

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



ITEM: 13.2
(ID # 13648)

MEETING DATE:
Tuesday, October 20, 2020

FROM : Regional Parks and Open Space District:

SUBJECT: REGIONAL PARK & OPEN-SPACE DISTRICT: Adopt Resolution No 2020-015
Approving the Application for Grant Funds From the Wildlife Conservation Board
for the Hidden Valley Habitat Restoration Project; District 2; \$0

RECOMMENDED MOTION: That the Board of Directors:

1. Adopt Resolution No. 2020-015 authorizing the Riverside County Regional Park & Open-Space District to apply for grant funds from the Wildlife Conservation Board;
2. If awarded, authorize the General Manager, or designee, to execute the grant agreement which may result from this application and to take all actions necessary to administer said agreement; and
3. Instruct the Clerk of the Board to return one copy of the resolution to the Riverside County Regional Park & Open-Space District.

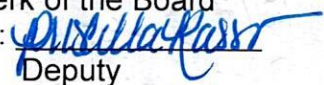
ACTION:Consent


Kyla R. Brown, General Manager 10/5/2020

MINUTES OF THE BOARD OF DIRECTORS

On motion of Supervisor Spiegel, seconded by Supervisor Hewitt and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington, Perez and Hewitt
Nays: None
Absent: None
Date: October 20, 2020
xc: Parks

Kecia R. Harper
Clerk of the Board
By: 
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 0	\$ 0	\$ 0	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: None			Budget Adjustment:	No
			For Fiscal Year:	20/21

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

Riverside County Regional Park & Open-Space District (RivCoParks) is partnering with HANA Resources Inc. (HANA), the San Bernardino Valley Municipal Water District (SBVMWD), and the Santa Ana Watershed Association (SAWA) to seek funding from the Wildlife Conservation Board (WCB) for Phase 1 of the Hidden Valley Habitat Restoration Project (Project) in the Hidden Valley Wildlife Area.

This large-scale habitat restoration project will restore and enhance approximately 1,301.43 acres of native riparian, Riversidean Alluvial Fan sage scrub, and grassland habitat, help reduce the impact of invasive *Arundo donax*, conserve sensitive wildlife, and improve the water quality. Previous management efforts have removed arundo and planted native perennial shrubs and trees, but the understory is currently dominated by annual weed species.

The goal of the Project is to maximize native plant diversity, increase resilience against future invasion of non-natives, and provide high-quality wildlife habitat.

The Project will be completed in two phases. We are currently seeking Phase 1 funding for the project planning, compliance, and permitting tasks. The Project will leverage and build on existing conservation efforts in the region and compliment the efforts of the Western Riverside County Regional Conservation Authority (RCA) to help the region meet federal, state, and local goals and objectives for our fish and wildlife.

Impact on Citizens and Businesses

The project will leverage, build on, and compliment other regional conservation efforts (including the Western Riverside County Regional Conservation Authority, U.S. Army Corps of Engineers mitigation lands, Orange County Water District mitigation projects, and the Upper Santa Ana River Habitat Conservation Plan) to help the region meet federal, state, and local goals and objectives for our fish and wildlife. The project area is a high priority for restoration because of its large size, history of invasive plant management, and value for wildlife and recreation.

SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA

California Environmental Quality Act (CEQA)

CEQA review and notifications will be conducted as required for the scope of the project once funding has been established.

Attachments

Resolution No 2020-015

Wildlife Conservation Board Funding Application


Douglas G. Jr. 10/13/2020


Gregory V. Prietas, Director County Counsel 10/8/2020

1 BOARD OF DIRECTORS

RIVERSIDE COUNTY REGIONAL PARK
& OPEN-SPACE DISTRICT

3 RESOLUTION NO. 2020-015

4 RESOLUTION OF THE RIVERSIDE COUNTY REGIONAL PARK AND OPEN-SPACE
5 DISTRICT BOARD OF DIRECTORS APPROVING THE APPLICATION FOR GRANT
6 FUNDS FROM THE WILDLIFE CONSERVATION BOARD FOR THE HIDDEN VALLEY
7 HABITAT RESTORATION PROJECT.

9 **WHEREAS**, funds were made available to the Wildlife Conservation Board for the
10 enhancement or restoration of fish and wildlife habitat and for the development of public access
11 facilities for hunting, fishing or other wildlife-oriented recreational uses.

12
13 **WHEREAS**, the Riverside County Regional Park & Open-Space District intends to
14 restore and enhance approximately 1,301.43 acres of native riparian, Riversidean Alluvial Fan
15 sage scrub, and grassland habitat, along with reducing the impact of invasive arundo (Arundo
16 donax), conserving sensitive wildlife and improving the water quality within the Hidden
17 Valley Wildlife Area.

18
19 **NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the Riverside
20 County Regional Park & Open-Space District, in regular session assembled on October 20, 2020
21 in the meeting room of the Board of Directors of the District located on the 1st floor of the
22 County Administrative Center, 4080 Lemon Street, California, herby:

- 23 1. Approve the filing of an application for funding from the Wildlife Conservation
- 24 Board; and
- 25 2. Certifies that said Applicant will comply with all federal, state and local
- 26 environmental, public health, and other appropriate laws and regulations applicable
- 27 to the project and will obtain or will ensure that the other project partners obtain all
- 28 appropriate permits applicable to the project; and

10.20.2020 13.2

FORM APPROVED COUNTY COUNSEL
BY  DATE 10/20/2020
KRISTINE BELL-VALDEZ

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- 3. Further commits to the terms and conditions specified in the grant agreement; and
- 4. Appoints the General Manager or designee, as a representative of Riverside County Regional Park & Open-Space District to conduct negotiations, execute, submit and sign all documents including but not limited to applications, agreements, amendments, payment requests, and other documents which may be necessary for the completion of the proposed project.

APPROVED AND ADOPTED the 20th day of October, 2020.

I hereby certify that the foregoing Resolution Number 2020-015 was adopted by the Board of Directors of the Riverside County Regional Park & Open-Space District.

ROLL CALL:

Ayes:	Jeffries, Spiegel, Washington, Perez and Hewitt
Nays:	None
Absent:	None

The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.

Kecia R. Harper, Clerk of said Board

By *Russella Ross*
Deputy

WILDLIFE CONSERVATION BOARD

1700 9th Street, 4th Floor
Sacramento, California 95811

Mailing Address

Post Office Box 944209
Sacramento, California 94244-2090

Restoration Funding Application*

APPLICANT INFORMATION

Full Legal Title of Organization Requesting Funding:

Riverside County Regional Park & Open-Space District (Parks District)

Mailing Address: 4600 Crestmore Road, Jurupa Valley, CA 92509

Federal Employee Identification Number: 95-6000930

Person Representing Organization: Dustin McLain

Title: Chief, Parks and Resources

Telephone: (951) 955-4102

Email address: dmclain@rivco.org

PROJECT INFORMATION

Project Title: Hidden Valley Wildlife Area Habitat Restoration Project, Phase 1: Planning and Permitting Project County: Riverside

Funding Request \$ 537,158.00

Total Project Cost (include in-kind contributions): \$ 939,195.00

Project Location: Distance and direction from nearest city: Riverside, within city limits

Assessor's Parcel Number(s) (APNs): 153030005, 153030006, 157020006, 157020008, 157020009, 157020011, 157020012, 157020013, 157020017, 157210004, 157210005, 162220003, 162220004, 162220005, 162240001, 162240006, 162240007, 162240008, 162240009, 162240010, 162240011, 162250003, 162250006, 162250007, 163290002, 163290003, 163290006, 163290008, 163290009, 163290010, 163300007, 163300008, 163300009, 163300010, 163300021, and 163300022

Current Zoning and Master Plan Designation: A-1, A-1-5, W-1 and No Master Plan Designations

Landowner (name(s), address(es) and (optional) email address(es)): Wildlife Conservation Board 1416 Ninth Street, Sacramento CA 95814 & Riverside County Regional Park & Open-Space District, 4600 Crestmore Road, Jurupa Valley, CA 92509

Proposed starting date: December 2020 Estimated completion date: December 2021

Legislative District: Senate: Richard Roth Assembly: Sabrina Cervantes

Project Elements (Check the program(s) that applies to your project):

- Enhancement or Restoration of Inland Wetlands (Central Valley only)

- Enhancement or Restoration of Riparian Habitat (Statewide)
- Habitat Enhancement and Restoration Program (General)
 - Wetlands outside the Central Valley
 - Endangered Species Habitat (Statewide)
 - Forest Land Habitat (Statewide)
 - Ecosystem Restoration on Agricultural Land (ERAL) (Statewide)

I. Project Location

Project Location

Riverside County Regional Park & Open-Space District (Parks District) is partnering with HANA Resources Inc. (HANA), San Bernardino Valley Municipal Water District (Valley District), and Santa Ana Watershed Association (SAWA) to seek funding from the Wildlife Conservation Board (WCB) to restore approximately 1,105.20 acres along the Santa Ana River in the Hidden Valley Wildlife Area (HVWA) in Riverside, California. The HVWA is an approximately 1,105-acre site located along the Santa Ana River (Attachment A). The street address is 11401 Arlington Avenue, Riverside, California. HVWA is owned by the State of California and the Parks District and managed by the Parks District. HVWA is located west of Van Buren Boulevard and south of Limonite Avenue, on the opposite side of the Santa Ana River. The Santa Ana River is located along the northern border of HVWA and flows in an east to west direction. The Santa Ana River trail runs through the HVWA south of the river.

The primary land uses to the north and south of the restoration site are single-family residences, golf courses, and open space (Attachment A). The open space parcels to the north owned by the Parks District and the City of Jurupa Valley. The Parks District and City of Riverside own open space parcels to the south of HVWA and the City of Norco owns open space to the west. There are two golf courses bordering HVWA (Goose Creek Golf Club and Paradise Knolls Golf Course) and the remaining parcels surrounding HVWA are privately owned residences or agricultural land. The adjacent agricultural lands are privately owned and either active or fallow pastureland.

Site Physical and Topographic Attributes

The HVWA lies within the Santa Ana River watershed, which encompasses 2,418 square miles in San Bernardino, Riverside, and Orange Counties (Clark 2007). The Santa Ana River is one of the largest rivers in Southern California with an annual discharge that averages 322,000 acre-feet of mostly subsurface water, although due to prolonged drought conditions and diversions for human-uses (drinking water, industrial, and agricultural) the average has been much less over the past century. The river's surface flow is augmented with treated wastewater, surface runoff from agriculture and storms, and imported water to meet the local population's water needs. Some of the surface flow percolates into aquifers that supplies wells and springs. Stream flow is extremely variable and experiences periodic major flash flood events.

The HVWA is located on the Santa Ana River on the inside of a meander bend on the south side of the river. HVWA is within the U.S. Geological Survey (USGS) *Corona North* and *Riverside West*, California 7.5-minute topographic quadrangles and has an elevation range of 620 to 820 feet above mean sea level (MSL) (Attachment A). The annual mean precipitation is 12 inches and mean temperature is 63 degrees Fahrenheit, with between 240 and 320 frost-free days (NRCS). HVWA supports a diverse array of finely textured organic soils typical of alluvial fans, comprised of Dello loamy sand (47%), Grangeville loamy fine sand (10%), and Grangeville fine loamy sand (10%) (Attachment A). The remaining soil types are diverse and comprise between 0.1% and 10% of the soil types at HVWA, ranging from coarse sand to

loam of the following types: Arlington, Buchenau, Cajalco, Delhi, Dello, Fallbrook, Gorgonio, Grangeville, Greenfield, Hanford, Madera, Monserate, Ramona, and Terrace escarpments.

The presence of year-round surface flows at HVWA in the river supports a series of native riparian and floodplain as well as upland vegetation communities. Disturbances due to flooding and fires have created a patchwork mosaic assemblage where open sites are initially colonized by early successional species followed by mulefat (*Baccharis salicifolia*) and sandbar willow (*Salix exigua*) thickets, and eventually replaced by Fremont cottonwood (*Populus fremontii*) forest and woodland. The upland is characterized by Riversidean Alluvial Fan sage scrub, coastal sage scrub, and nonnative California annual grassland. The site has an extensive history of ongoing invasive plant management (detailed below), mainly for giant reed (*Arundo donax*) and salt cedar (*Tamarix ramosissima*). Other invasives include blue gum eucalyptus (*Eucalyptus globulus*), castor bean (*Ricinus communis*), perennial pepperweed (*Lepidium latifolium*), Mexican fan palm (*Washingtonia robusta*), Russian thistle (*Salsola tragus*), short-podded mustard (*Hirschfeldia incana*), summer cypress (*Kochia scoparia*), and tree tobacco (*Nicotiana glauca*).

Historical Land Use and Management

The HVWA has been maintained and operated by the Parks District since 1974. The land belongs to the California Department of Fish and Wildlife (CDFW) and is operated by the County under a 50-year cooperative management agreement with the State of California. Prior to becoming the HVWA, the site was known as the Hidden Valley Gun Club. The Gun Club was founded in 1957 and remained active until 1974, when the property was purchased by the State and converted to a wildlife-oriented public use area. The Gun Club promoted pheasant and duck hunting in the area and is responsible for the development of much of the ponds and wetlands environment that exists today at HVWA. Until the lease expired in 1993, there was a Wildlife Training Center which housed exotic and native animals used for television and motion picture filming. The Center also served as a way station for sick and injured animals. The Center, which was originally built as the Gun Clubhouse, and then converted to the Wildlife Training Center has since been renovated and is now being used as the HVWA Nature Center.

The HVWA has long history of invasive giant reed management that began in 1995. Team Arundo contractors conducted giant reed control activities for 17 years (1995 to 2012). SAWA's Prop 50 Arundo Removal Project (PAR) removed approximately 785 acres of invasive plant species within 995 acres of the HVWA between 2008 and 2014 (Attachment B). The PAR project targeted giant reed, saltcedar, blue gum eucalyptus, castor bean, Mexican fan palm, and perennial pepperweed. The PAR project began in April 2008 and was expanded from its original scope of simply removing and retreating 600 acres of invasives because of cost-effective management by SAWA. In 2014 SAWA actively restored 40-acres of riparian habitat in areas previously dominated by giant reed. Since 2014 the Parks District and SAWA have continue managing giant reed at HVWA.

Current Land Use and Management

Today, the HVWA serves a vital role within the urbanized landscape of the Inland Empire, providing open-space for the local community and offers numerous recreational activities along an 8-mile stretch of the Santa Ana River Trail. HVWA's 25-mile trail system offers scenic views and opportunities for hiking, biking, running, equestrian, fishing, hunting, and viewing migratory birds, native flora and fauna, and aquatic wildlife. The onsite Hidden Valley Nature Center is an interpretive center that offers educational opportunities through live native wildlife exhibits and habitat displays, K-12 school programs, nature camps, and scout programs.

In March 2020, the Mann Fire burned 153.92-acres on the western edge HVWA and adjacent land. SAWA hired HANA to conduct a UAV flight of the Mann Fire burn scar to create orthomosaic images and

run a giant reed species recognition assessment analysis to estimate the cover of giant reed that resprouted following the fire (Attachment C). SAWA is currently treating the giant reed with herbicide and will be completed by the end of 2020. Attachment C contains the project report and maps, including a species recognition map of the giant reed regrowth since the fire occurred.

II. Project Description

Project Description

The project objectives are to restore and enhance floodplain and upland habitats (riparian, Riversidean Alluvial Fan sage scrub, and coastal sage scrub); remove and control invasive non-native plants like giant reed; provide high quality habitat for special-status plants and wildlife; and improve water quality. Previous management efforts have removed invasive non-native plants, including salt cedar and giant reed, and provided isolated restoration plantings of native riparian vegetation, but limited management has occurred to enhance understory habitat. The herbaceous vegetation layer throughout this area is currently dominated by non-native annual species. Project goals include 1) restore or enhance native plant structure, abundance and species diversity; 2) provide increased resistance to invasion by non-native plants; 3) increase habitat values and quality for wildlife with increased canopy layering and complexity; 4) provide a landscape-level lift, increasing connectivity between and within habitat types; and 5) increase continuity with other conserved lands. The project will be completed in two phases. We are currently seeking Phase 1 funding for project planning, compliance, and permitting tasks including preparing a comprehensive Plan of Action, outreach (regulatory agencies, stakeholders, equestrian community, and the public), and mapping. The timeline for Phase 1 tasks can be found in Attachment D. The California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) compliance tasks include the preparation of an Initial Study, technical studies (biological resources, cultural resources, noise, and air quality/greenhouse gas emissions), and the appropriate compliance documents (to be determined by the Initial Study) such as an Environmental Impact Report or Mitigated Negative Declaration. The permitting tasks include preparing all relevant permit applications; regulatory agency outreach, meetings, and coordination; and securing regulatory permits for the project including (but not limited to) Clean Water Act Section 401 and 404, Section 1602 Streambed Alteration Agreement, and a Section 7 Consultation. We will seek Phase 2 funding in a separate grant application. The Phase 2 scope of work for habitat restoration implementation will include invasive plant management, plant installation, maintenance (irrigation and weed control), species surveys, and performance monitoring.

The HVWA managed by the Parks District and owned by the State of California (CDFW) and the Parks District. The Parks and Valley Districts have past, current, and future mitigation and restoration projects occurring within the project area, as well as in the immediate vicinity and within the Santa Ana River Watershed. HVWA is bordered by open-space parcels owned by the Cities of Riverside, Norco, Jurupa Valley, and private landowners. The HVWA project will leverage, build on, and compliment other regional conservation efforts (including the Western Riverside County Regional Conservation Authority, U.S. Army Corps of Engineers mitigation lands, OCWD mitigation projects, and the Upper Santa Ana River Habitat Conservation Plan) to help the region meet federal, state, and local goals and objectives for our fish and wildlife. HVWA is a high priority for restoration because of its large size, history of invasive giant reed management, and value for wildlife and recreation. The project will benefit and improve habitat for the special-status species that inhabit the project area, including burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), Santa Ana River woollystar (*Eriastrum densifolium* subsp. *sanctorum*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). There are numerous other special-status species that have been confirmed

within HVWA or have the potential to occur there according to data from the Parks District and the CDFW’s California Natural Diversity Database (see Table 1). HVWA serves a vital role within this urbanized landscape, providing the numerous recreation activities for the community including wildlife viewing, hunting, fishing, equestrian, hiking, biking, running, nature camps, and school and scout programs.

Management Areas

We have started the process of identifying different management areas within the HVWA that will have habitat restoration or enhancement activities (Table 1). This map is currently in a rough draft and will be refined during the planning process and therefore does not attempt to depict an accurate representation of the actual acreage we will be restoration or enhancing (Attachment A). The management areas are shown in Table 1, *HVWA Management Areas*.

Table 1. HVWA Management Areas

Name	Estimated Size (acres or linear feet)
Mann Fire Area (West End)	133.56
Area West of Lower Farm Field	109.99
Channel Bisecting Lower Farm Field	5.75
Lower Farm Field	65.27
Area East of Lower Farm Field	165.42
East End	102.64
River Channel	24,490 linear feet

IIA. WORKPLAN

Table 2. Workplan

Task #	Task	Description
1.0	Project Management	
1.1	Project Management	The Project Manager will regularly keep WCB and its Cooperative Partners informed and updated on the timeline and deliverables and the progress of the project in light of the schedule provided. We will track the progress of the project, paying attention to technical accuracy, quality, and budgetary concerns. We will proactively interface with WCB and manage each of the tasks described below so that work can be completed according to the SOW, budget, and schedule. Activities associated with this task may include, attending meetings, project controls support, project oversight, coordination of workload, and managing schedule and resources to meet project deliverables on time and within budget.
1.2	Kickoff Meeting and Planning Charrette	A kickoff meeting will be conducted by the Cooperative Partners and relevant stakeholders to walk HVWA and participate in a planning charrette. The purpose of the charrette will be to identify goals and objectives, measures, and metrics for monitoring for the project that will be synthesized into the Plan of Action (POA) which includes a Habitat Restoration Plan. These goals and objectives, and measures will be informed by, and consistent with, long-term plans for HVWA and other planning efforts including, but not limited to, the Western Riverside County

		Multi-Species Habitat Conservation Plan and the Upper Santa Ana River Habitat Conservation Plan.
2.0	GIS/Aerial Imagery	
2.1	Geographic Information Systems	We will utilize ESRI's Suite of software products to provide mapping and GIS support on this project which includes creating, collecting, managing and analyzing spatial and tabular data. Our team is equipped with high-accuracy field data collection hardware and software compatible with a range of data types. Every effort will be made to coordinate field data collection efforts with other data collection efforts occurring the region to ensure compatibility of data to inform decision making over a broader geographic scale.
2.2	Aerial Imagery	We will conduct unmanned aerial vehicle (UAV) studies to measure the current growth of plant species and assess Plant Health for HVWA. The purpose of these assessment is to evaluate the site conditions utilizing HANA's patented modeling program and will be conducted annually to compare plant health over time. A UAV drone platform will be used to transport both a multispectral camera and an ultra-high resolution 4K digital camera to map the project area. The system processes the images to create an orthomosaic image of the land, where each pixel in the orthomosaic image is associated with the NDVI value. The system then uses plant species to NDVI value mappings and the orthomosaic image to identify current plant growth. Vegetation health at each layer (herb, shrub, and tree) will be calculated. A second analysis will be conducted that utilizes deep learning models and computer vision to conduct Plant Species Recognition, which will allow us to map and determine the location and density of giant reed within HVWA.
3.0	Plan of Action	
3.1	Plan of Action	The Cooperative Partners will author a Plan of Action (POA) based on the goals and objectives, measures, and monitoring metrics identified in the Kickoff Meeting and associated charrette planning. Project goals and objectives will be reviewed on an, at minimum, an annual basis and can be amended or updated as needed based on monitoring results and analysis in coordination with stakeholders. The POA will include relevant specific plans for measures that will be designed and implemented to meet the goals and objectives, including a Habitat Restoration Plan. Where relevant, decision trees will be developed to guide decision making for which measures would be implement based on monitoring results and data analysis from year to year. For example, a non-native removal and native revegetation plan will be developed. In Phase 1, we will complete 65% of the HMP and restoration design and the remaining 35% will be completed at the beginning of Phase 2. The restoration plan will identify the native plant species palettes, planting design success criteria including species diversity targets, container planting survival rates, total cover percentages to be reached annually. It would also identify thresholds for certain management activities to be implemented to better meet success criteria and, in turn, project goals and objectives Survey methodologies for all species-specific surveys would also be included. Data standards and reporting requirements will also be identified.
4.0	Outreach	
4.1	Regulatory	We will conduct outreach to the following entities as part of NEPA and CEQA compliance: California Department of Fish and Wildlife (CDFW), California Office of

	Agency Outreach	Historic Preservation (OHP), California Regional Water Quality Control Boards (RWQCB), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and Western Riverside County Regional Conservation Authority (RCA) and Multiple Species Habitat Conservation Plan (WRMSHCP).
4.2	Public Outreach	We will seek public review as part of the NEPA and CEQA compliance tasks. Public outreach activities will also occur before, during, and after Phase 2 implementation of the measures described in the POA. HVWA has a robust history of recreation this project will seek public input on how to maintain a balance between recreational uses and habitat restoration. Public workshops and other forms of outreach will seek to inform the public and other relevant stakeholders on the timing, location, and general goals of proposed work at HVWA.
4.3	Website	The project will include the development of a website to share live project updates and data with regulatory agencies and stakeholders. This website will include an interactive “dashboard” to share information about project tasks and progress towards meeting goals and objectives. The website will serve as a repository for project related data such as mapping progress of management measures across HVWA, species survey results, reporting, and other relevant information. The design of the website will build on the framework of a similar website currently in development by Valley District.
5.0	CEQA/NEPA Compliance	
5.1	CEQA/NEPA Compliance Tasks	The project follow will comply with both The National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). The project area is owned by the State of California, will be funded by a state program (Wildlife Conservation Board), and restoration work that occurs within the jurisdictional streambed (riparian vegetation) will fall under the jurisdiction of CEQA. Any restoration work that will occur within Waters of the United States (jurisdictional waters) will fall under NEPA. The following NEPA and CEQA Compliance tasks outlined below are proposed and subject to changed based on what is required for compliance.
5.1.1	Preparation of an Initial Study	We will prepare an Initial Study (IS) to identify and document any aspects of the project, either individually or cumulatively, which may cause a significant effect on the environment. Aspects of the project identified to result in no impact or less than a significant impact on the environment can be excluded from the Environmental Impact Report (EIR).
5.1.2	Notice of Preparation	We will prepare a Notice of Preparation (NOP) to be filed with the State Clearinghouse, and mailed to adjacent jurisdictions, responsible agencies, stakeholders, and members of the public who have requested notice.
5.1.3	Preparation and Review of Technical Studies	As part of the EIR work program, we will analyze potential for impacts to biological resources, cultural resources, noise, air quality, and greenhouse gas emissions. The environmental analyses will estimate the impacts on each resource category before and after the implementation of potential mitigation measures. We will conduct an internal review of technical studies.
5.1.4	Draft EIR and Notice of Completion	We will provide an Administrative Draft EIR for review and meet with regulatory agency staff, as necessary, to discuss comments. The Draft EIR will incorporate all appropriate revisions and a pre-press iteration will be submitted to the agencies for final approval. Upon approval, the Draft EIR will be submitted to the State

		Clearinghouse with a Notice of Completion. We will also prepare a Notice of Availability of a Draft EIR for posting with the State Clearinghouse, and adjacent jurisdictions, responsible agencies, stakeholders, and members of the public who have requested notice.
5.1.5	Preparation of the Response to Comments Document	Following completion of the public review period on the Draft EIR, we will prepare responses to all comments received. An administrative version of the Response to Comments Document will be submitted for review. As with the Administrative Draft EIR, we may attend a meeting with staff to discuss substantive written comments on the administrative Response to Comments. We will make all appropriate revisions and submit a pre-press iteration of the Response to Comments Document for final approval. Upon approval, we will incorporate the Response to Comments Document into the Final EIR.
5.1.6	Mitigation Monitoring and Reporting Program	A Mitigation Monitoring and Reporting Program (MMRP), as described in Section 15097 of the CEQA Guidelines, will be completed prior to certification of the Final EIR. The MMRP will identify all required mitigation measures, the party responsible for implementing the mitigation, and the timing and method of monitoring compliance. Methods of providing a public record of compliance will also be addressed. We will submit an administrative version of the MMRP for review and comment. We will make all appropriate revisions and submit a pre-press iteration of the MMRP for final approval. Upon approval, we will incorporate the MMRP into the Final EIR.
5.1.7	Final Environmental Impact Report	If changes to the text of the EIR arise during the public review of the Draft EIR, we will prepare a Revisions to the Draft EIR Document. This document will identify revisions in a strike- out/underline format. An Administrative Revisions to the Draft EIR Document will be submitted for review and comment. We will address all comments and submit a pre-press iteration of the Revisions to the Draft EIR Document for final approval. Upon approval of all documents, we will submit a Final EIR to be presented at certification hearings. The Final Project EIR will consist of the Revisions to the Draft EIR, Responses to Comments, and MMRP.
5.1.8	Preparation of Findings and Statement of Overriding Considerations	We will draft EIR Findings and, if necessary, a Statement of Overriding Considerations (SOC) to be presented at public hearings on the project. We will submit an administrative draft version of the Findings and SOC for review and comment. All appropriate changes will be made, and after approval, we will submit the final version of the Findings and SOC.
5.1.9	Attendance at Public Hearings	We will be available to attend an estimated four (4) public hearings on the project and be responsible for documenting any comments from the public hearings requiring response.
6.0	Technical Studies	
6.1	Technical Studies	As part of the EIR work program, we will conduct any biological resources, cultural resources, noise, air quality, greenhouse gas, and any other technical studies as required for NEPA and CEQA compliance.
6.1.1	Biological Resources	Biological resources studies will include wildlife, fish, and their habitats within an ecosystem whether it is located within a natural or urban setting. Wetlands and other aquatic resources have been identified by both the federal government and the state of California as important resources. The protection of these areas is

		critical for maintaining the physical, chemical, and biological integrity of waters of the U.S. and waters of the state.
6.1.2	Cultural Resources	Cultural resources studies will include prehistoric and historic-period archaeological sites, districts, landscapes, or any other physical manifestation of human activity. The analysis will be separated into the following categories: archaeological resources, built environment resources, and Native American resources.
6.1.3	Noise	Noise studies will address any potential noise and vibration impacts of the proposed project.
6.1.4	Air quality	Air quality studies will examine the degree to which construction and maintenance of the proposed project may result in changes to regional and local air quality.
6.1.5	Greenhouse Gases	Greenhouse gases (GHG) emissions refer to airborne pollutants that affect global climate conditions. These gaseous pollutants have the effect of trapping heat in the atmosphere and consequently altering weather patterns and climactic conditions over long timescales. Unlike other resource areas that are concerned primarily with localized project impacts (e.g., within 1,000 feet of the project sites), the global nature of climate change requires a broader analytic approach. Accordingly, although the GHG analysis focuses on emissions generated at HVWA, the climate change study area includes the global context.

IIB. MANAGEMENT PLAN.

The Parks District has a current contract with CDFW that expires in 2023. They are in the process of negotiating a new long-term contract that will span the 25-year maintenance period. As part of that contract, they will create a long-term maintenance plan which outlines maintenance activities and funding for HVWA and will include the habitat restoration project proposed for funding to WCB. The Parks District HVWA Maintenance and Management Plans from 1977 and 1995 can be found in Attachment A.

III. Probability of Success

1. Does the site contain the appropriate hydrology, soils, geography, etc. to support the proposed project? Explain.

Yes, the hydrology, soils, and geography at HVWA have previously supported riparian and floodplain (mulefat thickets, sandbar willow thickets, Fremont cottonwood forest and woodland) and upland (Riversidean Alluvial Fan sage scrub, and coastal sage scrub) plant communities. We are considering some recontouring of some upland areas that are too high in elevation for plants to access the water table, reducing the need for irrigation to establish riparian vegetation and increase the likelihood of restoration success of restoration.

2. Was the area historically occupied by habitat comparable to that proposed? Discuss.

Yes, HVWA previously supported riparian/floodplain (mulefat thickets, sandbar willow thickets, Fremont cottonwood forest and woodland) and upland habitats (Riversidean Alluvial Fan sage scrub, and coastal sage scrub).

3. Does the project utilize methods and technologies that are understood and well proven? If not, is there an adaptive management component to the project? Explain.

Yes, we will utilize an adaptive management approach. The project goals and objectives outlined in the POA will be reviewed on an annual basis or more frequently if necessary. The project goals will be amended or updated as needed based on monitoring results and analysis in coordination with stakeholders. The POA will have decision trees to guide decision making for which measures would be implement based on monitoring results and data analysis from year to year.

Our project intends to ensure the success of habitat restoration by designing and implementing restoration plantings that will help specifically prevent the re-establishment of giant reed in previously infested areas. We intend to accomplish that by using planting whip cuttings of mulefat in high densities plantings (9 cuttings/m²). Previous studies at HVWA by Dr. Kai Palenscar have shown that this cultural control technique was effective in inhibiting giant reed from re-establishing (Palenscar 2010 & 2012). This approach will be used in areas that need to suppress giant reed regrowth. In areas where giant reed has been successfully eradicated or were not previously invaded, we will restore or enhance other plant community types.

4. What are the expected maintenance methods and annual costs? Is there a viable public or private organization willing and able to perform the needed long-term management and maintenance?

The Parks District will continue the management of the HVWA and has committed to long-term management of the site to maintain the restoration project we have proposed. We will draft a long-term maintenance plan that includes an annual cost estimate.

5. Please explain any biological monitoring planned to assess the effectiveness of the proposed project.

The Phase 2 POA will detail a monitoring plan for the restoration project. Our draft scope of work for Phase 2 gives a brief description of the proposed monitoring activities. Vegetation monitoring activities will include California Rapid Assessment Method (CRAM) surveys, focused surveys for special-status plant species, UAV-based vegetation mapping and analysis (orthomosaic images, Species Recognition and Plant Health Assessment analyses), and photo-monitoring. Wildlife monitoring activities will include avian nesting bird surveys, focused surveys and species monitoring for special-status species, invasive cowbird monitoring, herpetofauna arrays, and fish surveys. The technical studies in Phase 1 will identify any additional surveys that will be required or recommended.

6. If a water supply is necessary to the success of the project what is the short and long-term source and availability of water for the project, and what are the short and long-term water costs?

The site has water tanks that were installed and maintained by SAWA that will be used for this project during Phase 2. The Phase 2 POA will estimate project costs for water and irrigation infrastructure. The long-term maintenance plan will estimate long-term water costs.

7. For riparian projects, describe the stream's flow regime. Does the site flood on a regular basis? Is there connectivity to the floodplain?

The HVWA lies within the Santa Ana River watershed, which encompasses 2,418 square miles in San Bernardino, Riverside, and Orange Counties (Clark 2007). The Santa Ana River is one of the largest rivers in Southern California with an annual discharge that averages 322,000 acre-feet of mostly subsurface water, although due to prolonged drought conditions and diversions for human-uses (drinking water, industrial, and agricultural) the average has been much less over the past century. The river's surface flow is augmented with treated wastewater, surface runoff from agriculture and storms, and imported water to meet local water needs. Some of the surface flow percolates into aquifers that supplies wells and springs. Stream flow is extremely variable and experiences periodic major flash flood events. The Upper Santa Ana River is not bound by levees and is still connected to the floodplain, and clear evidence of meander and channel braiding can be seen from aerial photographs.

8. Have the stressor(s) (e.g., intensive grazing, hydrology modifications, etc.) that caused the problem been eliminated or modified to reduce future impacts? Explain.

At HVWA, there is an extensive history of giant reed management since 1997 and they have made significant strides in reducing the extent of giant reed within the project area. The giant reed that remains at HVWA is mostly resprouting from areas that have been treated in the past and these areas do need additional treatment or are currently being treated. During flood events, some giant reed rhizomes are washed down from upstream infestations, but flood events are infrequent and there is management treating the giant reed upstream (discussed below). Disturbance events at HVWA such as floods and wildfire can result in new infestations (flood) or resprouting of treated areas (fire) which will require treatment to suppress them from further spread. The area that burned in the Mann Fire in March 2020 has stimulated regrowth of giant reed that was previously well-controlled, but this area is currently being undergoing treatment (see Question #8 for more information). Even with restoration, some maintenance of the site will be needed to suppress regrowth and maintain control and spread of the giant reed. The active restoration and maintenance proposed for this project will address treating giant reed at HVWA and increasing resilience from future invasions by planting dense stands of riparian vegetation.

HANA is currently mapping the site and will have updated giant reed maps completed by January 2021 that show the current extent at HVWA. These maps will demonstrate the effectiveness of management efforts at HVWA and the areas both upstream and downstream. These updated maps will demonstrate that the coordinated efforts in the watershed have been successful in greatly reduced the giant reed in the watershed and at HVWA.

9. Will the California Conservation Corps be involved in this project?

The Parks District does work with the California Conservation Corps (CCC) on an as-needed basis for their projects. We will address the need for CCC on this project during the development of the Plan of Action.

IV. Project Significance

1. Is the project on or near a State Wildlife Area, Ecological Reserve, National Wildlife Refuge, Private Wildlife Sanctuary, County Reserve, or any other protected habitat area? Name them and indicate how far they are from the project site.

The project area is bordered by open-space parcels owned by the State of California; Cities of Riverside,

Norco, and Jurupa Valley; and mitigation projects for the U.S. Army Corps of Engineers (USACE), Orange County Water District (OCWD), Parks District, and Valley District.

2. Where is the project located in relation to existing habitat types of high quality that are similar to the habitats to be restored or enhanced with this project? Are there critical or sensitive habitats (e.g., vernal pools, T&E habitats, etc.) nearby? Please include a map showing the locations in relation to the project site.

The Parks District and Valley District have past, current, and future mitigation and restoration projects occurring within the project area, as well as its immediate vicinity and in the Santa Ana River Watershed. The project area is bordered by open-space parcels owned by the Cities of Riverside, Norco, Jurupa Valley, and private landowners. The project will leverage, build on, and compliment other regional conservation efforts to help the region meet federal, state, and local goals and objectives for our fish and wildlife. The project area is a high priority for restoration because it will benefit and improve habitat for the special-status species that inhabit the project area, including burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), Santa Ana River woollystar (*Eriastrum densifolium* subsp. *sanctorum*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). There are numerous other special-status species that have been confirmed within the project area or have the potential to occur there according to data from the Parks District and the California Natural Diversity Database (see Attachment A).

3. Will the project provide or help establish a habitat corridor, connecting two larger protected areas or areas of high quality?

This project will increase connectivity between and within habitat types at HVWA and increase continuity with the adjacent conserved lands. The project area is bordered by open-space parcels owned by the Cities of Riverside, Norco, Jurupa Valley, and private landowners. The project will leverage, build on, and compliment other regional conservation efforts (including the Western Riverside County Regional Conservation Authority, U.S. Army Corps of Engineers mitigation lands, OCWD mitigation projects, and the Upper Santa Ana River Habitat Conservation Plan) to help the region meet federal, state, and local goals and objectives for our fish and wildlife. In addition, the HVWA serves a vital role within this urbanized landscape, providing the numerous recreation activities for the community including wildlife viewing, hunting, fishing, equestrian, hiking, biking, running, nature camps, and school and scout programs.

4. Describe adjacent land uses, including agricultural lands by type. Describe how the adjacent land uses could affect or be affected by the project, either conflicting or complementary.

Adjacent Land Use

The primary land uses to the north and south of the restoration site are single-family residences, golf courses, and open space (Attachment A). The open space parcels to the north owned by the Parks District and the City of Jurupa Valley. The Parks District and City of Riverside own open space parcels to the south of HVWA and the City of Norco owns open space to the west. There are two golf courses bordering HVWA (Goose Creek Golf Club and Paradise Knolls Golf Course) and the remaining parcels surrounding HVWA are privately owned residences or agricultural land. The adjacent agricultural lands are privately owned and either active or fallow pastureland.

Regional Conservation Efforts

The project will leverage, build on, and compliment other regional conservation efforts (including the Western Riverside County Regional Conservation Authority, U.S. Army Corps of Engineers (USACE) mitigation lands, Orange County Water District (OCWD) mitigation projects, and the Upper Santa Ana River Habitat Conservation Plan) to help the region meet federal, state, and local goals and objectives for our fish and wildlife. The project area is a high priority for restoration because of its large size, history of invasive giant reed management, and value for wildlife and recreation.

Regional Giant Reed Management

Hidden Valley

The giant reed within the HVWA project area and Upper Santa Ana River Watershed has been intensively managed over the past 25 years which has significantly reduced the giant reed cover. The Cal-IPC mapping project was completed in 2011 and shows a snapshot of giant reed cover at that time, but much of this giant reed has been actively managed and overall giant reed cover has been greatly reduced since that map was made (Attachment B). There is a concerted long-term effort in the watershed coordinated by multiple agencies and groups to continue to manage giant reed and restore wildlife habitat. Our HVWA project is vital to the success of all these efforts, which was the motivation for the development of the project we are seeking funding for.

Upstream from Hidden Valley

The Parks District and SAWA have been actively managing giant reed infestations in areas upstream HVWA: Louis Robidoux Park, Martha McLean Narrows Park, Rancho Jurupa RP, Mount Rubidoux Park, and along the main stem of the Santa Ana River from the Riverside/San Bernardino County Line to southwest of Mission Blvd. Due to these management efforts, the giant reed in these areas has been reduced significantly compared to the 2011 Cal-IPC map (Table 3, Attachment B). These Parks District giant reed management projects have been ongoing for the past 7 years as 404 mitigation. They have done extensive giant reed management and have attained the required performance criteria for giant reed of 10% or less of the total vegetation composition on these sites. The Parks District has met the success criteria consistently since 2017 and remains in compliance. The Parks District has a 20-year obligation to maintain success criteria once the credits from the mitigation bank have been sold.

SAWA also does annual treatments upstream of HVWA on the main stem of the Santa Ana River from the Riverside/San Bernardino County Line to southwest of Mission Blvd. for the Riverside County Flood Control District. The Flood Control District maintains "mowed areas" to maintain conveyance for flood events. They continually maintain the flood channel by mowing different areas each year. SAWA has been conducting giant reed management in the mowed areas since 2015 and the continues the annual maintenance of these sites.

Downstream from Hidden Valley

Significant giant reed management and habitat restoration has occurred and is ongoing downstream from HVWA to Prado Dam. The giant reed management efforts downstream from HVWA are not likely to impact the success of management and restoration at HVWA but successful management and restoration work at HVWA will contribute to the long-term success of these downstream projects and it is important to recognize the significant amount of work being done downstream. Table 3 lists these projects and Attachment B shows where they occur geographically.

Table 3. Giant Reed Removal and Habitat Restoration Projects Near HVWA

Upstream from Hidden Valley	
Riverside County Parks District (Parks District)	<ul style="list-style-type: none"> • 404 mitigation Arundo removal projects
Santa Ana Watershed Association (SAWA)	<ul style="list-style-type: none"> • Riverside County Flood Control District flood conveyance projects
Downstream from Hidden Valley	
U.S. Army Corps of Engineers (USACE)	<ul style="list-style-type: none"> • USACE SARM Target Areas • Alcoa Dike Project
Orange County Water District (OCWD)	<ul style="list-style-type: none"> • Prado Mitigation Area • SAWA Land Agreement
Santa Ana Watershed Association (SAWA)	<ul style="list-style-type: none"> • Norco Burn Project • PAR Project (Hidden Valley) • Prado Arundo Removal Project • Water Conservation Mitigation Removal Project
City of Norco	<ul style="list-style-type: none"> • Norco Arundo Removal Project
City of Corona	<ul style="list-style-type: none"> • City of Corona Mitigation Areas
Private Property (Altfillisch property)	<ul style="list-style-type: none"> • Arundo Removal Project

5. What species of fish or wildlife will benefit from the project, including any threatened or endangered species?

The project will benefit and improve habitat for the special-status species that inhabit the project area, including burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), Santa Ana River woollystar (*Eriastrum densifolium* subsp. *sanctorum*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). There are numerous other special-status species that have been confirmed within the project area or have the potential to occur there according to data from the Parks District and the California Natural Diversity Database, see Attachment A.

6. Is the project or project site part of, or consistent with, any conservation related plans, strategies, studies or programs? If so, identify the plan and explain.

This project's goals and objectives, and measures are consistent with, long-term plans for HVWA and other planning efforts including, but not limited to, the Western Riverside County Multi-Species Habitat Conservation Plan and the Upper Santa Ana River Habitat Conservation Plan.

7. How might the possible effects of global climate change (e.g., sea level rise, changes in precipitation and/or temperature, water availability, etc.) affect the long-term success of this project?"

The Western Riverside Council of Governments' *Subregional Climate Action Plan: Adaptation and Resiliency Strategy* identified increased extreme heat, drought, wildfire, and flooding as the most likely and impactful climate change-related hazards in the subregion (WRCOG 2012). The HVWA long-term maintenance plan will outline specific measures to outline and address climate change-related hazards. In general, the hazards outlined in the WRCOG report will present some long-term challenges for HVWA. However, the HVWA project will also provide climate-change resiliency and could help mitigate some of these impacts. The increased cover of native vegetation can help mitigation the effects of the urban heat island, improve air quality, and increase water percolation and storage. Replacing invasive giant reed with native riparian vegetation will also reduce wildfire risk and mitigate the known negative

impacts of giant reed on flooding and erosion.

V. Public Support

1. Is the project supported by, consistent with, or in conflict with any local or regional plans? Identify the plan and explain.

This project's goals and objectives, and measures are consistent with, long-term plans for HVWA and other planning efforts including, but not limited to, the Western Riverside County Multi-Species Habitat Conservation Plan and the Upper Santa Ana River Habitat Conservation Plan that is being developed by the Valley District. We have secured letters of support from CDFW and the Western Riverside County Regional Conservation Authority (Attachment E).

2. If the project site is privately-owned, is the property encumbered with a Williamson Act contract or any other conservation agreements (i.e. conservation, flood or agricultural easements)?

HVWA is owned by the State of California and the Parks District.

3. How does the project involve the local community or local interest groups and what type of commitments (cash, time, in-kind) have or will be made toward the project?

The currently proposed HVWA project is unique in that we have brought together the agencies and organizations (Parks District, Valley District, SAWA, and HANA) that have been involved in these giant reed removal projects with the specific purpose of addressing the issue of securing funding to restore this area and insure the future success of these previous giant reed removal projects. We have compiled an extensive list of stakeholders involved in conservation work on the Santa Ana River in Riverside and San Bernardino Counties for outreach and to solicit input on the planning and implementation of the project (Attachment F).

We have potential Phase 2 funding from the Bonneville Environmental Foundation's (BEF) California Water Action Collaborative (CWAC) that provides private cost sharing for water restoration projects in Southern California.

Additionally, we will work with local community organizations during Phase 2 to conduct outreach to the homeless populations in the East End of HVWA.

4. Please explain any planned public use of the project site, and if none is planned, explain why. Will volunteers be used to implement the project, and if so, how will the applicant assure that plan specifications are followed?

HVWA is open to the public and serves a vital role within this urbanized landscape, providing the numerous recreation activities for the community including wildlife viewing, hunting, fishing, equestrian, hiking, biking, running, and educational programs. The Parks District runs the onsite HVWA Nature Center which is open to the public and has live animal exhibits, native habitat displays, and activities for children. The Nature Center also offers the following educational programs for school-aged children: Knee-High Naturalists, School Field Trips, Summer Camps, and Scout Programs.

5. For Ecosystem Restoration on Agricultural Land (ERAL) projects explain the potential for the project to be applied to other agricultural properties in the area, and statewide.

Explain any outreach efforts to other landowners in the area regarding the project.

N/A.

VI. Project Readiness

1. Is (are) the landowner(s) willing to allow the construction of the project and agreeable to maintaining the project on a long-term basis (typically, 25 years)?

The Parks District has a current contract with CDFW that expires in 2023. They are in the process of negotiating a new long-term contract that will span the 25-year maintenance period. As part of that contract, they will create a long-term maintenance plan which outlines maintenance activities and funding for HVWA and will include the habitat restoration project proposed for funding to WCB. A letter of commitment from the Parks District can be found in Attachment E.

2. Has the applicant completed the environmental documents (including CEQA, which is required prior to WCB approval of funding) and obtained the necessary State, federal and local permits for the projects? If not, give the current status and expected completion date(s).

The project will be completed in two phases, we are currently seeking funding for Phase 1. Phase 1 tasks are project planning, compliance, and permitting including preparing a comprehensive Plan of Action, outreach (regulatory agencies, stakeholders, equestrian community, and the public), and mapping. The California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) compliance tasks include the preparation of an Initial Study, technical studies (biological resources, cultural resources, noise, and air quality/greenhouse gas emissions), and the appropriate compliance documents (to be determined by the Initial Study) such as an Environmental Impact Report or Mitigated Negative Declaration. The permitting tasks include preparing all relevant permit applications; regulatory agency outreach, meetings, and coordination; and securing regulatory permits for the project including (but not limited to) Clean Water Act Section 401 and 404, Section 1602 Streambed Alteration Agreement, and a Section 7 Consultation. We anticipate these tasks will take one year to complete. We will seek Phase 2 funding in a separate grant application. The Phase 2 scope of work for habitat restoration implementation will include permitting, 35% of the restoration design, invasive plant management, plant installation, maintenance (irrigation and weed control), species surveys, and performance monitoring.

3. Are there complications (hazardous materials, mosquito abatement, etc.) associated with the project that could delay the completion of the project? If so, please explain.

Since the homeless encampments on the East End of HVWA are an ongoing issue, we will have Parks District rangers conducting outreach full-time to the homeless populations during Phase 2. We will coordinate with local agencies to notify and safely relocate the homeless population prior to giant reed management work. We will work with local organizations to conduct ongoing outreach to the homeless population.

4. Have you contacted the Department of Fish and Game regarding this project (a DFG letter of support is required – contact the WCB project manager for assistance)?

We have been in contact with Richard Kim from the California Department of Fish and Wildlife (CDFW), Inland Deserts Region (6), Lands South Program and he has agreed to provide a letter of support for this project. A letter of support from CDFW can be found in Attachment E.

VII. Importance of Prompt Implementation

1. Is there a significant risk that the site or resource could be lost to development or other human uses? Explain.

No, the site is owned by the State of California and Parks District and managed as a wildlife and recreation area.

2. Will the project solve a problem that, if allowed to continue, would be significantly more expensive to fix in the future? Explain.

Yes, the project that we are proposing to WCB for funding will build upon the progress made by the SAWA and Parks District in controlling giant reed in HVWA and adjacent conserved lands. Giant reed has been managed since 1995, but very little habitat restoration has followed these removal projects due to lack of funding and coordination by interested parties. The giant reed infestation was extensive in this area and many years of intensive removal projects were necessary before any restoration projects could be attempted with the expectation of being successful. The currently proposed HVWA project is unique in that we have brought together the agencies and organizations that have been involved in these giant reed removal projects with the specific purpose of addressing the issue of securing funding to restore this area and insure the future success of these previous giant reed removal projects. Our project's collaborative partners fully acknowledge that the long-term success of these giant reed removal projects will be limited without being followed by habitat restoration. They are in total consensus that considerable and significant progress has been made and we have reached the point where restoration would be a good investment.

Future Management activities will be detailed in the Phase 2 scope of work and the proposal Plan of Action. We plan to continue managing giant reed in areas where it has resprouted or reinvaded from disturbance events during our project and use restoration to increase resilience from reinvasion of giant reed and other invasive plants. We will ensure the success of habitat restoration by designing and implementing restoration plantings that will help specifically prevent the re-establishment of giant reed in previously infested areas. We intend to accomplish that by using planting whip cuttings of mulefat in high densities plantings (9 cuttings/m²). Previous studies at HVWA have shown that this cultural control technique was effective in inhibiting giant reed from re-establishing (Palenscar 2010 & 2012). This approach will be used in areas that need to suppress giant reed regrowth and in areas where the giant reed has been successfully eradicated or were not invaded, we will restore or enhance other plant community types.

We will also target the other dominant invasive plants with herbicides and grow/kill cycles such as castor bean, perennial pepperweed, Mexican fan palm, Russian thistle, saltcedar, short-podded mustard, summer cypress, and tree tobacco. We will work with SAWA to expand their existing invasive cowbird trapping program. We are currently in the process of identifying and mapping areas to target for active restoration and enhancement of native plant species. We plan to design restoration plantings to maximize resilience against reinvasion of giant reed and other invasive plants.

Significant giant reed management and habitat restoration has occurred and is ongoing both

downstream and upstream from HVWA. Successful giant reed management and restoration work at HVWA will reduce reinvasion of giant reed downstream and the overall long-term success of these downstream projects.

3. Are other funds available and/or secured that may be at risk if the project is delayed?

No, the majority of the matching funds are in-kind contributions from the collaborative partners involved in the project.

VIII. Complete this question only if requesting funds for the enhancement or restoration of wetlands in the Central Valley. See Inland Wetlands Conservation Program.

Which of the six objectives of the Central Valley Habitat Joint Venture is the project designed to address and how will this project contribute to the achievement of that (those) objective(s)?

N/A, our project is not in the Central Valley.

IX. Funding Sources

Table 4, Project Budget

Task #	Task	WCB	Parks District (in-kind)	HANA (in-kind)	Valley District (in-kind)	SAWA (in-kind)	Total In-Kind Match	Total Cost
1	Project Management	\$45,780	\$0	\$0	\$25,200	\$0	\$25,200	\$70,980
2	GIS/Aerial Imagery	\$152,300	\$0	\$4,200	\$0	\$0	\$4,200	\$156,500
3	Plan of Action	\$38,448	\$0	\$0	\$32,396	\$0	\$32,396	\$70,844
4	Outreach	\$54,380	\$0	\$0	\$14,560	\$0	\$14,560	\$68,940
5	CEQA/NEPA Compliance	\$112,100	\$0	\$0	\$14,560	\$0	\$14,560	\$126,660
6	Technical Studies	\$134,150	\$0	\$0	\$7,000	\$304,121	\$311,121	\$445,271
	TOTALS	\$537,158	\$0	\$4,200	\$93,716	\$304,121	\$402,037	\$939,195

An Excel spreadsheet with the HVWA Project Budget can be found in Attachment D.

X. Experience

The Parks District has assembled a team of collaborative partners with key personnel that have extensive experience in their prospective fields, all of whom have the qualifications and experience for the HVWA project. Please refer to Attachment G, for an Organizational Chart of our collaborative partners and Resumes summarizing their educational background, credentials, and experience.

Riverside County Regional Park & Open-Space District (Parks District)

Organization Profile

The Parks District has a total of 46 years of experience managing important and sensitive habitat in Riverside County. In addition to the 14,500-acres of habitat management conducted on county and state-owned lands, the Parks District manages 45,000-acres of land for the Western Riverside County

Regional Conservation Authority Multi-Species Habitat Conservation Plan (WRC-MSHCP) which covers 146 species in an approximate 2,000 square mile service area. For the past 46 years, the Parks District has worked closely and successfully as a partner, and contractor, with the Department of Fish and Wildlife, the Western Riverside County Multi-Species Habitat Conservation Plan, and the Southwestern Riverside County Multi-Species Reserve, protecting, restoring, and enhancing habitat that is conducive and critical to sensitive species in the area.

Beyond reserve and general land management, the Parks District (as the Parks Department for the County of Riverside) has been providing security with the use of Park Rangers since the 1920's and interpretive services for nature and historical sites since 1975. Our team has extensive knowledge and experience to not only manage, but also protect and interpret the natural world for the inspiration, appropriate use, and safe enjoyment of the Reserve. We own and have access to a variety of heavy equipment and all tools needed to fulfill our proposal.

National Accreditation. The Parks District is one (1) of 171 accredited agencies (and one (1) of only four (4) in California) through the National Park and Recreation Associations Commission for Accreditation of Park and Recreation Agencies (CAPRA). Originally accredited in 2013, the Parks District successfully completed the re-accreditation process in 2019 with a 100% passing score. The process helps distinguish agencies demonstrating the highest standards of operation, management, and service to the community. CAPRA Accreditation includes standards on Natural Resource Management, Plans and Procedures, ensuring our agency demonstrates a management system of best practices and overall quality.

Experienced and Committed Land Managers. The Natural Resources Division (NRD) of the Parks District, consisting of 23 professionals, has in-depth knowledge of multi-species habitat management throughout western and southwestern Riverside County. As noted above, this experience extends over 46 years, with a collective total of 50 years of experience between our natural resource specialists, managers and chief.

Our Reserve Managers have over 40 years of cumulative experience as professional biologists, and in reserve management for the WRC-MSHCP, the Center for Natural Lands Management, and the Parks District.

Public Safety Experts. The Parks District employs 19 Park Rangers in the NRD and Park Operation Division (POD). All Rangers possess arrest, search and seizure certifications and have the authority to enforce County Ordinance 328 – Park Rules and Regulations, on all Parks District owned and managed properties, as well as unincorporated lands within the County jurisdiction. In addition, the Parks District has a strong relationship with the Riverside County Sheriff's Department and local/city police departments as we work cooperatively for enforcement and public safety. In addition, we place a high priority on safety, conducting weekly safety meetings and regular trainings.

Proficient in Habitat Management. The Parks District, and specifically the NRD team, understands the critical elements of habitat and species management and have experience in the following:

- Local, state and federal permitting experience and a good reputation with all regulatory agencies.
- Management staff with 40 years of experience with land management, biological monitoring and habitat restoration projects, including management of the Reserve.
- Using an adaptive management approach to by working closely with all Parks District team

members, local, state and federal partners.

- Applying efficient and strong management practices to ensure all work plan objectives are achieved and task orders are delivered upon.

In addition, we are very familiar with the 401, 404, 1600 and National Historic Preservation Act requirements. We utilize additional resources the Parks District offers, in addition to all departments of the County of Riverside as our parent agency, and the WRCRCA (planners, engineers, biologists, permitting/compliance staff, hydrologists, law enforcement officers, risk managers, etc.) to ensure we provide comprehensive and extensive service.

Key Personnel

DUSTIN MCLAIN

Chief – Parks and Resources for Parks District

California State University, San Jose, CA; B.A., Organismal and Conservation in Fisheries Management

Mr. McLain is a wildlife and regulatory biologist whose main species of interest includes the California red-legged frog, coho salmon and steelhead trout of the California coast range. U.S. Forest Service work allowed Mr. McLain to study, survey and monitor avian and amphibian species in the Eldorado National Forest; which included the northern goshawk, California spotted owl, willow flycatcher, red- legged frog and the mountain yellow-legged frog. As a biologist for ECORP Consulting, Inc., Mr. McLain conducted special-status species surveys, wetland delineations, monitoring of wildlife and was heavily involved in the regulatory permitting process which included authoring many 404/401/1600 permit application reports. Currently, as a Chief - Parks and Resources for Riverside County Regional Park and Open-Space District, Mr. McLain is in charge of the Operations of 7 Regional Parks, 6 Interpretive sites, oversees the day to day acquisition and adaptive management activities associated with the Multiple-Species Habitat Conservation Plan (MSHCP) for the Western Riverside County Regional Conservation Authority (RCA) and the Riverside County Parks Open-Space Habitat Program; which encompasses ±50,000 acres and 146 covered species. Daily activities include managing 2 Area Managers, 2 Natural Resources Managers and 6 Supervising Park Rangers making sure safe and enjoyable operations for guests using our regional parks and successful implementation of seasonal species surveys, planning, organizing, and implementing Reserve Management plans for covered species while working closely with the RCA, RCA Monitoring Division, USFWS and CDFW.

HANA Resources Inc. (HANA)

Organization Profile

HANA's experience originated in 1995 as a full-service multidisciplinary environmental consulting firm that serves public and private sector clients throughout California. HANA is certified with various federal, state and local agencies and currently holds the following certifications: Federal Small Business Enterprise (SBE), State Small Business Public Works (SB-PW), Woman-owned Business Enterprise (WBE), and Federal Woman-owned Small Business (WOSB). HANA acquired an environmental consulting firm, The Sanberg Group, Inc. (Sanberg) in August of 2017. At the time of acquisition, Sanberg had completed 22 years of providing environmental consulting services to a broad range of clients including local, state and federal governments, public utilities, and private entities. The acquisition of Sanberg by HANA increased the capacity and breadth of services offered. HANA has a broad range of project experience relevant and applicable to this proposed project. This includes over 24 years of environmental impact analysis and documentation in fulfillment of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), preparation of mitigation plans, performing biological

surveys and monitoring including threatened and endangered (T&E) species, California Rapid Assessment Method (CRAM) assessments, Habitat Mitigation and Monitoring Plans (HMMPs), special-status species surveys, environmental permitting, and management of large and complex environmental construction and restoration projects in a variety of geographic settings. HANA supports these types of projects with a fully capable Geographic Information System (GIS) staff with the necessary skills and technological resources available to process and manage large volumes of data. In order to accomplish the scope of services outlined in the RFP, HANA has assembled an experienced team of environmental professionals with extensive experience in their prospective fields. Provided below in Table 1, Firm Profile is a summary of our company business information.

HANA's affiliate company, Natures Image, Inc., is a full-service, large-scale habitat restoration contractor that holds a C-27 (landscape) license. Natures Image is an award-winning native habitat restoration, mitigation and consulting company with over 25 years' experience successfully completing hundreds of restoration projects involving revegetation, exotic weed abatement, seed imprinting, storm water pollution prevention, erosion control, trapping arrays, straw blowing, irrigation design and installation, pesticide spraying, aquatic planting, plant salvage, hydroseeding, critter fencing, site clearing, site preparation, and maintenance. They have extensive experience restoring and maintaining habitat communities such as riparian, wetlands, vernal pools, scrubs, freshwater and saltwater marshes, desert, chaparral, sycamore grassland, oak woodlands and native grasslands throughout the West Coast.

Key Personnel

SLOANE SEFERYN

Operations Manager/Senior Biologist for HANA Resources

Pennsylvania State University, University Park, PA; B.S., Wildlife & Fisheries Science – Wildlife Option

As Operations Manager of HANA Resources, Ms. Seferyn's primary responsibilities include oversight of daily operations, management of projects, staff mentoring and instruction, scheduling, and business development. She has a deep and comprehensive understanding required from client entities and regularly works tirelessly to meet and exceed client's goal(s). She has over 10 years of experience in environmental consulting and scientific research. Her extensive project management experience includes biological surveys and monitoring, natural resource investigation, habitat restoration and monitoring; CEQA/NEPA environmental impact analyses and document preparation; environmental site investigations; SWPPP preparation and environmental permitting. Ms. Seferyn has successfully managed multi-million dollar environmental and construction projects with long project schedules exceeding five years duration. She has also managed numerous compliance and permitting projects, biological and cultural inventories, construction monitoring, and post-construction projects. She is knowledgeable about native and non-native plants and wildlife species, having worked in upland, riparian, and desert habitats throughout Southern California.

CHRISTIANA CONSER

Project Manager/Restoration Biologist for HANA Resources

University of California, Davis, CA, Ph.D. (in process), Horticulture & Agronomy

San Francisco State University, San Francisco, CA; M.A., Biology

San Francisco State University, San Francisco, CA; B.S., Biology

Ms. Conser will be the Project Manager and Restoration Biologist for this project. She will oversee and coordinate all assigned planning, implementation, and monitoring tasks, including managing staff, work scheduling, QA/QC, invoicing, budgeting, and internal review of submittal packages. She will ensure all staff following the requirements as outlined in Plan of Action. Her expertise as a plant ecologist and

project manager working on land management, habitat restoration and mitigation projects, and special-status species surveys, qualifies her for this role. She has worked both independently and in teams on restoration planning, design, and implementation; vegetation surveys and mapping; botanical inventories; focused species surveys; wildlife surveys; and monitoring for mitigation and restoration projects. She also has extensive expertise in project development and funding, technical and report writing for proposals, restoration and mitigation plans, biological assessments, biological technical reports, surveys and monitoring protocols, and annual reports. She is knowledgeable about native, special-status, and non-native plants and wildlife species and has worked extensively in coastal sage scrub, chaparral, and riparian habitats.

JOHN THOMASON, QSD, CPESC, LEED AP (BD+C, ND), ENV SP

Senior Environmental Planner for HANA Resources

University of Tennessee, Knoxville, Tennessee; M.S., Geography

University of Tennessee, Knoxville, Tennessee; B.A., Geography

Arizona State University, Arizona, B.S.P.; Urban Planning

Mr. John Thomason is an experienced, principal-level environmental project manager for CEQA, NEPA, and SEPA projects throughout California and the West Coast. Major project management includes the Downtown Community Plan Update and Boyle Heights Community Plan Update EIRs for the City of Los Angeles, the Inglewood Transit Connector EIR, the Tulare CAG RTP/SCS EIR, the Kern COG RTP/SCS EIR, the Yorba Linda General Plan EIR, the Bakersfield High Speed Rail Station Area Plan EIR, and the San Juan Capistrano Historic Town Center Master Plan Repeal EIR. Mr. Thomason also has extensive experience as extension of staff for public agencies, including the Riverside County Transportation and Land Management Agency as well as the cities of Artesia, Cudahy, La Puente, Jurupa Valley, Calimesa, Pomona, Malibu, Goleta, Costa Mesa, South Pasadena, Desert Hot Springs, and Ridgecrest. He is also a CPESC/QSD and has worked on multiple stormwater compliance projects, including SWPPP preparation.

TRAVIS MCGILL

Permitting and Regulatory Specialist for HANA Resources

University of California, San Diego, San Diego, CA; B.S. Biology

Mr. McGill specializes in conducting due diligence surveys, habitat assessments, preparing biological technical reports, botanical surveys, protocol listed species surveys, and assisting with environmental permitting and compliance for both public and private sector clients. He assists clients in compliance with a range of environmental regulations, including the California Environmental Quality, National Environmental Policy Act, and State and Federal Endangered Species Acts. He also has experience preparing and processing federal and State Incidental Take Permits through the United States Fish and Wildlife Service (Section 7 and Section 10 of the Federal Endangered Species Act) and California Department of Fish and Game (Section 2080.1, 2081, subds. (b){c) of the Fish and Game Code). Mr. McGill conducts delineations of state and federal jurisdictional waters and helps clients through the regulatory permit process pursuant to Sections 404 and 401 of the Clean Water Act, the California Porter-Cologne Water Quality Control Act, and Section 1602 et. seq. of the California Fish and Game Code. Mr. McGill has effectively drafted and processed numerous state and federal regulatory applications for residential, restoration, commercial, flood control, institutional, and transportation projects. Mr. McGill also performs California Rapid Assessment Method (CRAM) analyses on riverine and depressional areas to identify the functionality of a drainage system. Mr. McGill also prepares and conducts Worker Education Training programs, biological monitoring, and nesting bird and burrowing owl clearance surveys in compliance with the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503, 3503.5, and 3513.

ANDREW J. FOX

UAV Drone Pilot/Executive VP for HANA Resources and Natures Image
California Institute of Technology, Pasadena, CA; Business Communications
Marist College, Poughkeepsie, NY; Communications

Mr. Fox is the developer of the revolutionary environmental products and processes HANA offers to the industry. Mr. Fox has also documented and mapped operations for restoration projects all over California using remote sensing tools including multiple Unmanned Aircraft Platforms such as quad copter drones for HANA. He is also in charge of Flight Operations for HANA, including developing operational procedures, maintaining all UAV equipment, pilot training, and research and development for future applications. Mr. Fox has been the driving force behind HANA aerial imagery technology. He is the author of all UAV patents and an industry leader in bringing this technology to the forefront applying it to commercial use.

GREG KAGANYUK

GIS Manager and UAV Pilot for HANA Resources
University of Washington, Seattle, WA; B.A. Geography

Mr. Kaganyuk is the GIS Manager and will be responsible for preparing maps for this project. He manages the compilation and analysis of spatial and environmental data, determines output products, identifies data needs, establishes timelines for dataset retrieval and creation, and performs analysis tasks. Mr. Kaganyuk is a FAA Certificated Drone Pilot and serves as the Pilot in Command for HANA's drone operations utilizing a variety of commercial drones and software. He has used drone technology for plant health monitoring, mitigation site monitoring, and invasive vegetation mapping, including giant reed. Greg played a large role in the initialization, development, implementation of HANA's patented Plant Health Analysis and Species Recognition Systems. In this role, he oversees the research and development workflows of emerging HANA technologies, and manages HANA's hardware and data needs. He continues to ever experiment, pioneer, and engineer novel tools for the environmental market space.

VARREN ANACLETO

UAV Pilot for HANA Resources
California State University, Long Beach, CA; M.A., Economics (in progress)
California State University, Long Beach, CA; B.A., Business Economics

Mr. Anacleto is the software engineer and lead developer of many of HANA's proprietary software and tools. He leads the team in the initialization, development, and implementation of the Plant Health Analysis and Species Recognition System. As the Software Engineer, he oversees the research and development workflows of emerging HANA technologies and manages HANA's hardware and data needs. He continues to experiment, pioneer, and engineer novel tools for the environmental market space. He leads the data processing effort, providing the highest data quality possible. Mr. Anacleto is a FAA Certificated Drone Pilot and serves as a Pilot for HANA's drone operations utilizing a variety of commercial drones and software. He has used drone technology for plant health monitoring, mitigation site monitoring, and invasive vegetation mapping, including giant reed. Varren played a large role in the initialization, development, implementation of HANA's patented Plant Health Analysis and Species Recognition Systems. In this role, he oversees the research and development workflows of emerging HANA technologies, and manages HANA's hardware and data needs. He continues to ever experiment, pioneer, and engineer novel tools for the environmental market space.

TAYLOR PAEZ

Field Biologist for HANA Resources

Humboldt State University, Humboldt, Fullerton, CA, B.S., Biology

Ms. Paez is be a field biologist and will conduct technical study and monitoring activities for this project. She has worked on projects involving habitat restoration, mitigation, and environmental permit compliance. Ms. Paez has worked independently as well as in teams on projects involving birds, bats, and plants throughout Los Angeles County. As an expert in avian identification, she can identify over 600 North American species by sight and sound. She has conducted breeding and nesting bird surveys, as well as general wildlife and botanical surveys. She has experience in pre-construction clearance surveys, biological monitoring, and invasive species removal. Having worked in upland, riparian, chapparal, coastal and urban habitats throughout Los Angeles County, she is skilled at identifying native and non-native plants and wildlife in the County.

MARTHA CORDOVA

Field Biologist for HANA Resources

University of California, San Diego, CA; M.A., Secondary Education for Biology (in progress)

Humboldt State University, Humboldt, CA; B.S., Biology

Ms. Cordova is be a field biologist and will conduct technical study and monitoring activities for this project. She has project experience in wildlife monitoring, nesting bird, small mammal trapping and bat surveys. Martha graduated from Humboldt State University where she majored Anthropology and is currently pursuing as master's degree in Biology. She is familiar with mitigation and monitoring plans, permit compliance, protection of biological resources, avian surveys, techniques used to sample wildlife populations, accurate data collection, and report preparation. She is knowledgeable about native and non-native plants and wildlife species, having worked in upland, riparian, and desert habitats throughout Southern California.

JAHAN KHALILLI

Field Biologist for HANA Resources

California State University, Fullerton, CA; B.S., Biology

Mr. Khalili is be a field biologist and will conduct technical study and monitoring activities for this project. He has project experience in wildlife monitoring, nesting bird, invasive species control and permit compliance. Mr. Khalili graduated from California State University Fullerton where he majored in Biological Sciences with a focus on the ecology and conservation of vertebrates in southern California. He is familiar with mitigation and monitoring plans, permit compliance, avian surveys, techniques used to sample wildlife populations, accurate data collection, and report preparation. He has worked closely with construction crews to ensure permit compliance and protection of biological resources. He is knowledgeable about native and non-native plants and wildlife species, having worked in upland, riparian, and desert habitats throughout Southern California.

MITCH FARR

Restoration Project Manager for HANA Resources/Natures Image

Saddleback College, Mission Viejo, CA; A.A., Horticulture and Landscape

Mr. Farr is the Restoration Project Manager and will oversee restoration maintenance tasks for this project. He leads and directs restoration projects from assessment and design all the way through implementation, construction and long-term monitoring and management. He assures the quality of Natures Image projects, as well as completion on time and budget. He has designed, developed and monitored various habitats in Southern California including Coastal Wetlands, Salt Marsh, Freshwater Wetlands, Riparian, Vernal Pool, Coastal Sage Scrub, Chaparral, Grassland and Oak Woodland.

San Bernardino Valley Municipal Water District (Valley District)

Organization Profile

The Valley District is a State Water contractor that provides supplemental water to 14 retail water agencies from Fontana to Yucaipa, meeting the water needs of nearly 700,000 business and residential customers. In addition to providing supplemental water from Northern California, Valley District is responsible for long-range water planning throughout its 325 square mile service area, including importing supplemental water, groundwater management, and wastewater and storm water disposal. Valley District has led the charge to enhance groundwater storage throughout the Santa Ana River Watershed. In the last few years, Valley District has maximized groundwater storage, bringing previous long-term lows to record-breaking storage.

Valley District is also leading the development of a fully integrated environmental compliance program, including the Upper Santa Ana River Habitat Conservation Plan (Upper SAR HCP), tributaries restoration, mitigation banking, as well as programmatic permitting to maintain compliance with applicable environmental rules and regulations. The Upper SAR HCP will specify how species and their habitats will be protected and managed in the future and will provide the incidental take permits needed by member agencies under the federal endangered species act to maintain, operate, and improve water resources infrastructure in the future.

Key Personnel

KAI PALENSCAR, PH.D.

Project Manager II, Biological Resources for Valley District
University of California, Riverside, CA; Ph.D. Botany and Plant Sciences
California State University, San Marcos, CA, B.S. Biology

Dr. Palenscar has more than 14 years of professional experience conducting botanical and biological surveys in Southern California. He started his career implementing and monitoring habitat restoration projects. From 2007-12 he conducted research at UC Riverside directed at refining habitat restoration methods within coastal Southern California riparian habitats. Prior to joining Valley District, he worked as a regulatory biologist for the US Fish and Wildlife Service within the Upper Santa Ana River Watershed (2013-19). He is experienced working with Santa Ana sucker, arroyo chub, San Bernardino kangaroo rat, Santa Ana River woolly-star, invasive and native plants and riparian- and alluvial fan-associated wildlife. He has taken courses including stream restoration, rare plant identification, Endangered Species Act compliance, Mitigation Banking, wetland delineation, etc. He has taught courses associated with native and exotic plant identification for the California Invasive Plant Council and general botany and plant taxonomy at UC Riverside. Dr. Palenscar was recently hired by the San Bernardino Valley Municipal Water District as a Project Manager, Biological Resources.

CHRIS JONES

Project Manager, Biological Resources for Valley District
University of California, Santa Barbara, CA; MESM, Environmental Science (Conservation Planning)
University of La Verne, La Verne, CA; B.S. Economics

Chris has nearly 14 years of professional experience conducting biological surveys and managing natural resource projects throughout California and Arizona. Chris spent the first few years of his career primarily participating in surveys for native flora and fauna including least Bell's vireo, burrowing owl, coastal California gnatcatcher, and San Bernardino kangaroo rat. He spent nearly 10 years working as a biologist for the U.S. Army Corps of Engineers, Los Angeles District. While at the Corps he worked on

projects including the Santa Ana River Mainstem Project and Prado Basin Feasibility Study. His work on these projects allowed him to focus on several riparian and aquatic restoration efforts in the Santa Ana River Watershed intended to benefit riparian and aquatic ecosystems and native species found in and around them including the Santa Ana sucker, least Bell's vireo, southwestern willow flycatcher, and coastal California gnatcatcher. Chris was hired by the San Bernardino Valley Municipal Water District in July of 2018 as a Project Manager, Biological Resources.

Santa Ana Watershed Association (SAWA)

Organization Profile

The Santa Ana Watershed Association (SAWA) is a 501(c)(3) non-profit organization committed to the protection and improvement of natural areas within the watershed with major focus on the removal of invasive species, native habitat enhancement and the protection of endangered, threatened and other sensitive species. Since its inception in 1997, SAWA's highly qualified biologists have been conducting endangered species monitoring in the Santa Ana Watershed in support of habitat restoration through invasive plant removal. In addition to general avian nesting surveys, mammal and herpetofauna surveys, habitat and vegetation analysis, SAWA biologists are considered local experts of the endangered Least Bell's Vireo. SAWA is often called upon by resource agencies, NGO's, consultants, and local governments for recommendations regarding the status of Vireo and other sensitive species throughout the watershed. Government regulatory agencies have come to rely on our un-biased results for information about any sensitive species, especially Vireo, in the Santa Ana River Watershed. SAWA biologists are listed on a Federal Fish and Wildlife Service Permit (TE-839480-5.4) and California Department of Fish and Wildlife Memorandum of Understanding for Least Bell's Vireo nest monitoring, California Gnatcatcher presence/absence and nest monitoring, Southwestern Willow Flycatcher presence/absence and nest monitoring California Least Tern colony nest monitoring and Cactus Wren presence/absence surveys.

Key Personnel

JAMES LAW

Habitat Restoration Services Manager for SAWA

University of California, Irvine, CA; B.S. Social Ecology

Mr. Law is the Manager of SAWA's Habitat Restoration Services department. He leads a field supervisor, three lead field technicians, and 12 field technicians, to include chainsaw and Green Climber® technicians. He has over 14 years' restoration experience including managing multiple invasive species removal and native habitat restoration projects throughout the Santa Ana Watershed. Mr. Law is responsible for departmental budgets and work plans.

MELODY AIMAR

Biological Programs Manager for SAWA

California State University, Fullerton, CA; M.S. Environmental Science

California State University, Long Beach, CA., B.S. Zoology

Ms. Aimar is the Biological Programs Manager for SAWA's Wildlife Habitat Management and Western Riverside County MSHCP Biological Monitoring Programs. She leads two biological monitoring teams that include biologist supervisors, taxa leads, biologist II, field biologists, data and GIS analysts, and seasonal assistants. She has over 20 years of experience with general and special-status species survey design, developing protocol methodology, managing departmental budgets, quality control of data collection, data analysis, regulatory compliance and reporting. Ms. Aimar holds a USFWS permit and

CDFW MOU for Least Bell's Vireo, California Gnatcatcher, California Least Tern, Coastal Cactus Wren, and Brown-headed Cowbird control.

ALLISON BECKMAN

Biological Supervisor for SAWA

***Old Dominion University, Norfolk, VA, M.S. Biology
Radford University, Radford, VA; B.S. Biology***

Ms. Beckman supervises the biological team that conducts avian monitoring. She conducts surveys and nest monitoring for Least Bell's Vireo (LBVI) within the Santa Ana River watershed. She is experienced with conducting protocol-level, presence/absence surveys, and nest monitoring for Southwestern Willow Flycatcher. She records all vertebrate species during monitoring and pays special attention to habitat that may harbor other sensitive species, including Southwestern Willow Flycatcher and Western Yellow-billed Cuckoo. Ms. Beckman trains biologists in LBVI behavior and nest-searching techniques. She monitor invasive plant removal projects for nesting bird avoidance. She conducts annual natural resource inventories of breeding and wintering birds, herpetofauna, mammals and vegetation analysis. She performs Brown-headed Cowbird trapping and hires and trains seasonal cowbird assistants. She coordinates the biological monitoring for restoration activities. She performs quantitative vegetation monitoring. She co-writes and proofs the annual LBVI report, produces annual technical reports and regulatory reporting (CNDDDB, 45-day Reports), performs quality control/proofing of technical reports.

FLORENCE CHAN

Biologist II for SAWA

***University of British Columbia, Vancouver, B.C.; M.S. Physical Geography
Alabama Agricultural and Mechanical University, Huntsville, AL, B.S. Biology***

Ms. Chan is a field biologist with over 15 years' experience including 1,000+ hours nest monitoring multiple species, including special status species, with excellent understanding of behavioral cues that indicate stress and breeding status. She holds a USFWS permit and CDFW MOU for protocol surveys and nest monitoring Least Bell's Vireo, California Gnatcatcher, California Least Tern and Brown-headed Cowbird control.

ANTHONY LOCATELLI

Biologist II for SAWA

***Texas A&M University, College Station, TX; M.S. Wildlife and Fisheries
University of Minnesota, Minneapolis and St. Paul, MN, B.S. Fisheries and Wildlife***

Mr. Locatelli is a field biologist with over 14 years' experience including 3,900+ hours nest monitoring multiple species, including special status species such as Least Bell's Vireo, Black-capped Vireo, Golden-cheeked Warbler, Grasshopper Sparrow, Spotted Owl and Greater Sage-grouse. He has an excellent understanding of behavioral cues that indicate stress and breeding status. He holds a USFWS permit and CDFW MOU for protocol surveys and nest monitoring Least Bell's Vireo and Brown-headed Cowbird control.

PATIENCE FALATEK

Biologist II for SAWA

Penn State University, State College, PA; B.S. Environmental Studies

Ms. Falatek is a field biologist with over 13 years' experience including 3,400+ hours nest monitoring multiple species, including special status species such as Least Bell's Vireo, Black-capped Vireo, Kirtland's Warbler and Coastal Cactus Wren. She has an excellent understanding of behavioral cues that indicate stress and breeding status. She holds a USFWS permit and CDFW MOU for protocol surveys and nest

monitoring of Least Bell's Vireo, California Gnatcatcher, Southwestern Willow Flycatcher, Coastal Cactus Wren, and Brown-headed Cowbird control.

JESSICA BURTON

Biologist II for SAWA

Illinois Wesleyan University, Bloomington, IL; B.S. Biology

Ms. Burton is a field biologist with over 7 years' experience including 1,000+ hours nest monitoring multiple species, including special status species, with excellent understanding of behavioral cues that indicate stress and breeding status. She has extensive experience monitoring WRC MSHCP covered species. She holds a USFWS permit and CDFW MOU for protocol surveys and nest monitoring Least Bell's Vireo, California Gnatcatcher (presence/absence), California Least Tern and Brown-headed Cowbird control.

COLLIN FARMER

Biologist II for SAWA

California State University, Fullerton, CA; M.S. Environmental Science

University of California, Santa Barbara, CA, B.S. Zoology

Mr. Farmer is a field biologist with over 8 years' experience including monitoring multiple species, including California Least Tern, Coastal Cactus Wren, raptors, salmonids (Chinook, Coho, Steelhead), herpetofauna, carnivores, and local flora. He has an excellent understanding of behavioral cues that indicate stress and breeding status. He holds a USFWS permit and CDFW MOU for protocol surveys and nest monitoring of Least Bell's Vireo, Southwestern Willow Flycatcher (presence/absence), and Brown-headed Cowbird control.

XI. References

References for the literature cited in this application can be found in Attachment H.

CHECKLIST

NOTE: The following information should be provided electronically to the WCB project manager a minimum of four months prior to the desired board meeting date.

- Full project description
- Firm cost estimates (Please indicate cost-share matches by other funding partners. Include in-kind contributions.) Provide as electronic spreadsheet.
- Management plan
- Timeline
- Project location map showing project area
- GIS shape files
- Site map or other maps that may more fully describe the project
- Detailed project drawing (a sketch showing relevant features of the proposed restoration project)
- Photos of proposed project site
- CEQA document or notice of exemption (Required prior to Board approval - contact WCB for assistance)
- If the restoration project is to be located on private lands, a legal description of the lands is required, including the assessor's parcel number.
- Resolution from applicant's governing board
- Support letters (if available)
- A recommendation letter from the Department of Fish and Game (contact WCB for assistance)

Mail one hard copy of the completed application to:

Executive Director

Wildlife Conservation Board
PO Box 944209
Sacramento, California 94244-2090