute for Conservation Research, Escondido, California.
- Zemba, R. and K.J. Kramer. 1984. The Known Limited Distribution and Unknown Future of Santa Ana River *Eriastrum*. *Crossosoma*. 10(5): 1-8.



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017-3489

January 17, 2020

SUBJECT: Nationwide Permit (NWP) Verification

Jeffrey Beehler
San Bernardino Valley Water Conservation District
1630 West Redlands Blvd, Suite A
Redlands, California 92373

Dear Mr. Beehler:

I am responding to your request (SPL-2017-00784-LRS) for a Department of the Army permit for your proposed project, SB Valley Water Conservation District Plunge Creek Conservation Project. The proposed project is located in Plunge Creek, within the city of Highland, San Bernardino County, California (Lat. 34.1049694°N, Long. -117.1587944°W).

Because this project would result in a discharge of dredged and/or fill material into waters of the U.S., a Department of the Army permit is required pursuant to Section 404 of the Clean Water Act (33 USC 1344; 33 CFR parts 323 and 330).

I have determined construction of your proposed project, if constructed as described in your application, would comply with Nationwide Permit (NWP) 27: *Aquatic Habitat Restoration, Establishment, and Enhancement Activities*. Specifically, and as shown in the enclosed figure (Figure 2: Project Impacts), you are authorized to:

1. Temporarily impact 0.335 acre of non-wetland waters of the United States through the creation of pilot channels in Plunge Creek.
2. Permanently impact 0.615 acre of non-wetland waters of the United States through the installation of water splitters and rock sills constructed from native boulders and tree rootwads.
3. Temporarily impact 0.545 acre of non-wetland waters of the United States through the installation of temporary access roads and staging areas.

For this NWP verification letter to be valid, you must comply with all of the terms and conditions in Enclosure 1. Furthermore, you must comply with the non-discretionary Special Conditions listed below:

activity I may request the use of discretionary authority in accordance with procedures in 33 CFR part 330.4(e) and 33 CFR part 330.5(c) or (d) to modify, suspend, or revoke this specific verification at an earlier date. Additionally, at the national level the Chief of Engineers, any time prior to March 18, 2022, may choose to modify, suspend, or revoke the nationwide use of a NWP after following procedures set forth in 33 CFR part 330.5. It is incumbent upon you to comply with all of the terms and conditions of this NWP verification and to remain informed of any change to the NWPs.

A NWP does not grant any property rights or exclusive privileges. Additionally, it does not authorize any injury to the property, rights of others, nor does it authorize interference with any existing or proposed Federal project. Furthermore, it does not obviate the need to obtain other Federal, state, or local authorizations required by law.

Thank you for participating in the Regulatory Program. If you have any questions, please contact Pam Kostka at (254) 644-3695 or via email at Pamela.K.Kostka@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the [customer survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey) form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

Enclosures



**LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS**

**COMPLIANCE DELIVERABLES CHECKLIST FOR
DEPARTMENT OF ARMY PERMIT**

Permit Number: *SPL-2017-00784-LRS*

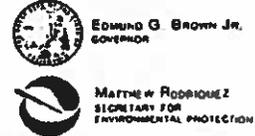
Name of Permittee: *Jeffrey Beehler, San Bernardino Valley Water Conservation District*

Date of Issuance: *January 17, 2020*

Please submit this checklist along with all required compliance deliverables (listed in the table below) to the Corps via email to splreglasb@usace.army.mil Upon receipt, the Corps will review proffered deliverables for sufficiency and, if approved, return an electronically-signed/dated copy of this checklist to you. PM provides e-signature upon receipt/approval of each compliance deliverable – PM returns the signed checklist to the applicant/agent in a progressive manner.

Condition #	Compliance deliverable	Corps approval
N/A	Notification of Commencement of Work	
Special Condition #1	ESA Compliance	
Special Condition #3	Post Project Implementation Report	
General Condition #30	Certificate of Compliance with Department of the Army Nationwide Permit	

Upon receipt and approval of all items listed in the table above, the Corps will consider you in full compliance with compliance deliverable requirements in your permit authorization. Note, however, that any ongoing reporting obligations associated with the permit may remain unaffected by this compliance deliverables determination.



Santa Ana Regional Water Quality Control Board

October 3, 2018

Mr. Jeffrey Beehler
San Bernardino Valley Water Conservation District
1630 West Redlands Boulevard, Suite A
Redlands, California 92373

jbeehler@sbwwcd.org

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER FOR THE PLUNGE CREEK CONSERVATION PROJECT (SARWQCB WDID # 362017-41)

Dear Mr. Beehler:

Enclosed please find a Clean Water Act Section 401 Water Quality Certification and Order, authorized by Santa Ana Regional Water Quality Control Board Executive Officer, Hope A. Smythe. This Order is issued to the San Bernardino Valley Water Conservation District for the Plunge Creek Conservation Project (Project). Attachments A through C of the Enclosure are also part of the Order.

This Order is issued in response to an application submitted by San Bernardino Valley Water Conservation District for proposed Project discharge to waters of the State to ensure that the water quality standards for all waters of the State impacted by the Project are met. You may proceed with your Project according to the terms and conditions of the enclosed Order.

If you require further assistance, please contact me by phone at (951)782-3295 or by email at Jason.Bill@waterboards.ca.gov. You may also contact David Woelfel, Chief of Regional Planning Programs Section, by phone at (951) 782-7960 or by email at David.Woelfel@waterboards.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Bill".

Jason Bill
Environmental Scientist
Regional Planning Programs Section
Santa Ana Regional Water Quality Control Board

Enclosures (1): Order for Plunge Creek Conservation Project



Santa Ana Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date: October 3, 2018

Reg. Meas. ID:	418300
Place ID:	843090
SARWQCB WDID:	362017-41
USACE #:	Not Available

Program Type: Restoration

Project Type: Ecological Aquatic/Stream/Habitat Restoration

Project: Plunge Creek Conservation Project (Project)

Federal Permit: United States Army Corps of Engineers (USACE) Nationwide Permit (NWP) 27, Aquatic Habitat Restoration, Enhancement, and Establishment Activities

Applicant: San Bernardino Valley Water Conservation District

Applicant Contact: Jeffrey Beehler
San Bernardino Valley Water Conservation District
1630 West Redlands Boulevard, Suite A
Redlands, California 92373
Phone: (909) 793-2503
Email: jbeehler@sbywcd.org

Applicant's Agent: John W. Markham
ICF
601 West 5th Street, Suite 900
Los Angeles, California 90071
Phone: (805) 693-3240
Email: John.Markham@icf.com

Water Board Staff: Jason Bill
Environmental Scientist
3737 Main Street, Suite 500
Riverside, California 92501
Phone: (951) 782-3295
Email: Jason.Bill@waterboards.ca.gov

Water Board Contact Person:

If you have any questions, please call Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) staff listed above or (951) 782-4130 and ask to speak with the Regional Planning Programs Section Chief.

WILLIAM RUIH, CHAIR | HOPE A. SMYTHE, EXECUTIVE OFFICER

3737 Main St., Suite 500, Riverside, CA 92501 | www.waterboards.ca.gov/santaana

I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued at the request of San Bernardino Valley Water Conservation District (herein after Permittee) for the Project. This Order is for the purpose described in application and supplemental information submitted by the Permittee. The application was received on December 6, 2017. The application was deemed complete on December 21, 2017.

Santa Ana Water Board staff requested additional information necessary to supplement the contents of the complete application, and the Permittee responded to the request for supplemental information. See Table 1.

Table 1 Record of Supplemental Application Information	
Date of Request for Supplemental Information	Date all requested information was received.
12/26/2017	8/22/2018

Additionally, Santa Ana Water Board staff issued a Denial Without Prejudice on December 26, 2017.

II. Public Notice

The Santa Ana Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from August 16, 2018 to effective date of the Order. The Santa Ana Water Board did not receive any comments during the comment period.

III. Project Purpose

The Project will restore flows into remnant channels of an historical floodplain area, increase the area of suitable habitat for the federally listed San Bernardino kangaroo rat (SBKR) (*Dipodomys merriami parvus*) and other sensitive species, and increase groundwater recharge opportunities without increasing the risk of flooding or erosion. The Project area is approximately 200 acres located along a degraded section of Plunge Creek. Currently, there is a substantial amount of degraded native habitat within the historical floodplain area. The degradation is largely due to human disturbances (mining, ditch construction) and artificial confinement of the primary Plunge Creek channel by construction of the Orange Street bridge, pipeline crossings, and flood control levees. These conditions contribute to a less dynamic channel than historically existed, with reduced lateral movement and channel braiding and incisions of portions of the primary channel. As a result of the confinement and increase in the primary channel flow conveyance capacity, only larger flood events overtop the primary channel banks. Many remnant channels exist in the proposed Project area, are hydrologically disconnected from the confined primary channel, and rarely, if ever, receive flood flows under current conditions. The reduction in secondary flow paths and lateral migration results in muting of natural fluvial processes that historically created conditions suitable for pioneer riversidean alluvial fan sage scrub (RAFSS) communities, the preferred native habitat of SBKR. The design goal of the Project is to create hydrologic conditions that will enable natural fluvial processes to reoccupy historical floodplains and remnant distributary channels. The hydraulic conditions must be sufficient to flush recently deposited silts away from the underlying sand and to scour away non-native grasses, as well as deposit sand substrate to enable growth and establishment of native floodplain and alluvial fan habitats. Through the achievement of the design goal, the ecological goals of the Project are to re-establish pioneer

(34.1048° N/-117.1588° W). A map showing the Project location is found in Attachment A of this Order.

VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of the Santa Ana Water Board. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the Water Quality Control Plan for the Santa Ana Basin (1995) and subsequent amendments (Basin Plan) and other plans and policies, which may be accessed online at: http://www.waterboards.ca.gov/plans_policies/. The Basin Plan includes 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.

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.

Receiving Water: Plunge Creek, Valley Reach

Existing or Potential Beneficial Uses: Municipal and Domestic Supply (MUN), Groundwater Recharge (GWR), Water Contact Recreation (REC1), Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), and Wildlife Habitat (WILD).

VII. Description of Direct Impacts to Waters of the State

Temporary impacts to waters of the United States (WOTUS), including waters of the State, will occur from the construction of five flow splitters, three of which will be constructed with large native boulders harvested from the Project area. The remaining two flow splitters will be constructed of large woody material, in addition to the boulders. Other impacts will occur from the excavation of pilot channels from the existing main channel of Plunge Creek. In addition, temporary impacts will occur from the construction of temporary access routes needed to construct Project elements. If adaptive management actions are needed to change the design of the splitter structures and other Project design elements, then additional temporary impacts might occur.

Total Project fill/excavation quantities for all impacts are summarized in Table 2. Permanent impacts are categorized as those resulting in a physical loss in area and also those degrading only the ecological condition.

Table 2: Total Project Fill/Excavation Quantity									
Aquatic Resource Type	Temporary Impact ¹			Permanent Impact					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	CY ²	LF	Acres	CY	LF	Acres	CY	LF
Stream Channel	0.880	—	231.5	—	—	—	0.615	—	558.7

¹ 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.

² Cubic Yards (CY); Linear Feet (LF)

A. Authorization

Impacts to waters of the State shall not exceed quantities shown in Table 2.

B. Reporting and Notification Requirements

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment B, including specifications for photo and map documentation during the Project construction. Written reports and notifications shall be submitted using the *Reporting and Notification Cover Sheet* located in Attachment B and signed by the Permittee or an authorized representative.

1. Project Reporting

- a. **Annual Reporting:** The Permittee shall submit an Annual Report each year by the effective date of the Certification. Annual reporting shall continue until a *Notice of Project Complete Letter* is issued to the Permittee.

2. Project Status Notifications

- a. **Commencement of Construction:** The Permittee shall submit a *Commencement of Construction Report* at least seven (7) days prior to start of initial ground disturbance activities.
- b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a *Request for Notice of Completion of Discharges Letter* following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Santa Ana Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Santa Ana Water Board staff will issue to the Permittee a *Notice of Completion of Discharges Letter*, which will end the active discharge period and, if appropriate, associated annual fees.
- c. **Request for Notice of Project Complete Letter:** The Permittee shall submit a *Request for Notice of Project Complete Letter* when construction and any required post-construction monitoring is complete³ and no further Project activities will occur. This request shall be submitted to Santa Ana Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Santa Ana Water Board staff will issue to the Permittee a *Notice of Project Complete Letter*, which will end the post discharge monitoring period and associated annual fees.

- 3. **Conditional Notifications and Reports:** The following notifications and reports are required, as appropriate.

³ Completion of post-construction monitoring will be determined by Santa Ana Water Board staff and will be contingent on successful attainment of restoration and mitigation performance criteria.

d. Modifications to Project

Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Santa Ana Water Board staff by submitting a Modifications to Project Report, 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. The Permittee shall inform Santa Ana Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. Notification may be made in accordance with conditions in the Certification Deviation section of this Order.

e. Transfer of Property Ownership: This Order is not transferable in its entirety or in part to any person or organization except after notice to the Santa Ana Water Board in accordance with the following terms:

- i. The Permittee shall notify the Santa Ana Water Board by submitting a *Transfer of Property Ownership Report* of any change in ownership or interest in ownership of the Project area. The Permittee and purchaser shall sign and date the notification and provide such notification to the Santa Ana Water Board at least ten (10) days prior to the transfer of ownership. The purchaser shall also submit a written request to the Santa Ana Water Board to be named as the permittee in a revised order.
- ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.

f. Transfer of Long-Term Best Management Practices (BMPs) Maintenance: If maintenance responsibility for post-construction BMPs is legally transferred, the Permittee shall submit to the Santa Ana Water Board a copy of such documentation and shall provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee shall provide such notification to the Santa Ana Water Board with a *Transfer of Long-Term BMP Maintenance Report* at least ten (10) days prior to the transfer of BMP maintenance responsibility.

C. Water Quality Monitoring

1. **General:** If surface water is present, continuous visual surface water monitoring shall be conducted to detect accidental discharge of construction related pollutants (e.g., oil, grease, turbidity plume, or uncured concrete).
2. **Accidental Discharges/Noncompliance:** Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, Santa Ana Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.
3. **Post-Construction:** The Permittee shall visually inspect the Project site during the rainy season for five (5) years 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, contact the Santa Ana Water Board staff overseeing the Project within three (3) working days. The Santa Ana Water Board may require the submission

3. Permitted actions shall not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters, as adopted in the Basin Plan and subsequent Basin Plan Amendments or in any applicable State Water Resources Control Board water quality control plan or policy. The source of any such discharge shall be eliminated as soon as practicable.
4. In response to a suspected violation of any condition of this Order, the Santa Ana Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Santa Ana Water Board deems appropriate, provided that the burden, including costs, of the reports 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.
5. The Permittee shall, 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. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.
6. This Order and all of its conditions 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.
7. **Construction General Permit Requirement:** The Permittee shall maintain compliance with conditions described in and required by the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002) and any subsequent approvals.

F. Administrative

1. Signatory requirements for all document submittals required by this Order are presented in Attachment C of this Order.
2. This Order does not authorize any act that results in the taking of a threatened, endangered, or candidate species, or any act that is now prohibited or becomes prohibited in the future under either the California Endangered Species Act (Fish & G. 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 the Permittee, the Permittee shall obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.
3. The Permittee shall grant Santa Ana 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:
 1. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept;

- c. Substances resulting from Project-related activities and that could be harmful to aquatic life shall not be discharged to soils or waters of the State. These substances include but are not limited to petroleum lubricants and fuels, cured and uncured cements, epoxies, paints and other protective coating materials, Portland cement concrete or asphalt concrete, and washings and cuttings thereof. All waste concrete shall be removed from the Project site.
 - d. Motorized equipment shall not be maintained or parked in or near any stream crossing, channel, or lake margin in such manner that petroleum products or other pollutants from the equipment might enter these areas under any flow conditions. Vehicles shall not be driven or equipment shall not be operated on-site in waters of the State onsite, except as necessary to complete the proposed Project.
 - e. Prior to construction activities, the Permittee shall delineate the work area with brightly colored fencing or other methods to ensure temporary impacts to WOTUS and waters of the State do not exceed the limits authorized in this Certification.
3. **Hazardous Materials:** During construction activities, the Permittee shall comply with local, State, and federal laws and regulations regarding the handling and storage of hazardous substances.
 4. **Invasive Species and Soil Borne Pathogens:** BMPs to stabilize disturbed soils shall include the use of native plant species whenever feasible.
 5. **Storm Water:** The Project shall comply with the local regulations associated with the Santa Ana Water Board's Municipal Stormwater Permit issued to San Bernardino County and co-permittees under NPDES No. CAS618036 and Waste Discharge Requirements Order No. R8-2010-0036, and subsequent iterations thereof.

H. Mitigation for Temporary Impacts (refer to Table 3)

1. The Permittee shall restore all areas of temporary impacts to waters of the State and all Project site upland areas of temporary disturbance, which could result in a discharge of waters of the State, in accordance with a *Habitat Mitigation and Monitoring Plan (HMMP)* submitted and with written acceptance by Santa Ana Water Board staff prior to the commencement of construction activities. The HMMP shall provide the following: a schedule; plans for grading of disturbed areas to pre-project contours; planting palette with plant species native to the Project area; seed collection location; invasive species management; performance standards; and maintenance requirements (e.g., watering, weeding, and replanting).
2. The Santa Ana Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by Santa Ana Water Board Executive Officer that the performance standards have not been met or are not likely to be met within the monitoring period.
3. If restoration of temporary impacts to waters of the State is not completed within 90 days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the State.

J. Certification Deviation

1. Minor modifications of Project locations or predicted impacts may be necessary as a result of unforeseen field conditions, necessary engineering re-design, construction concerns, or similar reasons. Some of these prospective Project modifications may have impacts on water resources. For purposes of this Certification, a *Certification Deviation* is a Project locational or impact modification that does not require an immediate amendment of the Order because the Santa Ana Water Board has determined that any potential water resource impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA Findings. After the termination of construction, this Order will be formally amended to reflect all authorized Certification Deviations and any resulting adjustments to the amount of water resource impacts and required compensatory mitigation amounts.
2. A Project modification will not be granted a *Certification Deviation* if it warrants or necessitates changes that are not addressed by the Order conditions or the CEQA environmental document such that the Project impacts are not addressed in the Project's environmental document or the conditions of this Order. In this case a supplemental environmental review and a different Order will be required.

XIII. Water Quality Certification

I hereby issue the Order (SARWQCB WDID # 362017-41) for the Plunge Creek Conservation Project. This Order certifies that 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), as long as all of the conditions listed in the Order are met. This discharge is also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ, which authorizes this Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.).

Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions 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 Santa Ana Water Board's Basin Plan and Policies.



Hope A. Smythe
Executive Officer
Santa Ana Water Quality Control Board

10/3/18
Date

- Attachment A Project Map
- Attachment B Report and Notification Requirements
- Attachment C Signatory Requirements



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd, Suite C-220
Ontario, CA 91764
909-484-0167
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



April 11, 2019

Jeffrey Beehler
San Bernardino Valley Water Conservation District
1630 West Redlands Blvd, Suite A
Redlands, CA 92373

Dear Mr. Beehler,

**Notification of Lake or Streambed Alteration, Notification No. 1600-2017-0203-R6,
Plunge Creek Conservation Project impacting Plunge Creek, tributary to the
Santa Ana River.**

As the California Department of Fish and Wildlife (CDFW) had until August 10, 2018 to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you or inform you that an Agreement is not required. CDFW did not meet that date. As a result, by law, you may now complete the project described in your notification without an Agreement.

Please note that pursuant to Fish and Game Code section 1602, subdivision (a)(4)(D), if you proceed with this project, it must be the same as described and conducted in the same manner as specified in the notification and any modifications to that notification received by CDFW in writing prior to August 10, 2018. This includes completing the project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the notification. If the term proposed in your notification has expired, you will need to re-notify CDFW before you may begin your project. Beginning or completing a project that differs in any way from the one described in the notification may constitute a violation of Fish and Game Code section 1602.

The Plunge Creek Conservation Project (Project) is located in the active channel and historic floodplain of Plunge Creek upstream of the Orange Street bridge and immediately south of Abbey Way within the City of Highland, County of San Bernardino (Latitude 34.104969, Longitude -117.158794). The Project is part of a comprehensive Wash Plan Habitat Conservation Plan that will restore historic braids of Plunge Creek for the dual purpose of habitat restoration and increased ground water recharge. The Project will excavate two pilot channels from Plunge Creek, through the historic floodplain, and back to the active channel. The pilot channels will enable flood flows to be conveyed onto the historic floodplain and into the remnant channels currently separated from the active channel by high elevation terrace topography. The design goal of the Project is to create hydrologic conditions that will enable natural fluvial processes to reoccupy historic floodplains and remnant distributary channels. The ecological goals of the Project are to re-establish pioneer Riversidean alluvial fan sage scrub (RAFSS) habitat which, in turn, is expected to expand suitable habitat for the San

Jeffrey Beehler
Page 3 of 3

resources, as well as a net gain in aquatic resources functions and services. Your project term ends on March 26, 2024.

Also note that while you are entitled to complete the Project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include, but are not limited to, Fish and Game Code sections 2080 *et seq.* (species listed as threatened or endangered, or a candidate for listing under the California Endangered Species Act); section 1908 (rare native plants); sections 3511, 4700, 5050, and 5515 (fully protected species); section 3503 (bird nests and eggs); section 3503.5 (birds of prey); section 5650 (water pollution); section 5652 (refuse disposal into water); section 5901 (fish passage); section 5937 (sufficient water for fish); and section 5948 (obstruction of stream).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site.

If you have questions regarding this letter, please contact Brandy Wood, Environmental Scientist, at 909-483-6319 or by email at brandy.wood@wildlife.ca.gov.

Sincerely,



Scott Wilson
Environmental Program Manager

ec: California Department of Fish and Wildlife

Brandy Wood
Inland Deserts Region
Brandy.wood@wildlife.ca.gov

- Robinson's Pepper Grass (*Lepidium virginicum* var. *robinsonii*) (CNPS List 1B) – There has been one report (1987) of the pepper grass occurring within the Wash Planning Area, north of the Santa Ana Wash and south of Greenspot Road.

Source: Existing Biological Conditions Report (Dudek 2007)

E. Has a biological study been completed for the project site?

The following biological reports have been produced for this project.

- Existing Biological Conditions Report (Dudek 2007)
- Upper Santa Ana River Wash Plan Habitat Conservation Plan (ICF 2017)
- Environmental Impact Report (2008)

Box 12: MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction. (continued)

According to Upper Santa Ana River Wash Plan HCP, Section 5.5, pages 5-32 and 5-33, the following water quality minimization measures will be implemented.

- Construction activity and access roads will be minimized to the extent practicable in all drainages, streams, pools, or other features that could be under the jurisdiction of the USACE, State Water Board, and/or CDFW. If impacts on these features are identified, a formal jurisdictional delineation and permit applications to the regulatory agencies may be required.
- When stream flows must be diverted, the diversions will be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected will be cleaned out in a manner that prevents the sediment from reentering the stream. Care will be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
- Erodible fill material will not be deposited into water courses. Brush, loose soils, or other similar debris material will not be stockpiled within the stream channel or on its banks.
- Covered Activities near to or within the HCP Preserve or other natural areas will incorporate plans to ensure that runoff discharged is not altered in an adverse way when compared with existing conditions, which includes landscape irrigation. Stormwater systems will be designed to prevent the release of sediments, toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within the HCP Preserve.

CITY OF HIGHLAND IMPORT / EXPORT OPERATIONS PERMIT

CITY OF HIGHLAND
Engineering Department; Transport Permits
Procedures, Requirements and General Conditions regarding;
(Earthwork Material) Import / Export / Stockpile Permits

In order to obtain an Earthwork Material Transport Permit as referenced above, the applicant shall provide information, as requested per items 1 - 6, below, to the City's Engineering Department, regarding the operations proposed to be performed under this permit,

1. Indicate the description / purpose and/or type of earthwork material transport permit you are requesting, i.e. Import /Stockpile? Or Export?

2. *Indicate the proposed locations of the material source and/or destination sites. If material is to be imported to, or exported from, properties located within the City Limits of Highland, CA.

3. Indicate the proposed transport route(s) for the import/export operations, by street location, as well as the proposed source entry/exit access location, and/or the proposed destination entry/exit access location.

4. Indicate the total estimated material quantity by volume, (in cubic yards), and type of material to be imported/ exported.

5. List the type, load capacity, and the total number of trucks to be used for the proposed import/export operations.

6. Indicate the estimated total number of round-trips per day. (For all trucks during an eight hour working day), the estimated duration of said import/export operations, and the date for which they are proposed to begin.

*, if the proposed material source and/or destination sites are privately owned properties, or rights-of-way, easements, etc., which are owned by Public Agencies, other than the City of Highland, then the applicant shall submit documentation to the City, indicating the property address, or APN, and shall be signed and dated by legal property owner(s), stating that they are aware of, and agree to the applicants operations proposed under this permit, or contractor shall apply for a separate permit for Stockpiling and/or Grading. (Applies also to properties which are currently performing operations, previously permitted for ongoing residential, commercial or industrial, development projects, in the City of Highland).

Procedures, Requirements and General Conditions for Earthwork Material Transport Permits, continued on next page

Dust / Erosion Control Measures

1. Comply with **all** City and AQMD requirements for dust control, and as directed by the City's Inspector.
2. Permit applicant shall comply with all state NPDES/ SWPPP requirements, the County of S.B.'s BMP, the City approved Erosion control Plan, and as directed the City's Public Works Inspector. A copy of the WDID number from the SWRQCB, showing receipt of the NOI, shall be submitted to the City.(If applicable)

Street Cleaning/Repairs

1. City streets affected by the proposed Import/Export operations, shall be cleaned at the end of each day. In the event that the streets permitted for the transporting material, are not cleaned in a reasonably timely manner, as determined by the City Engineer, then City Forces may clean the streets, and the costs for which will be borne by the applicant. The City's Inspector will review the streets at the conclusion of all work performed by the applicant under this permit to determine if any remedial street repairs are required.
2. Damage to City street improvements, as a result of operations performed under this permit, shall be repaired immediately or after completion of said operations, as directed by the City Engineer and City Inspector. Care shall taken to not damage utilities, and/or other facilities on private or public property, located adjacent to the operations described under this permit.

PLANS

SAMPLE AGREEMENT

THIS CONTRACT CONSTRUCTION SERVICES AGREEMENT (“Agreement”) by and between the **SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT**, a special district (“District”), and **XXXX (“XXX”)**, a California corporation (“Contractor”), is effective upon signature by District and Contractor.

NOW THEREFORE, the parties hereto agree as follows:

RECITALS

1. **Independent Contractor.** Contractor is an independent contractor and not an employee of the District. Contractor shall have no authority to bind the District by any statement, representation, or promise of any kind or nature without first obtaining the District’s written consent.
2. **Coordination with Owner (if not District).** Contractor shall not interfere with the District’s relationship with the Owner and shall not deal directly with the Owner or Owner’s representative without prior authorization in each instance from the District. The Contractor is hereby authorized to coordinate directly with the Owner to secure site access. Additionally, the Contractor is authorized to coordinate directly with the Owner to ensure diversion flows are maintained in the existing diversion canal as specified on Sheet C1 of the Plans under Construction Schedule Constraints.
3. **Authority.** The parties represent that they are authorized to enter into this Agreement and that the persons executing this Agreement on their behalf have the authority and capacity to do so.
4. **Construction.** This Agreement shall not be construed against any of the parties and the rule of construing contract ambiguities against the party drafting the contract shall be inapplicable.
5. **Effect of Headings.** The headings used in this Agreement are for convenience only and shall not affect the construction or interpretation this Agreement.
6. **Word Usage.** Unless the context clearly requires otherwise, plural and singular numbers will be considered to include the other; the masculine, feminine, and neuter genders will each be considered to include the others; “shall,” “will,” “must,” “agree,” and “covenants” are each mandatory; “may” is permissive; “or” is not exclusive; and “includes” and “including” are not limiting.
7. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties, supersedes all prior or contemporaneous oral or written agreements between the parties, and may only be amended by an instrument in writing executed by the parties.
8. **Successors and Assigns.** This Agreement shall be binding upon, and inure to the benefit of, the successors and assigns of the parties.
9. **Counterparts.** This Agreement may be executed in counterparts, a facsimile of which shall be deemed an original, and all of which shall together be deemed one and the same instrument.
10. **Governing Law.** This Agreement shall be construed under, and governed by, the laws of the State of California.
11. **Severability.** If any provision of this Agreement is held to be invalid or unenforceable, such invalid or unenforceable provision(s) shall not affect the validity or enforceability of any other provision of this Agreement.

SCOPE OF WORK and CONTRACT DOCUMENTS

Contractor shall furnish all labor, services, materials, equipment and tools of every kind and nature to fully perform in a workmanlike and timely manner the following scope of work (“Contract Work”):

Insert Scope of Work as listed in the Notice Inviting Bids and as revised or amended in any issues addenda. Note that cost shown in each Bid Schedule are independent of each other and shall not be adjusted based upon which Phase is constructed.

Contractor shall perform the Contract Work in strict accordance with the Contract Documents which are incorporated herein by reference and shall not deviate from the Contract Documents without the prior written approval of the District. Contractor shall be responsible for any additional costs, delays or damages caused by deviation from the Contract Documents without the prior written approval of the District. All Contract Work shall be subject to the satisfaction and approval of the District and Owner identified above.

A condition precedent to the Contractor receiving a Notice to Proceed for the Contract Work is Contractor's submission of a signed copy of this Agreement, bonds, insurance certificates requested by the District, a Storm Water Pollution Prevention Plan if required and an updated list of Contractor's subcontractors and material suppliers on the project.

The Contract Documents consist of the following:

This Agreement and all accompanying documents thereto

Notice Inviting Bids

Special Provisions

Plans (T1, G1, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C12, D1, D2 and D3 dated [February 2020]

Instructions to Bidders

Bid Proposal

2009 Edition of ("Greenbook") Standard Specifications for Public Works Construction Addenda

In the event of a conflict or discrepancy among the Contract Documents, interpretation will be based on the following priorities: (1) this Agreement; (2) the Special Provisions (3) Plans (4) 2009 Edition of ("Greenbook") Standard Specifications for Public Works Construction.

TIME FOR PERFORMANCE AND SCHEDULING

Contract Time - Contractor shall complete all work within the number of days listed in the Special Provisions after Notice to Proceed from the District has been issued.

Scheduling - Time is of the essence under this Agreement. Contractor shall cooperate with the District in the timely performance of the Contract Work and shall develop the schedule for the Project, for approval by the District, which conforms to the construction schedule constraints listed on Sheet T1 of the Plans.

The District shall have the right to direct the scheduling of the Contract Work as the District deems to be in the best interest for the Project as a whole and Contractor shall perform the Contract Work in accordance with the approved schedule so as not to delay, disrupt, or damage the work. Should Contractor fall behind the approved schedule or if, in the opinion of the District, Contractor is not maintaining a satisfactory rate of progress, the District may direct Contractor to take such action as the District deems necessary to timely perform the Contract Work, including, but not limited to, increasing the number of superintendents, foremen, and laborers, increasing the number of crews, increasing the number of shifts, employing more or better equipment, working overtime, expediting delivery of materials, substituting materials, changing the sequence of performance, or any other increase or acceleration of effort, all of which shall be performed by Contractor at no cost to the District.

In the event the Contract Work is delayed or disrupted by the District, the Owner, or third parties, Contractor may make a written request to the District for a time extension.

The District may award the Contract during winter months when weather may result in construction delays. In the event that weather conditions result in the loss of working days, the Contract Time shall be extended by an equivalent amount of time. In the event that weather delays result in a loss of 20 working days or more, the District and the Contractor will negotiate an equitable adjustment in cost to compensate for mobilization and standby costs

SCHEDULE OF PRICES

The final bid schedule will be inserted here.

PAYMENT

The District shall pay Contractor for full performance of the Contract Work based on the approved percent completion of the Contract Work in strict compliance with the Contract Documents, less retainage, and subject to any adjustment to the Contract Price and/or time.

No later than the first (1st) day of each month in which Contractor is continuing to perform the Contract Work, Contractor shall submit to the District the following:

- (1) A payment request for the Contract Work, less retainage, performed during the previous month;
- (2) A schedule of values showing the percentage and amount completed of the Contract Work through the current payment request.
- (3) Conditional waivers and releases upon progress payment from Contractor and Contractor's subcontractors and material suppliers in a form acceptable to the District; and
- (4) Unconditional waivers and releases upon progress payment from Contractor and, as applicable, Contractor's subcontractors and material suppliers for the previous payment application in a form acceptable to the District.

The District shall make progress payments to Contractor. The District shall pay Contractor an amount, less retention of ten percent (10%), equal to the value of the Contract Work satisfactorily completed by Contractor as documented in the payment request and approved by the District, within thirty (30) business days of the District approval.

Upon satisfactory completion of the Contract Work, including satisfactory completion of any punch list work, Contractor shall submit to the District the following:

- (1) A final payment request for the Contract Work, including previously withheld retainage, completed by Contractor;
- (2) A final schedule of values showing the percentage and amount completed of the Contract Work;
- (3) Conditional waivers and releases upon final payment from Contractor and Contractor's subcontractors and material suppliers;
- (4) Unconditional waivers and releases upon progress payment from Contractor and, as applicable, Contractor's subcontractors and material suppliers for the previous payment application.

In addition to the foregoing, a condition precedent to final payment by the District to Contractor is acceptance by the District of the satisfactory completion of the Contract Work and Contractor's submission of any manuals and warranties applicable to the Contract Work.

The District shall pay Contractor an amount, including previously withheld retention, equal to the value of the Contract Work satisfactorily completed by Contractor and approved by the District, within thirty (30) business days of the District approval.

No payment, whether a progress payment or final payment shall be construed as an acceptance of defective or incomplete work

INSPECTION AND ACCEPTANCE

The Contract Work and Contractor's performance of the Contract Work is subject to the direction of the District and the satisfaction and approval of the District.

Unless otherwise provided, all equipment, materials, and work shall be subject to inspection and testing by the District. The District will observe the progress and quality of the work and determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. The District shall not be required to make comprehensive or continuous inspections to check the quality of the work, and shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work. Visits and observations made by the District shall not relieve the Contractor of its obligation to conduct comprehensive inspections of the work and to furnish proper materials, labor, equipment, and tools, and perform acceptable work, and to provide adequate safety precautions, in conformance with the intent of the Contract.

Materials, equipment, and workmanship shall be subject to the inspection of, and rejection by, the District if not in conformance with the Contract Documents. Defective materials, equipment, or Contract Work shall be removed from the premises by the Contractor, whether in place or not, and shall be replaced with new and acceptable materials, equipment, or work. Repair of defective materials, equipment, or work shall be subject to the District's acceptance.

Upon substantial completion of the Contract Work, Contractor shall make its own "punch list" of Contract Work which is incomplete, defective, or otherwise not in compliance with the Contract Documents applicable to the Contract Work and shall furnish the punch list to the District. Contractor shall immediately correct all items on its punch list and all items on any other punch list or other list of discrepancies in the Contract Work provided by the District so as to expedite final inspection and acceptance of the project

LIQUIDATED DAMAGES

See Special Provision Section 6.9 (Liquidated Damages). Section 6.9 in the Standard Specifications for Public Works Construction 2009 edition shall apply if Liquidated Damages requirements are not included in the Special Provisions.

CHANGES / CLAIMS / RESOLUTION OF CONSTRUCTION CLAIMS

Changes. The District may issue written change orders or written change directives for the Contract Work. Contractor shall be obligated to perform such change orders and change directives and the Contract Price and time may be adjusted as specified in such change orders and change directives. Oral changes to the Contract Work are not valid and Contractor shall have no claim or entitlement to payment or additional time unless, prior to performance, Contractor receives a written change order or written change directive from the District.

If Contractor requests a written change order but there is a dispute as to whether the work at issue is a change in the Contract Work or there is a dispute as to the price or time associated with such change order, the District may issue a written change directive to the Contractor and the Contractor shall be obligated to perform such change directive without either party admitting liability for the change or waiving their respective rights under this Agreement. Any request by the Contractor for additional compensation or additional time shall be based on Contractor's actual direct costs and actual time incurred with respect to the change in the Contract Work. At the District's request, Contractor shall submit and give the District access to, current, accurate and complete data to substantiate any actual direct costs and any actual time claimed by Contractor.

For any change in the Contract Work initiated by the District, Contractor shall be entitled to an adjustment to the Contract Price and/or time, but only to the extent of such adjustments actually received by the District on behalf of Contractor, and Contractor shall have no right to make any claims against the District for further adjustment to the Contract Price and/or time.

Contractor Claims. Contractor shall give written notice to the District of any claim for compensation, additional compensation, extension of time or other relief of any kind or nature alleged to have been caused in whole or in part by any act or omission by the District within seven (7) days after commencement of the event giving rise to such claim. Such notice shall state the factual basis for the claim, shall itemize all costs incurred and shall indicate the number of delays and/or anticipated delays. Contractor shall provide any additional information requested by the District. With respect to any claim caused in whole in part by any person other than the District, Contractor shall only be entitled to such relief less any costs incurred by the District in connection with such claim

Dispute Resolution. Unless otherwise agreed to in writing by the parties, with respect to any claim or dispute of any nature involving the District and Contractor in which the amount claimed by either party is no more than \$50,000, the parties shall first attempt to resolve such claim, informally. If, following a period of thirty (30) days, or such longer period as mutually agreed to by the parties, the parties are unable to resolve the claim informally, the parties agree to mediate the claim before a mediator mutually agreed to by the parties. If, following mediation, the parties are unable to resolve the claim, either party may commence a legal action. The parties agree that the party failing to comply with these dispute resolution procedures shall not be entitled to the recovery of their attorney's fees in a legal action. Provided, however, that the foregoing dispute resolution procedures shall not apply if it would cause a party to be unable to timely foreclose on a mechanics lien, as applicable, or if the District pursue a claim for injunctive relief under the following paragraph.

If the District in its sole and absolute discretion believes that Contractor is not in compliance with any applicable laws, statutes, regulations, ordinances, building codes, permit conditions, recordkeeping and reporting obligations, mitigation measures and other government requirements of every nature applicable to the Contract Work, the District may, but is not obligated to, immediately commence legal action to obtain injunctive relief (including a temporary restraining order, preliminary injunction and/or permanent injunction) and any related remedies to compel such compliance. The prevailing party in any such action for injunctive relief and any related remedies shall be entitled to the recovery of their attorney's fees, without regard to whether it complied with the dispute resolution process above.

With respect to any claim or dispute of any nature involving the District and Contractor in which the amount claimed by either party exceeds \$50,000, or if amount claimed by either party is no more than \$50,000 and the parties have complied with the foregoing dispute resolution procedures or agreed to waive such procedures in writing, the parties agree that in any legal action the prevailing party making a monetary claim shall only be entitled to recover its reasonable attorney's fees equal to the proportion of the amount awarded to the amount claimed, and shall pay the other party's reasonable attorney's fees equal to the proportion of the amount denied to the amount claimed

PREVAILING WAGE

The Contractor agrees to comply with the provisions of Sections 1771 and 1774 of the California Labor Code pertaining to the payment of prevailing wage rates, and to require each of its subcontractors to so comply. Pursuant to Section 1775 of the California Labor Code, the Contractor, and any of its subcontractors, shall forfeit to the District, and the District will withhold from any monies due the Contractor, the amount of any penalties, as determined by the Labor Commissioner, to be assessed for nonpayment of prevailing wage rates.

In accordance with State of California Senate Bill No. 854, Contractor will maintain and will require all subcontractors to maintain valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project. Contractor shall notify the District in writing immediately, and in no case more than twenty-four (24) hours, after receiving any information that Contractor's or any of its subcontractor's DIR registration status has been suspended, revoked, expired, or otherwise changed.

Contractor will pay, and will require all subcontractors to pay, all employees on said Contract a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work. Federal prevailing wage rates apply for federally funded projects. Travel and subsistence pay shall be paid in accordance with Labor Code § 1773.1.

Contractor shall be subject to penalties in accordance with Labor Code of § 1775 for each worker paid (either by Contractor or by any subcontractors) less than the prevailing rate described above on the work provided for in this Contract.

Contractor and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the Contractor and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1813.

Contractor will comply with the provisions of Labor Code § 1777.5 pertaining to the employment of apprentices to the extent applicable to this Contract.

Contractor, by executing this Contract, hereby certifies:

“I am aware of and will comply with the Labor Code § 3700 by securing payment for and maintaining in full force and effect for the duration of the contract, complete Workers' Compensation Insurance, and shall furnish a Certificate of Insurance to the City before execution of the Contract. The City, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this paragraph.”

Contractor further agrees to require all subcontractors to carry Workers' Compensation Insurance as required by the Labor Code of the State of California.

WORKERS COMPENSATION AND INSURANCE CERTIFICATION

Before commencing with the Contract Work, Contractor shall obtain and maintain at Contractor's cost until final acceptance of the project, full insurance coverage as set forth herein with insurance carriers with an AM Best rating of no less than A-VII. The insurance required under this section shall not be restricted solely to Contractor's defense and indemnity obligations but are intended to extend to all claims, liability, and loss of whatever nature arising from relating to Contractor, the Contract Work, or this Agreement regardless of the alleged liability or fault of any party indemnified under this Agreement. Each insurance policy shall name the District as an additional insured. Each insurance policy is to provide primary coverage to the District and its elected and appointed boards, officers, agents and employees. It is not secondary or in any way subordinate to any other insurance or coverage maintained by the District

The insurance and defense and indemnity obligations under this Agreement are non-delegable. Contractor shall not subcontract any portion of the Contract Work without retaining absolute responsibility for requiring similar insurance from its Contractors. Contractor's failure to maintain complete insurance shall be deemed a material breach of this Agreement and the

District may either terminate this Agreement or provide the required insurance and deduct the cost of which from any payment due to Contractor.

Contractor shall be responsible for all insurance premiums required under this Agreement and shall defend, indemnify and hold harmless the District from and against any claim, loss or damage for which insurance should have been provided under this Agreement.

Contractor shall obtain and maintain the following minimum required insurance

Workers' Compensation: Workers' compensation insurance as required by law.

Commercial General Liability: Commercial general liability insurance on a form no less broad than ISO CG 00 01 with insurance coverage of not less than the following minimum amounts of liability:

\$2,000,000 each occurrence

\$2,000,000 general aggregate

\$2,000,000 completed operations aggregate

Contractor shall endorse its commercial general liability policy with an additional insured endorsement on ISO CG 20 10 11 85 or both CG 20 10 12 04 and CG 20 37 12 04 naming as additional insured's the District, the Owner, and Project Sponsor.

Automobile Liability: Automobile liability insurance covering "any auto" including owned, non-owned and hired vehicles with a combined single limit of \$1,000,000.

Professional Liability: If Contractor has design responsibilities, professional errors and omissions liability insurance with a limit of \$1,000,000 per claim.

Contractor's commercial general liability, workers compensation, automobile liability and any other insurance policies required to be obtained and maintained by Contractor shall be primary and the District's insurance shall be non-contributory to any claim to which the insurance applies. Contractor shall have its insurance policies endorsed to show primary status and provide a copy to the District. Contractor's insurance policies shall contain a standard cross-liability endorsement, severability of interest's clause and a waiver of all rights of subrogation by Contractor's insurer against the District, the Owner, and Project Sponsor.

Before commencing the Contract Work, Contractor shall deliver to the District copies of certificates of insurance certifying the types and amounts of coverage, certifying that the insurance policies were in force before Contractor commenced the Contract Work, certifying that the insurance policies apply to the Contract Work and to the activities and liability of Contractor under this Agreement.

Contractor shall, at the District's request, deliver to the District a complete copy of the insurance policy required to be maintained by Contractor. Contractor may not cancel, materially modify, or reduce the scope of coverage or coverage limits of the insurance required to be maintained by Contractor until final acceptance of the Project by the District. The following notice must appear on the certificates of insurance furnished by Contractor and the Contractor shall obtain endorsements to its insurance policies substantially as follows:

Insurer may not cancel, modify or reduce the scope of coverage or coverage limits for a period of third (30) days after written notice to the District of the intent to cancel, modify, or reduce coverage.

Cancellation of or Changes in Insurance: The Contractor shall provide the District with, or the Contractor's insurance policies shall contain a provision that the District shall receive, written notice of cancellation or any change in the insurance required in the Specifications, including insurer, limits of coverage, term of coverage, or policy period. The written notice shall be

provided to the District at least ten (10) days in advance of cancellation for non-payment of premium and thirty (30) days in advance for any other cancellation or policy change. Failure to provide written notice of cancellation or any change in the insurance required in the Specifications may constitute a material breach of the Contract, in the sole discretion of the District, upon which the District may suspend or terminate the Contract.

Failure to Maintain Insurance: The Contractor's failure to maintain or provide acceptable evidence that it maintains the insurance required in the Specifications shall constitute a material breach of the Contract, upon which the District may immediately withhold payments due to the Contractor, and/or suspend or terminate the Contract. The District, at its sole discretion, may obtain damages from the Contractor resulting from said breach. Alternatively, the District may purchase the insurance required in the Specifications and, without further notice to the Contractor, deduct the premium cost from sums due to the Contractor or pursue reimbursement from the Contractor.

INDEMNIFICATION

To the fullest extent permitted by law, Contractor shall defend, indemnify and hold harmless the District, Owner, and Project Sponsor and their officers, directors, shareholders, members, managers, partners, employees, agents, representatives and sureties (“Indemnified Parties”), from and against any and all claims, losses, suits, actions, demands, awards, judgments, attorneys’ fees, expert fees, costs and expenses of every nature which may arise out of, pertain to, or relate to, in whole or in part, Contractor, Contractor’s subcontractors and material suppliers, or their employees, agents or representative’s performance of the Contract Work, except to the extent caused by the sole or active negligence or willful misconduct of the District, or for claims that do not arise out of the scope of work of Contractor. Contractor’s obligation to defend Indemnified Parties shall be immediate upon written notice by the District and Contractor shall, if requested by the District, defend Indemnified Parties using counsel approved in the sole discretion by the District.

PAYROLL RECORDS / APPRENTICES / HOURS OF WORK

Payroll Records: The Contractor agrees to comply with the provisions of Section 1776 of the California Labor Code pertaining to payroll records and will be responsible for compliance by its subcontractor(s).

Employment of Apprentices: The Contractor agrees to comply with the provisions of Section 1777.5 of the California Labor Code relating to the employment of apprentices by the Contractor and its subcontractor(s).

Hours of Labor: The Contractor agrees to comply with Sections 1810 through 1815 of the California Labor Code pertaining to the hours of labor and payment for such. Pursuant to Section 1813 of the California Labor Code, the Contractor and any of its subcontractor, shall forfeit to the District, and the District will withhold from any monies due the Contractor, the amount of twenty-five dollars (\$25) for each worker employed in the execution of the Contract by the Contractor or any of its subcontractor for each calendar day required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of the Sections 1810 through 1815 of the California Labor Code

PROVISIONS REQUIRED BY LAW AND ADDITIONAL RESPONSIBILITIES

Compliance with Laws. Contractor is responsible for all contributions, taxes, deposits and other payments with respect to the wages, salaries, benefits, or other obligations paid or owed by Contractor to Contractor’s employees and others who perform work or render services to Contractor. Contractor is responsible for all income, gross receipts, use, and other taxes

applicable to materials, equipment, tools, and labor incorporated and used in Contractor's performance of the Contract Work.

Contractor shall comply with all laws, statutes (including, but not limited to, the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*; the California Environmental Quality Act, Cal. Public Resources Code § 21000 *et seq.*; the Endangered Species Act, 7 U.S.C. § 136, 16 U.S.C. § 1531 *et seq.*; the California Endangered Species Act, Cal. Fish and Game Code § 2050 *et seq.*; the Clean Water Act, 33 U.S.C. § 1251, *et seq.*; Lake and Streambed Alteration Program, Cal. Fish & Game Code § 1600, *et seq.*; and the National Historic Preservation Act, 16 U.S.C. § 470 *et seq.*; Federal Acquisition Regulations, 48 C.F.R. Chap. 1), regulations (including, but not limited to, those associated with the previously identified statutes), ordinances, building codes, permit conditions, recordkeeping and reporting obligations, mitigation measures and other government requirements of every nature applicable to the Contract Work, and shall obtain and hold all licenses, certifications and other government requirements necessary to perform the Contract Work.

Contractor shall conduct shoring and trench safety operations in accordance with OSHA and the Construction Safety Orders of the State of California, pursuant to the provisions of Section 6707 of California Labor Code. The Contractor shall submit to the District a Site Safety Plan, which shall include details of provisions for worker protection from caving ground.

Contractor shall comply with rules, policies and procedures pertaining to health, safety, substance abuse and general conduct in the workplace established by the California Occupational Safety and Health Administration, and to other rules of law applicable to the Contract Work.

Superintendence and Cooperation. Contractor shall have a qualified, experienced, and competent superintendent at the Project at all times during performance of the Contract Work and as otherwise necessary to ensure full performance of Contractor's obligations under the Contract Documents applicable to the Contract Work. Contractor is responsible for the superintendence and safety and progress of the Contract Work in conformance with the Contract Documents, including activities of suppliers and subcontractors. Contractor's superintendent shall have absolute authority in all respects to act for and on behalf of Contractor and to bind Contractor by statements made, agreements reached, actions taken and notices received. Contractor's superintendent shall have the authority and responsibility to execute promptly and properly the District's directions relating to the Contract Work.

The Contractor shall place on record with the District, and keep current, the name of the Contractor's superintendent and the phone number at which he/she can be contacted at such times that he/she is not at the work site (such as after working hours and on holidays and weekends) to respond to the District requests to correct safety and other problems that may arise in connection with the Contract Work.

If any person employed by the Contractor, including the Contractor's superintendent, shall fail or refuse to carry out the directions of the District or shall appear to the District to be incompetent or to act in a disorderly, unsafe, or improper manner, that person shall be removed from the work site immediately on the request of the District, and such person shall not again be employed on the Project. Such discharge shall not be the basis for any claim for compensation or damages against the District.

Protection and Storage. Contractor shall provide necessary and appropriate protection of the Contract Work, protect the work of others with respect to Contractor's performance of the Contract Work and shall assume all risks of loss, damage, deterioration or destruction of the Contract Work and damage to the work of others caused by Contractor's performance of the Contract Work, including stored materials, by weather, individuals, or other causes until final acceptance by the District. Contractor shall store and protect its materials, equipment, tools and other items as well as those furnished to Contractor by the District or others. Storage areas,

workshops, and other areas used or to be used by Contractor, if any, may be designated by the District and no materials, equipment, tools or other items owned or used by Contractor shall be stored except in those areas designated by the District. Contractor shall maintain such areas in an orderly and well-kept manner. Contractor shall coordinate all material, equipment and tool deliveries with the District and Owner prior to delivery to the site. Contractor shall not be entitled to payment for storage either on or off site.

Site Safety. Contractor shall comply with all safety laws, rules and regulations applicable to Contractor's performance of the Contract Work including, but not limited to, all federal, state and local rules and regulations promulgated by government agencies.

Contractor shall defend, indemnify and hold harmless the District from and against any and all costs and expenses incurred by the District for fines, penalties and corrective measures resulting from acts or omissions of Contractor, its subcontractors, material suppliers, employees, agents and assigns, resulting from their failure to comply with such safety laws, regulations and rules.

The Contractor shall be solely and completely responsible for the conditions of the work site, including safety of all persons and property during performance of the Contract Work. This requirement shall apply continuously and not be limited to normal working hours. Contractor shall immediately report to the District any injury to or caused by any of Contractor's employees at the site. A written report shall be made on the date of the incident or accident and submitted by Contractor to the District.

Labor Relations. Contractor shall do whatever is necessary in the performance of the Contract Work, or as may be directed by the District, to assure the harmonious labor relations on the Project and to prevent strikes or other labor disputes on the Project. Contractor shall remove from the Project site any subcontractor, material supplier, employee or agent for whom Contractor is responsible whose conduct is objectionable by the District or whose performance is unsatisfactory in the judgment of the District. Contractor agrees that in the event of a work stoppage or other disruption caused in whole or in part by a strike or other labor dispute involving Contractor, its subcontractors, material suppliers, employees, or agents for whom Contractor is responsible, the District shall have the right to terminate Contractor's performance of the Contract Work upon forty eight (48) hours written notice to Contractor.

Cleanup and Removal and Disposal. Contractor shall keep the Project site in a clean and neat condition. Contractor shall clean up all trash and debris resulting from Contractor's performance of the Contract Work and shall turn over its work areas in a clean and neat condition so as to permit any succeeding work to be performed without delay and without the need for further cleaning. Contractor shall be responsible for the removal of non-hazardous trash and debris, and shall have responsibility for the discovery, identification, reporting, handling, removal and disposal of all hazardous materials in accordance with applicable federal, state and local laws, regulations, standards and other requirements. Should Contractor fail to keep the project site in a clean and neat condition, fail to clean up all trash and debris resulting from Contractor's performance of the Contract Work, or fail to remove non-hazardous trash and debris or to remove hazardous materials, the District may perform such work through others and charge the cost thereof to Contractor which the District may deduct from any payment due to Contractor

Qualifications and Inspection. Contractor represents that it is fully qualified, experienced, and licensed to perform the Contract Work, has had, if it desires, the opportunity to inspect and conduct any tests deemed necessary by Contractor to perform the Contract Work, and assumes all risks with respect to the Contract Documents and the general and specific conditions involved in performing the Contract Work including, but not limited to, natural and manmade characteristics of the site both above and below ground, site accessibility, site storage, on-site operations, labor rates and availability, weather conditions, and any other condition of any nature which could affect Contractor's cost and performance of the Contract Work

EQUAL EMPLOYMENT OPPURTUNITY (EEO) PROVISIONS

During the performance of this Contract, the Contractor agrees as follows:

1. The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor certifies and agrees that all persons employed by such firm, its affiliates, subsidiaries, or holding companies are and will be treated equally by the firm without regard to or because of race, color, religion, sex or national origin and in compliance with all antidiscrimination laws of the United States of America and the State of California.
2. In all advertisements for labor or other personnel, or requests for employment of any nature, the Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
3. The Contractor shall deal with its subcontractor without regard to or because of race, color, religion, sex or national origin.
4. The Contractor shall comply with current Federal employment and reporting requirements for County funded construction Contracts. Specifically, the Contractor shall make a good faith effort to comply with Federal employment goals for minority and female employment. The Contractor shall report minority and female employment data on the Federal form provided by the District. This form shall be submitted to the Engineer before the start of construction and twice annually by March 1 and September 1 of each year. Each failure to submit this form by due date will result in a Contractor penalty of \$200, which shall be deducted from any monies due the Contractor.
5. The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other Contract or understanding, a notice, to be provided by the District, advising the said labor union or worker's representative of the Contractor's commitments under this subsection.
6. The Contractor shall allow the District access to its employment records during regular business hours to verify compliance with these provisions when so requested by the District.
7. The Contractor agrees that if the District finds that any of the above provisions have been violated, the same shall constitute a material breach of the Contract upon which the District may determine to cancel, terminate or suspend the Contract. While the District reserves the right to determine independently that the antidiscrimination provisions of the Contract have been violated, in addition, a determination by the Federal Equal Employment Opportunity Commission or the California Fair Employment and Housing Commission that the Contractor has violated Federal or State antidiscrimination laws may constitute a finding by the District that the Contractor has violated the antidiscrimination provisions of the Contract.
8. The Contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex or national origin cannot result. The Contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The Contractor's obligation extends further to ensuring that its employees are not assigned to perform their services at any location, under the Contractor's control, where the facilities are segregated. This obligation extends to all Contracts containing the equal opportunity clause regardless of the amount of the Contract. The term "facilities," as used in this section, means waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, wash rooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees; Provided, that separate or single-user restrooms and necessary dressing or sleeping areas shall be provided to assure privacy

between the sexes. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of nondiscrimination clause. At its option, and in lieu of canceling, terminating or suspending the Contract, the County may impose damages for any violation of the antidiscrimination provisions of this subsection, in the amount of \$200.00 for each violation found and determined. The County and the Contractor specifically agree that the aforesaid amount shall be imposed as liquidated damages, and not as a forfeiture or penalty. It is further specifically agreed that the aforesaid amount is presumed to be the amount of damages sustained by reason of any such violation, because, from the circumstances and the nature of the violation, it is impracticable and extremely difficult to fix actual damages.

9. The Contractor shall include the provisions of the foregoing paragraphs 1 through 8 in every subcontract over \$10,000.00, so that such provisions will be binding upon each subcontractor performing work required by the Contract.

PERFORMANCE AND PAYMENT BOND

The District requires that Contractor furnish to the District, as obligee, a performance and payment bonds for 100% of the Contract value with surety acceptable to the District. The protection and coverage of the bonds furnished by Contractor shall extend at least to the entities protected and types of claims covered by the District's bonds so that no claim can be made against the District's bonds which are not recoverable against Contractor's bonds.

Attachment "A" and "B", Performance and Payment Bonds, respectively, shall be executed and included as attachments to this contract.

GUARANTY

The Contractor guarantees the construction and installation of the work included in this project. Should any of the materials or equipment prove defective or should the work as a whole prove defective, due to faulty workmanship, material furnished or methods of installation, or should the work or any part thereof fail to operate properly as originally intended and in accordance with the Plans and Specifications, due to any of the above causes, all within 12 months from the date of filing the Notice of Acceptance by the Secretary, the undersigned agrees to reimburse the District upon demand, for its expenses incurred in restoring said work to the condition contemplated in said project, including the cost of any such equipment or materials replaced and the cost of removing and replacing any other work necessary to make such replacement or repairs, or upon demand by the District, to replace any such material and to repair said work completely without cost to the District so that said work will function successfully as originally contemplated.

The District shall have the unqualified option to make any needed replacements or repairs itself or to have such replacements or repairs done by the undersigned. In the event the District elects to have said work performed by the undersigned, the undersigned agrees that the repairs shall be made and such materials as are necessary shall be furnished and installed within a reasonable time after the receipt of demand from the District. If the undersigned shall fail or refuse to comply with his obligations under this guaranty, the District shall be entitled to all cost and expenses, including attorney's fees, reasonably incurred by reason of the said failure or refusal.

TERMINATION OF CONTRACT

Termination for cause (breach or default): Should Contractor refuse or fail for any reason to diligently, efficiently, timely, skillfully, safely or cooperatively prosecute the Contract Work;

supply sufficient and competent supervision or labor; have sufficient materials and equipment of the proper quality and quantity; promptly correct work considered to be defective; pay its bills; or discharge its obligations to under this Agreement, the District may upon forty eight (48) hours written notice to Contractor (except if Contractor advises the District that it is no longer in business, in which case, no notice is required) terminate Contractor and/or (except in the case of emergencies, in which case, no notice is required) provide such labor, materials, equipment, tools and services and deduct the cost thereof, together with an loss or damage occasioned thereby, from any payment due to Contractor. In addition, the District may use funds otherwise earned by Contractor on the project or other projects to pay Contractor's past due bills and obligations including back charges owed to the District.

If Contractor is terminated, the District may assume control of the Contract Work, take possession of all materials and equipment necessary to continue performance of the Contract Work (including, but not limited to, materials, equipment, tools, supplies or other items located on the project site, in storage off site, in transit to the site, or in the process of being manufactured), prosecute the Contract Work using the District's own forces or those of others, and use funds otherwise owing to Contractor to prosecute and complete the Contract Work. Contractor grants a lien and security interest in all of Contractor's materials, equipment, supplies and contract rights to secure performance and completion of the Contract Work.

Upon termination of Contractor, Contractor shall not be entitled any further payments on the Project until the Contract Work has been completed and accepted by the District, and not until final payment has been received by the District. Contractor shall be liable for all costs and expenses of completing the Contract Work, including all performance costs of any nature plus a reasonable allowance for overhead and profit, and any damages, losses, expenses, attorneys' fees or costs, incurred by the District as a result of the termination of Contractor. If, after final payment to the District, the unpaid balance to Contractor exceeds the performance costs, overhead and profit, and any damages, losses, expenses, attorneys' fees or costs incurred by the District in completing the Contract Work, the District shall pay the difference to Contractor. If, after final payment to the District, the performance costs, overhead and profit, and any damages, losses, expenses, attorneys' fees or costs incurred by the District in completing the Contract Work exceeds the unpaid balance to Contractor, Contractor shall pay the difference to the District.

Termination for convenience: In addition to the District's right to terminate Contractor for breach or default, the District may terminate Contractor if the District determines that such termination is in the best interest of the Project. Upon such termination, Contractor shall be entitled to the reasonable, actual direct cost of satisfactorily completed Contract Work and materials purchased prior to termination, plus a single mark of not more than ten percent (10%) for provable overhead (including job site and home office) and provable profit on satisfactorily completed Contract Work, plus the reasonable out-of-pocket costs of terminating the Contract Work, less any amounts paid by the District, costs incurred by the District and back charges due to the District. Contractor shall not receive any compensation, overhead, or profit on Contract Work not completed or for materials not purchased. Provided, however, that the total sum to which Contractor may be entitled, including all prior payments made to or on behalf of Contractor, shall not exceed the Contract Price.

If, after termination of Contractor, it is determined for any reason that Contractor was not in breach or default, Contractor's sole and exclusively remedy shall only be entitled to the amount due under the Agreement as if termination was for no-fault. Regardless of whether the termination for fault or no-fault, Contractor shall not be entitled to special, consequential or exemplary damages or lost profit on account of termination of Contractor.

The Board may, whenever the interests of the District so require, terminate the Contract, in whole or in part, for the convenience of the District. The District will give written notice of the termination to the Contractor specifying the part of the Contract terminated and the date termination becomes effective. The Contractor shall incur no further obligations in connection with the terminated Work, and, on the date set in the notice of termination, the Contractor shall stop Work to the extent specified. The Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated Work. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated Work. The District may direct the Contractor to assign the Contractor's right, title, and interest under the terminated orders or subcontracts to the District. The Contractor must still complete the Work not terminated by the notice of termination and may incur obligations as are necessary to do so. The District may require the Contractor to transfer title and deliver to the District, in the manner and to the extent directed by the District, the fabricated or un-fabricated parts, Work in process, completed Work, supplies, and other material produced or acquired for the Work terminated and other property that, if the Contract had been completed, would be required to be furnished to the District. The Contractor shall, upon direction of the District, protect and preserve property in the possession of the Contractor in which the District has an interest. If the District does not exercise this right, the Contractor shall use its best efforts to sell such supplies and manufacturing materials for the benefit of the District. If the parties are unable to agree on the amount of a termination settlement, the District will pay the Contractor the following amounts:

- a. For Contract Work performed before the effective date of termination, the total (without duplication of any items) of:
 - (i) the cost of work completed in accordance with the Plans and Specifications based on the quantity constructed and the Contract Unit Price or lump sum Bid price of the respective Bid item less prior progress payments, and any applicable Liquidated Damages and any other deductions or withholds to which the District may be entitled to in accordance with applicable law, including the amounts of outstanding Stop Notices or labor compliance notices to withhold shall be withheld until the Stop Notices or notices to withhold are resolved as provided by law.
 - (ii) The cost of settling and paying terminated subcontracts and orders that are properly chargeable to the terminated portion of the Work; and
- b. The reasonable costs of effectuating the settlement of the Work terminated, including:
 - (i) Accounting, clerical, and other expenses reasonably necessary for the preparation of termination settlement bids and supporting data;
 - (ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and
 - (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

Termination for Improper Consideration: The District may, by written notice to the Contractor, immediately terminate the right of the Contractor to proceed under the Contract if it is found that consideration, in any form, was offered or given by the Contractor, either directly or through an intermediary, to any District officer, employee or agent with the intent of securing the Contract or securing favorable treatment with respect to the award, amendment or extension of the Contract or the making of any determinations with respect to the Contractor's performance pursuant to the Contract. In the event of such termination, the District shall be entitled to pursue the same remedies against the Contractor as it could pursue in the event of default by the Contractor. The Contractor shall immediately report any attempt by and District officer or

employee to solicit such improper consideration. The report shall be made either to the District General Manager, charge with the supervision of the employee The Board of Supervisors. Among other items, such improper consideration may take the form of cash, discounts, service, the provision of travel or entertainment, or tangible gifts.

IN WITNESS WHEREOF, the parties to this Agreement have duly executed it effective on the date set forth above.

**San Bernardino Valley Water Conservation
District:**

CONTRACTOR:

Signature: _____

Signature: _____

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Date of Execution: _____

Date of Execution: _____

Attachment A
PUBLIC WORK
BOND FOR FAITHFUL PERFORMANCE

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ as

Principal, and _____ a

(Guaranty Corporation)

(State)

Corporation, as Surety, are held firmly bound unto the San Bernardino Valley Water Conservation District in the sum of _____ Dollars(\$____), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that whereas said Principal has been awarded and is about to enter into a written Contract dated _____, 2020, with the San Bernardino Valley Water Conservation District for:

Plunge Creek Conservation Project

and is required by said District to give this bond in connection with the execution of said Contract. In case suit is brought by the District to successfully enforce the terms of this Bond, the District shall be awarded its reasonable attorney fees and costs, including expert costs; NOW, THEREFORE, if the said Principal shall well and truly do and perform all of the covenants and obligations of said Contract on his part to be done and performed at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect.

WITNESS our hands this ____ day of _____, 2020.

Principal

Attach acknowledgment.

By

Principal

Guaranty Company

Attach acknowledgment. By:

Guaranty's Attorney-in-Fact

Attachment B
BOND FOR MATERIAL AND LABOR

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ as Principal and
_____, a
(Guaranty Company) (State)

Corporation, as Surety, is held and firmly bound unto the San Bernardino Valley Water Conservation District in the sum of _____ Dollars (\$ _____), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the above obligation is such that, whereas said Principal has been awarded and is about to enter into a written Contract dated, _____ 2020, with the San Bernardino Valley Water Conservation District for:

Plunge Creek Conservation Project

which is hereto attached, and to which reference is hereby made for all particulars, and is required by said District to give this bond in connection with the execution of said Contract; NOW THEREFORE, if said Principal as Contractor in said Contract, or his Subcontractors, fails to pay for any materials, provisions, or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, said surety will pay the same in the amount not exceeding the sum set forth above, and also in case suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court. This bond shall insure to the benefit of any and all persons, companies, and corporations entitled to file claims under and by virtue of the provisions of Chapter II of Title 4 or Part 3 of the Code of Civil Procedure of the State of California.

WITNESS our hands this _____ day of _____, 2019.

Principal

Attach acknowledgment. By:

Principal

Guaranty Company

Attach acknowledgment. By:

Guaranty's Attorney-in-Fact

INSTRUCTIONS TO BIDDERS

CONSTRUCTION OF

PLUNGE CREEK CONSERVATION PROJECT

at

East of Boulder Avenue
In the City of Highland, CA

Project No. SBVWCD – 001C



**San Bernardino Valley
Water Conservation District**

Helping Nature Store Our Water

FORM OF PROPOSAL AND SIGNATURE

All bids must be submitted in sealed envelopes, bearing on the outside the bidder's name, address, the name of the project for which the bid is submitted and the appropriate State CONTRACTOR's License designation held by the bidder. Bids shall be submitted to in sealed envelopes marked on the outside, "SEALED BID FOR THE PLUNGE CREEK CONSERVATION PROJECT - DO NOT OPEN WITH REGULAR MAIL" Proposals which are not properly marked may be disregarded. It is the sole responsibility of the bidder to insure the bid is submitted in the proper time. The Proposal must be executed in accordance with the instructions contained on the forms provided. If the bidder is an individual or a partner, the signature on the Proposal and bid bond must be the same as the name of the bidder shown on other parts of these forms.

PREPARATION OF THE PROPOSAL/WITHDRAWAL OF PROPOSALS

The Invitation to Bid, Special Provisions, Instructions to Bidders and Bid Proposal for construction of the Plunge Creek Conservation Project (Project) are provided to help bidders prepare a proposal that meets the minimum requirements for this solicitation. The proposal package, plus addenda issued prior to the proposal submission date and time, comprise all the information that will be provided to Contractors to assist in preparing a bid.

The San Bernardino Valley Water Conservation District (District) requires that certain documents be submitted by the Bidder. These documents summarized in the Bidder's Checklist.

A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal, provided that the bidder's request for withdrawal is received at the office designated for receipt of proposals in writing before the time specified for opening bids. Revised proposals must be submitted as specified herein. The request for withdrawal shall be executed by the bidder or his duly authorized representative. Proposals that have been withdrawn, or received after the time specified for opening bids shall be returned to the bidder unopened. Upon bid opening, all proposed bid amounts shall be maintained and guaranteed by the Contractor for 120 days.

AWARD OF CONTRACT

The Contractor will be selected based on an evaluation of both, the Bidder's Qualifications and Bid Price. The District reserves the right to award the Contract to the most qualified and responsible Bidder in the opinion of the District. The contract may or may not be awarded to the lowest bidder. Award will be a two step process. The initial (and preliminary) selection will be made based upon the lowest Total Bid submitted and a review of the Contractor's Qualifications based upon the information contained in the Bidder Information and Statement of Qualifications. Once the initial selection is made, that contractor will be interviewed to confirm their qualifications based upon their proposed construction approach, proposed schedule and understanding of working in and around habitat of endangered species. The District will interview the second lowest and qualified bidder for possible award only if not satisfied with the initial selection. This process will be repeated until a final selection is made. The total awarded contract price will be based on the costs shown in the bid form for work described in the Bid Proposal without consideration of proposed substitutes, equivalents, or design refinements. Where the Plans indicate that an equivalent will be considered subject to the review of Northwest Hydraulic Consultants (NHC), who is designated a representative of the District, the equivalent will not be considered until after the successful bidder is selected and the Contract is executed.

CONTRACTOR'S LICENSE REQUIREMENTS

The Contractor shall possess a valid California Class A contractor's license from the time the bids are due and throughout the entire term of the contract. District will not award this Contract to a Bidder who fails to possess the required license.

EXECUTION OF CONTRACT

The successful bidder shall execute a written contract with the District on the form of agreement provided, and shall secure all insurance and bonds required by the Specifications within Eight (8) working days from the date of the award. Failure to enter into a contract shall be just cause for the annulment of the award and the forfeiture of the proposal guarantee. If the successful bidder fails to execute the contract, the District may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder fails to execute the contract, the District may award the contract to the third lowest bidder. On the failure of such second or third lowest responsible bidder to execute the contract, such bidder's guarantees shall be likewise forfeited to the District. The work may then be re-advertised.

SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

Before submitting a proposal, the bidder shall carefully examine the drawings, specifications, and other contract documents, and shall visit the site of the work. The submission of a proposal shall be prima facie evidence that the bidder is familiar with existing site conditions and that they have a clear understanding of the requirements of the contract regarding the furnishing of materials and performance of work.

Where the bidder feels that additional field data are either necessary or desirable, it shall be the bidder's responsibility to make all examination and field studies necessary for their own determination of the character of materials that will be encountered in any required excavation and embankment construction operations and to fully determine all cost factors related thereto which shall be included in their bid price for the work.

Such additional field data required by the bidder shall be undertaken at the bidder's expense. The submittal of a bid will be accepted as prima facie evidence that in compliance herewith, the bidder has accurately and fully informed themselves of all geologic and soils conditions that will influence the cost of performing the work and that all such factors were carefully considered by them, prior to making their bid.

NON-COLLUSION AFFIDAVIT

The Bidder shall execute, sign, and submit the form provided in the Bid Proposal. The form shall be notarized prior to submission

STATEMENT OF EXPERIENCE

A Statement of Experience is required within the Bidder Information Sheet and Bidder Qualification Form and shall be included in the Bid Proposal. It must be completed and submitted to verify that the bidder has the minimum experience required for this proposal. The minimum experience qualification for the bidder is to have completed three (3) projects of similar scope involving stream restoration in an environmentally sensitive habitat.

ADDENDA

The bidder shall acknowledge the receipt of each addendum issued on the form provided in the bid proposal.

INTERPRETATION OF PLANS AND DOCUMENTS

Bidders must satisfy themselves by personal examination of the work site, plans, specifications and other contract documents, and by any other means as they may believe necessary, as to the actual physical conditions, requirements and difficulties under which the work must be performed.

No bidder shall at any time after submission of a proposal make any claim or assertion that there was any misunderstanding or lack of information regarding the nature or amount of work necessary for the satisfactory completion of the job.

Should a bidder find any errors, omissions, or discrepancies in the plans, specifications, and other contract documents or should they be in doubt as to their meaning, they shall notify the District. A written addendum will be sent to all bidders, should it be found necessary. The District will not be responsible for any other explanation or interpretations of the proposed documents. The Contractor shall save harmless the District from any loss or damages as a result of his/her intentional failure to report any error, omission or conflicting procedure.

Deadline for Request for Interpretation prior to bid: All requests for interpretation and/or questions regarding the bid documents (i.e. Plans, Specifications, Contract Documents, Bid Forms, etc.) must be received by five (5) working days before the bid date including as revised by addendum, Questions asked of the District after this may not be addressed.

PROPOSAL CHECKLIST AND ASSEMBLY

IMPORTANT

Failure to properly Complete Bid Package May Result in Rejection of Bid

- | | |
|---|---|
| 1 | Proposal – Assemble all pages in same numbering sequence as original |
| | <input type="checkbox"/> Replace Bid Sheets from Addendum in sequence |
| | <input type="checkbox"/> Unit Prices are entered for all bids (or Alternative Bids) |
| | <input type="checkbox"/> Corrections or changes in the bid document are initialed |
| | <input type="checkbox"/> Subcontractors, if any, are listed |
| | <input type="checkbox"/> Non-collusion Declaration is executed and submitted with Bid |
| | <input type="checkbox"/> Bidder General Information and Statement of Experience Form is completed and correct with required resume attached |
| | <input type="checkbox"/> Proposal is complete and signed by authorized company representative |
| 2 | Addendums, if any, are acknowledged |
| | <input type="checkbox"/> Acknowledgment of addenda received is submitted |
| 3 | Bidder’s Security |
| | <input type="checkbox"/> 10% of Bid Amount in Cashier’s Check, Certified Check or Bidder’s Bond |
| | <input type="checkbox"/> If Bidder’s Bond, surety signature is notarized |
| | <input type="checkbox"/> If Bidder’s Bond, surety power of attorney is attached |
| 4 | Registered with department of Industrial related (DIR) (Senate Bill 854) |
| | <input type="checkbox"/> DIR Registration Number identified for Bidder and all subcontractors on Subcontractor form |

BID PROPOSAL

For the

CONSTRUCTION OF

PLUNGE CREEK CONSERVATION PROJECT

at

East of Boulder Avenue
In the City of Highland, CA

Project No. SBVWCD – 001C



**San Bernardino Valley
Water Conservation District**

Helping Nature Store Our Water

BID PROPOSAL FORM

Proposal to
San Bernardino Valley Water Conservation District
For the construction of:
Plunge Creek Conservation Project

Name of Bidder: _____

Business Address: _____

Phone No: _____

To San Bernardino Valley Water Conservation District (District):

Pursuant to and in compliance with your Invitation to Bid and the other documents relating thereto, the undersigned, Bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and the Scope of the Work, the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, material, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete in a workmanlike manner, all of the Work required in connection with the construction of said Work, all in strict conformity with the Bid Proposal Documents, including Addenda Nos. _____, for the prices hereinafter set forth.

Bids delivered to the District at the time set for opening of Bids shall be irrevocable, and may not be withdrawn for a period of thirty (30) days after the date set for the opening of the bids except as noted in the Contract.

Schedule of Prices:

All applicable sales taxes, State and/or Federal and any other special taxes, patent rights, or royalties are included in the prices quoted in this Bid.

The quantities specified are the District's estimates and are approximate only, being given as a basis for the comparison of bids. The District does not, expressly or by implication, agree that the actual amount of work will correspond therewith.

Where unit prices are used, payment for each item will be based on the actual quantity of work performed times the item unit contract price. Determinations of the actual quantities and classifications of unit price work performed by the Contractor will be made by the District and may be more or less than the specified, estimated quantities. Unless otherwise indicated in the Bid Item Descriptions, the unit price shall be valid for actual quantities up to 25% more than or less than the bid quantity. Unit prices may be adjusted per Section 3.2.2 of the Standard Specifications.

The Total Bid provided in the bid proposal form will be used as one element for evaluation of proposals. Contractor's Statement of Qualifications will be used as the second element. The Contractor will be selected based on both elements, and the lowest Total Bid may not be selected.

All representations made by Bidder in this Bid are made under penalty of perjury.

BY: _____

TITLE: _____

SIGNATURE: _____

DATE _____

BID SCHEDULE

BID FORM: (Refer to Bid Item Descriptions on subsequent pages for a more detailed description of items included under each of the following items)

BID SCHEDULE A – Phase 1

ITEM NO.	DESCRIPTION	QTY.	UNIT	UNIT PRICE	TOTAL
1	Mobilization (Note: this lump sum figure cannot exceed 10 percent of the total for bid)	1	LS		
2	Clearing and Grubbing	2.4	AC		
3	Site Preparation, BMPs, and SWPPP	1	LS		
4	Upper Pilot Channel Excavation	3130	CY		
5	Splitter Mound Keystone Boulder	14	EA		
6	Splitter Mound Native Rock	184	CY		
7	Splitter Mound Coarse Streambed Fill	65	CY		
8	Splitter Mound Filter Material	19	CY		
9	Splitter Mound LWM	193	LF		
10	Boulder Anchor Assembly	3	EA		
11	Boulder Stockpile Mound	10	EA		
12	Export Excess Material	3260	CY		
13	Site Restoration	1	LS		
15	On-Site Mitigation Measures	1	LS		

The Total Bid shall be generated from the above bid items by adding together the total amount for each bid item, in accordance with the requirements the Contract, see Attachment C. The sum of all the bid item amounts shall be the bidder's bid and inserted, both in words and numerically, in this section.

Total Bid Schedule A

\$ _____

Total Bid Schedule written in words:

Note: Contractor must submit a Bid for both Schedule A and B

BID FORM: (Refer to Bid Item Descriptions on subsequent pages for a more detailed description of items included under each of the following items)

BID SCHEDULE B – Phase 1 and Phase 2

ITEM NO.	DESCRIPTION	QTY.	UNIT	UNIT PRICE	TOTAL
1	Mobilization (Note: this lump sum figure cannot exceed 10 percent of the total for bid)	1	LS		
2	Clearing and Grubbing	6.8	AC		
3	Site Preparation, BMPs, and SWPPP	1	LS		
4	Upper Pilot Channel Excavation	4000	CY		
5	Lower Pilot Channel Excavation	2030	CY		
6	Splitter Mound Keystone Boulder	78	EA		
7	Splitter Mound Native Rock	1020	CY		
8	Splitter Mound Coarse Streambed Fill	325	CY		
9	Splitter Mound Filter Material	126	CY		
10	Splitter Mound LWM	230	LF		
11	Boulder Anchor Assembly	3	EA		
12	Boulder Stockpile Mound	60	EA		
13	Berm (soil disposal area)	6754	CY		
14	Site Restoration	1	LS		
15	On-Site Mitigation Measures	1	LS		

The Total Bid shall be generated from the above bid items by adding together the total amount for each bid item, in accordance with the requirements the Contract, see Attachment C. The sum of all the bid item amounts shall be the bidder's bid and inserted, both in words and numerically, in this section.

Total Bid Schedule B

\$ _____

Total Bid Schedule written in words:

Note: Contractor must submit a Bid for both Schedule A and B

LIST OF SUBCONTRACTORS

The Bidder shall list below the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of one percent of the Contractor's total bid. The Bidder shall also list below the portion of the work that will be done by each subcontractor. The Contractor shall list only one subcontractor for each portion as is defined by the Contractor in his or her bid. Failure to list subcontractors with portions of the work in excess of the minimum amounts listed above constitutes a declaration by the Contractor that it is qualified and able to self-perform the work. Any Contractor found to be unqualified or unable to self-perform any part of the work not listed below may be disqualified.

Work to be Performed	Subcontractors License Number	Percent of Total Contract	Subcontractor's Name and Address
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

Note: Attach Additional Sheets If Required and DIR Registration Number for Bidder and all subcontractors is required

BIDDER'S SECURITY

KNOW ALL MEN BY THESE PRESENTS,

That _____ as Principal,
and _____ as Surety, are held and
firmly bound unto **San Bernardino Valley Water Conservation District**, hereinafter called the
"District," in the sum of _____ dollars, (**Not less
than 10 percent of the total amount of Bid**) for the payment of which sum, well and truly to be
made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly
and severally, firmly by these presents.

WHEREAS, said Principal has submitted a Bid to the District to perform the work required
under the bidding schedule(s) of the District's Contract Documents entitled: **Plunge Creek
Conservation Project**.

NOW, THEREFORE, if said Principal is awarded a contract by the District and, within the time
and in the manner required in the "Instructions to Bidders" enters into a written Agreement on
the form of agreement bound with said Contract Documents, furnishes the required certificates of
insurance, and furnishes the required Performance Bond and Payment Bond, then this obligation
shall be null and void, otherwise it shall remain in full force and effect.

FURTHERMORE, Surety, for value received, hereby stipulates and agrees that no change,
extension of time, alteration or addition to the terms of the Contract Documents shall in affect its
obligation under this bond, and Surety does hereby waive notice of such changes.

In the event suit is brought upon this bond by the District and the District prevails, Surety shall
pay all costs incurred by the District in such suit, including attorney's fees and costs.

SIGNED AND SEALED, this _____ day of, _____ 20__

(SEAL) (Principal) (Surety) (SEAL) _____

By: _____ By: _____
(Signature) (Signature)

BIDDER INFORMATION SHEET AND STATEMENT OF QUALIFICATIONS

Bidder's General Information and Statement of Experience:

The Bidder shall furnish the following information. Additional sheets shall be attached as required. Failure to complete Item Nos. 1 through 7, at the time of bid submittal will cause the bid to be non-responsive and may cause its rejection. Bidders shall submit Item No. 8 if requested by the District prior to award of contract. No award will be made until all of the Bidder's General Information (i.e., Items 1 through 7, inclusive Item 8, if requested) is delivered to and accepted by the District.

(1) Contractor's Name and Address:

(2) Contractor's Telephone Number: _____

(3) Contractor's License: Primary Classification _____

State License No. _____

Expiration Date: _____

Supplemental Classifications held, if any: _____

Name of Licensee, if different from (1) above:

(4) Name of person who inspected site or proposed Work for your firm:

Name: _____ Date of Inspection: _____

(5) Name, address, and telephone number of surety company and agent who will provide the required bonds on this contract:

Bidder's General Information and Statement of Experience Continued on next page

Bidder's General Information and Statement of Experience Cont.

- (6) **Statement of Experience:** List three projects completed as of recent date involving work of similar complexity and cost. Of the three (3) projects, two (2) must show experience involving stream restoration in an environmentally sensitive habitat.

Project	Contract Price	Name, address, telephone # of OWNER
1.		
2.		
3.		
4.		
5.		

- (7) The resume of the person who will be designated chief construction superintendent or on-site construction manager.
- (8) A financial statement, references, and other information, sufficiently comprehensive to permit an appraisal of Contractor's current financial condition.

CONTRACTOR'S AFFIDAVIT OF NON-COLLUSION FORM

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

State of California } SS.
County of San Bernardino

_____, being first duly sworn, deposes and says that he or she is _____ of _____ the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid."

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Subscribed at:

(City) (County) (State)

on _____ 20 _____
(Date)

NOTARY TO AFFIX SEAL
AND CERTIFICATE OF
ACKNOWLEDGMENT

(Bidder's name)

(Bidder's signature)

ACKNOWLEDGMENT OF ADDENDA RECEIVED

The bidder shall acknowledge the receipt of addenda by placing an "x" by each addendum received.

ADDENDUM NO. 1 _____
ADDENDUM NO. 2 _____
ADDENDUM NO. 3 _____
ADDENDUM NO. 4 _____
ADDENDUM NO. 5 _____
ADDENDUM NO. 6 _____
ADDENDUM NO. 7 _____
ADDENDUM NO. 8 _____

If an addendum or addenda have been issued by the agency and not noted above as being received by the bidder, the bid proposal will be rejected.

(Bidder's name)

(Bidder's signature)