Attachment B

Attachment 2

Board Contract Summary

BC ____-____

For use with Expenditure Contracts submitted to the Board for approval. Complete information below, print, obtain signature of authorized departmental representative, and submit this form, along with attachments, to the appropriate departments for signature. See also: *Auditor-Controller Intranet Policies->Contracts.*

D1.	Fiscal Year	2017-18 and 2018-19
D2.	Department Name	Public Works
D3.	Contact Person	Joddi Leipner
D4.	Telephone	805-882-3614

K1.	Contract Type *(check one)*: ☑ Personal Service ☐ Capital	
K2.	Brief Summary of Contract Description/Purpose	Maintenance, Monitoring and Reporting for ~24 acres of native plant restoration on the County-owned Baron Ranch
K3.	Department Project Number	054
K4.	Original Contract Amount	$ 459,822 (includes $41,802 contingency)
K5.	Contract Begin Date	July 1, 2017
K6.	Original Contract End Date	
K7.	Amendment? (Yes or No)	No
K8.	- New Contract End Date	June 30, 2019
K9.	- Total Number of Amendments	NA
K10.	- This Amendment Amount	$ NA
K11.	- Total Previous Amendment Amounts	$ NA
K12.	- Revised Total Contract Amount	$ NA

B1.	Intended Board Agenda Date	June 20, 2017
B2.	Number of Workers Displaced *(if any)*	0
B3.	Number of Competitive Bids *(if any)*	Professional Services (4 proposals)
B4.	Lowest Bid Amount *(if bid)*	NA
B5.	If Board waived bids, show Agenda Date	NA
	and Agenda Item Number	
B6.	Boilerplate Contract Text Changed? *(If Yes, cite Paragraph)*	Yes, section 33 prevailing wages added

F1.	Fund Number	1930
F2.	Department Number	054
F3.	Line Item Account Number	7460
F4.	Project Number *(if applicable)*	129923
F5.	Program Number *(if applicable)*	1750
F6.	Org Unit Number *(if applicable)*	NA
F7.	Payment Terms	monthly

V1.	Auditor-Controller Vendor Number	NA
V2.	Payee/Contractor Name	Ecological Conservation & Management
V3.	Mailing Address	6755 Mira Mesa Blvd, Suite 123413
V4.	City State (two-letter) Zip (include +4 if known)	San Diego, CA 92121
V5.	Telephone Number	858-842-7344
V6.	Vendor Contact Person	Tito Marchant
V7.	Workers Comp Insurance Expiration Date	2/5/18
V8.	Liability Insurance Expiration Date	com - 9/2717, prof -2/18/18
V9.	Professional License Number	
V10	Verified by (print name of county staff)	

V11 Company Type *(Check one):* ☐ Individual ☐ Sole Proprietorship ☐ Partnership ☑ Corporation

I certify information is complete and accurate; designated funds available; required concurrences evidenced on signature page.

Date: 5/22/17 Authorized Signature: _____

Revised 1/13/2014

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Ecological Conservation and Management, Inc. with an address at 6755 Mira Mesa Blvd. Suite 123413 San Diego, California 92121 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

WHEREAS, the COUNTY has mitigation requirements for the restoration of native habitats under the California Environmental Quality Act and in association with regulatory permits and/or approvals issued by the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife for the Tajiguas Landfill Project; and

WHEREAS, the COUNTY completed a fair, competitive selection process and selected the Contractor as most qualified on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required; and

WHEREAS, the Contractor has successfully completed restoration, monitoring and reporting of approximately 50 acres of native habitat for the COUNTY at the Baron Ranch including areas proposed for maintenance, monitoring and reporting under this agreement and has significant working knowledge of the mitigation requirements, the restoration site and site infrastructure; and

WHEREAS, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by COUNTY and COUNTY desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. DESIGNATED REPRESENTATIVE

Joddi Leipner at phone number (805) 882-3614 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Tito Marchant at phone number (858) 842-7344 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. NOTICES

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To COUNTY: Joddi Leipner, Senior Engineering Environmental Planner, Santa Barbara County Public Works, Resource Recovery and Waste Management Division 130 E. Victoria Street, Suite 100, CA 93101, FAX (805) 882-3601.

To CONTRACTOR: Tito Marchant, Ecological Conservation and Management, 6755 Mira Mesa Blvd. Suite 123413 San Diego, CA 92121, FAX (858)943-4771.

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

3. SCOPE OF SERVICES

CONTRACTOR agrees to provide services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference.

4. TERM

CONTRACTOR shall commence performance on July 1, 2017 and end performance upon completion, but no later than June 30, 2019 unless otherwise directed by COUNTY or unless earlier terminated.

5. COMPENSATION OF CONTRACTOR

In full consideration for CONTRACTOR's services, CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of EXHIBIT B attached hereto and incorporated herein by reference. Billing shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 NOTICES above following completion of the increments identified on EXHIBIT B. Unless otherwise specified on EXHIBIT B, payment shall be net thirty (30) days from presentation of invoice.

6. INDEPENDENT CONTRACTOR

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent contractor as to COUNTY and not as an officer, agent, servant, employee, joint venturer, partner, or associate of COUNTY. Furthermore, COUNTY shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, COUNTY shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save COUNTY harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the COUNTY or to this Agreement.

7. STANDARD OF PERFORMANCE

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. DEBARMENT AND SUSPENSION

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

10. CONFLICT OF INTEREST

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of COUNTY.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to COUNTY all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). COUNTY shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless COUNTY against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by COUNTY in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

12. NO PUBLICITY OR ENDORSEMENT

CONTRACTOR shall not use COUNTY's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use COUNTY's name or logo in any manner that would give the appearance that the COUNTY is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of COUNTY. CONTRACTOR shall not release any informational pamphlets, notices, press

releases, research reports, or similar public notices concerning the COUNTY or its projects, without obtaining the prior written approval of COUNTY.

13. **COUNTY PROPERTY AND INFORMATION**

All of COUNTY's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain COUNTY's property, and CONTRACTOR shall return any such items whenever requested by COUNTY and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such items only in connection with providing the services. CONTRACTOR shall not disseminate any COUNTY property, documents, or information without COUNTY's prior written consent.

14. **RECORDS, AUDIT, AND REVIEW**

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars ($10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the COUNTY or as part of any audit of the COUNTY, for a period of three (3) years after final payment under the Agreement (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by COUNTY or the State, at no charge to COUNTY.

If federal, state or COUNTY audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or COUNTY governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from COUNTY, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to COUNTY as specified by COUNTY in the notification.

15. **INDEMNIFICATION AND INSURANCE**

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in EXHIBIT C attached hereto and incorporated herein by reference.

16. **NONDISCRIMINATION**

COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

17. **NONEXCLUSIVE AGREEMENT**

CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

18. **NON-ASSIGNMENT**

CONTRACTOR shall not assign, transfer or subcontract this Agreement or any of its rights or obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign, subcontract or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

19. TERMINATION

A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.

1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services.

2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term.

3. **For Cause.** Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.

B. By CONTRACTOR. Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.

C. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for satisfactory services performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

20. SECTION HEADINGS

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

21. **SEVERABILITY**

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

22. **REMEDIES NOT EXCLUSIVE**

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

23. **TIME IS OF THE ESSENCE**

Time is of the essence in this Agreement and each covenant and term is a condition herein.

24. **NO WAIVER OF DEFAULT**

No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

25. **ENTIRE AGREEMENT AND AMENDMENT**

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

26. **SUCCESSORS AND ASSIGNS**

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

27. **COMPLIANCE WITH LAW**

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

28. **CALIFORNIA LAW AND JURISDICTION**

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

29. **EXECUTION OF COUNTERPARTS**

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. **AUTHORITY**

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

31. **SURVIVAL**

All provisions of this Agreement which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

32. **PRECEDENCE**

In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

33. **PREVAILING WAGES**

Contractor shall comply with the California Labor Code, including but not limited to the payment of prevailing wages when required. The general prevailing wage rates determined by the Director of Industrial Relations, for the county or counties in which the work is to be done, are on file at Santa Barbara County Public Works Department, Resource Recovery and Waste Management Division, 130 E. Victoria Street, Suite 100, Santa Barbara, CA 93101. Copies of these general prevailing wage rates shall be made available to any interested party on request. Changes, if any, to the general prevailing wage rates will be available at the same location. The prevailing wage rates are also available online from the California Department of Industrial Relations' website at http://www.dir.ca.gov/dlsr/pwd. The CONTRACTOR shall post applicable prevailing wage rates at each job site.

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

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Agreement for Services of Independent Contractor between the **County of Santa Barbara** and Ecological Conservation and Management, Inc.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

By: _____
Deputy Clerk

COUNTY OF SANTA BARBARA:

By: _____
Chair, Board of Supervisors

Date: _____

RECOMMENDED FOR APPROVAL:

Santa Barbara County Public Works Department

By: _____
Scott D. McGolpin Department Head, Public Works Director

CONTRACTOR:

Ecological Conservation and Management, Inc.

By: _____
Authorized Representative

Name: Tito A. Blanchard

Title: President

APPROVED AS TO FORM:

Michael C. Ghizzoni
County Counsel

By: _____
Deputy County Counsel

APPROVED AS TO ACCOUNTING FORM:

Theodore A. Fallati, CPA
Auditor-Controller

By: _____
Deputy

APPROVED AS TO FORM:

Risk Management

By: _____
Risk Management

EXHIBIT A

STATEMENT OF WORK

BARON RANCH RESTORATION MAINTENANCE MONITORING AND REPORTING PHASES V, A AND B

Contractor shall provide native plant maintenance, monitoring and reporting services for the Baron Ranch Restoration Project as set forth in Ecological Conservation and Management, Inc. "Baron Ranch Restoration Maintenance and Monitoring Proposal" dated April 14, 2017 (Revised May 8, 2017). The detailed scope of work is stipulated in Attachment A-1 and is incorporated by reference.

Tito Marchant, Julie Simonsen, Benito Lo, Russell Smith, Antonio Olea and Samuel Perez shall be the primary individuals personally responsible for providing the services as specified in Attachment A-1. CONTRACTOR may not substitute other persons for these persons without the prior written approval of CONTRACTOR's Designated Representative.

Suspension for Convenience. COUNTY may, without cause, order CONTRACTOR in writing to suspend, delay, or interrupt the services under this Agreement in whole or in part for up to 30 days. COUNTY shall incur no liability for suspension under this provision and suspension shall not constitute a breach of this Agreement.

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Attachment A-1

Ecological
Conservation
& Management
Holistic Habitat Specialists

(revised May 8, 2017)

April 14, 2017

Joddi Leipner
Senior Engineering Environmental Planner
Santa Barbara County Public Works
Resource Recovery and Waste management
130 E. Victoria Street, Suite 100
Santa Barbara, California 93101

Subject: Baron Ranch Restoration Maintenance and Monitoring Proposal

Dear Ms. Leipner,

We want to thank you for selecting Ecological Conservation & Management, Inc. (ECM) for the Baron Ranch Restoration Maintenance and Monitoring project. We appreciate the opportunity to see this large and complex project through its final phase of completion. ECM will continue to provide you support in all aspects of this project as well as provide recommendation for the overall management of the ranch.

Although we believe our cost and approach to the project is adequate and competitive, we understand the difficult financial environment the County Public Works Resource Recovery and Waste Management Division is facing. We have therefore decrease the rates for the Principal and Senior Ecologist to reduce costs without decreasing the level of effort which would compromise the work at hand. We have also reduced the rate of the ATV-Trailer. These cost reductions will affect both Year 1 and Year 2. The savings from these reductions add up to $13,130.00 for year 1 and year 2 of the contract not including the 10% contingency. The overall cost reduction will not affect our approach, level of effort, or probabilities of success. We will continue to work with you to find cost effective solutions and ensure the success of the last phases of this project. Attached to this letter, we are providing you with a revised Budget and final Scope of Work to be incorporated into the contract documents that will be presented to the County Board of Supervisors for final approval and subsequent contract execution.

Since it is likely there will be out of scope issues, particularly with the maintenance of the water conveyance system, we recommend increasing the percentage of the contingency fund. We understand that these funds can only be used at the discretion of the County based on unforeseen events that may jeopardize the success of the project.

The table below summarizes the revised cost per task and fiscal year. A detailed cost spreadsheet is attached with this document.

	Tasks	Year 1: 2017-2018	Year 2: 2018-2019	*Year 3: 2019-2020**
Task 1	Maintenance	$ 152,650.00	$ 120,200.00	*$ 44,015.00*
Task 2	Monitoring	$ 37,670.00	$ 31,100.00	*$ 34,400.00*
Task 3	Mgmt., Coordination & Reporting	$ 39,180.00	$ 37,220.00	*$ 39,240.00*
		$ 229,500.00	**$ 188,520.00**	***$ 117,655.00***
	10% Contingency	**$ 22,950.00**	**$ 18,852.00**	***$ 11,765.50***
		$ 252,450.00	**$ 207,372.00**	***$ 129,420.50***

Year: 2019-2020 is a preliminary budget pending review and approval by County and ECM.*

As President and Principal Ecologist of ECM, I have the authority to commit the firm to execute the work as outlined in our approach and cost. Our proposal is based on a fixed price basis not-to-exceed amount of $459,822.00 for Year 1 and Year 2 of the contract including the 10% contingency. Invoices will be submitted monthly and will represent Percent Complete estimates for each mayor task. Monthly invoices will be accompanied by a brief letter describing the overall status of the project. Our proposal and cost estimate will remain effective for sixty (60) days from the proposal due date (April 14, 2017). If you have any question or comments regarding our approach and cost estimates, please do not hesitate to contact me via phone at (858) 842-7345 or via email at Tito@EcologicalCM.com.

Sincerely,

T. A. Marchant

Tito Marchant
President/ Principal Ecologist

TABLE OF CONTENTS

INTRODUCTION

The Baron Ranch Restoration Program includes the restoration of approximately 51 acres of native habitat at the County-owned Baron Ranch. As stated in the Restoration Plan, the overarching goals of the restoration program are to improve the quality of existing habitat and to create additional habitats within the Arroyo Quemado watershed at the Baron Ranch. Implementation of the Restoration Plan will offset the effects of the Reconfiguration Project on the California red-legged frog, loss of native habitats, impacts to sensitive plants, and specimen oak and shrub species on the Tajiguas Landfill. The Restoration Plan will be implemented in coordination with the California Red-legged Frog Management Plan to ensure restoration, enhancement, and management activities in the Arroyo Quemado watershed will lead to habitat benefits for the California red-legged frog.

Since 2009 the County of Santa Barbara Resource Recovery & Waste Management (County) has been implementing the Baron Ranch Restoration Project including the implementation, maintenance and monitoring of Phases I through V, A and B. Approximately 51 acres have been restored to date, including coast live oak woodland, southern coast live oak riparian woodland, southern willow scrub, coastal sage scrub, chaparral, and freshwater marsh plant communities. The County now seeks to continue with the monitoring, maintenance and management of Phases V, A and B of the Baron Ranch Restoration Project.

Ecological Conservation and Management (ECM) implemented all 7 phases of the Restoration Plan. Each phase, once implemented, is followed by approximately five years of maintenance and monitoring. Each phase and the type and acreage of vegetation installed is presented in Table 1, below. Seven phases have been installed to date. Phase I includes approximately 1.3 acres of freshwater marsh and 0.6 acres of southern willow scrub toward the jurisdictional requirement. Phase I was installed in summer/fall 2009. Phase II was installed in winter of 2009/2010 and includes approximately 9.1 acres of southern coast live oak riparian forest. Phase III was installed in winter of 2010/2011 and includes approximately 8 acres of southern coast live oak riparian forest, 1.7 acres of southern willow scrub and 0.9 acres of *Ceanothus megacarpus* chaparral. Phase IV was installed in winter of 2012 and includes 5.8 acres of Venturan coastal sage scrub. Phase V was installed in winter of 2013 and includes 4.8 acres of southern willow scrub, 1.7 acres of coast live oak woodland, and 0.4 acres of Venturan coastal sage scrub. Phase A includes 10.8 acres of coast live oak woodland and was implemented in 2016. Phase B includes 6.2 acres of *Ceanothus megacarpus* chaparral and was also implemented in 2016.

This proposal will cover the period from July 2017 to June 2019. The contract, once awarded, could be extended for one additional year and would cover through June 2020. This scope of work includes the following principal tasks:

Task 1:	Maintenance;
Task 2:	Monitoring;
Task 3:	Management, Coordination and Reporting; and
Task 4:	Phase A and B Maintenance, Monitoring and Reporting 2019-2020.

Table 1. Phased Implementation of Mitigation at Baron Ranch

Phase	FWM (acres)	SWS (acres)	CLORF (acres)	SCLOW (acres)	CMC (acres)	VCSS (acres)	Total (Acres)
Phase I	1.3						1.3
Phase II			9.1				9.1
Phase III		1.7	8		0.9		10.6
Phase IV						5.8	5.8
Phase V		4.8		1.7		0.4	6.9
Phase VI (Phase A)					6.2		6.2
Phase VII (Phase B)				10.8			10.8
Total	**1.3***	**6.5**	**17.1**	**12.5**	**7.1**	**6.2**	**50.7**

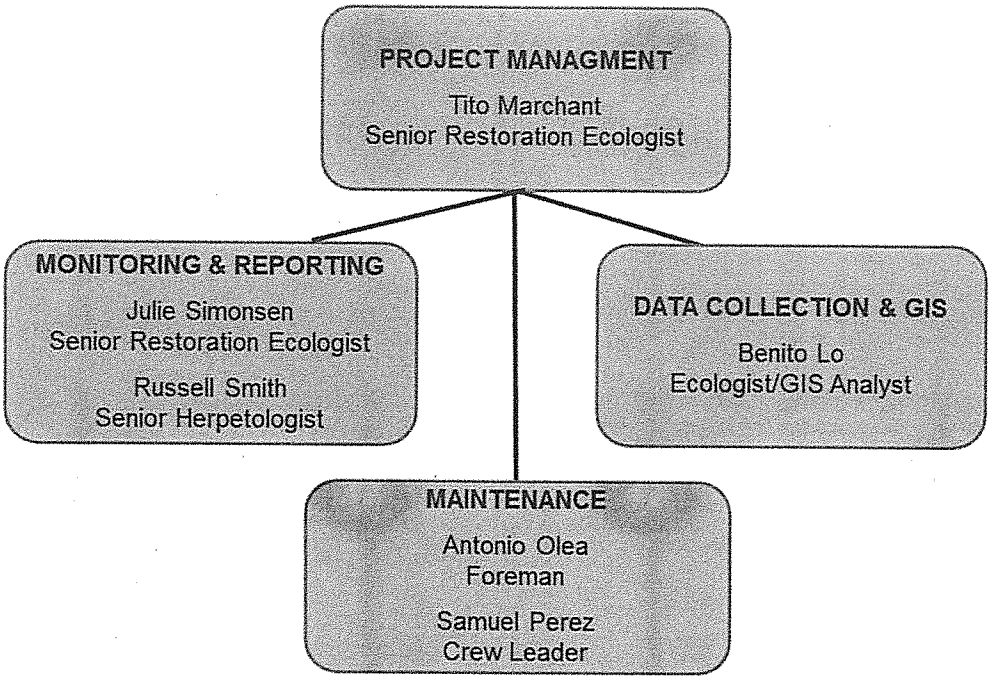
Because Mr. Tito Marchant wrote the Baron Ranch Restoration Plan, ECM is confident that the guidelines provided in this document are consistent with our philosophy and experience in restoring native habitats. In every project, we follow the following principles: 1) thoroughly understand the clients goals and objectives for the project; 2) identify disturbances that are altering the natural process onsite; 3) design the project to restore natural processes including soil, hydrology, native plant recruitment, and wildlife; and 3) apply Adaptive Management proactively from data generated for a sound monitoring program. ECM therefore proposes to follow the Plan's recommendations with only a few modifications. It is understood that Adaptive Management principles will be used throughout the duration of the project and that deviations from some of the recommendations found in the Restoration Plan may occur if the monitoring data demonstrate a need to modify maintenance activities.

ECM has been fortunate to provide professional services for the Baron Ranch Restoration Project to the County since 2010. Through this experience, we have gained indispensable knowledge regarding logistics at the Baron Ranch which allowed the successful restoration of native habitats adjacent to the orchard operations. ECM is knowledgeable about the water supply and infrastructure within the Ranch including the location of pumps and connections required to maintain the restoration areas. We have facilitated resolution of potential conflicts with water use, water infrastructure, pesticide application, and harvesting schedules. We have also developed a deep understanding of the microhabitats within the Ranch and how soil, hydrology, and seed bank characteristics affect both native and non-native growth and phenology throughout the seasons. This knowledge has allowed ECM to proactively manage weed populations and reduce competition with the restored plant communities, minimizing effort and herbicide use. A reactive approach to weed control on the Ranch could be highly detrimental because of the size of the area to be managed and the acreage of invasive species adjacent to restored habitats.

ECM has also ensured that prior to implementation activities all areas have been surveyed for the presence of sensitive species, full compliance with the Migratory Bird Act as well as providing a California red-legged frog informational training to all personnel and that all restoration activities are in compliance with the Biological Opinion and the California red-legged frog Management Plan.

PERSONNEL

Biographies of key ECM staff are listed below and in the organizational chart based on management responsibilities and technical expertise. Resumes of key staff are included at the end of this section.



Tito Marchant (Senior Restoration Ecologist) – Project Manager

Tito Marchant is the proposed Project Manager and Project Restoration Ecologist. Mr. Marchant has over 25 years of experience in natural resources management in California. Mr. Marchant's experience with sensitive species studies includes multiple surveys for the California Red-legged Frog at Baron Ranch, Tajiguas Landfill and Las Virgenes Creek in Ventura County. Mr. Marchant has been the Project Manager/Project Restoration Ecologist during the last seven years, successfully implementing and managing all phases of the Baron Restoration Project. His experience also includes wetland assessments and delineations; aquatic and marine species studies, restoration planning and design of all major habitat communities found in central and southern California; and direct supervision of large and complex restoration programs. Mr. Marchant has managed numerous restoration projects with the specific goal of creating habitat for sensitive species. His experience with the project and with staff at RRWMD also includes his role as Principal in Charge of the biological work for the Tajiguas Landfill through December 2009. Mr. Marchant will be the point of contact for this project and will be available in person during maintenance activities as well as during monitoring efforts. Mr. Marchant will be available to the County through phone and email at all times during the contract period. Specifically, Mr. Marchant responsibilities will include:

- Inspection and approval of all plant and seed material prior to their use;
- ECM staff education program, California red-legged frog and nesting bird surveys;
- Map and mark project boundaries and habitat types to be created;
- Coordination and communication with County staff;

- Coordinate and supervise all maintenance activities; and
- Provide project management and coordination to ensure project mitigation requirements are met

Estimated 756 hours, approximately 14 percent of the total labor hours for Years 1 and 2.

Julie Simonsen, M.S. (Senior Restoration Ecologist) – Monitoring & Reporting

Ms. Simonsen has over 24 years of experience in natural resources management in California. Her experience includes the management of complex environmental assignments and in particularly assisting clients meeting their regulatory responsibilities. Ms. Simonsen has extensive experience in the development of comprehensive invasive plant management plans as well as monitoring programs for vegetation and wildlife species. Ms. Simonsen provided QA/QC and was the principal reviewer of all the regulatory documents that emanated from the Tajiguas Landfill Reconfiguration Project and was a co-author of the Biological Assessment, California Red-legged Frog Management Plan for the Reconfiguration Project, and Baron Ranch Restoration Plan. During the last seven years, Ms. Simonsen has coordinated the monitoring of the restoration phases, co-authored all the annual monitoring reports and provided QA/QC for all deliverables to the County. She is also holds the Qualified Applicator License for ECM's pesticide business license and is responsible for the approach to invasive weed control. Specifically, Ms. Simonsen responsibilities will include:

- Compliance with regulatory requirements;
- Development of Integrated Pest Management approach;
- Coordinate quantitative botanical and general wildlife monitoring efforts;
- Conduct data analysis and reporting for the project; and
- Provide QA/QC for all documents sent to the County.

Estimated 380 hours, approximately 7 percent of the total labor hours for Years 1 and 2.

Russell Smith, M.S. (Senior Herpetologist) – Monitoring & Reporting

Mr. Smith has over 30 years of experience working with amphibians and reptiles in southern California. He is considered an expert on the California red-legged frog and has conducted research on this species throughout central California. Mr. Smith led the California red-legged frog surveys for the Reconfiguration Project at the Tajiguas Landfill including installing pit tags for the relocation effort. He also provided technical guidance on the California Red-Legged Frog Management Plan. Specifically, Mr. Smith's responsibilities will include:

- Field and technical support for California red-legged frog issues, including potential surveys.

Benito Lo, M.S. (Ecologist/GIS Analyst) – Monitoring & Reporting

Mr. Lo has eight years of experience working in public and private sectors of the environmental consulting and conservation fields. As an ecologist, Mr. Lo has worked on a variety of monitoring and management projects throughout southern California coastal sage scrub, chaparral, oak woodland, grassland and estuarine habitats. Mr. Lo has been involved in vegetation, insect, and water quality monitoring programs where transect data was collected to assess the diversity and health of ecosystems. Through his GIS experience, he has produced vegetative maps as deliverables to restoration work groups used in the determination and promotion of potential

restoration projects. Mr. Lo has worked on the Baron Ranch Restoration Project for the last year including horticultural and quantitative monitoring, field GPS data collection and mapping, preparation of figures and acreage analysis and oversight of nursery operations. Specifically, Mr. Lo's responsibilities will include:

- Quantitative data collection and analysis; and
- Development of GIS-based maps and figures to support regulatory requirements.

Estimated 177 hours, approximately 3 percent of the total labor hours for Years 1 and 2.

Antonio Olea (Foreman) – Implementation and Maintenance

Mr. Olea has 16 years of experience working in the native vegetation communities of southern California. He has worked as a foreman overseeing both habitat restoration crews and native plant nursery operations for over 10 years. Mr. Olea's has specific experience with freshwater marsh, coast live oak, chaparral, coast sage scrub, riparian and grassland habitats. He has 12 years of experience designing and installing irrigation systems. He has been personally responsible for installing the irrigation systems for the Baron Ranch restoration projects and assuring that they are maintained and functional for the last 7 years. He is familiar with the water conveyance system including pipe location and pump operation. He has also supervised and conducted all weed control efforts throughout Baron Ranch is very knowledgeable about species identification and appropriate control techniques depending on the phenological stage of the species. Specifically, Mr. Olea's responsibilities will include:

- Supervision of maintenance crew;
- Maintenance of supplemental water systems; and
- Implementation of weed control and supervision of herbicide treatments.

Estimated 1,280 hours, approximately 24 percent of the total labor hours for Years 1 and 2.

Samuel Perez (Crew Leader) – Implementation and Maintenance

Mr. Perez has over 20 years of experience managing agricultural operations including irrigation and weed control. He worked for the last 20 years as the foreman for the orchard operations at Baron Ranch. He is intimately familiar with the Ranch and the water conveyance system. One of his primary responsibilities on the Ranch included the operation and maintenance of the water conveyance system including operating and maintaining the various pumps and pipelines. He also supervised and conducted weed control efforts throughout the orchards at Baron Ranch is knowledgeable about control techniques and pesticide safety. Specifically, Mr. Perez's responsibilities will include:

- Maintenance of supplemental water systems; and
- Implementation of weed control.

Estimated 288 hours, approximately 6 percent of the total labor hours.

Ecological Conservation & Management
Holistic Habitat Specialists

Principal Ecologist

Overview

Mr. Marchant has over 20 years of experience in the field of natural resources management in California. Mr. Marchant's experience includes wildlife studies, biological assessments, sensitive species surveys, land and habitat management plans, and native habitat restoration. His research has focused on the conservation of rare plants and has authored several articles on population genetics of narrow endemics, pollination ecology, and plant conservation.

In the field of restoration ecology, Mr. Marchant has designed, managed, and supervised the installation of complex restoration programs, including wetlands, scrub, riparian woodland, native grassland, oak woodland, and vernal pools. His understanding of invasive plant ecology, native communities, their restoration needs, and the interactions between wildlife and their habitats makes him ideally suited for designing sound mitigation programs and successfully managing complex restoration projects.

In the field of wildlife, Mr. Marchant has specialized in the study and monitoring of sensitive species, including birds, reptiles and amphibians. He has extensive experience studying, surveying and monitoring the reproductive success of the federally threatened California gnatcatcher. He regularly conducts ornithological surveys, including raptors and other sensitive birds. His amphibian experience includes population studies for the California red-legged frog in Santa Barbara and Ventura counties, as well as surveys for Arroyo Toad in Orange County, and lowland leopard frogs and spadefoot toad in Imperial County. His entomological experiences include conducting studies and surveys for the Quino checkerspot butterfly (Riverside & San Diego Counties), El Segundo Blue Butterfly (Los Angeles County), Casey's June beetle, Coachella Valley Jerusalem Cricket, Coachella Giant San Treader Cricket, and the Coachella Valley Grasshopper (San Bernardino County), and Andrews Dune Beetle (Imperial County).

Mr. Marchant's aquatic experience includes serving as the Little Corona Marine Protected Area Resident Biologist for over three years. In this capacity, he conducted intertidal ecology studies, monitoring sea urchin population, and behavioral studies of Aplysia californica. In addition, his duties included conducting nature interpretation and outdoor lectures focusing on the ecology of the rocky intertidal. Mr. Marchant also served as a Naturalist for the Upper Newport Bay Estuary, where he participated in shore-birds censuses, marine-invertebrate sampling, and also conducted lectures on the ecology of coastal estuaries.

Mr. Marchant has extensive experience in wetland delineation and quantitative monitoring; design and maintenance of wetland restoration areas; performing habitat characterizations and vegetation mapping; and wetland permitting/annual reporting consistent with the Army Corps of Engineers and Department of Fish and Game regulatory programs. He is also knowledgeable of Section 7/10(a) and 4(d) Consultation, CEQA guidelines, and Endangered Species Act legislation/policies.

Education

Graduate Research, Ecology and Evolutionary Biology,
University of California, Irvine

B.S., Biological Sciences,
University of California, Irvine

Permits

Survey Permit for California Gnatcatcher and Quino Checkerspot Butterfly

Training

Wetland Planning and Design

ACOE Approved Wetlands Delineation and Management

Training Courses in Riparian and Desert Restoration

Professional Memberships

Society for Ecological Restoration
California Natsive Plant Society
California Exotic Plant Council
Society for Conservation Biology
California Native Grass Association

Project Experience - Habitat Restoration and Invasive Weed Control

Baron Ranch Restoration Project. Santa Barbara County, CA.
The Baron Ranch Restoration Program seeks to mitigate impacts associated with two large projects at the Tajiguas Landfill in Goleta, California. Mr. Marchant developed a restoration plan in 2008 to guide and manage the mitigation efforts for these projects and since 2010 has led the implementation and management of five of the seven phases of the restoration program. Over 50 acres of native habitat will be restored once the program is fully implemented. Baron Ranch is an approximately 1,100-acre parcel owned by the County situated immediately adjacent to the Tajiguas Landfill. Arroyo Quemado and its tributaries traverse the Baron Ranch and support an important breeding population of California red-legged frogs. Approximately 107 acres of the property are currently used for orchards (i.e., avocado and cherimoya orchards). The overarching goals of the restoration program are to improve and augment habitat for targeted wildlife within the Arroyo Quemado watershed. These goals will be met through the protection, enhancement, restoration and creation of native riparian and upland plant communities within agriculture and disturbed areas of the Baron Ranch.

City of San Diego Pilot Channel Giant Reed Removal Project, San Diego County, CA
The City of San Diego implemented the Pilot Channel Invasive Species Control Project as partial mitigation for the flood control dredging of the Tijuana River. Trash and sediment inputs from Mexico are deposited in the Tijuana River reducing its flood capacity. Under such conditions, the surrounding residences, farms, and stables near the Tijuana River are subject to flooding during large rain events. As Project Ecologist, Mr. Marchant oversaw the implementation of the invasive control program to treat and control giant reed, castor bean and salt cedar. Approximately five acres of invasive-weed species have been treated as of Fall 2013. The project posed specific challenges with regard to access and timing of the treatment. The initial treatment had to be completed in a short time period between the end of the bird breeding season and the start of the winter rain season. The initial treatment is part of a five-year control and monitoring program, which will include subsequent retreatment of invasive plant species and initial removal of dead biomass away from the active channel so that the flood capacity of the river is not compromised.

All American Canal Dune Restoration Project, Imperial County, CA
This project seeks to mitigate impacts to dune habitat from the construction of the All-American Canal Lining Project. Mr. Marchant is the Project Manager and responsible for monitoring and measuring sand accumulation over two years, documenting and quantifying native plant colonization, determining whether appropriate dune habitat can be restored, and assisting the Imperial Irrigation District in the planning of future phases of the project. As part of this scope of work, a monitoring plan was developed to evaluate sand deposition and dune plant establishment. The monitoring plan is structured to account for differences in these parameters due to slope, aspect and proximity to the active dune system. Mr. Marchant conducts quarterly sand deposition monitoring using sediment pins to monitor deposition and erosion and has conducted two botanical surveys to document plant colonization and distribution.

Channan Remington Memorial Wetland Restoration Project, Imperial County, CA
This is a mitigation project for impacts from the construction of the All-American Canal within the Imperial Irrigation District service area. As Project Manager and restoration ecologist, Mr. Marchant oversaw all maintenance and monitoring of this five-year project including vegetation and wildlife assessments and invasive species control.

Goat Canyon Coastal Sage Scrub Restoration Project, San Diego County, CA
The Goat Canyon Restoration Project is being implemented as mitigation for International Boundary and Water Commission (IBWC) impacts along the US border region within the Tijuana River Valley. As the Project Manager, Mr. Marchant was responsible for all tasks including the design, implementation, and a two-year maintenance of five acres of coastal sage scrub, which included several intermittent drainages. The project occurs within and adjacent to habitat occupied by the California gnatcatcher and least Bell's vireo and therefore the restoration plant palette included species favored by these two sensitive species. Site implementation began with extensive weed control and removal of biomass. Due to the extensive weeds onsite, including black mustard, nettle and castor bean, the integrated pest control program for the project included a herbicide treatment with both pre- and post-emergence capabilities to control the weed populations and minimize the total use of herbicides onsite. A drip-irrigation system was installed to provide adequate water to container plants and minimize weed germination. Following the first year of monitoring the site achieved 60-percent native cover and non-native cover was kept below 10 percent.

Managed Marsh Planning and Design for IID's Water Transfer Project, Imperial Valley, CA
As the Project Principal for this large and complex 959-acre wetland restoration project, Mr. Marchant led a large, multidisciplinary group of professionals, including engineers, hydrologists, environmental scientists, wetland and restoration ecologists, and wildlife biologists through the design and planning phases. The overarching goal of the Managed Marsh project was to create habitat which supports the Yuma clapper rail, California black rail, and other covered bird marsh and riparian species to compensate for drain habitat impacts related to the Water Transfer Program and IID's drain operation and management. This project was successfully implemented and completed in 2011.

Tijuana River Valley Invasive Plant Removal Program, Otay Valley, CA
In conjunction with Southwest Wetlands Interpretive Association, Mr. Marchant served as Project Principal over the last ten years of the invasive removal program within the Tijuana River, targeting giant reed, castor bean, and tamarisk. Treatment involved a combination of cut-stump and foliar-herbicide treatment in the 441-acre treatment area.

Design-Build Wetland Restoration and Wildlife Monitoring Study for the All-American Canal Lining Project, Imperial County, CA
As Project Manager, Mr. Marchant was responsible for technical oversight of all tasks, providing QA/QC for deliverables, ensuring that the project adhered to the agreed schedule and budget and serving as the primary point of contact. Mr. Marchant led the team to provide design, construction, development, and monitoring for the All American Canal Lining Project (AACLP) Wetland Enhancement program. The approach focused in obtaining adequate and accurate biotic and abiotic baseline conditions to develop a wetland design and restoration program that maximized the opportunities presented at the wetland complex and minimized costs associated with monitoring and maintenance activities such as weed control and irrigation. This project was successfully implemented during 2005 and 2006 and has met all mitigation requirements including the presence of the Yuma clapper rail and the California black rail.

USFWS Tijuana Slough National Wildlife Refuge Restoration, San Diego, CA
Over the course of several contracts, ECM, in coordination with Southwest Wetlands Interpretive Association, Mr. Marchant has conducted invasive weed control and habitat restoration with the USFWS Refuge. As Project Manager, he oversaw the planning, design and implementation of the coastal-sage and riparian-scrub restoration.

San Miguel Habitat Management Area, San Diego, CA
In his role as Project Manager/Senior Restoration Ecologist, Mr. Marchant provided restoration services to the Otay Water District (District) for the San Miguel Habitat Management Area (HMA). The District is developed for the HMA as a mitigation bank to mitigate for impacts associated with the District's capital improvement projects. The HMA protects burrowing owls, California gnatcatcher, Quino checkerspot butterfly, least Bell's vireo, and Otay tarplant. Mr. Marchant was responsible for providing Quality Assurance and Control, as well as project management.

Project tasks included the creation of a 14-acre native grassland to provide habitat for Burrowing owls, restoration of 12 acres of coastal sage scrub to enhance habitat for resident coastal California gnatcatcher, creation and enhancement of 2 acres of freshwater marsh and riparian scrub to enhance habitat for resident least Bell's vireo, and creation of habitat for the Quino checkerspot butterfly. Through this project, he led the maintenance of the approximately 200-acre HMA, developed and implemented an Integrated Pest Management program, and provided maintenance and enhancement for 12 artificial burrows for burrowing owls.

Chappo Post-Fire Invasive Weed Control, Camp Pendleton. CA
In his role as restoration ecologist, Mr. Marchant oversaw the implementation of weed control areas in the native chaparral habitat following an intensive wildfire. Maintenance efforts were balanced with natural recruitment and regrowth to increase native cover and minimize erosion.

Post-fire Erosion and Revegetation Camp Pendleton. CA
As Restoration Ecologist in the implementation an erosion-control program for the large open-space fire at Camp Pendleton, Mr. Marchant helped developed erosion-control devices that could be left in wildlands setting, and designed seeding plant palette to address the varying site conditions throughout the area.

Antonio Parkway Extension Restoration Program, Orange, C
As Project Manager/Senior Restoration Ecologist, Mr. Marchant revised the restoration plan, supervised its implementation, conducted the monitoring and report preparation, managed the project budget, and coordinated the interactions with the corresponding regulatory agencies. Plant communities restored and created included seasonal ponds, vernal pools, riparian scrub, riparian woodland, oak woodland, coastal sage scrub, and native grassland. The total restoration area was approximately 65 acres along Chiquita Ridge, Orange County. The project presented many challenges and difficulties, including almost complete dominance of weedy species, compacted and disturbed soils and insufficient irrigation. Vernal pools and wetland creation included micro-grading and hydrogeomorphology. Restoration methodologies were periodically adjusted to reflect the dynamics of each site. This project required close monitoring and adaptive management of weeds and planting techniques.

Coal Canyon Wildlife Corridor Restoration, Orange County, CA
As Project Manager, led team in restoring riparian and Riversidean Alluvial Fan Sage Scrub on a highly disturbed 13-acre site for the State of California Department of Parks. The site will serve as a major habitat corridor between the Chino Hills State Park and the Santa Ana Mountains. The project involves the restoration of a deeply incised channel to a more natural braided channel that is a tributary to the Santa Ana River. In addition to the stream channel, approximately 12 acres of upland habitat that is currently dominated by invasive weeds was restored to Riversidean Sage Scrub habitat. The project has been maintained and monitored for three years following installation.

Thompson Creek Dam Restoration Project, Los Angeles, CA
As Project Manager, Mr. Marchant managed and provided turnkey restoration services to the Los Angeles County Department of Public Works with the Thompson Creek Dam Restoration Project. The scope of work includes the design, implementation, maintenance and monitoring of a 12-acre erosion control basin, and a two-acre coastal sage scrub/chaparral habitat. We also developed a weed-management and eradication program. Mr. Marchant served as the Project Manager and provided Quality Assurance and Control.

Roseville Oak Mitigation Planting Project, Roseville, CA
In his position as Principal Biologist, Mr. Marchant worked with the biologists to develop and implement an oak-mitigation planting plan for the City of Roseville to establish a minimum of 5,000 native oaks per their oak-mitigation ordinance. The project scope includes planting 6,250 native seedlings and trees from the (Los Robles) nursery, design and installation of an above ground temporary irrigation system, three years of temporary irrigation and IPM (Invasive Pest Management), and five years of monitoring for the 10 sites totaling over 35 acres.

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Sacramento Area Flood Control Agency (SAFCA) Lower American River Project, Sacramento, CA
As Principal Biologist for the two-year contract, Mr. Marchant developed a work plan and coordinates the maintenance of seven levee repair sites damaged during high water events along the Lower American River. Scope of work includes frequent irrigation of installed container plants, removal of non-native and invasive plants, installation of locally collected cuttings and source identified plants from the nursery, and monitoring and repair of herbivore exclusion fencing and cages.

Sacramento County Invasive Plant Management Project, Sacramento, CA
As Principal Biologist, Mr. Marchant was in charge of continuing the invasive-plant management project through 2007 and 2008 that concentrated on the elimination of Red Sesbania, Arundo, and Spanish and French Broom along the Lower American River. Techniques included hand removal, herbicide application, and seed collection along both shores from Nimbus Dam to the convergence with the Sacramento River. Access to many of the projects areas and islands required using special shallow-water watercraft. Restoration activities include collection and installation of cuttings, planting seedlings from the nursery stock, and installation of 10,000 of fencing to reduce herbivore damages.

Elderberry Transplant and Mitigation Project for the Western Area Power Administration, Sacramento, CA – Teamed with EM-Assist.
As Principal Biologist, Mr. Marchant assisted in the development of the restoration plan and directly managed the transplant of 100+ mature Elderberry plants and the installation of 3,600 propagated Elderberry and associated native plants. The plants were contract-grown specifically for this project. The project area consisted of 26 acres in Goethe Park, where he also led the installation of an irrigation system. The four year-maintenance includes general and noxious weed control, fire-prevention and erosion-control techniques.

Project Experience-Ecological Studies and Regulatory Documentation

Baseline Ecological Surveys for the Imperial Irrigation District's HCP, Imperial County, CA
As Project Principal, Mr. Marchant coordinated with IID, the regulatory agencies, and academic advisors to develop and implement a study design for this three-year, large-scale project focused on evaluating the presence/absence of 91 plant and wildlife species with a potential to occur within IID's service area, which covers a significant portion of the Imperial Valley. The data obtained from these surveys allowed the development of habitat suitability models to determine the probability of detection for the plant and animal species that are the focus of these surveys. The data obtained from this project will ultimately be used to prepare the Habitat Conservation Plan and the Imperial Valley Natural Communities Conservation Program Plan, providing guidance for mitigation measures and adaptive management. Mr. Marchant also provided technical QA/QC for reports associated with this project.

Drain Vegetation Survey and Geodatabase Development for the Imperial Irrigation District, San Diego, CA
As Project Manager, Mr. Marchant's responsibilities for field surveys of approximately 1,500 miles of drains and canals encompassed the assessment of wetland vegetation, species composition, vegetation cover, and the development of a GIS based Geodatabase. He led a team of eight biologists, botanists, and GIS analyst that carried out the work during the months of August and September. They managed to complete the work ahead of schedule and under budget. Further responsibilities included technical oversight and management, ensuring the project had the needed resources, provided QA/QC and served as the primary point of contact.

Tajiguas Landfill Biological and Permitting Services, Santa Barbara County, CA
As the Project Principal, Mr. Marchant has provided Quality Assurance, and directed all work, for this project, including a biological assessment, a wetland delineation and jurisdictional determination, surveys for sensitive species and the development of a comprehensive restoration plan to mitigate impact to biological resources. The Landfill is an existing County-owned and operated municipal waste disposal facility located in a coastal canyon, Canada de la Pila, approximately 26 miles west of the City of Santa Barbara. Pila Creek is a seasonal drainage on the south slope of the Santa Ynez Mountains. Pila Creek, to the north and west of the Landfill and the adjacent floodplain, have been disturbed by Landfill activities. Two sedimentation basins were constructed in the active stream channel immediately north of the existing Landfill in the 1980's to improve water quality in Pila Creek and to provide storm-water control for the Landfill as well as provide a source of dust-control water at the landfill. In addition, they provide habitat for the California red-legged frog (Rana aurora draytonii) (CRLF) and other wildlife species. The basins require periodic maintenance to retain their capacity and improve the quality of the water discharged to Pila creek as required by WDRs. The planned future activities will require permits to be obtained from resources agencies including the US Army Corps of Engineers (COE), the US Fish & Wildlife Service (FWS), and the California Department of Fish and Game (DFG).

Upper Newport Bay Land Management Plan
As the Principal Biologist, Mr. Marchant led a team of ecologist who developed a comprehensive Land Management Plan for the 750-acre Upper Newport Bay Estuary/Ecological Reserve and necessary environmental documentation to support CEQA determination. The purpose of this plan was to establish a set of management goals and tasks that will ensure the long-term protection of the Reserve, associated plant and animal communities, and, where feasible, provide or allow for compatible public uses. As part of this project a general botanical survey was conducted to verify existing vegetation and habitat maps. Botanists summarized this information in a report which characterized vegetation communities, series, and sub-associations. Wildlife biologists conducted surveys to identify potential habitat for sensitive wildlife species including insects, fish, amphibians, reptiles, birds and mammals. A restoration feasibility analysis was conducted concurrently with biological and baseline surveys. Areas that were dominated by invasive non-native plants or disturbed native vegetation were evaluated for restoration. Sensitive species known to be present in the Reserve, such as the California gnatcatcher and the clapper rail, were the target of these restoration opportunities.

Alternatives to Mitigate Natural Community Conservation Plan (NCCP) Habitat, Orange, CA
As a Senior Biologist, Mr. Marchant assisted in the determination of alternatives to mitigate NCCP habitat associated with future planned improvements at Frank R. Bowerman (FRB) Landfill for the County of Orange Integrated Waste Management Department (IWMD). The purpose of the project is to provide the County with alternatives for mitigating impacts to coastal sage scrub and sensitive species covered under the Central and Coastal Subregion Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) and that may be affected by future expansion efforts at the FRB Landfill. Mr. Marchant is responsible for the feasibility analysis of each alternative, developing screening criteria and for developing recommendations base on the cost-benefit analysis of each alternative. He is also responsible for the implementation and review of sensitive-species surveys and biological assessments.

Tijuana River Valley Ecological Studies, San Diego, CA
As Project Manager/Principal Biologist, Mr. Marchant provided ecological studies of this 1,800-acre site to the County of San Diego Department of Parks and Recreation. The Tijuana River Valley Regional Park contains critical habitat for the least Bell's vireo and the southwestern willow flycatcher. In addition, the mesas adjacent to the valley contain many unique botanical resources. ECM conducted focused surveys for the least Bell's vireo, southwestern willow flycatcher, light-footed clapper rail, California gnatcatcher, arroyo toad, and raptors like the northern Harrier and white-tailed kite. The botanists conducted a general botanical survey and vegetation mapping, and surveyed for over twenty rare plant species. This data served as baseline biological condition and for identification of sensitive biological resources that are present in this diverse ecosystem. Mr. Marchant served as the Senior Biologist conducting many of the surveys and providing Quality Assurance and overall project management.

Delhi Sands Flower-Loving Fly Habitat Management Plan, Riverside County, CA
Mr. Marchant served as Principal Biologist for this project, responsible for developing a Delhi Sands Flower-Loving Fly Habitat Management Plan for a 186-acre site in the Jurupa Hills in Riverside County, immediately adjacent to the San Bernardino County line. Scope of Work includes developing management strategies, evaluating potential restoration activities, providing a long-term cost and funding analysis, and a habitat mapping of the site.

Ecological Conservation & Management
Holistic Habitat Specialists

Principal Ecologist

Overview

Ms. Simonsen has 20 years of experience in the field of environmental and biological consulting in southern California, with expertise in habitat restoration and biological monitoring. Ms. Simonsen also has proven leadership capabilities as Project Manager on a number of large multi- year and multi-task projects. She has authored numerous restoration plans, biological assessments, biological resource sections for environmental impact reports, technical reports, adaptive management plans and other environmental documents. Her project experience includes government, military, commercial, local jurisdictions and residential projects. She is knowledgeable of the regulatory framework of CEQA, NEPA, and the ESA, including wetland permitting.

Ms. Simonsen has been involved in all aspects of habitat restoration, including feasibility analyses, design, implementation, monitoring, maintenance, and the preparation of integrated pest-management plans. Her project experience is vast, covering coastal sage scrub, riparian, wetland, oak woodland, native grassland, desert scrub, vernal pool and dune habitats. Ms. Simonsen has been involved in various habitat restoration projects focused on enhancing or creating habitat for sensitive species, such as California red-legged frog, Least Bell's Vireo, California Gnatcatcher, Western Burrowing Owl, Yuma Clapper Rail, California Black Rail, Santa Barbara honeysuckle, Plummer's Baccharis, and several species of Brodiaea and Mariposa lily. She also conducts restoration project monitoring, gathering transect data to monitor cover, diversity and plant survival, and has experience assessing functional habitat parameters, which include bird and insect species diversity and abundance in restored areas, as a measure of restoration success.

Ms. Simonsen also has experience designing and implementing large- scale biological surveys, as well as long-term and multiple-species monitoring programs. She has experience using statistical simulations to optimize monitoring programs. She has conducted demographic research studies on several sensitive bird, plant, and insect species in southern California including foraging and habitat requirements, seasonal and geographic distribution, and reproductive success. She is responsible for the design, implementation, and management of field studies, the collection and analysis of data, client interactions, and agency coordination. All of her project experience is heavily integrated with GIS from initial project setup, to data input, analysis, and final presentation.

Project Experience - Habitat Restoration and Invasive Weed Control

Baron Ranch Restoration Project, Santa Barbara County, CA
The Baron Ranch is owned and operated by the County of Santa Barbara Resource Recovery and Waste Management and serves to mitigate impacts at the adjacent Tajiguas Landfill. As lead ecologist, Ms. Simonsen oversees the monitoring and weed-control efforts for this 42-acre restoration program, which includes riparian, oak woodland, freshwater marsh, chaparral and coastal sage scrub habitat. This project is constrained by the presence of the California red-legged frog, requiring modified approaches for restoration installation and weed control. She is also the author of the annual reports for the last five years of the project.

City of San Diego Pilot Channel Giant Reed Removal Project San Diego County, CA
The Pilot Channel is a portion of the Tijuana River that is subject to flooding and requires active management. Invasive-weed treatment within the river is a necessary component for effective mitigation. As the Project Manager and lead ecologist, Ms. Simonsen oversaw the chemical treatment of target invasive plant species, working with a Pest Control Advisor to develop an approach for this unique situation. In coordination, with ECM restoration crew, 5 acres of giant reed biomass were treated and subsequently removed from an ecologically sensitive area.

Education

M.S. Ecology
San Diego State University

Graduate Research, Entomology
University of California, Riverside

B.S., Biology (concentration in Environmental Biology)
University of California, Irvine

Permits

Survey Permit for California Gnatcatcher and Quino Checkerspot Butterfly

Training

Constructed Wetland Workshop
Successful CEQA Compliance
Erosion Control Workshop
Restoration with Native Grasses
Wetland Delineation Course
Quino Checkerspot Butterfly Survey Techniques Workshop
Audubon/MAPS Bird Banding Course
Desert Tortoise Training Workshop

Professional Memberships

Society for Ecological Restoration
California Native Plant Society
California Invasive Plant Council
Society for Conservation Biology
California Native Grass Association

Channan Remington Memorial Wetland Restoration Project, Imperial County, CA
This is a mitigation project for impacts from the construction of the All-American Canal within the Imperial Irrigation District service area. As restoration ecologist, Ms. Simonsen coordinated all monitoring of this project including vegetation and wildlife assessments. She developed an integrated pest-management program for the invasive plant species onsite and authored the annual monitoring reports for the last five years.

Tijuana River Valley Invasive Plant Removal Program, Otay Valley, CA
In conjunction with Southwest Wetlands Interpretive Association, Ms. Simonsen served as Project Manager over the last ten years of the invasive removal program within the Tijuana River, targeting giant reed, castor bean, and tamarisk. Treatment involved a combination of cut-stump and foliar-herbicide treatment in the 441-acre treatment area.

Goat Canyon Coastal Sage Scrub Restoration Project San Diego County, CA
The restoration site was designed to address International Boundary and Water Commission Impacts along the US border near the Tijuana River Valley. As restoration ecologist, Ms. Simonsen contributed to the restoration design and developed the integrated pest management approach for this project. This included an innovative pre- emergent approach to invasive nettle species.

All American Canal Dune Restoration Project, Imperial County. CA
The project is mitigation for impacts from the construction of the All-American Canal in the Algodones Dunes, within the Imperial Irrigation District service area. As lead ecologist, Ms. Simonsen developed and implemented a monitoring program for sand deposition and a vegetation assessment. She conducted the analysis and authored the final report.

USFWS Tijuana Slough National Wildlife Refuge Restoration, San Diego, CA
Over the course of several contracts, ECM, in coordination with Southwest Wetlands Interpretive Association, has conducted invasive weed control and habitat restoration with the USFWS Refuge. As restoration ecologist, Ms. Simonsen contributed to the planning and design of the coastal-sage and riparian-scrub restoration, and developed the approach for the treatment of invasive plant species.

Managed Marsh Planning and Design for IID's Water Transfer Project, Imperial Valley, CA
As the Deputy Project Manager for this large and complex wetland restoration project, Ms. Simonsen had the responsibility of overseeing the work to be done by a large, multidisciplinary group of professional engineers, environmental scientists, wetland and restoration ecologists, and wildlife biologists. In addition, the Managed Marsh also provides for conservation of drain and tamarisk habitats pursuant to IID's NCCP currently in development, and meet the requirements of the In-Valley Biological Opinion to offset potential salinity and selenium impacts to rails.

Design-Build Wetland Restoration and Wildlife Monitoring Study for the All-American Canal Lining Project, Imperial Valley, CA
As the Sr. Restoration Ecologist for all activities associated with the habitat creation, restoration, and enhancement activities for the Chanan Remington Memorial Wetland Project, Ms. Simonsen contributed to project planning, design and implementation. She also coordinated site reconnaissance, vegetation mapping, and wildlife study design for this project.

Roseville Oak Mitigation Planting Project, Roseville, CA
As Sr. Restoration Ecologist, Ms. Simonsen assisted in the establishment of 5,000 native oaks. Project design and implementation used native seedlings and trees propagated at the project nursery. She also assisted biologists in developing planting plans and irrigation designs for the ten open-space, preserve planting sites within Roseville. The five-year establishment includes temporary irrigation, Invasive Pest Management (IPM), and monitoring.

Spring Canyon Mitigation Project, U.S. Border Patrol, San Diego, CA
As the Project Manager for this project, Ms. Simonsen was responsible for the design and implementation of a wetland- and riparian-mitigation program. This project included wetland and riparian enhancement, restoration, and creation, as well as large-scale removal of Arundo and Tamarisk. Ms. Simonsen was responsible for coordinating with and overseeing subcontracted landscape architects and landscape contractors.

Bonita Meadows Restoration Feasibility Analysis, Caltrans District 11, San Diego, CA
As the Project Manager for this project, Ms. Simonsen prepared a wetland- and riparian-restoration feasibility analysis for Bonita Meadows, a tributary to Sweetwater River. She also managed a team of restoration ecologists, wetland biologists, and hydrogeologists while characterizing conditions for hydrology, soils, existing riparian vegetation, and exotic weed populations to identify potential enhancement, restoration, and creation opportunities within the drainage. A key challenge of this project was evaluating the intermittent contributions of nuisance run-off as a potential water source to support the wetland.

Native Grassland Restoration Area, Otay Water District
As restoration ecologist, Ms. Simonsen developed the project's restoration plan and oversaw implementation and maintenance of 14-acre native grassland restoration project. The purpose of the restoration area was to provide suitable habitat for burrowing owls and foraging habitat for raptors, including appropriate habitat for the 11 artificial burrows located within the restoration area.

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Delhi Sands Flower-Loving Fly (DSFLF) Restoration Program, Angelus Block Company
Ms. Simonsen, as lead ecologist, developed and implemented initial restoration plan for conservation area for the Delhi Sands flower-loving fly, as part of the project HCP for this species. She was responsible for developing restoration techniques that were subject to agency review and approval, coordinating agency interactions, conducting quantitative assessment of site conditions, and supervising work crew. Monitored construction and restoration activities for the presence of the DSFLF.

MCB Camp Pendleton Cocklebur Vernal Pool Ecosystem Enhancement Plan, San Diego County, CA
Ms. Simonsen served as Project Manager/Senior Restoration Ecologist, developing an enhancement plan for the Cocklebur sensitive area, which includes approximately 145 vernal pools. The project involved assessing vernal pools and upland resources, and developing a management plan that provides management direction and implementable objectives for short- and long-term goals to increase the value of the habitat. Key sensitive species evaluated include: San Diego Fairy Shrimp; Riverside Fairy Shrimp; California gnatcatcher; spreading Navarretia; Pendleton button celery; and thread-leaved brodiaea.

Chappo Post-Fire Invasive Weed Control, Camp Pendleton, CA
In her role as Project Manager and lead ecologist, Ms. Simonsen developed methods to minimize weed invasion in chaparral habitat, post- fire. The plan required maintaining levels of control for all non-native and invasive species with the potential to colonize the area. She also oversaw contractor implementation of plans.

Post-fire Erosion and Revegetation Camp Pendleton, CA
Project Manager and lead ecologist in developing an erosion-control program for large open-space fire at Camp Pendleton, Ms. Simonsen developed a GIS model to prioritize areas of the greatest erosion concern due to fire intensity, erodibility of soils and topography. She developed erosion-control devices that could be left in wildlands setting, and designed seeding plant palette to address the varying site conditions throughout the area. Furthermore, she oversaw contractor implementation of plan.

Kinder Morgan Pipeline Restoration Project, Camp Pendleton, CA
Ms. Simonsen was Project manager and lead restoration ecologist on this 23-mile pipeline project that crossed the entire width of Camp Pendleton from San Clemente to Oceanside. The pipeline included restoration of seven different vegetation communities including oak woodland, native grassland, coastal sage scrub, chaparral, riparian woodland and riparian scrub habitat. Other vegetation communities included several sensitive species of arroyo toad and thread-leaved brodiaea.

Angelus Block, Rialto, San Bernardino County
As part of the project HCP for this species, Ms. Simonsen developed and implemented initial restoration plan for conservation areas for the Delhi Sands Flower-loving Fly. Responsible for developing restoration techniques that were subject to agency review and approval, she coordinated agency interactions, conducted quantitative assessment of site conditions, and supervised work crew. As well, she monitored construction and restoration activities for the presence of the DSFLF.

City of Diamond Bar, Los Angeles County
Ms. Simonsen conducted mitigation monitoring associated with three residential tracts in the City of Diamond Bar. Mitigation for impacts to oak woodlands, walnut woodland, sage scrub, and riparian habitat occurred both on and offsite. The project involved monitoring visits to assess plant health and overall site condition, development of remedial measures to aid site success, preparation of monitoring reports, and coordination with the City and maintenance contractor.

Crystal Cove State Park, Orange County
Ms. Simonsen planned and implement restoration programs for the coastal sage scrub, oak woodland, and riparian habitats within the park. Responsibilities included design, installation, and monitoring of habitat restoration sites, performing transect surveys for various habitats, propagating native plants, collecting of native seeds, exotic eradication, and supervising work and prison crews. In coordination with the Nature Conservancy, she participated in and helped plan controlled burning.

Project Experience - Ecological Studies and Regulatory Documentation

Baseline Ecological Surveys for the Imperial Irrigation District's HCP, Imperial Valley, CA
As the Project Manager and lead ecologist for the project, Ms. Simonsen coordinated with the Imperial Irrigation District IID, the regulatory agencies, and academic advisors to develop and implement a study design for this three-year, large-scale project focused on evaluating the presence/absence of 91 plant and wildlife species with a potential to occur within IID's service area. The data obtained from this project will ultimately be used to prepare the Habitat Conservation Plan and the Imperial Valley Natural Communities Conservation Program Plan, providing guidance for mitigation measures and adaptive management for each of these plans.

San Miguel Habitat Management Area, Otay Water District, San Diego County, CA
As Project Manager, Ms. Simonsen was responsible for overseeing management of the preserve. In addition to oversight, she implemented or participated in the following principal tasks: Quino checkerspot butterfly surveys; California gnatcatcher surveys; sensitive plant surveys; burrowing owl artificial burrow mitigation program; least Bell's vireo surveys; and invasive nonnative weed control program. She was also responsible for all contact and coordination with the District and resource agencies.

Tajiguas Landfill Biological Monitoring and Permitting, Santa Barbara County, CA
The Landfill is an existing County-owned and operated municipal waste disposal facility located in a coastal canyon, Canada de la Pila, approximately 26 miles west of the City of Santa Barbara. As Senior Restoration Ecologist and person responsible for QA/QC, Ms. Simonsen has provided technical support for all work regarding this project. This included a biological assessment, a wetland delineation and jurisdictional determination, surveys for sensitive species, and the development of a comprehensive restoration plan to mitigate impact to biological resources. She also authored and provided technical QA/QC for all reports associated with this project. The main constraint of the project is that it provides habitat for the federally-threatened, California red-legged frog (Rana aurora draytonii) (CRLF). Project permits were obtained from resources agencies including the US Army Corps of Engineers (COE), the US Fish & Wildlife Service (FWS), and the California Department of Fish and Game (DFG).

Desert Habitat Mapping Project for the Imperial Irrigation District, Imperial Valley, CA
Ms. Simonsen served as Project Manager/Senior Biologist for the large scale 67,200-acre mapping of the natural habitats adjacent to the IID canals. Ms. Simonsen was responsible for the successful design and implementation of the classification methodology for desert habitats. The project included the development of a geodatabase to model the habitat of the 28 HCP covered species.

Sage Hill Resource Management Plan. San Diego, CA
The County of San Diego Department of Parks and Recreation acquired the Sage Hill property, which is included in the proposed North County MSCP preserve system. Ms. Simonsen was the lead ecologist developing biological components of the Resource Management Plan, including biodiversity studies for birds, reptiles, amphibians, insects and bats. She also prepared the Vegetation Management Plan and fire modeling.

Drain Vegetation Survey and Geodatabase Development for the Imperial Irrigation District, San Diego, CA
As Senior Biologist, Ms. Simonsen led field surveys of approximately 1,500 miles of drains and canals to assess wetland vegetation, species composition, vegetation cover, and the development of a GIS based Geodatabase. The work was completed ahead of schedule and under budget. Ms. Simonsen's responsibilities included technical oversight and management, ensuring the project had the needed resources, and provided QA/QC.

Anderson/Waterford Property Burrowing Owl Surveys, Imperial Valley, CA
As Sr. Biologist, Ms. Simonsen conducted focused surveys for the western burrowing owl (Athene cunicularia hypugea) (BUOW) for Westmount Properties, LLC of the Waterford/Anderson Property (site) near El Centro, California. The purpose of this survey was to assess the presence of this species on site and estimate its population density based on standard protocols set forth by the Burrowing Owl Consortium.

Jameson/Benson Property Burrowing Owl Surveys, Imperial Valley, CA
As Senior Biologist, Ms. Simonsen conducted focused surveys for the western burrowing owl (Athene cunicularia hypugea) (BUOW) for the Jameson/Benson Property (site) near Brawley, California. The purpose of this survey was to assess the presence of this species on site and estimate its population density based on standard protocols set forth by the Burrowing Owl Consortium. She also provided QA/QC for the project.

Robert B. Diemer Treatment Plant North Access Road Environmental Impact Report and Biological Surveys, Orange County, CA
As the Project Manager for the Biological Services required for this project, Ms. Simonsen oversaw all of the field work and report preparation tasks associated with this project, which entailed the construction of a new, emergency access route for Metropolitan Water District plant personnel, service trucks, and emergency vehicles to improve public safety in Chino Hills State Park. To oversee the field work tasks, Ms. Simonsen assured that the vegetation mapping, wetland delineation, and sensitive species surveys were completed efficiently, following the most recent accepted protocols. She also provided guidance during the report preparation and provided QA/QC on all draft and final deliverables.

On-Call Contract for Biological Services, Caltrans District 11, San Diego and Imperial Counties, CA
As the Project Manager for this on-call contract, Ms. Simonsen conducted data review, habitat assessments, focused endangered plant and animal studies, GIS mapping, impact analyses, and development of mitigation measures for a number of projects throughout San Diego County. In addition, she conducted a number of sensitive species surveys, vegetation mapping, impact analysis and provided quality control and assurance during document preparation.

City of San Diego Los Penasquitos Watershed Plan, San Diego, CA
Ms. Simonsen's roll as Project Manager and main author for the development of the Los Penasquitos Watershed Plan allowed her to take responsibility for coordinating and overseeing technical experts in the fields of conservation planning, stormwater runoff management, hydraulics and sediment transport, water quality and toxicology, and GIS. The plan evaluated stressors in the watershed and developed specific goals and objectives to address these stressors and improve the overall health of the watershed. She participated in public outreach which included staff from the City, RWQCB, and the Citizens Advisory Committee.

Casey's June Beetle Surveys, Agua Caliente Indian Tribe, Riverside, CA
As lead ecologist, Ms. Simonsen designed and conducted insect surveys to determine the distribution of Casey's June beetle, Coachella Valley grasshopper, Coachella giant sand treader cricket, and the Coachella Valley Jerusalem cricket on lands owned by the Agua Caliente Indian Tribe, as part of the baseline data generated for their Multi-Species Habitat Conservation Plan.

California Gnatcatcher Research, Nature Reserve of Orange County, Laguna Beach, CA
Ms. Simonsen monitored breeding pairs of coastal California gnatcatchers at North Laguna Laurel in Laguna Beach, California. This was part of a larger project on coastal California gnatcatcher breeding biology by Jon Atwood and Dave Bontrager.

El Segundo Blue Butterfly Population Census, Los Angeles, CA
Ms. Simonsen performed a population census for the El Segundo blue butterfly at the Los Angeles International Airport, including block counts and surveying a reference transect under the direction of Dr. Richard Arnold.

San Joaquin Hills Burn Area California Gnatcatcher Research, Nature Reserve of Orange County, CA
Ms. Simonsen conducted coastal California gnatcatcher and cactus wren surveys in the 1992 Laguna Beach Burn Area as part of a long-term population study. Study also included mapping potentially suitable habitat for these species, as well as all observations of special status plant and wildlife species. She prepared a report analyzing data that characterized the colonization of these species into the burn area.

North Ranch Policy Planning Area, Orange County, CA
Ms. Simonsen conducted field surveys for the coastal California gnatcatcher, arroyo toad, California red-legged frog, and a number of sensitive plant species including the Intermediate Mariposa lily. She also conducted a habitat assessment for the Quino checkerspot butterfly for the 9,000-acre project area. She prepared reports summarizing habitat quality and survey results for the wildlife species mentioned above.

Invertebrate Community Assessment, Irvine Ranch Water District
Ms. Simonsen conducted invertebrate surveys of riparian and wetland habitat at the San Joaquin Marsh Mitigation Project as a measure of restoration success within riparian habitat. Annual results were compared to control/natural habitats.

Ballona Lagoon Coastal Dune Restoration Monitoring, Los Angeles County, CA
As restoration ecologist, Ms. Simonsen monitored dune revegetation along waterways within the developed portion of the Ballona Lagoon in Marina del Rey. She assessed plant establish and reestablishment of the insect community. Insects were sampled using pitfall traps, sweep nets and butterfly nests and identified to genus.

North Laguna Laurel California Gnatcatcher Nest monitoring, Laguna Beach, CA
Ms. Simonsen monitored breeding pairs of coastal California gnatcatchers at the North Laguna Laurel Area of the Nature Reserve of Orange County. This research was part of a larger study in the area directed by Dave Bontrager.

Los Alisos Water District California Gnatcatcher Nest Monitoring, County of Orange, CA
Breeding pairs of California gnatcatchers were monitored in order to determine reproductive success and to assess for potential effects of adjacent construction activity.

Foothill Transportation Corridor South USFWS Protocol California Gnatcatcher Surveys, Orange County, CA
Ms. Simonsen conducted verification surveys in historically occupied habitat and full protocol surveys were performed in habitat previously unoccupied.

Barham Ranch USFWS Protocol California Gnatcatcher Surveys, Orange County, CA
Ms. Simonsen performed USFWS protocol coastal California gnatcatcher presence/absence surveys in the City of Orange scope of influence. Breeding status was determined and the habitat occupied was characterized. She also assisted in developing a Biological Assessment Report for the property.

Serrano Heights Development USFWS Protocol California Gnatcatcher Surveys, Orange County, CA
Ms. Simonsen performed protocol California gnatcatchers, vegetation description, and surveyed for NCCP Identified Species, including birds, plants and reptiles.

UC Irvine Ecological Preserve California Gnatcatcher Nest Monitoring, Orange County, CA
Ms. Simonsen monitored reproductive success of the California Gnatcatchers on the Preserve. She was responsible for overseeing several field assistants and authored a seasonal report of the population status.

North Wetland Project, Laguna Niguel, Orange County
As Project Manager and lead ecologist, Ms. Simonsen prepared a Biological Assessment for the City of Laguna Niguel Department of Public Works for a wetland creation project to treat water run-off. She conducted habitat reconnaissance to identify environmental and biological constraints. She also performed surveys for special-status plant and animal species, analyzed project impacts and developed mitigation measures.

1161 Summit Place, Laguna Beach, Orange County
Ms. Simonsen prepared a Biological Assessment for property owner for a residential development project. She conducted habitat reconnaissance to identify environmental and biological constraints. She performed analysis of project impacts and developed appropriate mitigation measures within the context on the project specific plan and Laguna Beach General Plan.

Pinyo Property and South Coast Medical Center Access Easement Area, Laguna Beach, Orange County
Ms. Simonsen prepared Biological Assessment for the property owner for a residential development project. She conducted habitat reconnaissance to identify environmental and biological constraints, performed surveys for special status plant and animal species, and analyzed project impacts and developed mitigation measures within the context of the Orange County Central/Coastal NCCP and the City of Laguna Beach General Plan. Environmental issues included sensitive habitats, plant, and wildlife species.

Thomas Riley Streambed Stabilization Project, Orange County
Ms. Simonsen developed a mitigation plan for impacts to Wagon Wheel Creek associated with the installation of stream stabilization devices by the County of Orange. Habitats impacted include wetland, riparian, and oak woodland. She also assisted with the wetland delineation and ACOE/CDFG permitting process.

Hollywood Reservoir Water Quality Improvement Project, Los Angeles County
The project involved impacts to coast live oaks, riparian, and sage scrub habitats associated with the construction of two underground water tanks. Project mitigation occurred on the resulting cut and fill slopes, totaling approximately 50 acres. Ms. Simonsen provided several services, including mitigation monitoring, negotiations with contractor and LA Department of Water and Power on plan revisions, direction of maintenance personnel, and addressed public concerns regarding mitigation process. She also assisted with planting and irrigation plans.

Marshburn Channel South, Orange County
Ms. Simonsen was the niological monitor for vegetative maintenance activities occurring in wetland/riparian habitat within the channel. Biological issues regarding least Bell's vireo, southwestern willow flycatcher, raptors, and nesting bird species.

Brown Headed Cowbird Trapping, Orange County
Involved in the monitoring of an endangered species management program for the California gnatcatcher and Least Bells Vireo in Orange County, California for Griffith Wildlife Biology, Ms. Simonsen was responsible for maintenance and daily monitoring of brown headed cowbird traps, surveying for least Bell's vireo and coastal California gnatcatcher.

US Forest Service, Descanso District, San Diego County
Ms. Simonsen conducted focused Quino Checkersport Butterfly Surveys for the US Forest Service, Descanso District, San Diego County.

USFWS Post-fire Butterfly Surveys in Proctor Valley, San Diego County. CA
Ms. Simonsen conducted Quino checkerspot butterfly surveys and mapping of adult and larval host plant resources in the first spring following fires in coastal sage scrub and chaparral habitat.

Kinder Morgan Pipeline Integrity Assessment. San Diego, CA
As Project Manager, Ms. Sinonsen developed strategy to assess biological constraints across more than 20 miles of pipeline to facilitate rapid access by Integrity crews, given sensitive species issues and seasonal constraints.

Impact of Host Plant Chemistry on the Chalcedon checkerspot butterfly, Riverside, CA
As a graduate student in entomology, Ms. Simonsen investigated the external phenolic leaf resin produced by the sticky monkey flower (Mimulus aurantiacus) and its effect on the checkerspot butterfly (Euphydryas chacledona). Natural variation within and among populations was documented and a genetic basis to this variation was determined. The goal of this research was to determine whether herbivory by the larvae was a significant agent of selection on resin phenotypes and thereby potentially structure population variation. The project involved extensive collections throughout southern California and rearing of a lab population of checkerspot butterflies.

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Presentations/Publications

Simonsen, Julie. 2013. Optimizing a Multi-Species Monitoring Design: A Case Study From an Agroecosystem. Thesis for the Master of Science in Biology with a Concentration in Ecology San Diego State University.

Hobbs, R., J. Simonsen and T. Marchant. 2007. Controlling Giant Reed (Arundo donax) in the Tijuana River Valley. California Invasive Plant Council Symposium. Poster Presentation.

Marchant, T., R. Alarcon, J. Simonsen, P. Ruiz, and H. Koopowitz. 1998. Population ecology of Dudleya multicaulis (Crassulaceae); a threatened narrow endemic. Madroño.

Van Dam, N., J. Simonsen, and J. D. Hare. 1997. Evolutionary significance of diverging herbivore preferences for glandular and non-grandular trichome types of Datura wrightii. In Proceedings of the Ecological Society of America Annual Meeting, Albuquerque, New Mexico.

Bowler, P., J. Simonsen, and M. Schroeder. 1995. California gnatcatcher use of mule fat and coastal sage scrub restorations as a wetlands margin dispersal corridor. Symposium on the Biology of the California Gnatcatcher.

Woehler, E., M. Schroeder, T. Stecher, J. Simonsen, and J. Ezovski. 1995. Dynamics of a population of California Gnatcatchers, 1991 to 1995. Symposium on the Biology of the California Gnatcatcher.

Simonsen, J. 1994. Fauna Analysis of Coastal Sage Scrub – Habitat Requirements and Viability Considerations for Sensitive Species in Koopowitz, H. and A. Thornhill eds., University of California Ecological Reserve Management Plan.

Ecological Conservation & Management
Holistic Habitat Specialists

Biologist

Overview

Mr. Lo has four years of experience working in public and private sectors of the environmental consulting and conservation fields. Mr. Lo is a recent graduate of both the Ecology graduate program at San Diego State University and the Geographic Information Science and Technology graduate program at the University of Southern California. During his concurrent graduate programs, Mr. Lo specialized in non-native plant invasion, soil chemistry and ecology, and the application of GIS techniques and spatial database design to environmental questions. As a student, Mr. Lo has acquired leadership and management skills through the training and coordination of undergraduate research assistant in precise and sensitive laboratory assays.

Prior to and during his graduate education, Mr. Lo worked on a variety of monitoring and management projects throughout southern California coastal sage scrub, chaparral, oak woodland, grassland and estuarine habitats. Mr. Lo has been involved in vegetation, insect, and water quality monitoring programs where transect data was collected to assess the diversity and health of ecosystems. He has produced vegetative maps as deliverables to restoration work groups used in the determination and promotion of potential restoration projects.

Education

M.S. Ecology
San Diego State University

M.S. GIST
University of Southern California

B.S., Ecology, Behavior,
and Evolutionary Biology
University of California, San Diego

Project Experience

Southern California Vegetation Monitoring Project, San Diego and Orange Counties, CA.
Mr. Lo conducted shrubland and grassland vegetation surveys throughout San Diego and Orange County to account for species richness and cover under the guidelines of the MSCP and NCCP. Mr. Lo collected vegetation data through point-intercept and quadrat transect methods.

Oak Tree Pest and Disease Monitoring Project, Orange County, CA.
Mr. Lo conducted oak tree surveys to assess the health and recruitment rate of Orange County oak tree groves. Mr. Lo collected data on tree diameter at breast height, tree height, and distances to neighboring trees, as well as evaluations of tree health, based on pest exit-hole, fungal infection, and foliage abundances.

Hermes Copper Monitoring Project, San Diego County, CA.
Mr. Lo conducted butterfly surveys throughout San Diego County to identify Hermes Copper population locations and quantify population numbers. He worked both independently and in two-person teams to record the identity and location (GPS) of over 50 different species of butterflies in addition to the Hermes Copper Butterfly.

Soil Characteristics in Grassland Restoration Study, San Clemente Island, CA.
For his master's thesis at San Diego State University, Mr. Lo studied the effects of a grassland restoration project on soil chemistry, moisture and nutrient-cycling potential. Mr. Lo collected soils monthly from a grassland that had been treated with different combinations of fire, seeding, irrigation and herbicide treatments. He analyzed soils in a laboratory, where he trained and coordinated eight concurrent research assistants to complete monthly soil assays.

Juniper Canyon Mapping Project, San Diego, CA.
As a graduate intern for San Diego Canyonlands, Mr. Lo led and coordinated the efforts of a three-person team in surveying and mapping the environmental, recreational and human resources of the Juniper Canyon system in urban San Diego, CA. Mr. Lo designed a functional database workflow that facilitated data collection and manipulation between team members. His team produced three maps as deliverables to San Diego Canyonlands.

Estuarine Health Assessment Project, Imperial Beach, CA.
Mr. Lo participated in transect surveys of two San Diego estuarine systems where he collected soil samples, conducted in-field water quality assessments through the use of a YSI-55 meter, measured water-flow speed, and conducted both point- intercept and quadrat vegetation surveys. In lab, Mr. Lo assessed soil salinity through a light refraction technique. Additionally, Mr. Lo identified and catalogued estuary insects that were collected and preserved four years prior.

Brodiaea filifolia Survey, Camp Pendleton, CA.
Mr. Lo conducted full-coverage straight-line transects to survey for Brodiaea filifolia populations. The three-person team utilized Trimble GeoXH GPS units to walk along and maintain parallel transects seven meters apart to obtain full ground coverage.

Least Tern Restoration Habitat Monitoring Project, San Diego, CA.
As a graduate student, Mr. Lo led teams of undergraduate students in vegetation surveys in Least Tern restoration zones. Mr. Lo and his teams recorded vegetation and ground cover, and plant height transect data used to evaluate the habitat requirements for successful Least Tern restoration management.

Mangrove Restoration as Carbon Offset Feasibility Assessment, Imperial Beach, CA.
Mr. Lo conducted a scientific literature review in order to evaluate the feasibility of mangrove forest restoration as offsets for construction-oriented carbon emissions. Mr. Lo created a detailed budget necessary for mangrove forest restoration, and wrote a report outlining research findings on the efficiency of mangrove forests as carbon sinks.

Additional Skills & Qualifications

Applications: ArcGIS, Microsoft SQL Server 2012, Excel,Word, Powerpoint, Systat, Sigmaplot

Hardware: Trimble GeoXH GPS, Trimble Nomad, YSI-55.

QUALIFICATIONS

Ecological Conservation and Management (ECM) provides comprehensive natural resource management services throughout central and southern California. Our lead biologists bring over 50 years of experience managing, restoring and monitoring California's native habitats and wildlife. Our mission is to provide the most attentive, cost-effective approach to specialized natural resource management, and an unwavering commitment to the project at hand. By eliminating unnecessary overhead expenditures, we can provide senior staff with strong project management capabilities and technical skills at rates that allow them to participate in the field work, day to day activities, and decision making. Knowledge, experience, commitment and value are the characteristics that define our business philosophy.

ECM staff have over 50 years of experience in native habitat restoration. We specialize in creating and enhancing environments for threatened and endangered species. ECM has designed and implemented coastal sage scrub projects with emphasis on Coastal California Gnatcatcher requirements in San Diego County, riparian scrub habitat for Least Bell's Vireo in San Diego and Santa Barbara counties, sensitive marsh birds in Imperial County and sensitive insects in Riverside, Imperial and San Diego counties. ECM restoration ecologists have strong backgrounds in wildlife biology and hold survey permits for several listed species. ECM provides Design-Build habitat restoration services which include the design, planning, implementation, plant propagation, construction, maintenance, management and monitoring of native habitat restoration programs. ECM senior staff has designed and implemented successful, long-term and complex projects in central and southern California for over 25 years. These projects included coastal sage scrub, riparian scrub/woodland, oak woodland, freshwater marsh, desert scrub, and chaparral. ECM has also worked in the translocation and restoration of sensitive plant populations.

Licenses and Permits

ECM holds the necessary license and permits to conduct biological resource management in southern California including biological surveys, habitat restoration and non-native weed control. For general and focused species surveys, Mr. Marchant (TE007581-2) and Ms. Simonsen (TE007520-4) hold USFWS 10(a)(1)(A) permits to work with sensitive wildlife and are permitted to conduct surveys and monitor nests of the coastal California gnatcatcher. They also hold DFW collecting permits for the common and sensitive species.

For habitat restoration services, ECM holds a contractor's license from the Contractor State Licensing Board for Landscaping (C-27), which is often required for habitat restoration work particularly on public works projects. ECM also holds a business license with the California Department of Pesticide Regulations for the use pesticides (License No. 38164). Both Tito Marchant and Julie Simonsen hold Qualified Applicator Licenses: Mr. Marchant (QAL No. 128895, Category B-Landscape Maintenance) and Ms. Simonsen (QAL No. 124157, Category B-Landscape Maintenance, Category C-Right-of-Way, Category E-Forest, and Category F-Aquatic).

Table 2. Summary of Licenses and Permits

California State License Board Landscaping (C-27)	# 1012904, Exp. 04/30/18
Department of Pesticide Regulations Business License Qualified Applicator License	# 38164, Exp. 12/31/2018 # 124157, Exp. 12/31/2017 # 128895, Exp. 12/31/2017
US Fish and Wildlife 10(a)(1)(A) Survey Permit Casey's June Beetle, Coastal California Gnatcatcher (nest monitoring), Quino Checkerspot Butterfly	TE007520-4
Department of Fish and Wildlife Scientific Collecting Permit	# SC-7270, Exp. 02/25/2018

Project Experience

The following three projects are representative of ECM's habitat restoration experience. Each of these projects are of similar size and scope as the Baron Ranch Restoration Projects. References for these specific projects are included in the reference section of this proposal.

1) **BARON RANCH RESTORATION PROJECT**
County of Santa Barbara Resource Recovery & Waste Management Division
Goleta, California 2010 - On-going

ECM's principal ecologists have been providing comprehensive ecological restoration services to the County of Santa Barbara for over ten years. During this time, ECM has been awarded three competitive contracts to execute the 50-acre Baron Ranch Restoration Program. Our professional services include the planning, implementation, monitoring, maintenance, management and coordination with resources agencies. The main goal of this project is to mitigate impacts to the federally threatened California red-legged frog (*Rana aurora draytonii*).

ECM principal ecologists assisted the County in preparing the required environmental and regulatory permitting documents including: Biological Assessment/Biological Technical Report, California Red-legged Frog Management Plan, California Red-legged Frog Survey of the Baron Ranch, Tree Survey of Proposed Project Area at the Tajiguas Landfill, Baron Ranch Restoration Plan, Jurisdictional Delineation, and resource agency permits. The Baron Ranch Restoration Program provides a comprehensive restoration strategy for the developed and degraded portions of the Arroyo Quemado watershed on the Baron Ranch, which will serve as the compensatory mitigation site. Baron Ranch is an approximately 1,100-acre parcel owned by the County situated immediately adjacent to the Tajiguas Landfill. The property includes native and disturbed habitats, as well as, agricultural orchards. Arroyo Quemado and its tributaries traverse the Baron Ranch and support an important breeding population of California red-legged frogs. The overarching goals of the restoration program are to improve and augment habitat for targeted wildlife within

the Arroyo Quemado watershed. These goals will be met through the protection, enhancement, restoration and creation of native riparian and upland plant communities within disturbed areas of the Baron Ranch.

Because of the large scale and complexity of the restoration effort, the program includes seven phases. The County has selected ECM to implement, maintain, monitor and manage all phases of the restoration program including: 1.5 acres of freshwater marsh, 17.1 acres of coast live oak riparian forest, 12.5 acres of coast live oak woodland, 6.5 acres of southern willow scrub, and 7.1 acres of chaparral, and 6.2 acres of coastal sage scrub. ECM implemented the last two phases in 2016. To date, more than 41,000 trees and shrubs have been installed representing over 50 species and, according to the last monitoring data, more than 90% are alive and thriving. We have installed a large, complex drip irrigation system to conserve water that has also provided adequate water and reduced weed germination. ECM installed a native plant nursery at Baron Ranch to supplement planting and reduce costs of purchased plant material. Over 20,000 trees and shrubs were propagated and cultivated for subsequent planting. Mr. Marchant as the Project Manager & Ecologist has been intimately involved in all aspects of the project and directly supervised the implementation effort. He routinely conducts horticultural monitoring of all phases and determines maintenance efforts. Mr. Marchant coordinates all project activities with the County and assist in the coordination with resource agencies. Ms. Simonsen has led the botanical monitoring, report preparation and integrated pest management plan.

All phases of this project are meeting and/or exceeding mitigation requirements. In fact, Phase I, II, and III have been fully completed, Phase IV will be successfully completed this year, Phase V is exceeding all mitigation requirements and might be signed off before the five-year requirement, and the last two phases, installed in 2016, have a plant survival greater than 90 percent and overall doing very well. It is this type of performance that has lead the County to award multiple contracts to ECM.

Contract Value: $ 2,357,077.00 (2010-$605,522.00, 2012-$961,065.00, 2015-$790,490.00)

2) CHANNAN REMINGTON MEMORIAL WETLAND RESTORATION PROJECT
Imperial Irrigation District
Imperial County, California 2010 - On-going

The project's objectives are to create, restore, and enhance approximately 50 acres of habitat for the state threatened California Black Rail (*Laterallus jamaicensis*), the federally endangered Yuma Clapper Rail (*Rallus longirostris yumanensis*), the state endangered Gila Woodpecker (*Melanerpes uropygialis*), and the federally threatened Yellow-billed Cuckoo (*Coccyzus americanus*). The project mitigates impacts from the Imperial Irrigation District, All-American Canal Lining Project. ECM's principal ecologist Tito Marchant, has been leading the Wetland Restoration Project efforts from the very beginning and continues manage maintenance and monitoring activities as well as assisting the Imperial Irrigation District (IID) in the transfer of this project to the California Department of Fish & Wildlife for its long-term stewardship.

Groundwater monitoring was conducted to assess the potential impact of canal lining on the surrounding 2,000-acre wetland complex. Data was analyzed for trends and potential changes that may have occurred before and after the construction of the new canal. The baseline studies included a detailed habitat assessment and feasibility analysis. A GIS database was generated integrating information on access, soils, groundwater elevations, vegetation communities, vegetation cover, existing wetland habitat, invasive plants, wildfire history, sensitive resources and wildlife observations. The GIS database generated allowed us to create a spatial model to identify areas suitable for restoration. Using this data, we designed a wetland area with a hydrology that mimics natural flooding, facilitate the recruitment of native species while allowing us to manage water elevation without engineered structures or pumps, satisfy the unique habitat requirements of two listed freshwater marsh bird species including hydrology, water elevation, foraging, nesting and dispersal habitat. Based in all these studies and the ecology of the target bird species, a comprehensive restoration plan was developed detailing long term operation and monitoring in an adaptive management framework.

Implementation efforts also included the control of two dominant invasive species that exists throughout the wetland restoration complex: ravenna grass and tamarisk. Over sixty percent of the plant cover within the 50-acre restoration site was attributed to these two species at the start of the project; invasive plant cover is now less than 2 percent and under control. Collection of seeds and cuttings from the existing wetland and riparian habitat early in the project allowed us to use locally adapted species with better probabilities for survival. Cuttings and seeds were propagated at an on-site nursery set up for this purpose. Over 12,000 trees have been propagated and planted onsite.

Because the goals of the project are to create and restore habitat for sensitive wildlife, a vegetation and wildlife monitoring plan was developed to evaluate the response of wildlife to restoration efforts as well as the changes to plant composition and cover. This information has been crucial for carrying out adaptive management decisions. Wildlife activity has been documented to evaluate changes in the relative abundance and species diversity of birds and mammals within the study area during and following the wetland enhancement activities including focused surveys for marsh species. To date, both California black rail and Yuma clapper rail have been observed using the wetland project area during the breeding season. Bird diversity and abundance has increased and is higher than adjacent reference areas. Marsh habitat has increased by approximately twenty percent since project construction.

ECM has monitored, maintained and managed the project for the last 7 years. All phases of the Project were completed on-time and within budget. In 2016, ECM was awarded another contract to complete the 10-year monitoring and maintenance period specified in the resource agency permits. In addition, ECM has been commissioned to develop an adaptive resource management plan to guide the long-term management of the project.

Contract Value: $1,263,634.00 (2010-$1,000,004.00, 2015-$109,250.00, 2016-$154,380.00)

3) CANYON VIEW RESIDENTIAL DEVELOPMENT PROJECT
Summit Land Partners, LLC
Palm Springs, California 2014-On-going

This project involves developing resource specific mitigation strategies for a newly listed species. The Canyon View Project in Palm Springs is located on an alluvial fan at the base of the San Rosa mountains. The project occurs within critical habitat and is occupied by the federally endangered Casey's June beetle. The beetle was listed in 2011; however mitigation standards had yet to be developed for this narrow endemic species requiring extensive coordination with USFWS. Furthermore, the beetle is not a covered species under the Agua Caliente Tribal Habitat Conservation Plan and was provided no protection although the species is located within the limits of the plan. ECM coordinated with U.S. Fish and Wildlife Service as part of this project and the larger Habitat Conservation Plan effort for the beetle, including participation in multi-stakeholder meetings and USFWS led research projects. ECM also took the lead in evaluating potential mitigation land within Casey's June beetle critical habitat including identifying important habitat characteristics and soliciting interest for land owners in the sale or establishment of conservation easement on their property. This research led to identification of a mitigation site with high quality habitat for the beetle and an agency approved mitigation strategy that included impacts to waters of the U.S. and waters of the state.

This project exemplifies ECMs experience coordinating with the resource agencies on sensitive issues and developing mitigation strategies including compliance with multiple species habitat conservation plans. Specifically, ECM's biological resource services on the project included reconnaissance and focused surveys, vegetation mapping, sensitive species surveys, and jurisdictional delineation. This data was used to inform the design phase of the project including avoidance and minimization of resources, as well as balancing resource conservation with onsite flood control constraints. This stage of the project required coordination with hydrologist, engineers, architects and landscape designers; and the review of design plans and hydrological studies.

As part of the CEQA support for this project ECM prepared a biological technical report that included an impact analysis, mitigation strategy and consistency with the multi-species habitat conservation plan. ECM also prepared the jurisdictional delineation and permit applications for water under the jurisdiction of the Department of Fish and Wildlife, Environmental Protection Agency, and U.S. Army Corps of Engineers. The permitting strategy included securing a waiver for the utilization of a nationwide permit to facilitate agency permitting.

ECM is currently coordinating the land acquisition and conservation easement of the mitigation parcel. The agreements require coordination between the property owner, resource agencies, Bureau of Indian Affairs and third party steward. ECM is facilitating the PAR analysis and legal review.

Contract Value: $290,100.00

4) **TIJUANA INVASIVE PLANT CONTROL PROGRAM**
Southwest Wetlands Interpretive Association
San Diego, California 2010-2015

Ecological Conservation and Management (ECM) principal ecologists have a long-standing working relationship with the non-profit group Southwest Wetland Interpretive Association (SWIA) in their efforts to restore the Tijuana Estuary and River Valley. For over a decade, both Tito Marchant and Julie Simonsen have worked closely with SWIA as Project Managers and Senior Ecologists, managing invasive plant species and restoring native habitat. This program included multiple grants from local and federal agencies for the treatment and control of invasive species and implementation and maintenance of riparian and scrub habitat restoration. Over fifteen-hundred acres of riparian woodland ad scrub have been treated for invasive weed species with a re-sprout rate of less than five percent. The primary plant species of concern for control are giant reed (*Arundo donax*), castor bean (*Ricinus communis*), and salt cedar (*Tamarix ramosissima*). ECM implemented mechanical and chemical control methods in an integrated pest management framework. These methods have proven highly effective in preventing re-sprouting and reducing herbicide use.

The Tijuana Estuary is one of the largest functioning wetlands remaining in Southern California; and provides habitat for several protected avian species, such as the federally listed Least Bell's Vireo, the Light-Footed Clapper Rail, the Belding's Savannah Sparrow, the California Gnatcatcher and numerous raptors that utilize the estuary for nesting and foraging. Because sensitive riparian habitat surrounds infested areas, the project must be executed with great care to avoid any impact to sensitive species. Once the invasive weeds were controlled, the restoration effort included riparian and coastal scrub species, which are key habitat parameters for the Least Bell's Vireo and California gnatcatcher. These listed species, as well as a number of other sensitive bird species have been recorded utilizing these restored habitats. ECM also implemented irrigation strategies, such as drip-irrigation, that efficiently provided adequate watering for native plants while minimizing germination and establishment of non-native and invasive species.

The project also included vegetation mapping and the use of GIS to track the cover and distribution of the target weed species over large areas of the valley. This data was used to inform weed management approach as well as adaptive management measures to address re-sprouting and new infestations of invasive species. The Project was completed on-time and within budget each year.

ECM's biological services utilized on this project included: field reconnaissance, vegetation mapping, invasive plant mapping, sensitive species surveys, GIS data collection and figure preparation, and agency coordination. ECM's restoration services included: feasibility studies, conceptual restoration plans, design of irrigation plans and planting plans, invasive weed control, installation of habitat restoration plantings, installation of irrigation systems, ecological restoration monitoring and maintenance.

Contract Value: $497,000 (over multiple grants)

5) **VICTORIA GROVE NATURAL AREA PROJECT**
Victoria Grove Maintenance Association
Corona, California
2016 – On-going

The Victoria Grove Natural Area is an open space preserve that serves as mitigation for the Victoria Grove Residential Development. The preserve is located in the Western Riverside County Multiple Species Conservation Plan and includes fresh water marsh, riparian scrub, riparian woodland and sage scrub vegetation communities. The preserve is protected under a conservation easement with the resource agencies. Ecological Conservation and Management is assisting the Victoria Grove Maintenance Association with the stewardship of the preserve including monitoring, maintenance and weed control requirements stipulated in the conservation easement and associated management plans.

ECM conducted monitoring to assess the health of the native vegetation communities and the status of the preserve infrastructure. All habitat types were walked to assess horticultural parameters including signs of new growth, seed set and new seedlings. In addition, mapping of non-native and invasive weed species were conducted to inform maintenance efforts and the integrated pest management plan. Biological monitoring also included habitat use of the natural area by wildlife including Black Crowned Night Herons, Cooper's Hawks, Red-shoulder Hawk and the Greater Roadrunner. Vegetation monitoring also included an evaluation of tree damage and mortality. ECM assessed for an infestation of the polyphagous shot hole borer including signs of frass, staining, gumming, and exit holes.

In addition, ECM monitored the flow conveyance structures located throughout the main drainage including storm water drains and culverts. ECM evaluated functionality of the structures and whether flow could be impeded by sediment, vegetation or debris. In addition, preserve signage, trash, debris and human use of the preserve was assessed. A monitoring report was prepared that summarized results, provided maintenance recommendations and informed the resource agencies on the status of the preserve.

The natural area was not maintained for a number of years and numerous non-native species were prevalent including salt cedar, pepper trees, palm trees, castor bean and tree tobacco. ECM developed an integrated pest management approach that used a combination of mechanical and herbicide control techniques to manage weed populations onsite. These techniques were implemented by ECM's habitat restoration crew in sensitive habitat requiring care not to impact non-target vegetation. Due to contracting constraints treatment extended into spring; ECM conducted nesting bird and raptor surveys allowing the weed treatment to be completed while avoiding impact to wildlife species.

As part of this project ECM coordinates with a number of stakeholders including the maintenance association, homeowner's management company, residents of the development and the resource agencies.

Contract: $58,800

APPROACH

Ecological Conservation and Management, Inc. (ECM) has founded on the principle of providing high quality, scientifically rigorous biological services to our clients in a cost-effective manner. We have achieved this goal by understanding our client's goals, objectives and challenges; and by providing senior staff with strong project management capabilities at a reasonable rate that allows them to participate in the field work, writing, and day to day activities and decision making. Through the intensive involvement of our senior staff we can deliver a high quality, on-budget and on-schedule product.

ECM has a proven track record in weed control and invasive plant species management. We have managed or controlled for such problematic species giant reed, salt cedar, castor bean, ice plant, mustard, exotic thistles, poison hemlock, anise and non-native grasses, including several glyphosate resistant species. Both Mr. Marchant and Ms. Simonsen have Qualified Applicator Licenses with the California Department of Pesticide Regulation. No project is ever the same. Because of it, we believe that our extensive experience and record of performance and success is the best qualification for native habitat restoration projects.

The Baron Ranch Restoration Project will receive the full attention of Mr. Tito Marchant; the proposed Project Manager/Principal Ecologist, whose total workload is limited to ensure that all project demands are addressed. We have eliminated unnecessary layers of management and overhead that overburden hourly rates and generally removes project principals for the day to day management. ECM's Project Manager will be available to meet as requested by the County to assure that the County's objectives are being met.

ECM implements our quality control plan through a series of rigorous peer reviews by senior staff at all major milestones of the project. Thorough QA/QC requires time and effort to be conducted correctly. We have observed that budget and schedule constraints can have a significant impact and limit the effectiveness of this phase of the project. It is ultimately the responsibility of Tito Marchant to ensure that all the points of our quality control plan are addressed prior to submitting deliverables to the County, including: 1) that the deliverable meets the specifications outlined in the scope of work; 2) confirmation that the deliverable has been peer reviewed and technical edited; 3) coordination with the resource agencies has been documented and that the findings are consistent with the documentation; 4) all calculations, recommendations have been verified; and that 5) client communication has occurred to ensure deliverable meets their expectations and does not generate any issues that have not previously been brought to their attention.

Scope of Work

ECM understands that the County is looking for a qualified California Native Plant Restoration firm to maintain and monitoring Phases V, A and B of the Baron Ranch Restoration Project. Our assumptions are included in the scope of work below.

Task 1 Maintenance

The primary maintenance activities include control of invasive species, watering, ensuring that plants are growing and healthy, and that the irrigation systems are operational. Maintenance will

typically follow monthly horticultural visits when the sites are surveyed and maintenance priorities are set.

Task 1.1 Non-Native Plant Species Control

Based on our experience at Baron Ranch, infestations of poison hemlock, sweet fennel, castor bean, tobacco tree, cheese weed and mustard species are expected to be the primary non-native plants of concern. These plants will be controlled with herbicide early on in their development and hand pulled later in the season as the density of these plants decreases. Some species such as mustard can be controlled with glyphosate, but others require a combination of chemicals because they have shown resistance to this herbicide. Based on the percentage weed cover, ECM has and will continue to obtain a Pest Control Recommendation from a Pest Control Advisor, as required by the California Department of Pesticide Regulation on public lands. No invasive plant species will be allowed to set seed within the restoration areas. Irrigation frequency will be closely monitored and adjusted so that the plants receive adequate water for growth, while minimizing weed germination.

Task 1.1.1 Phase V Weeding

ECM will provide maintenance for Phase V (6.9 acres) between July 2017 and June 2018, a period of one year. At the initiation of this contract, Phase V will be at the end of the fourth growing season and is currently meeting success standards for cover and plant survival. Phase V also had a large infestation of sweet fennel and poison hemlock in and adjacent to the restoration area that have been difficult to control. Based on our knowledge of the weed cover in this phase we estimate that 3 weed control events are necessary per year for a total of 4 days. The primary area for weed control is the slope on the south side of Drainage A where native plant cover is relatively low. This area is adjacent to large and dense stands of weed species.

Task 1.1.2 Phase A Weeding

Phase A involves the restoration of approximately 10.8 acres of Coast Live Oak Woodland including the installation of approximately 7,000 containers. The proposed 10.8-acre restoration area consists of three polygons on the west side of Arroyo Quemado. ECM will provide weed control in Phase A from July 2017 through June 2019, a period of two years. At the initiation of this contract, Phase A will be at the end of the second growing season; percent survival is good but native vegetative cover is low. Approximately half of Phase A is located within a previous avocado orchard and the remaining half was barren or disturbed habitat. The areas restored under the old avocado orchard contain a thick mulch layer of avocado leaves which inhibits most weed germination. These areas are also generally surrounded by additional avocado orchards or native vegetation so the potential to be colonized by weeds is reduced. The restored areas that were previously barren have extensive weed germination after rainfall events even in years of lower than normal rain. Weed treatment will generally begin in early winter of each year with an initial pre- and post-emergent treatment of the entire 10.8 acres. This effort takes approximately two weeks. Subsequent retreatment will occur through spot spraying and hand removal primarily during the growing season: March through June. It should be noted that this strategy proved very effective this past year with above average rainfall. After the implementation of this phase in 2015 there was very little rain overall; but there were areas with 80 percent weed cover and many weeds quickly grew to two feet in height. Conversely, in 2017 and with record

rains in the region, the weed cover was minimal on those areas that receive the pre- and post-emergent treatment. This pro-active approach results in less effort, cost and herbicide use during the rest of the year. It helped reduced the weed seed bank in the soil thereby helping to meet the mitigation requirements. This task is based on 3 treatments for the first year for a total of 16 days. The first pass typically takes about 8 days. The level of effort will be reduced to 12 days in Year 2.

Task 1.1.3 Phase B Weeding

ECM will maintain Phase B (6.2 acres) restored areas from July 2017 through June 2019, a period of two years. At the initiation of this contract, Phase B will be at the end of the second growing season; percent survival is good but native vegetative cover is low. Phase B includes previous avocado orchards of which 80 percent or approximately five acres had been abandoned. In the recently active orchards weed cover is low due to the mulch layer and native vegetation on the slopes to the north. In contrast, the abandoned orchards in the western polygon had a heavy understory of non-native vegetation including smilo grass, mustard, thistle, tobacco tree and cheeseweed. A concerted effort in weed control is required in Phase B because of the lower number of plants installed and the high non-native cover. It should be noted that because only about half of the recommended plants were installed, it is likely that this Phase will require longer time and maintenance to reach its native plant cover requirement. The time devoted to this task is also higher because of the steepness of the terrain which makes it difficult to access. We will use the same strategy as described above. Depending on rainfall, weed treatment will begin in winter with an initial pre- and post-emergent treatment of the entire 6.2 acres. We expect this effort to take approximately 3 treatments at about 4 days each for a total of 12 days during the first year. Subsequent retreatment will occur through spot spraying and hand removal. The level of effort will be reduced to 9 days in Year 2.

Task 1.2 Watering

The restoration phases at Baron Ranch are fed through a series of pumps and pipes that fill the reservoir. The reservoir must be filled to create the necessary pressure for water to flow to the different restoration areas. Each phases and sometime specific areas within a phase are on different valves to maintain sufficient pressure. When gravity does not provide enough pressure, such as when irrigating Phase B, pumps must be used. ECM has been working together with Ag Land in the past and with the County for over seven years and is intimately familiar with the complexity and operation of the water conveyance and irrigation systems. The irrigation system includes a series of sediment filters that must be maintained during watering events. In addition, the irrigation is a drip system requiring inspection and repair of each individual emitter while irrigation takes place. Our watering strategy follows the concept of deep watering with longer intervals in between watering events. The length of time between monitoring increases as plants become more established. This method of watering promotes deep rooting and is a principal factor in the high plant survival and vigorous growth shown in every phase thus far implemented and maintained at Baron Ranch. Irrigation frequency will be closely monitored and adjusted so that the plants receive adequate water for growth, while at the same time every effort will be made to conserve water resources. It should be noted that ECM's responsibility for this task is limited to operating and maintaining the irrigation system that provides water to the restoration areas, from the point of connection with the two major pumps and valves. It is RRWMD's responsibility

to operate and maintain the water conveyance system that brings water from wells into the reservoir and then from the reservoir to the two major pumps located on the east and west side of the Arroyo Quemado.

Task 1.2.1 Phase V Watering

This task includes watering approximately 300 newly installed plants in Phase V during the first year of the contract only (July 2017 – June 2018). Based on our knowledge of the status of these plants, we propose to water approximately every other month for a total of six times. The watering will be done using a water trailer and hoses to water each plant by hand.

Task 1.2.2 Phase A Watering

ECM will water Phase A (10.8 acres) restored areas from July 2017 through June 2019, a period of two years. Watering will be conducted approximately monthly during the growing season from March through June and every six to eight weeks throughout the rest of the year, depending on rainfall and soil characteristics. Due to water availability and pressure constraints, watering is generally limited to 4 to 6 hours a day. In our experience the drip system needs to be checked during each use to make sure the plants are receiving adequate watering. Inspection of all emitters as well as filters during each watering event is included in this scope of work. Each watering pass takes 3 days and watering is assumed to occur every other month for a total of 18 days, not monthly as indicated in the RFP. This schedule is proposed for Years 1 and 2 of the contract; however, weather, soils, plant species, water availability and pressure will all affect the frequency and duration of watering events.

Task 1.2.3 Phase B Watering

ECM will water Phase B (6.2 acres) restored areas from July 2017 through June 2019, a period of two years. Watering will be conducted approximately monthly during the growing season from March through June and every six to eight weeks throughout the rest of the year for a total of 6 watering events during the first year. Because water availability and pressure constraints, watering is generally limited to 4 to 6 hours a day. This task is based on 12 days for Years 1 and 2 of the contract. Inspection of all emitters and filters during each watering event is included in this scope of work.

Task 1.2.4 Phase V Irrigation System Removal and Disposal

This task includes the removal of the entire irrigation system for Phase V. The system covers 6.9 acres and is not limited to the 300 container plants water in this contract. This task is based on 2 days with a crew of 3. The irrigation is proposed to be recycled at Tajiguas Landfill. Our costs do not include disposal fees.

Task 1.2.5 Phase A and B Irrigation System Removal and Disposal

This task includes the removal of the entire irrigation systems for Phase A and B. The system covers 10.8 acres in Phase A and 6.2 acres in Phase B. Although irrigation is anticipated to tamper off by the end of 2018, irrigation removal and disposal will not occur until the end of the contract in case drought conditions persist.

Task 1.3 Seeding Phase A

Seeding during early winter is recommended in a few areas that were too steep for installing container plants. Seeding will help increase native plant cover and reduce the potential for non-native species to colonize. These slopes cover a relatively small area, less than 2 acres in total which are currently barren. This task is based on one day with a crew of 3. It is recommended that the seed mix include shrubs and grasses species that have successfully established in other phases. Seeded areas will be irrigated with the existing irrigation system. No additional irrigation labor or supplies is included in this scope and budget. The cost of seed is not included in this proposal.

Task 2 Monitoring

As part of this task, ECM will provide monthly horticultural monitoring and quantitative monitoring for the annual report. Monitoring will evaluate project success in relation to the project performance criteria as specified in the Baron Ranch Restoration Plan and regulatory permit requirements. This scope of work includes 12 months of horticultural monitoring for Phase V (July 2017 to June 2018) and the botanical monitoring in spring 2018 that will gather quantitative data for the 2018 annual report. This scope also includes horticultural and botanical monitoring for both Phase A and B from July 2017 through June 2019 including two botanical monitoring events in 2018 and 2019.

Task 2.1 Horticultural Monitoring

Monthly horticultural monitoring visits will qualitatively assess the health of the plant material and the overall condition of all phases. Specifically, the Project Ecologist will evaluate the health of container plant material, the adequacy of the watering regime, the species and life stage of non-native weeds, and evidence of natural recruitment. The monthly horticultural monitoring will also guide maintenance activities to ensure plants are growing healthy and becoming established. After each horticultural monitoring event, a list of priorities for maintenance activities will be conveyed to the foreman and crew. Maintenance priorities, overall health and growth of plants, as well other relevant information about the project such as the conditions of the water conveyance system and water supply will be incorporated into a summary emailed to the monthly. Photographic documentation will be taken during these visits and incorporated into a detailed quarterly report. This task includes 12 months of monitoring for Phase V and 24 months of monitoring for Phases A and B.

Task 2.2 Botanical Monitoring

Botanical monitoring will provide quantitative data concerning vegetative plant cover estimates, percent survival, and tree height to monitor changes in the restoration effort over time. Quantitative monitoring of Phase V, A and B will be conducted through transects using the point-intercept methodology to determine absolute cover. This scope of work is based on 14 transects across the three phases (Table 3). Tree height will be calculated by measuring the tree heights from approximately 20 percent of all installed coast live oak trees in the woodland areas. Average tree height for other species, including arroyo willow, narrow-leaved willow, and western sycamore will be based on sampling approximately 10 percent of the installed trees per species. Similarly, percent survival will be determined based on a sample of at least 10 percent of the plants installed per species.

Table 3. Number of Transects in Each Phase

Phase	No. of Transects
Phase V	5
Phase A	6
Phase B	3
Total	14

In addition, photo points, landscape photographs taken at the same location overtime to document progress, will be taken to provide a consistent frame so that differences over time are easily seen and recorded. ECM will continue to monitor the18 photo points already established in all three phases.

Two (2) botanical monitoring efforts are included in this scope of work: one quantitative monitoring event for Phase V in 2018 and two events for Phase A and B in 2018 and 2019. Each of these monitoring efforts will be conducted during the growing season (between April and June) in 2018 and 2019.

Task 3 Management, Coordination, and Reporting

This task includes project management, coordination with the County and resource agencies, and reporting.

3.1 Management and Coordination

ECM was founded on the idea of eliminating unnecessary layers of management and overhead that burden hourly rates and remove project principals for the day to day management that can make or break a project. Toward this end, Mr. Marchant will serve as Project Manager and Senior Restoration Ecologist based on both his technical expertise and experience working with the County of Santa Barbara over the last seven years. The County's project managers and accounting staff will have direct access to Mr. Marchant through cell phone and email to ensure a same day response. He will also personally oversee the allocation of staff and resources to meet the needs of the project. Mr. Marchant will also be personally responsible for preparing all invoices, the prevailing wages supporting documents and associated progress reports submitted to the County. Ultimately, Mr. Marchant takes personal responsibility for ensuring success for all phases of the Baron Ranch restoration project.

ECM quality control plan involves a series of rigorous peer reviews by senior staff at all major milestones of the project. It is ultimately the responsibility of Tito Marchant, the Project Manager, to ensure that all the points of our quality control plan are addressed prior to submitting deliverables to the County. Mr. Marchant will be supported by Julie Simonsen, Principal Ecologist, in ensuring: 1) that all the deliverable meets the specifications outlined in the scope of work; 2) confirming that the documents have been peer reviewed and technical edited; 3) that coordination with the resource agencies has been documented and supports the findings documented (if and when appropriate); 4) that all calculations, recommendations have been verified; and that 5) client

communication has occurred to ensure deliverable meets their expectations and does not generate any issues that have not previously been brought to their attention.

Mr. Tito Marchant, the proposed Project Manager, will continue to work closely with RRWMD management staff, particularly with the County's Project Manager, Ms. Joddi Leipner during the length of this contract to coordinate field work, assist with regulatory agency and sign-off and provide advice and guidance. ECM clearly understands that it is our responsibility to ensure project success and we will make every effort to proactively manage the project both on the ground and in our communication and technical advice to the County to meet the restoration plan and regulatory performance standards.

Monthly emails will be sent to the County summarizing the results from horticultural assessment visits to all phases and will include priority maintenance activities, recommendations, and a summary of existing conditions. Representative photographs will be included in these monthly emails. The growth stage will also be described to record when and if installed species are flowering and setting seed.

As part of this scope and budget, Mr. Marchant will be available to attend eight (8) face to face meetings with RRWMD and four (4) field meetings regulatory agencies or other organizations at either Baron Ranch, Tajiguas Landfill, or at County offices over the contract term of July 2017 to June 2019.

Task 3.2 Quarterly Update Reports

Eight (8) quarterly reports are included in this scope. The first report will be submitted on October 1, 2017. Quarterly reports will summarize the status of each phase, make recommendations for maintenance and management, and will include photographs of each photo point from each phase.

Task 3.3 Annual Monitoring Reports

Two (2) annual monitoring reports are included in this scope of work and will be submitted by December 1st of 2017 and 2018. Annual reports will be concise and will include graphs, figures, photographs, and tables. Each report will summarize results from the qualitative and quantitative monitoring, outline the progress made toward meeting mitigation requirements, and will identify major problems and challenges faced during the year. Adaptive management strategies implemented, conclusions and future recommendations will also be provided. The reports will also include a discussion of compliance with performance standards such as those included in the project's Streambed Alteration Agreement and restoration plan. ECM will finalize the report within thirty (30) days based on one set of comments made by County staff. A final report will be submitted to the County no later than January 1st.

Task 4 Phases A and B Maintenance, Monitoring and Reporting 2019-2020

This task includes the scope of work for the end of the fourth year of monitoring and maintenance through the growing season of the fifth year.

Task 4.1 Maintenance

Task 4.1.1 Phase A Weeding

Phase A involves the restoration of approximately 10.8 acres of Coast Live Oak Woodland including the installation of approximately 7,000 containers. The proposed 10.8-acre restoration area consists of three polygons on the west side of Arroyo Quemado. ECM will provide weed control in Phase A from July 2019 through June 2020, the fourth year of maintenance and monitoring. Weed treatment will generally begin in early winter of each year with an initial pre- and post-emergent treatment of the entire 10.8 acres. This effort takes approximately two weeks. Subsequent retreatment will occur through spot spraying and hand removal primarily during the growing season: March through June. This pro-active approach results in less effort, cost and herbicide use during the rest of the year. It helped reduced the weed seed bank in the soil thereby helping to meet the mitigation requirements. This task is based on 3 treatments for a total of 11 days.

Task 4.1.2 Phase B Weeding

ECM will maintain Phase B (6.2 acres) restored areas from July 2019 through June 2020, beginning at the end of the fourth year of maintenance and monitoring. In the active orchards weed cover is low due to the mulch layer and native vegetation on the slopes to the north. In contrast, the abandoned orchards in the western polygon had a heavy understory of non-native vegetation including smilo grass, mustard, thistle, tobacco tree and cheeseweed. Depending on rainfall, weed treatment will begin in winter with an initial pre- and post-emergent treatment of the entire 6.2 acres. We expect this effort to take approximately 2 treatments for a total of 8 days.

Task 4.1.3 Phase A Watering

No watering is proposed in Phase A during the third year of the contract which corresponds to the second half of the fourth and fifth year of monitoring. Supplemental water is anticipated to have been discontinued to facilitate agency sign-off after the fifth year of monitoring and maintenance.

Task 4.1.4 Phase B Watering

No watering is proposed in Phase B during the third year of the contract which corresponds to the second half of the fourth and fifth year of monitoring. Supplemental water is anticipated to have been discontinued to facilitate agency sign-off after the fifth year of monitoring and maintenance.

Task 4.2 Monitoring

As part of this task, ECM will provide monthly horticultural monitoring and quantitative monitoring for the annual report. Monitoring will evaluate project success in relation to the project performance criteria as specified in the Baron Ranch Restoration Plan and regulatory permit requirements. This scope of work includes 12 months of horticultural monitoring for Phases A and B (July 2019 to June 2020). It also includes the botanical monitoring in spring 2020 that will gather quantitative data for the 2020 annual report; however, the 2020 annual report is not included in this scope of work.

Task 4.3 Management, Coordination and Reporting

Mr. Tito Marchant, the proposed Project Manager, will continue to work closely with RRWMD management staff, particularly with the County's Project Manager, Ms. Joddi Leipner during the

length of this contract to coordinate field work, assist with regulatory agency and sign-off and provide advice and guidance. Monthly emails will be sent to the County summarizing the results from horticultural assessment visits to all phases and will include priority maintenance activities, recommendations, and a brief summary of existing conditions. Representative photographs will be included in these monthly emails. As part of this scope and budget, Mr. Marchant will be available to attend four (four) face to face meetings with RRWMD and two (2) field meetings regulatory agencies or other organizations at either Baron Ranch, Tajiguas Landfill, or at County offices during the third year of the contract.

Four (4) quarterly reports are included in this scope. The first report will be submitted on October 1, 2019. Quarterly reports will summarize the status of each phase, make recommendations for maintenance and management, and will include photographs of each photo point from each phase.

The 2019 annual monitoring report is included in this scope of work and will be submitted by December 1, 2019. Each report will summarize results from the qualitative and quantitative monitoring, outline the progress made toward meeting mitigation requirements, and will identify major problems and challenges faced during the year. Adaptive management strategies implemented, conclusions and future recommendations will also be provided. The reports will also include a discussion of compliance with performance standards such as those included in the project's Streambed Alteration Agreement and restoration plan. ECM will finalize the report within thirty (30) days based on one set of comments made by County staff. A final report will be submitted to the County no later than January 1st.

COST SUMMARY

	Tasks	Year 1: 2017-2018	Year 2: 2018-2019	*Year 3: 2019-2020**
Task 1	Maintenance	$ 152,650.00	$ 120,200.00	*$ 44,015.00*
Task 2	Monitoring	$ 37,670.00	$ 31,100.00	*$ 34,400.00*
Task 3	Mgmt., Coordination & Reporting	$ 39,180.00	$ 37,220.00	*$ 39,240.00*
		$ 229,500.00	**$ 188,520.00**	***$ 117,655.00***
	10% Contingency	**$ 22,950.00**	**$ 18,852.00**	***$ 11,765.50***
		$ 252,450.00	**$ 207,372.00**	***$ 129,420.50***

Baron Ranch Restoration Proposal

Budget Summary
July 2017 - June 2018

BUDGET & FISCAL YEAR 1: JULY 2017 - JUNE 2018		Labor Costs								Direct Costs					
	Job Category	PM / Principal Ecologist	Senior Restoration Ecologist	Ecologist / GIS Analyst	Foreman	Crew Leader / Sm Equip Operator	Landscape Maintenance Laborer	Administration & Payroll Support	Total Labor Costs	4x4 Truck Day	4x4 ATV w/trailer Day	Power Tools Day	Supplies & Herbicides	Total Direct Costs	Total Costs
Tasks	Rates	$ 145.00	$ 115.00	$ 80.00	$ 65.00	$ 48.00	$ 38.00	$ 60.00		$ 150.00	$ 100.00	$ 45.00			
Task 1	Maintenance														
1.1.1	Phase V Weeding			5	40	40	40		$ 6,440.00	$ 750	$ 400	$ 720	$ 1,600	$ 3,470.00	$ 9,910.00
1.1.2	Phase A Weeding		20	12	160	160	160		$ 27,420.00	$ 2,700	$ 1,600	$ 2,880	$ 2,800	$ 9,980.00	$ 37,400.00
1.1.3	Phase B Weeding		20	10	120	120	120		$ 21,220.00	$ 2,100	$ 1,200	$ 2,160	$ 2,200	$ 7,660.00	$ 28,880.00
1.2.1	Phase V Watering				60	60	60		$ 9,060.00	$ 900	$ 600			$ 1,500.00	$ 10,560.00
1.2.2	Phase A Watering		20	8	180	180	180		$ 30,120.00	$ 3,000	$ 1,200		$ 600	$ 4,800.00	$ 34,920.00
1.2.3	Phase B Watering		20	8	120	120	120		$ 21,060.00	$ 2,100	$ 1,000		$ 400	$ 3,500.00	$ 24,560.00
1.2.4	Phase V Irrigation System Removal				20	20	20		$ 3,020.00	$ 300	$ 200			$ 500.00	$ 3,520.00
1.2.5	Phase A & B Irrigation System Removal								$ -					$ -	$ -
1.3	Seeding Phase A		8	4	10	10	10		$ 2,750.00	$ 150				$ 150.00	$ 2,900.00
	Sub-Total Task 1	0	88	47	710	710	710	0	$ 121,090.00	$ 12,000	$ 6,200	$ 5,760	$ 7,600	$ 31,560.00	$ 152,650.00
Task 2	Monitoring														
2.1	Horticultural Monitoring		144						$16,560.00	$ 1,800				$ 1,800	$ 18,360
2.2	Botanical Monitoring		128	48					$18,560.00	$ 750				$ 750	$ 19,310
	Sub-Total Task 2	0	272	48	0	0	0	0	$35,120.00						$ 37,670
Task 3	Management, Coordination & Reporting														
3.1	Coordination & Project Management	96						48	$16,800.00	$ 900				$ 900	$ 17,700
3.2	Quarterly Update Report	48		8				4	$7,840.00						$ 7,840
3.3	Annual Monitoring Report	48	40	20				8	$13,640.00					$ -	$ 13,640
	Sub-Total Task 3	192	40	28	0	0	0	60	$38,280.00	$ 900	$ -	$ -	$ -	$ 900	$ 39,180
	Totals														$ 229,500
														10% Contingency	$ 22,950

Baron Ranch Restoration Proposal

Budget Summary
July 2018 - June 2019

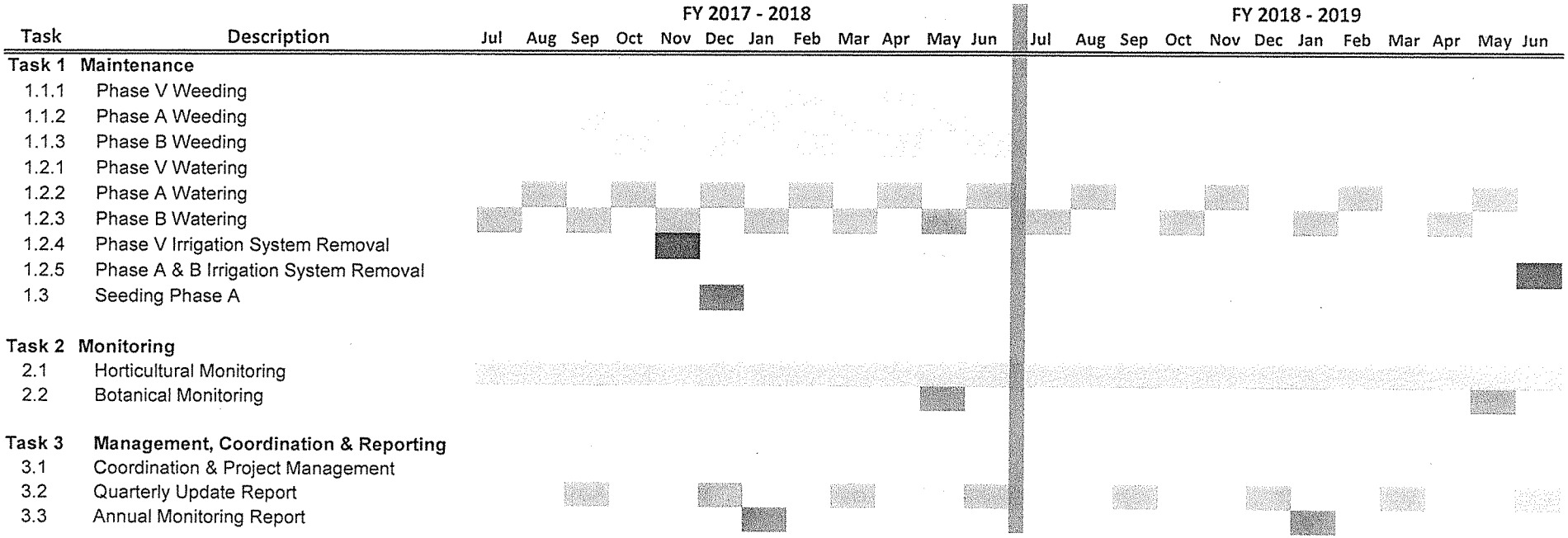
BUDGET & FISCAL YEAR 2: JULY 2018 - JUNE 2019		Labor Costs								Direct Costs					
	Job Category	PM / Principal Ecologist	Senior Restoration Ecologist	Ecologist / GIS Analyst	Foreman	Crew Leader / Sm Equip Operator	Landscape Maintenance Laborer	Administration & Payroll Support	Total Labor Costs	4x4 Truck Day	4x4 ATV w/trailer Day	Power Tools Day	Supplies & Herbicides	Total Direct Costs	Total Costs
Tasks	Rates	$ 145.00	$ 115.00	$ 80.00	$ 65.00	$ 48.00	$ 38.00	$ 60.00		$ 150.00	$ 100.00	$ 45.00			
Task 1	Maintenance														
1.1.1	Phase A Weeding		20	10	120	120	120		$ 21,220.00	$ 2,100	$ 1,000	$ 1,800	$ 2,000	$ 6,900.00	$ 28,120.00
1.1.2	Phase B Weeding		20	10	90	90	90		$ 16,690.00	$ 1,650	$ 900	$ 1,600	$ 1,500	$ 5,650.00	$ 22,340.00
1.2.1	Phase A Watering		20	8	180	180	180		$ 30,120.00	$ 3,000	$ 1,200		$ 500	$ 4,700.00	$ 34,820.00
1.2.2	Phase B Watering		20	8	120	120	120		$ 21,060.00	$ 2,100	$ 1,000		$ 400	$ 3,500.00	$ 24,560.00
1.2.4	Phase A & B Irrigation System Removal				60	60	60		$ 9,060.00	$ 900	$ 400			$ 1,300.00	$ 10,360.00
	Sub-Total Task 1	0	80	36	570	570	570	0	$ 98,150.00	$ 9,750	$ 4,500	$ 3,400	$ 4,400	$ 22,050.00	$ 120,200.00
Task 2	Monitoring														
2.1	Horticultural Monitoring		60	60					$11,700.00	$ 1,800				$ 1,800	$ 13,500
2.2	Botanical Monitoring		120	40					$17,000.00	$ 600				$ 600	$ 17,600
	Sub-Total Task 2	0	180	100	0	0	0	0	$28,700.00	$ 2,400	$ -	$ -	$ -	$ 2,400	$ 31,100
Task 3	Management, Coordination & Reporting														
3.1	Coordination & Project Management	96						48	$16,800.00	$ 900				$ 900	$ 17,700
3.2	Quarterly Update Report	40		8				4	$6,680.00						$ 6,680
3.3	Annual Monitoring Report	48	40	10				8	$12,840.00					$ -	$ 12,840
	Sub-Total Task 3	184	40	18	0	0	0	60	$36,320.00	$ 900	$ -	$ -	$ -	$ 900	$ 37,220
	Totals														$ 188,520
														10% Contingency	$ 18,852

Baron Ranch Restoration Proposal

Budget Summary
July 2019 - June 2020

BUDGET & FISCAL YEAR 3: JULY 2019 - JUNE 2020	Labor Costs								Direct Costs					
Job Category	PM / Principal Ecologist	Senior Restoration Ecologist	Ecologist / GIS Analyst	Foreman	Crew Leader / Sm Equip Operator	Landscape Maintenance Laborer	Administration & Payroll Support	Total Labor Costs	4x4 Truck Day	4x4 ATV w/trailer Day	Power Tools Day	Supplies & Herbicides	Total Direct Costs	Total Costs
Tasks Rates	$ 150.00	$ 120.00	$ 80.00	$ 65.00	$ 48.00	$ 38.00	$ 60.00		$ 150.00	$ 150.00	$ 45.00			
Task 1 Maintenance														
1.1.1 Phase A Weeding		20		110	110	110		$ 19,010.00	$ 1,800	$ 1,500	$ 1,125	$ 1,800	$ 6,225.00	$ 25,235.00
1.1.2 Phase B Weeding		20		80	80	80		$ 14,480.00	$ 1,200	$ 1,200	$ 900	$ 1,000	$ 4,300.00	$ 18,780.00
1.2.1 Phase A Watering								$ -					$ -	$ -
1.2.2 Phase B Watering								$ -					$ -	$ -
Sub-Total Task 1	0	40	0	190	190	190	0	$ 33,490.00	$ 3,000	$ 2,700	$ 2,025	$ 2,800	$ 10,525.00	$ 44,015.00
Task 2 Monitoring														
2.1 Horticultural Monitoring		120						$14,400.00	$ 1,800				$ 1,800	$ 16,200
2.2 Botanical Monitoring		120	40					$17,600.00	$ 600				$ 600	$ 18,200
Sub-Total Task 2	0	240	40	0	0	0	0	$32,000.00						$ 34,400
Task 3 Management, Coordination & Reporting														
3.1 Coordination & Project Management	96						48	$17,280.00	$ 1,800				$ 1,800	$ 19,080
3.2 Quarterly Update Report	40		8				4	$6,880.00						$ 6,880
3.3 Annual Monitoring Report	48	40	10				8	$13,280.00					$ -	$ 13,280
Sub-Total Task 3	184	40	18	0	0	0	60	$37,440.00	$ 1,800	$ -	$ -	$ -	$ 1,800	$ 39,240
Totals														$ 117,655
												10% Contingency		$ 11,766

Baron Ranch Restoration Project
Schedule FY '17 - FY '18



Task	Description
Task 1	**Maintenance**
1.1.1	Phase V Weeding
1.1.2	Phase A Weeding
1.1.3	Phase B Weeding
1.2.1	Phase V Watering
1.2.2	Phase A Watering
1.2.3	Phase B Watering
1.2.4	Phase V Irrigation System Removal
1.2.5	Phase A & B Irrigation System Removal
1.3	Seeding Phase A
Task 2	**Monitoring**
2.1	Horticultural Monitoring
2.2	Botanical Monitoring
Task 3	**Management, Coordination & Reporting**
3.1	Coordination & Project Management
3.2	Quarterly Update Report
3.3	Annual Monitoring Report

REFERENCES

The reference list provided below includes clients with whom we have worked with for at least 3 years. All of our references have been for large and complex biological and/or restoration projects. We have had multiple projects with the Imperial Irrigation District and the Southwest Wetlands Interpretive Association. We strongly believe that ultimately people hire people and the decision is usually based on trust and past performance. We have been very fortunate to have worked with the project managers listed below, as well as, with the County on the Tajiguas project. The experiences and relationships we have developed with our clients are indeed a testimony that when people work together well, the outcome is always positive. Please feel free to contact the people we have listed. Also, please find our client letters of recommendation on the following pages as testimony of our technical expertise and project management.

1) BARON RANCH RESTORATION PROJECT

Joddi Leipner — jleipner@cosbpw.net — 805-882-3614
Senior Engineering Environmental Planner
Santa Barbara County Public Works
Resource Recovery and Waste Management
130 E. Victoria Street, Suite 100
Santa Barbara, California 93101

2) CHANNAN REMINGTON MEMORIAL WETLAND RESTORATION PROJECT

Vikki Dee Bradshaw — vbradshaw@mwdh2o.com — 213-217-6028
*Formerly with the Imperial Irrigation District
Principal Environmental Specialist /Environmental Planning Team
The Metropolitan Water District of Southern California

3) CANYON VIEW RESIDENTIAL DEVELOPMENT

Rhonda Neely — rneely@summitllc.com — 949-554-6936
Vice President
Summit Land Partners, LLC
430 Thirty Second Street, #200
Newport Beach, California 92663

4) VICTORIA GROVE NATURAL AREA PROJECT

Susan Beaver, CCAM — sbeaver@encorepmc.com — 951-279-3934
Victoria Grove Maintenance Association
c/oEncore Property Management
P.O. Box 1117,Corona, Ca. 92878
526 Queensland Circle, Corona, CA 92878

5) TIJUANA INVASVIE SPECIES CONTROL PROGRAM

Mayda Winter — swiaprojects@aol.com — 619-575-0550
Program Director
Southwest Wetlands Interpretive Association
708A Seacoast Drive
Imperial Beach, California 91932

John Bolan, PhD
Project Manager
Southwest Wetlands Interpretive Association
708A Seacoast Drive
Imperial Beach, Ca 91932

JohnBoland@sbcglobal.net

EXHIBIT B

PAYMENT ARRANGEMENTS
Periodic Compensation

A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, not to exceed $418,020.

B. The Director of Public Works or designee is authorized to approve changes or additions in the services being performed under this Agreement in an amount not to exceed $41,802. Any changes or additions in the services being performed under this Agreement must be approved in advance and in writing by the COUNTY.

C. Payment for services and /or reimbursement of costs shall be made upon CONTRACTOR's satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY.

D. Monthly CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed over the period specified. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY REPRESENTATIVE shall evaluate the quality of the service performed and if found to be satisfactory shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.

E. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.

EXHIBIT C

Indemnification and Insurance Requirements
(For Professional Contracts)

INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person or entity and for any costs or expenses (including but not limited to attorneys' fees) incurred by COUNTY on account of any claim except where such indemnification is prohibited by law. CONTRACTOR's indemnification obligation applies to COUNTY's active as well as passive negligence but does not apply to COUNTY's sole negligence or willful misconduct.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance
Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than $1,000,000 per occurrence and $2,000,000 in the aggregate.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than $1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than $1,000,000 per accident for bodily injury or disease.
4. **Professional Liability** (Errors and Omissions) Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than $1,000,000 per occurrence or claim, $2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).

2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.

3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.

4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.

5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".

7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew

such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.

9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.

10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:

    i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
    ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
    iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.

11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.

ECOLO-1 OP ID: JS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 05/09/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ISU Ins. Svc.-Cormarc Tasman License# 0E63467 25220 Hancock Ave. #200 Murrieta, CA 92562 Kenneth Snipper	CONTACT NAME: Kenneth Snipper PHONE (A/C, No, Ext): 951-290-5040 FAX (A/C, No): 951-278-0664 E-MAIL ADDRESS:
INSURED Ecological Conservation and Management, Inc. 6755 Mira Mesa Blvd. Suite #123413 San Diego, CA 92121	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Nationwide Mutual Ins Co — 23787 INSURER B : Philadelphia Insurance Company INSURER C : Markel Insurance Company — 38970 INSURER D : Lloyd's of London INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER: 1

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:	X	X	ACPGLO7836343219	09/27/2016	09/27/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			PHPK1576780	11/12/2016	11/12/2017	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		MWC0022481-06	02/05/2017	02/05/2018	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Professional Liab			493166	02/18/2017	02/18/2018	Aggregate Per Claim	2,000,000 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

County of Santa Barbara, its officers, officials, employees, agents and volunteers are named as additional insured. Waiver of Subrogation applies to General Liability, coverage is primary and non-contributory, where required by written contract.

CERTIFICATE HOLDER

SANT130

County of Santa Barbara
Resource Recovery & Waste Mgmt
Attn: Joddi Leipner
130 E. Victoria St., Ste. 100
Santa Barbara, CA 93101

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

J. Streicher

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 24 04 05 09

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIO NS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:
COUNTY OF SANTA BARBARA RESOURCE RECOVERY & WASTE MGMT
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

All terms and conditions of this policy apply unless modified by this endorsement.

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 71 56 08 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED PRIMARY AND NON-CONTRIBUTORY ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

COUNTY OF SANTA BARBARA RESOURCE RECOVERY & WASTE MGMT
130 E VICTORIA ST STE 100 SANTA BARBARA, CA 93101

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. **Section II - Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf; in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

No such person or organization is an additional insured for liability arising out of the "products-completed operations hazard".

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. The following is added to **SECTION III - LIMITS OF INSURANCE:**

The limits of insurance applicable to the additional insured are those specified in the written contract between you and the additional insured, or the limits available under this policy, whichever are less. These limits are part of and not in addition to the limits of insurance under this policy.

D. With respect to the insurance provided to the person or organization shown in the Schedule of the Endorsement, **Condition 4. Other Insurance** is replaced by the following:

4. Other Insurance

If other valid and collectible insurance is available to the additional insured for a loss we cover under Coverages A or B of this Coverage Part, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when it is excess as provided under part b., below. When this insurance is primary, we will not seek contribution from other insurance available to the person or organization shown in the Schedule of this endorsement.

b. Excess Insurance

This insurance is excess over:

(1) Any of the other insurance, whether primary, excess, contingent or on any other basis:

(a) That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";

(b) That is Fire insurance for premises rented to you or temporarily occupied by you with permission of the owner;

(c) That is insurance purchased by you to cover your liability as a tenant for "property damage" to premises rented to you or temporarily occupied by you with permission of the owner; or

(d) If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion g. of Section I - Coverage A - Bodily Injury And Property Damage Liability

When this insurance is excess, we will have no duty under Coverages A or B to defend the additional insured against any "suit" if any other insurer has a duty to defend the additional insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the additional insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

(1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and

(2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

c. Method Of Sharing

If all of the other insurance available to the additional insured permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance available to the additional insured does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

All terms and conditions of this policy apply unless modified by this endorsement.