ATTACHMENT A

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

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 Impact Sciences, Inc., having its principal place of business at 803 Camarillo Springs Road, Suite A, Camarillo, California, 93012 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

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

- 1. **DESIGNATED REPRESENTATIVE.** Allen Bell at telephone number (805) 568-2033 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Tony Locacciato at telephone number (805) 437-1900 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 first class mail, postage prepaid, or otherwise delivered as follows:

To COUNTY:

County of Santa Barbara

Planning and Development Department

123 E. Anapamu Street Santa Barbara, CA 93101

Attn: Allen Bell, Senior Planner

To CONTRACTOR:

Impact Sciences, Inc.

803 Camarillo Springs Road, Suite A

Camarillo, CA 93012

Attn: Tony Locacciato, Principal

or at such other address or to such other person that the parties may from time to time designate. Notices and consents under this section, which are sent by mail, shall be deemed to be received five (5) days following their deposit in the U.S. mail.

- 3. **SCOPE OF SERVICES.** CONTRACTOR agrees to provide services to COUNTY in accordance with Exhibit A attached hereto and incorporated herein by reference.
- 4. <u>TERM.</u> CONTRACTOR shall commence performance on August 10, 2011 and end performance upon completion, but no later than September 28, 2012 unless otherwise directed by COUNTY or unless earlier terminated.
- 5. **COMPENSATION OF CONTRACTOR.** 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. <u>INDEPENDENT CONTRACTOR</u>. CONTRACTOR shall perform all of its services under this Agreement as an independent contractor and not as an employee of COUNTY. 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.

- 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. <u>TAXES.</u> 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.
- 9. **CONFLICT OF INTEREST.** CONTRACTOR covenants that CONTRACTOR presently has no interest and shall not acquire any interest, direct or indirect, 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.

The term "organizational conflict of interest" means that a relationship exists whereby CONTRACTOR has interests which may diminish the capacity to give impartial, technically sound, objective assistance and advice or may otherwise result in a biased work product or may result in an unfair competitive advantage.

CONTRACTOR agrees that if an organizational conflict of interest is discovered with respect to this CONTRACT, CONTRACTOR shall make an immediate and full disclosure in writing to COUNTY which shall include a description of the action which the CONTRACTOR has taken or proposes to take to avoid, eliminate or neutralize the conflict. COUNTY may, however, terminate the CONTRACT if it could be in the best interests of the COUNTY.

- 10. **RESPONSIBILITIES OF COUNTY.** COUNTY shall provide all information reasonably necessary by CONTRACTOR in performing the services provided herein.
- 11. OWNERSHIP OF DOCUMENTS. 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, and any material necessary for the practical use of the data and/or documents 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 materials under this section except after prior written approval of COUNTY.

No materials produced in whole or in part under this Agreement shall be subject to copyright in the United States or in any other country except as determined at the sole discretion of COUNTY. COUNTY shall have the unrestricted authority to publish, disclose, distribute, and other use in whole or in part, any reports, data, documents or other materials prepared under this Agreement.

- 12. **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 practices. 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.
- 13. <u>INDEMNIFICATION AND INSURANCE</u>. CONTRACTOR shall agree to defend, indemnify and save harmless the COUNTY and to procure and maintain insurance in accordance with the provisions of Exhibit C attached hereto and incorporated herein by reference.
- 14. <u>NONDISCRIMINATION</u>. 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.
- 15. <u>NONEXCLUSIVE AGREEMENT.</u> 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.
- 16. <u>ASSIGNMENT</u>. CONTRACTOR shall not assign any of its rights nor transfer any of its obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign or so transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

17. TERMINATION.

- A. <u>By COUNTY</u>. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience or because of the failure of CONTRACTOR to fulfill the obligations herein. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services effected (unless the notice directs otherwise), and deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process.
- 1. For Convenience. COUNTY may terminate this Agreement upon thirty (30) days written notice. Following notice of such termination, CONTRACTOR shall promptly cease work and notify COUNTY as to the status of its performance.

Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for service 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.

2. 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 this Agreement by written notice which shall be effective upon receipt by CONTRACTOR.

- B. <u>By CONTRACTOR</u>. 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.
- 18. **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.
- 19. **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.
- 20. **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.
- 21. <u>TIME IS OF THE ESSENCE</u>. Time is of the essence in this Agreement and each covenant and term is a condition herein.
- 22. **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.
- 23. 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.
- 24. <u>SUCCESSORS AND ASSIGNS.</u> 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.
- 25. <u>COMPLIANCE WITH LAW.</u> CONTRACTOR shall, at his 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.
- 26. <u>CALIFORNIA LAW</u>. 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.

- 27. **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.
- 28. <u>AUTHORITY.</u> All 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.
- 29. **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.
- 30. <u>SUBCONTRACTORS.</u> CONTRACTOR is authorized to subcontract with subcontractors identified in Contractor's Proposal. CONTRACTOR shall be fully responsible for all services performed by its subcontractor. CONTRACTOR shall secure from its subcontractor all rights for COUNTY in this Agreement, including audit rights.
- 31. <u>HANDLING OF PROPRIETARY INFORMATION</u>. CONTRACTOR understands and agrees that certain materials which may be provided may be classified and conspicuously labeled as proprietary confidential information. That material is to be subject to the following special provisions:
- A. All reasonable steps will be taken to prevent disclosure of the material to any person except those personnel of CONTRACTOR working on the project that have a need to use the material.
- B. Upon conclusion of CONTRACTOR'S work, CONTRACTOR shall return all copies of the material direct to party providing such material. CONTRACTOR shall contact COUNTY to obtain the name of the specific party authorized to receive the material.
- 32. <u>IMMATERIAL CHANGES.</u> CONTRACTOR and COUNTY agree that immaterial changes to the work program (time frame and mutually agreeable work program changes which will not result in a change to the total contract amount) may be authorized by Planning and Development Director, or designee in writing, and will not constitute an amendment to the Agreement.
- 33. <u>NEWS RELEASES/INTERVIEWS.</u> CONTRACTOR agrees for itself, its agents, employees and subcontractors, it will not communicate with representatives of the communications media concerning the subject matter of this Agreement without prior written approval of COUNTY. CONTRACTOR further agrees that all media requests for communication will be referred to COUNTY.

Agreement for Services of Independent Contractor between the County of Santa Barbara and Impact Sciences, Inc.

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

COUNTY OF SANTA BARBARA

	COUNTY OF SAINTA BARDARA
	By: Chair, Board of Supervisors Date:
ATTEST: CHANDRA L. WALLAR CLERK OF THE BOARD	CONTRACTOR METONY LOCACCIATO Mark Austin IMPACT SCIENCES, INC.
By: Deputy	By: Mark Austr Tax ID Number: 95-4/49/64
APPROVED AS TO FORM: COUNTY COUNSEL	APPROVED AS TO ACCOUNTING FORM: ROBERT W GEIS, CPA AUDITOR-CONTROLLER
By: Rachel Yun Muller Deputy County Counsel	By:
	APPROVED AS TO FORM: SUPERVISING RISK ANALYST

G:\GROUP\PERMITTING\Case Files\CDH\06-cases\06CDH-00000-00038 Dos Pueblos - Lot 1\CEQA Revised EIR\EIR Contract\Contract.doc

Mananue Rau

a	ract Summary Form Contract Number: BC/.	2		
Contr	ract Summary Form Contract Number: 1	F - 055		
D1.	Fiscal Year	: 2011 – 2012 FY		
D2.	Budget Unit			
D3.	Requisition Number	: N/A		
D4.	Department Name			
D5.	Contact Person	: Allen Bell		
D6.	Phone			
K1.	Contract Type (check one): [X] Personal Service			
K2.		: Paradiso del Mare Ocean and Inland Estates Revised EIR		
K3.	Original Contract Amount	: \$228,310.00 (excluding 20% contingency of \$45,660.00)		
K4.	Contract Begin Date	: August 10, 2011		
K5.	Original Contract End Date			
K6.	Amendment History (leave blank if no prior amen			
	Seq#EffectiveDateThisAmndtAmtCumAmndtToDe	ateNewTotalAmtNewEndDate Purpose (2-4 words)		
	\$ \$	\$		
<u>K7.</u>	Department Project Number ::			
B1.	Is this a Board Contract? (Yes/No):	Yes		
B2.	Number of Workers Displaced (if any):			
B3.	Number of Competitive Bids (if any):			
B4.	Lowest Bid Amount (if bid):			
B5.	If Board waived bids, show Agenda Date:	N/A		
B6.	and Agenda Item Number:			
B7.	Boilerplate Contract Text Unaffected? (Yes / or ci.	te $\P\P$): No. Added two paragraphs to #9 Conflict of Interest.		
Added sections: #30 Subcontractors, #31 Handling of Proprietary Information, #32 Immaterial Changes, and #33				
News	Releases/Interviews.			
F1.	Encumbrance Transaction Code:			
F2.	Current Year Encumbrance Amount:			
F3.	Fund Number			
F4.	Department Number			
F5.	Division Number (if applicable)			
F6.	Account Number ::			
F7.	Cost Center number (if applicable):			
F8.	Payment Terms:			
V1.	Vendor Numbers (A=uditor; P=urchasing):			
V2.	Payee/Contractor Name ::	Impact Sciences, Inc.		
V3.	Mailing Address	803 Camarillo Springs Road, Suite A		
V4.	City State Zip:	Camarillo, CA 93012		
V5.	Telephone Number:			
V6.	Contractor's Federal Tax ID Number (EIN or SSN)			
V7.	Contact Person:			
V8.	Workers Comp Insurance Expiration Date:			
V9.	Liability Insurance Expiration Date[s] $(G=enl; P=$	rofl): 02/12/2012 (G and P)		
	Professional License Number	N/A		
V11.	Verified by (name of County staff):	Ruth Reverdy, Administration, P&D		
V12.	Company Type (Check one): [] Individual [] S	ole Proprietorship [] Partnership [X] Corporation		
I certify: information complete and accurate; designated funds available; required concurrences evidenced on				

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

EXHIBIT A

SCOPE OF SERVICES

PROPOSAL TO PREPARE A REVISED ENVIRONMENTAL IMPACT REPORT FOR THE PARADISO DEL MARE OCEAN ESTATE AND INLAND ESTATE IMPACT SCIENCES, INC., JULY 22, 2011

County of Santa Barbara

Proposal to Prepare a Revised Environmental Impact Report for the Paradiso del Mare Ocean Estate and Inland Estate

Submitted to:
County of Santa Barbara
Planning and Development
123 E. Anapamu Street
Santa Barabara, CA 93101
Contact: Allen Bell

Submitted by: Impact Sciences, Inc. 803 Camarillo Springs Road, Suite A Camarillo, CA 93012 Contact: Mark Austin





July 22, 2011

County of Santa Barbara Planning and Development Department 123 East Anapamu Street Santa Barbara, California \$1301

Attention:

Allen Bell

Subject:

Proposal to Prepare a Revised Environmental Impact Report for the

Paradiso del Mare Ocean and Inland Estates Project

Dear Mr. Bell:

On behalf of Impact Sciences, we are pleased to present our proposal to prepare a revised EIR addressing the proposed new locations for the estate homes proposed on the Paradiso Del Mare site in the Gavio: a coast.

Impact Sciences has been a leader in the preparation of thorough environmental review documents for public agencies throughout the Central Coast for over two decades. To meet the need for updated and detailed analysis of natural resource, cultural resource, and coastal planning issues, our approach includes substantial involvement of Principals of our firm with substantial experience with projects of similar complexity in the coastal zone of Los Angeles, Ventura, and Santa Barbara Counties. This experience is complemented by our local knowledge, gained through our work on post-approval biological resource studies for the adjacent Santa Barbara Ranch property, and involvement in the environmental review of the Dos Pueblos Golf Course project.

Neither Impact Sciences, nor any of the members of our proposed project team, has been hired by CPH Dos Pueblos Associates; Brooks Street; Makar Properties, LLC; Dudek; Penfield & Smith; or Shubin and Donaldson architects to assist in the preparation of material directly related to any component of the proposed project or related projects under study in this EIR. No member of the Impact Sciences team has a financial gain or an interest in the final autcome of the project.

The contents of this proposal, including our proposed not-to-exceed cost, remain effective for not less than 60 days. We have also reviewed and concur with the County's standard contract provisions as included in the "Agreement for Services of Independent Contractor."

OFFICES THROUGHOUT CALIFORNIA

Mr. Allen Bel July 22, 2011 Page 2

We appreciate your consideration of Impact Sciences to assist the County with the completion of the environmental review of this project. We are open to revising our proposed scope of work, and the associated cost proposal, as needed to meet the County's need for consulting assistance on this project Should you have any questions about our proposal, please contact us.

Very truly yours,

IMPACT SCIENCES, INC.

Tony Locaccia to, AICP

Principal

Mark Austin, AICP

Associate Principal



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County of Santa Barbara

Proposal to Prepare The Paradiso del Mare Ocean Estate and Inland Estate Revised EIR

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Appendix A – Detailed Resumes

Section 1. Introduction

Impact Sciences, Inc., (herein referred to as Impact Sciences) is pleased to submit this proposal outlining our understanding and approach for preparation of a revised environmental impact report (EIR) for the Paradiso del Mare Ocean Estate and Inland Estate Project in the Gaviota area of Santa Barbara County. Our team includes two other Central Coast firms, Associated Transportation Engineers (ATE) to provide specialized support in the area of traffic and circulation and ASM Affiliates to assist with cultural resource issues. Impact Sciences worked with both ATE and Dr. David Whitley of ASM Affiliates on numerous projects in the Central Coast over the last 15 years and brings our well-established long-term working relationships to this project.

The County of Santa Barbara prepared a Draft EIR for the Paradiso del Mare Ocean Estates and Inland Estates Project and circulated the Draft EIR for public review from September 3, 2009 until November 3, 2009. Upon the completion of public review, the County received two-dozen letters on the Draft EIR commenting on numerous planning and environmental issues. In response to these comments, the applicant subsequently revised the project and made changes to the project in an effort to reduce environmental impacts. These modifications included moving the development envelope of the Ocean Estate approximately 1,200 feet west of the original proposed site, and the development envelope of the Inland Estate approximately 150 feet south of the original proposed site. In addition, the applicant revised the design and orientation of the proposed building structures, utility corridors, driveway access, and added a conditional offer to dedicate a public parking area on the Inland Estate. Given the magnitude of the changes, the County has decided to prepare a revised EIR for this project and circulate the revised Draft EIR for public review pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15088.5(g).

The major issues of concern to the public in the revised EIR will continue to be those addressed in the original EIR. These include the aesthetic and visual impact of the new estate homes and the related site improvements from the Highway 101 corridor, the beach and public trails; cultural resource impacts due to the multitude of archaeological resources on the site, including a Chumash burial site; biological resource impacts associated with sensitive habitat including, but not limited to coastal sage scrub, southern willow scrub, and wetland habitats; sensitive wildlife species supported by the habitat present on the site and the beach including monarch butterfly, white-tailed kite, and seals; recreational issues associated with providing public access to both the beach and the Naples surf break.

The 2009 Draft EIR contains a thorough description of the environmental and regulatory setting and detailed analysis of the impacts of the original project. Our approach involves updating and revising the setting information only where needed to respond to the comments on the 2009 EIR or where the

information needs to be updated due to age. Our efforts will focus on updating the impact analysis to address the new locations for the estate homes and site improvements and providing a full assessment of the new alternative locations identified for analysis by the applicant.

In response to the need for detailed analysis of the project and alternatives, our proposed approach includes substantial commitment of time by the principals of Impact Sciences—Tony Locacciato, AICP, Dr. Daryl Koutnik, and Mark Austin, AICP—to update the aesthetics, biology, cultural resource, recreation, land use policy, and other key topics of analysis, as well as commitment of our principals to attend all key meetings and public hearings to provide full support to County staff during the process. This group of professionals has extensive experience dealing with projects of similar complexity in the coastal zone of Los Angeles and the Central Coast.

Section 2. Qualifications

Impact Sciences, Inc., will take the role of lead consultant for the Paradiso del Mare Ocean and Inland Estates EIR. To provide the range of technical studies needed for the EIR, our team includes Associated Transportation Engineers (ATE) to prepare the revised traffic study and ASM Affiliates to provide cultural resource support. We have a long-standing working relationship (in excess of 17 years) with both ATE and Dr. David Whitley of ASM Affiliates, and it will augment our team's ability to work effectively together for the County of Santa Barbara on this important project.

Impact Sciences

Firm Capabilities and History

Impact Sciences, Incorporated, (herein referred to as Impact Sciences [Tax Identification No. 95-4149164]) will serve as the primary consultant for the term of this contract. Since 1988, Impact Sciences has provided multi-disciplinary environmental planning services to clients throughout California. The firm's principal service is the preparation of Environmental Impact Reports (EIRs) and Environmental Impact Statements (EISs). The firm also maintains five in-house technical service divisions: (1) biological resources, (2) air quality services, (3) visual resources, (4) acoustical analysis, and (5) geographical information systems (GIS) services. Other planning and environmental services the firm provides include preparation of specific plans, master environmental assessments, and environmental constraints studies. Our professional staff of environmental planners, air quality specialists, acoustic specialists, and biologists is located in our offices in the cities of Camarillo, Pasadena, Riverside, Oakland, and in the Sacramento region. The professional staff is supported by an array of production and administrative staff.

Impact Sciences offers broad technical capabilities, strategic and innovative thinking, and communication skills. Our philosophy of providing solutions to environmental planning and technical issues, combined with responsive service, results in long-term relationships with our clients. Impact Sciences is sought out on a regular basis to provide environmental planning information early in the planning of major projects and by public agencies to prepare EIRs for technically complex and controversial projects. Our firm's mission is to provide outstanding and cost-effective planning and environmental services that meet the particular needs of an individual client.

Our Services Include:

- Environmental Impact Reports
- Other California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) Compliance Documents
- Biological Surveys
- Wetlands Delineation and Permitting
- Air Quality Assessments and Permitting
- Visual Simulations and Impact Assessments
- GIS Mapping and Analyses

- Planning Constraints Analyses
- Environmental Impact Statements
- Endangered Species Surveys and Permit Negotiations
- Master Environmental Assessments
- Habitat Restoration Plans
- · Acoustical Analyses
- Mitigation Monitoring

Experience

Impact Sciences has conducted CEQA/NEPA projects on the California Central Coast, including Santa Barbara, Ventura, and San Luis Obispo counties. The staff members of Impact Sciences have prepared hundreds of EIRs, EISs, air quality, noise, and biological studies. We are specialists in the preparation of environmental documents, pursuant to CEQA and NEPA. Many of these projects have been subject to considerable public and agency scrutiny and debate; however, no environmental document prepared by the Impact Sciences staff has been judged to be legally inadequate. This fact demonstrates the thoroughness and credibility of the products prepared by the firm.

Our documents have evaluated most kinds of planning, private development, and infrastructure projects that occur in California. As our experience and reputation have grown, we have been recognized and selected for our ability to handle complex projects of various types and sizes, especially where it is expected that controversy will occur and the need for a legally defensible document is crucial.

Descriptions of selected projects that are representative of our experience with projects within Santa Barbara County, the Central Coast, and coast zone issues are as follows:

Santa Barbara Ranch Grassland Survey, County of Santa Barbara – Impact Sciences identified and characterized grassland communities on the Santa Barbara Ranch project site in order to identify different types of grassland communities, both native and non-native, and to quantify the relative cover of native species within each identified grassland community type. The extent of native grasslands on site was determined using the relevé method to estimate plant cover and quadrat surveys to collect quantitative data on relative cover of native and non-native species within grasslands, and an evaluation of which grasslands constitute an environmentally sensitive habitat area.

Northshore EIR and Support Services, City of Oxnard - Impact Sciences was retained by the City of Oxnard as the City's environmental planning consultant for this residential project on a 91-acre site in the City's coastal zone at Harbor Boulevard and West Fifth Street. Impact Sciences was involved in all phases of the environmental review of this project, processing of an amendment to the City's Local Coastal Plan, and is currently involved with the biological mitigation monitoring and implementation of a habitat restoration project to recreate coastal wetlands to mitigate impacts of the project. The North Shore site was used as a disposal site for oil field waste for 30 years and was heavily contaminated with oil and hazardous materials. Planning and processing of the proposed plan to remediate this contamination and develop the site with single-family homes was complicated by the discovery of the Ventura marsh milk vetch, a native plant species believed to be extinct. Impact Sciences served as the primary biological resources consultant and worked closely with Coastal Commission staff and the California Department of Fish & Game to develop mitigation strategies for potential impacts to the milk-vetch and for impacts to portions of the site identified as coastal wetlands.

Because of Environmental Protection Agency involvement in the soil remediation program, Impact Sciences prepared an abbreviated Biological Assessment for a Section 7 consultation. Another state special status species, the silvery legless lizard, was present on the North Shore site and Impact Sciences implemented a plan to move these lizards to a mitigation site and to return the lizards at a future time. Impact Sciences surveyed the site for legless lizards and moved 59 individuals to secure habitats. Several acres of wetlands under State jurisdiction were to be impacted by the development, requiring the selection of a mitigation site and the development of the "Wetland Creation and Dune Enhancement Plan for the McGrath Site" located across Harbor Boulevard from the site. The California Coastal Commission required a buffer and resource protection area on the North Shore site, for which Impact Sciences prepared the "Resource Protection Area and Ventura marsh milk vetch Management Plan." Impact Sciences has been actively involved in the project management for the implementation, both earthwork and planting, of both the mitigation and management plans for the two sites. Impact Sciences has also been involved in the selection of plant materials for the landscaping of the residential and common space areas, due to a requirement to avoid using any invasive or non-native species likely to become invasive on the site. The project also involves the creation of two new populations of the Ventura marsh milk vetch at off-site locations, one on the mitigation site and one on the Ballona Marsh preserve in Los Angeles County which Impact Sciences is currently working with the California Department of Fish and Game to plan and implement, and a fencing plan for the Mandalay State Park western snowy plover nesting grounds, which are across Harbor Boulevard from the North Shore site.

Sandman Inn Redevelopment Project EIR, City of Santa Barbara – Impact Sciences prepared an EIR for a proposed urban infill redevelopment project on upper State Street in the City of Santa Barbara. The project would demolish an existing 113-room hotel and adjacent restaurant, and would construct 73 residential condominiums with underground parking on one portion of the project site. The other portion of the project site would be developed with either a 106-room, three-story hotel with underground parking, or two office buildings totaling 14,254 square feet with at-grade parking. Additionally, a single residential unit on a separate parcel would be demolished to provide new access via San Remo Drive for an adjacent apartment complex that is currently accessed from State Street via the project site. Issues identified for the project include aesthetics related to the potential for obscuring views of the Santa Ynez Mountains from a scenic corridor, along with the loss of skyline trees. The potential impacts of project trip generation on area roads and intersection were evaluated, and air quality impacts related to demolition, construction, and operation were also assessed.

Santa Barbara Ranch Monarch Butterfly Survey, County of Santa Barbara – Impact Science conducted monarch butterfly surveys in order to summarize winter use by monarch butterfly of the Santa Barbara Ranch and Dos Pueblos Ranch sites, located west of Goleta in unincorporated Santa Barbara County. Surveys included site visits to Coronado Butterfly Preserve, Ellwood, approximately 4 miles east of the site, a known monarch reference site, to confirm the continued presence of monarch butterflies within the region, and to characterize their general behavior in the area in the event that on-site results were negative or equivocal.

River Terrace Residential Project EIR, City of Lompoc – Impact Sciences prepared an EIR for the proposed construction of 308 residential units, 17,666 square feet of commercial floor area, a 9,110-square-foot community recreation center, a private park, and additional recreational amenities on the 26.22-acre site. The residential component of the project included 62 single-family, patio homes on individual lots with zero lot lines, 65 townhomes, and 181 attached condominium units. In addition, 15 percent of the 308 units were proposed as affordable low-income to moderate-income households, with at least 40 percent of those units used for very low-income households. The commercial component of the project included two buildings located near the site entrance at the intersection of Laurel Avenue north of 12th Street. Development of the River Terrace Project also required approvals by the City of Lompoc of a General Plan Amendment, a Zone Change, a Preliminary/Precise Development Plan, a Vesting Tentative Subdivision Map, and Redevelopment Agency (RDA) Board review and approval. Major issues addressed in the EIR included water supplies, biological resources, hazardous material due soil contamination, traffic and circulation issues, and the loss of open space.

Calabasas Peak Residential EIR, Malibu Beach area, County of Los Angeles - Impact Sciences is in the process of preparing an EIR for the proposed construction of four single-family residences on four individual lots on the north side of Calabasas Peak Motorway. The project also includes the development of access roads within 50 feet of a significant ridgeline. The two-story residences with partially below grade basements will have a maximum height of the 36 feet above grade. Proposed improvements include for each residence includes a garage, a private driveway with fire department turnaround, a swimming pool, drainage devices, retaining walls ranging from 2 to 10 feet high, and private septic systems. In addition, approximately 1,800 linear feet of the existing dirt Calabasas Peak Motorway, which is currently a major riding and hiking trail, will be paved and widened to the required 20-foot width. Also, the project will connect to a public water system that would tie to the existing District 29 New Summit Tank located on the east side of Old Topanga Boulevard. The proposed water system would include installation of a new booster pump station on the south side of Old Topanga Canyon Road, on-site water tanks, and fire hydrants along the new water system. The project also includes request for a CUP for the proposed grading and an Oak Tree Permit for the encroachment of several oak trees. In addition, the project requires Coastal Commission review given the project location. The major issues to be addressed in the EIR will include growth-inducing impacts due to the improvement of access roads, and expansion of the water system; biological issues associated with the sensitive natural habitats existing at the project sites consisting of Coast Live Oaks and typical dry montane chaparral scrub dominated by mixed Chamise, Sumac, and Ceanothus; cultural resource issues; fire issues associated with being located within a very high fire hazard zone; and water quality issues associated with provision of septic systems.

Dos Pueblos Creek Restoration Plan – Impact sciences prepared the Dos Pueblos Creek Restoration Plan in order to initiate planning to enhance areas of natural, scenic, wildlife, biological, open space, and drainage corridors within Dos Pueblos Creek consistent with ongoing agricultural use on lands within the Dos Pueblos Creek drainage. The restoration area encompasses canyon bottom habitats along the approximately 4-mile reach of Dos Pueblos Canyon Creek from the Pacific Ocean to Los Padres National Forest. The document serves as a conceptual plan outlining opportunities for habitat improvement to achieve the goal of improved conditions for native fish within Dos Pueblos Canyon.

Seabridge Supplemental EIR, City of Oxnard - Impact Sciences prepared a detailed Supplemental EIR for the City of Oxnard for a tentative tract map and Coastal Development Permit (CDP) for the build out of the Mandalay Bay Specific Plan Area. Seabridge is a 135-acre water-oriented mixed-use community consisting of residential, commercial, and recreational land uses. Uses in this new community include 275 single-family homes, and 165,000 square feet of commercial use with approximately 335 mixed-use residential units. The project included the creation of over 30 acres of new waterways and marinas

connecting to Channel Islands Harbor. Consistency of the project with the Mandalay Bay Specific Plan, which serves as a component of the City's Local Coastal Plan (LCP), was a major component of the analysis in the EIR, which was a supplement to the Mandalay Bay Specific Plan EIR. Seabridge was developed on prime agricultural land and the mitigation included in the City's LCP included the removal and relocation of the topsoil to another site in the City's coastal area. The impact associated with the relocation of this soil was assessed in the EIR. Other topics of analysis in the EIR included geology and soils, surface hydrology and water quality, marine water quality and sediment, traffic and circulation, noise, air quality and the provision of public services by the City of Oxnard and the County of Ventura. Specialized technical analysis in the EIR included an assessment of increased recreational boat traffic at the mouth of Channel Island Harbor and analysis of the circulation of water in the new channels and the effect on marine water quality.

Organizational Structure, Top Management, and Approximate Contribution

The organization structure of Impact Sciences is a matrix structure, where teams are assessable from the functional areas of the organization in order to see projects through from conception to completion. Impact Sciences top management includes: Mr. Eric Sakowicz, CEO; and Mr. Thomas Worthington, President. The approximate contribution of Impact Sciences of the entire work effort is estimated to be 85 percent.

Associated Transportation Engineers (ATE)

Firm Capabilities and History

Associated Transportation Engineers, Incorporated (ATE [Tax Identification No. 95-3780888]) is an engineering and planning firm that specializes in traffic engineering, transportation planning, traffic signal design, traffic signal timing optimization, traffic control plans, and parking facility planning and design. Established in 1978, ATE has completed projects for a wide variety of clients located throughout California and the western United States. Public-sector clients include city, county, state, and federal agencies, as well as the military. Private-sector clients include environmental and planning consulting firms, architects, attorneys, engineers, private development interests, and major commercial corporations. Located in Santa Barbara, California, ATE is an association of Richard L. Pool, a registered professional engineer, and Scott A. Schell, a nationally certified planner (AICP and PTP).

ATE staff has earned a reputation for creative problem solving through a team-oriented, consensus-building approach. ATE staff has developed solid working relationships with city, county, and agency staff throughout the state, and have worked with personnel in the 12 Caltrans districts statewide. ATE has demonstrated the capability of developing innovative solutions and providing quality services

at competitive costs. ATE has also established a solid record of completing projects on time and within budget.

ATE staff has been involved in many transportation planning projects, which have included traffic capacity and operations analysis, traffic surveys and traffic counts, and pedestrian and bikeway facility design review. ATE staff has prepared the traffic analysis for many environmental documents, mitigated negative declarations, and EIRs. Transportation planning efforts completed by ATE include citywide Circulation Element traffic modeling, development of specific plans for local and regional areas, development of traffic fee programs, Transportation Demand Management (TDM) plans, redevelopment plans, roadway corridor studies, neighborhood impact studies, and parking studies.

Experience

Traffic and Circulation Study for the Santa Barbara County Housing Element Update – ATE prepared a traffic and circulation study for the County of Santa Barbara Housing Element Update. The study evaluated the traffic impacts related to the development of the identified housing rezone sites located throughout the County. A more detailed key site analysis was completed to evaluate the project-specific traffic impacts of a selected number of housing sites that were proposed for rezoning. The traffic analysis completed by ATE was used by the County to prepare the EIR for the Housing Element Update.

Traffic and Circulation Study for the OUSD Project – ATE prepared a traffic impact study for this senior residential project proposed on this key site adjacent to the Orcutt Old Town area. The study included an analysis of existing traffic conditions within the study area based on average daily, AM, and PM peak hour traffic count data. Trip generation estimates were calculated for the project, and project-specific impacts were identified based on County impact criteria. A cumulative analysis was also completed analyzing future conditions within the study area based on traffic volumes generated by the County's computer traffic model. Intersection and roadway improvement measures were developed for the identified project-specific and cumulative traffic impacts. The traffic study report was prepared pursuant to the County format requirements and submitted to the County for incorporation into the project EIR.

Traffic and Circulation Study for the North County Jail Project. – ATE prepared a traffic impact study assessing potential impacts for a new Santa Barbara County jail proposed in the Orcutt area of the county. The study analyzed existing traffic conditions within the study area based on average daily, AM, and PM peak hour traffic count data. Trip generation estimates were calculated for the project, and project-specific impacts were identified based on County impact criteria. A cumulative analysis of future conditions within the study area based on traffic volumes generated by the County's computer traffic

model was also completed. Intersection and roadway improvement measures were developed for the identified project-specific and cumulative traffic impacts. The traffic study report was prepared pursuant to the County format requirements and submitted for incorporation into the project EIR.

Other Santa Barbara County experience includes the following:

- Traffic and Circulation Study for Bacara Hotel Expansion Project
- Traffic and Circulation Study for the Isla Vista Master Plan
- Traffic and Circulation Study for the Santa Barbara Airport Master Plan
- Traffic and Circulation Study for the Santa Barbara Ranch Project
- Traffic and Circulation Study for the Goleta Marriott Project
- Traffic and Circulation Study for the Vista Del Mar School Relocation

Organizational Structure and Top Management

The organization structure of ATE is a matrix structure where teams are assessable from the functional areas of the organization in order to see projects through from conception to completion. ATE's top management includes Mr. Richard Pool, CEO; and Mr. Scott Schell, President. The approximate contribution of ATE's of the entire work effort is estimate to be less than 10 percent.

ASM Affiliates, Inc.

Firm Capabilities and History

ASM Affiliates, Inc. (ASM) is a Cultural Resources Management (CRM) firm with more than 35 years of experience in providing historic preservation services to government agencies. With more than 53 professionally qualified archaeologists, historians, architectural historians, GIS specialists, cultural anthropologists, ethnographers, technical specialists, and administrative staff, ASM can efficiently provide management planning documents of the highest quality.

ASM offers a full range of professional CRM services including constraints-feasibility analyses, overviews, predictive modeling, field surveys, archaeological sampling and testing, significance and National Register eligibility evaluations, Architectural History, Native American consultation and ethnography, archival studies, construction monitoring, data recovery, preservation planning, and custom designed/Geographic Information Systems (GIS) for municipal, state, and federal agencies, as well as private and tribal environmental and planning departments.

ASM employs a business plan that is designed to ensure comprehensive, integrated management oriented toward quality control, efficient project execution, and timely completion. This business plan is not merely a theoretical construct, but a proven approach that we have applied over the past 34 years.

ASM has been awarded numerous multi-year, on-call contracts with U.S. Army Corps of Engineers (1986 to 2001), Caltrans District 11 (1988 to 2008), Naval Facilities Engineering Command (1998 to current), Imperial Irrigation District (1997 to current), the Bureau of Reclamation (2005-2009), City of San Diego Metropolitan Wastewater Department (1991 to 2002), Centre City Development Corporation (1997 to current), Bureau of Land Management and other federal, state, and local agencies. We also serve as staff for several Native American tribal organizations in Southern California.

Dr. David Whitley of ASM Affiliates served as Chief Archaeologist for the UCLA Archaeological Information Center from 1983 to 1987, supervising the review of the cultural resource sections of all environmental documents for Los Angeles, Orange, and Ventura Counties. As Prehistoric Archaeologist appointed by Governor George Deukmejian to the State of California Historical Resources Commission (appointed 1986), Dr. Whitley was responsible for the review of all nominations to the National Register of Historic Places, as well as for California Historical Landmarks designations, including both archaeological and historical properties. Dr. Whitley has served as an expert legal witness for archaeological concerns before the State of Washington, Shorelines Hearings Board.

Experience

Dr. Whitley's experience includes:

Hitchcock Ranch Project, County of Santa Barbara - Phase II and Phase III archaeological test and salvage excavations at site CA-SBa-1661/H, Hitchcock Ranch, City of Santa Barbara, Santa Barbara County, California - W & S Consultants conducted Phase II and III investigations at site CA-SBa-1661/H, Hitchcock Ranch, City of Santa Barbara, Santa Barbara County, California. These investigations resulted in the evaluation (Phase II) of CA-SBa-1661/H and in the mitigation (Phase III) of potential adverse impacts to the site.

Arroyo Linda Crossroads Specific Plan, City of Arroyo Grande - Phase I archaeological and historical resource survey of the 300-acre Arroyo Linda Crossroads Specific Plan area, City of Arroyo Grande, San Luis Obispo County, California. W & S Consultants conducted a Phase I investigation of the Arroyo

Linda Crossroads Specific Plan area for Impact Sciences, Inc. This investigation resulted in the identification of several archaeological sites within the 300-acre project site.

Mahoney Ranch Project, County of Santa Barbara - Phase I archaeological resource survey of the 272-acre Mahoney Ranch in the City of Santa Maria, Santa Barbara County, California. W & S Consultants conducted a Phase I investigation of the Mahoney Ranch property. This investigation did not result in the identification of cultural resources within the 272-acre project site.

Other major experience includes the following:

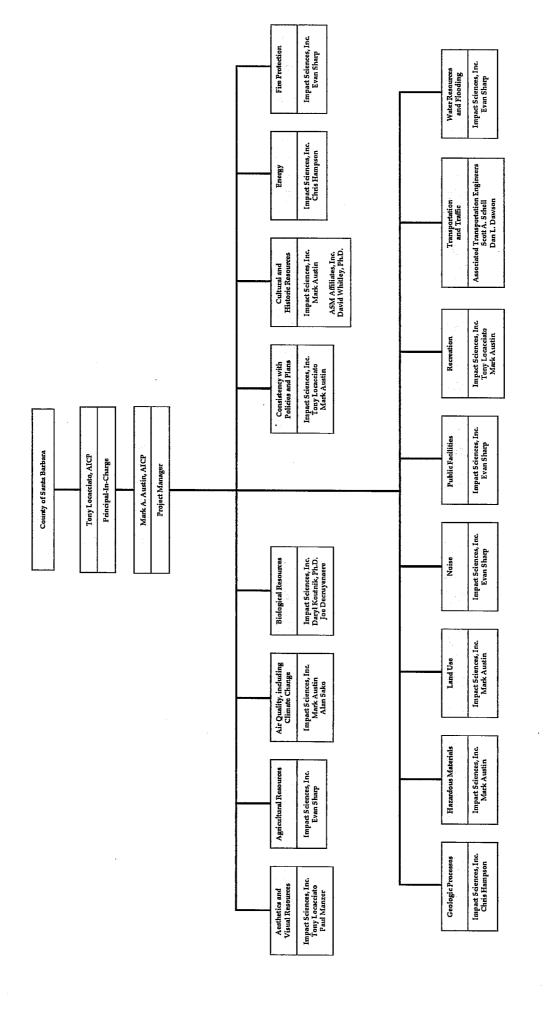
- Newhall Ranch Project: Phase I Survey and Phase II Archaeological Test Excavations on Eight Sites within the 12,000 Acre Newhall Ranch Specific Plan, Los Angeles County, California.
- Phase I, II and III archaeological survey, test excavations, data recovery and monitoring, on 18 sites within the 2,000 acres Lake Sherwood Ranch, Ventura County, for the David Murdock Development Corporation;
- Phase I archaeological survey and Phase II test excavation of CA-LAN-2203H within the 540 acres
 College Park study area, Palmdale, for Mr. David Bushnell, Bushnell Optical Company;
- Phase I survey/Class III archaeological inventory, Rocketdyne Santa Susana Field Laboratory (SSFL),
 Area 4, for Rocketdyne and the Boeing Company.

Organizational Structure and Top Management

ASM Affiliates, Inc. is a matrix structure, where teams are assessable from the functional areas of the organization in order to see projects through from conception to completion. ASM Affiliates top management includes: Mr. John R. Cook, RPA, President; and Ms. Catherine A. Wright, B.S. - Vice President, Business Operations. David A. Whitley, Ph.D., is a principal of ASM Affiliates. Based on the cost proposal, ASM's approximate contribution to the entire work effort is approximately 2 percent.

Section 3. Key Personnel

Impact Sciences has assembled a team that is outstanding in all respects in order to provide Santa Barbara County with the required California Environmental Quality Act (CEQA) services and adequately address its unique issues. Impact Sciences will serve as the prime contractor and will manage all environmental studies and EIR preparation. Our team includes ATE to address transportation and circulation and ASM Affiliates for cultural resource support. You will see from the information presented below that the skills and experience of our team closely match the environmental services required for the Paradiso del Mare Ocean Estate and Inland Estate Project and that our team is qualified for this work. As requested, by the County of Santa Barbara. Impact Sciences is committing that the key personnel proposed for this project will be the actual individuals performing the work.



Impact Sciences

Mr. Tony Locacciato, AICP, Principal-in-Charge

Bachelor of Science, City and Regional Planning, California Polytechnic University, San Luis Obispo Years with Impact Sciences: 15

Estimated Hours: 100

Percentage of Hours: 9

Mr. Locacciato will act as the principal-in-charge on the Paradiso del Mare Ocean Estate and Inland Estate Project. Mr. Locacciato is the Principal for Impact Sciences' Southern California Environmental Services Group. He has 30 years of diverse experience in planning and environmental analysis. His background in consulting, public sector planning, and private development results in an understanding of the relationships between land use regulations, environmental impacts, and the implementation of projects. Mr. Locacciato has experience in land use planning, land use studies, preparation of specific plans, preparation of master environmental assessments, program and project EIRs, supplemental EIRs, addendums to EIRs, initial studies, mitigated negative declarations, and site feasibility and constraints analysis. He also has provided a wide range of environmental consulting services to cities, including preparation of EIRs, review of EIRs, and direction of mitigation monitoring programs. Mr. Locacciato has been involved in the planning and environmental review of commercial, industrial, residential, and mixed-use projects in urban settings throughout California, as well as a wide variety of public infrastructure and public facility projects, including park and courthouse facilities and water, sewer, and roadway projects. His specialty is the management of complex multi-disciplinary projects. As Principal of Impact Sciences' environmental planning practice in Southern California, Mr. Locacciato provides oversight and direction of environmental review conducted by Impact Sciences and manages some of the firm's more complex projects.

Mr. Mark Austin, AICP, Associate Principal/Project Manager

Master of Business Administration, California State University, Channel Islands Bachelor of Science, Natural Resources Management, California Polytechnic State University, San Luis Obispo Years with Impact Sciences: 12

Estimated Hours: 383

Percentage of Hours: 32

Mr. Austin will act as the project manager on the Paradiso del Mare Ocean Estate and Inland Estate Project. Mr. Austin is an Associate Principal with over 17 years of diverse experience in planning and environmental analysis. He has successfully managed numerous controversial environmental documents

in compliance with both CEQA and NEPA. He is responsible for a variety of tasks, such as technical editing, report organization, project scheduling, personnel assignment and supervision, budget control, subconsultant coordination, and client contact including presentations to local agency decision makers. His experience includes a wide variety of projects throughout the Central Coast counties of San Luis Obispo, Santa Barbara, and Ventura. Some of these projects include the serving as the project manager or primary investigator for the Los Robles del Mar EIR for the City of Pismo Beach, Marian Medical Center Expansion Project for the City of Santa Maria, Walmart Expansion Project and River Terrace Residential Project for the City of Lompoc, the Arroyo Linda Specific Plan EIR for the City of Arroyo Grande, the Windermere Ranch Project for the County of Santa Barbara, and the Dos Pueblos Golf Course Project for the County of Santa Barbara. In addition, Mr. Austin prepared the technical noise and air quality assessment in support of the permitting requirements for the permanent abandonment and removal of Platforms Hilda, Heidi, Hazel, and Hope for Chevron USA and oil and gas pipelines located in state waters off the Santa Barbara County coast.

Daryl Koutnik, Ph.D., Director of Biology

Bachelor of Arts, Mathematics and Biology, California State University, Northridge Master of Science and Doctor of Philosophy, Botany, University of California, Davis Years with Impact Sciences: 4

Estimated Hours: 115

Percentage of Hours: 10

Dr. Koutnik will act as the principal biologist on the Paradiso del Mare Ocean Estate and Inland Estate Project. Dr. Koutnik has over 25 years of experience in biology and project management. He has directed, managed, and conducted plant and wildlife studies, biological resource inventories, sensitive species surveys, environmental impact assessments, biological constraints analyses, habitat restoration plans, and mitigation monitoring plans for private and public sector clients throughout Southern California. Dr. Koutnik has a thorough understanding of CEQA, having worked in and managed the environmental review section of the Los Angeles County Department of Regional Planning for more than 14 years. He also managed and coordinated the Significant Ecological Areas Technical Advisory Committee of Los Angeles County in implementing that jurisdiction's General Plan designated Significant Ecological Areas (SEAs). In addition, he initiated and managed the Los Angeles County Environmental Review Board (ERB) for development proposed with the Coastal Zone of the Santa Monica Mountains. Dr. Koutnik has broad knowledge of both state and federal Endangered Species Acts, and state and federal regulations involving biological resources. His biological expertise includes knowledge of biological and ecological relationships, with particular emphasis on habitat impact analysis, special-status plant species, and wildlife movement corridors. He has an exceptional knowledge of Southern California flora, and was an

active participant in the drafting of the West Mojave Plan for multi-species habitat conservation.

Dr. Koutnik is a contributor to The Jepson Manual: Higher Plants of California and The Jepson Desert Manual.

He is internationally recognized as an expert on prostrate spurges and other members of the spurge

family (Euphorbiaceae). He is co-author of the book Cotyledon and Tylecodon, published in 2004. Recent

work in the County of Santa Barbara has included direct Santa Barbara Ranch monarch butterfly survey,

the Dos Pueblos Creek Restoration Plan, and the Santa Barbara Ranch grassland survey. In addition, Dr.

Koutnik has a substantial amount of preparing document in the coastal zone including the preparation

and certification of the EIR for the multi-component Neptune Marina and Fisherman's Village project in

the community of Marina del Rey.

Joe Decruyenaere, Senior Botanist

Bachelor of Science, Biology, University of California, Riverside

Master of Science, Botany, University of California, Riverside

Years with Impact Sciences: 3

Estimated Hours: 65

Percentage of Hours: 6

Mr. Decruyenaere will act as the biologist in support of Dr. Koutnik on the Paradiso del Mare Ocean

Estate and Inland Estate Project. Mr. Decruyenaere has 13 years of professional experience in biological

research, environmental impact analysis, and project management. He has been involved in the

preparation and review of over a dozen EIRs and has conducted impact analysis and provided guidance

on the development of mitigation monitoring plans for dozens of others. Mr. Decruyenaere has

conducted a wide variety of field-related work, including general biological surveys, focused sensitive

plant surveys, vegetation mapping, small mammal trapping, passerine bird nesting studies, and water

chemistry sampling and testing.

Alan Sako, Air Quality Scientist

Bachelor of Science, Atmospheric, Oceanic, and Environmental Science, University of California, Los Angeles

Years with Impact Sciences: 7

Estimated Hours: 32

Percentage of Hours: 3

Mr. Sako will act as the principal air quality specialist on the Paradiso del Mare Ocean Estate and Inland

Estate Project. Mr. Sako has nine years of extensive experience in modeling emissions of air pollutants

and performing ambient air quality impact analyses and health risk assessments for EIRs and other

CEQA-related documents. He is well versed in using many of the current air pollutant dispersion

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modeling programs such as AERMOD, ISCST3, and CALINE4. In addition, Mr. Sako has worked on

numerous air quality permitting projects, compliance issues, and emissions inventories for commercial

and industrial clients. He has also worked with the Port of Long Beach on diesel emission reduction

strategies and air pollutant monitoring projects. Mr. Sako has prepared studies for Climate Action Plans

and has conducted inventories and prepared analysis for greenhouse gas emission studies. Mr. Sako is

very familiar with the Santa Barbara County Air Quality Pollution Control District Scope and Content of

Air Quality Sections in Environmental Documents through preparation of air quality analysis for the Marian

Medical Center Expansion Project for the City of Santa Maria, the Walmart Expansion Project, the Home

Depot Project, and River Terrace Residential Project for the City of Lompoc.,

Chris Hampson, Project Planner

Bachelor of Science, Environmental Management & Protection, California Polytechnic State University, San Luis

Years with Impact Sciences: 3

Estimated Hours: 124

Percentage of Hours: 11

Mr. Hampson will act in a role of supporting the environmental team in the revising of the sections of the

Paradiso del Mare Ocean Estate and Inland Estate Project EIR that need minor revisions. Mr. Hampson is

a project planner with experience in environmental analysis for a variety of development projects. He has

assisted in the preparation of environmental documents pursuant to CEQA, including EIRs and Notices

of Preparation. Mr. Hampson has prepared a variety of sections for EIRs for residential, mixed-use, and

commercial projects.

Evan Sharp, Project Planner

Bachelor of Science, Environmental Management & Protection, University of California, Santa Cruz

Years with Impact Sciences: 3

Estimated Hours: 124

Percentage of Hours: 11

Mr. Sharp is an environmental staff planner with knowledge of California planning. He has five years of

experience as an environmental staff planner and has prepared a wide variety of sections for

environmental impact reports including aesthetics, agriculture, cultural resources, geology and soils,

hazards, land use and planning, population and housing, public services, recreation, and utilities.

Mr. Sharp has extensive knowledge of the California Department of Conservation's California

Agricultural Land Evaluation and Site Assessment Model, good team working skills, and good

communication skills. He has experience working with state agencies and their regulatory requirements.

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Paul Manzer, Visual Services Manager

Associate of Arts, Technical Arts, Los Angeles Pierce College

Videography and Screen Writing Graduate, University California, Los Angeles

Years with Impact Sciences: 6

Estimated Hours: 203

Percentage of Hours: 17

Mr. Manzer will act as the principal QA/QC person who will review the applicant visual simulations and

prepare needed visual simulations for on Paradiso del Mare Ocean Estate and Inland Estate Project.

Mr. Manzer manages all project graphics and designs the graphic formats of all reports and exhibit

materials. He has over 25 years of experience in graphic design and cartography. Mr. Manzer is

experienced in the use of numerous computer illustration and document layout programs. His experience

also includes the preparation of visual simulations, shade and shadow studies, visual and viewshed

analyses, photography, multimedia presentations, and marketing videos. Mr. Manzer's computer

experience includes, but is not limited to, power usage of Autodesk Studio Max and AutoCAD; ESRI

ArcMap; Adobe Illustrator, Photoshop, Acrobat, InDesign, and Premiere; and Microsoft Excel, Word, and

PowerPoint.

The remaining 5 percent of Impact Sciences hours are allocated to document production.

Associated Transportation Engineers – Transportation/Circulation

Scott A. Schell, AICP, PTP

Bachelor of Arts with High Honors, Environmental Studies and Economics, University of California, Santa Barbara

Years with ATE: 27

Mr. Schell will be the Principal Transportation Planner for the project. Mr. Schell is a transportation

planning specialist with a broad background in traffic operations, transportation planning theory, and

environmental regulations (CEQA, NEPA, etc.). Mr. Schell joined ATE as a Transportation Planner in

1983 and became a partner in the firm in 1992. During his tenure with ATE, he has been responsible for

and participated in over 1,500 transportation planning studies, traffic impact reports, and parking studies

for projects located throughout California. Mr. Schell has focused much of his work in the Santa Barbara

area.

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Dan L. Dawson, Supervising Transportation Planner

Bachelor of Arts, Economics, California State University, Chico Years with ATE: 21

Mr. Dawson joined ATE as a Transportation Planner in 1989. Since that time, he has participated in over 1,200 transportation planning and parking studies throughout California, Nevada, and Arizona. Mr. Dawson participated in the development of the traffic studies for corridor studies and specific plans located throughout California. Mr. Dawson participated in traffic and circulation studies for numerous projects in the Orcutt area of Santa Barbara County.

ASM Affiliates, Inc. – Cultural Resources

David S. Whitley, Ph.D., RPA, Principal

Former Chief Archaeologist at UCLA, Dr. Whitley is also currently an Adjunct Professor at Arizona State University. He has conducted Phase I, II and II CEQA studies in coastal California since 1982. He is the author of 17 books and over 100 articles, has served as Prehistoric Archaeologist on the State of California Historical Resources Commission, and is currently the archaeological and anthropological advisor to the Ventura County Cultural Heritage Board. For 10 years he also served on the ICOMOS council of directors and has represented the US at UNESCO international heritage management meetings.

Section 4. Study Methodology

Impact Sciences approach and methodology for preparation of the Revised Environmental Impact Report (EIR) for the Paradiso del Mare Ocean and Inland Estates Project is presented in this section. The 2009 Draft EIR provides a thorough description of the environmental and regulatory setting and detailed analysis of the potential impacts of the project as originally proposed. Our approach involves updating information and analysis in each section of the 2009 Draft EIR to address the new proposed locations for the Ocean and Inland Estates on the project site. Some of the EIR sections will require minimal updating, while others will require more revision, as further discussed below, since the proposed new locations for the two estate homes were selected to avoid or lessen the unavoidable significant impacts identified in the Draft EIR for the original proposal. This approach, using the existing Draft EIR information to the greatest degree possible and focusing on the analysis of the key topics affected by the new proposed locations will allow the Impact Sciences team to prepare the first draft of the EIR for County review in a time- and cost-efficient manner.

Task 1: Preparation of Administrative Revised Draft EIR

Impact Sciences will prepare an Administrative Revised Draft EIR for review by County staff. Our approach to the preparation of each of the sections of the EIR and the environmental topics identified for review in the County's Request for Proposal is presented below.

Executive Summary

The existing 43-page summary from the 2009 Draft EIR will be updated to reflect the revisions to the topical analysis sections of the EIR. The narrative description of the project and the alternatives will be updated along with the summary table, in accordance with Section 15123 of the State CEQA Guidelines.

Introduction

A comprehensive update to the existing Introduction section in the 2009 Draft EIR will be made to describe to the reader the purpose of the EIR and its role in the County of Santa Barbara's environmental and project review process. The current Introduction section provides an overview of the project that will be updated and project objectives, which remain unchanged. The purpose and legal authority and public review process are addressed next. The discussion of the public review process will be updated and expanded to include a summary of the past and upcoming steps in the environmental review process being conducted by the County for this project, including:

The Draft EIR was circulated for public review from September 3, 2009 until November 3, 2009

- The County received two-dozen comment letters on the Draft EIR
- The applicant subsequently revised the project and made changes to the project in an effort to reduce impacts.
- The County revised the Draft EIR in accordance with Section 15088.5 of the CEQA Guidelines and is circulating the Revised Draft EIR for additional public review and comment.

With regard to the upcoming steps in the environmental review process, this section will explain that the County will recirculate the entire Revised Draft EIR and conduct a public hearing on the Revised Draft EIR. As required by *State CEQA Guidelines* Section 15088.5(g), a summary of the revisions to the EIR will be provided in the introduction.

Project Overview

The detailed project description of the proposed Parasido del Mare Ocean and Inland Estates Project, included in Section 2.4 of the Project Overview section of the 2009 Draft EIR will be updated, including maps, plans, and other graphics sufficient to fully define the new proposed locations of the estate homes on the project site, all related site and access improvements, and the construction process based on the updated project description to be provided by County staff. This section will include a complete list of the revised project plans. Impact Sciences will review the updated project description prepared by County staff for completeness, clarity, and consistency with the revised site plans, building elevations and other project plans. Any errors, omissions or other matters will be corrected in consultation with County staff and the project applicant. Only minimal updating of the environmental setting presented in Section 2.3 will be provided to reflect some of the comments submitted on the 2009 Draft EIR. The list of related projects in the Gaviota Coast considered in the cumulative impact analysis in Section 2.6 will also be updated based on updated information from County Planning.

Environmental Impact Analysis

Impact Sciences will provide analysis of each of the topics identified in the County's Request for Proposal at both a project-specific and cumulative level, based on the identified significance thresholds listed for each topic. Each of the topical sections in the revised EIR will be organized in a similar order as the original EIR as follows:

- Environmental setting
- Regulatory setting
- Environmental impacts

- Thresholds for determining significance
- Impact assessment methodology
- Project impacts and mitigation measures
- Cumulative impacts
- Residual impacts

Aesthetics and Visual Resources

The Aesthetics and Visual Resources section is one of the key sections of this EIR and careful and thorough updating is proposed. The general and regulatory setting in the existing EIR section is well developed. The methodology used, adapted from the Bureau of Land Management Visual Resource Management System, is well developed and fully described. For this reason, fully updated analysis will be provided within this framework.

In order to support a more detailed and robust analysis of the potential impacts of the project, the description of the existing visual characteristics of the site will be expanded. In the current EIR section, this description is less than two pages in length. For the impact analysis to address the change in the existing visual character of the site and on scenic view that will result from the project, additional description of the topography and existing vegetation is needed. Additionally, this description needs to be organized to address the different portions of the site where the estate homes were originally proposed, where they are currently proposed, and where the alternative locations are to support more detailed impact analysis in this section and the alternatives section. Additional photographs will be taken and added to the section to support this expanded description of the existing conditions.

We understand the applicant will be submitting visual simulations of estate homes in the new proposed locations. Impact Sciences prepares photo visual simulations with our in-house staff and will review the visual simulations submitted by the applicant to determine if the homes and related site improvements are accurately located horizontally and vertically in relation to the existing site topography. Based on the expanded discussion of the existing visual setting and the new visual simulations, the impact analysis will be updated using the existing methodology and significance thresholds. Mitigation measures for the proposed location, site, and landscape will be proposed for any significant impacts.

Agricultural Resources

Impact Sciences will update the agricultural resources analysis and section prepared for the 2009 Draft EIR to address the new Ocean Estate and Inland Estate locations. This EIR section will require minimal

updating to address the impacts of the new locations. Impact Sciences will recalculate the loss of agricultural soils due to the moving of the Ocean Estate and Inland Estate and modification to residential site plans. Further expansion and discussion of the use of potential organic farming techniques for the 6 acres of proposed agriculture planting areas will be addressed based on comments received on the previous EIR.

Air Quality, including Climate Change

Air Quality. Impact Sciences will review the existing air quality analysis for the project and make any necessary updates. Based on a review of the Air Quality section of the 2009 Draft EIR, we propose to update the local ambient air pollutant concentrations for the project region using the most recent data from the California Air Resources Board (CARB) and the Santa Barbara County Air Pollution Control District (SBCAPCD).

Impact Sciences will update the project emissions using the California Emissions Estimator Model (CalEEMod). The South Coast Air Quality Management District developed CalEEMod as a statewide emissions model for land use development projects. The model is intended to be a successor to the URBEMIS2007 model. CalEEMod contains the most recent air quality modeling assumptions and is able to estimate emissions of greenhouse gases (GHGs) from direct and indirect sources. It also contains more robust mitigation options compared to URBEMIS2007. As described under the Greenhouse Gas task, this model will be used to estimate the project's direct and indirect GHG emissions. Therefore, we will also update the project's criteria air pollutant emissions in order to maintain consistency throughout the EIR. The emissions will be compared to the air quality thresholds in the County's Environmental Thresholds and Guidelines Manual.

We will review the section to ensure that the analysis adequately addresses all of the County's thresholds of significance, including those related to CO hotspots, health risks, and consistency with the air quality management plan.

Greenhouse Gases (GHG)/Climate Change. Impact Sciences will update the Greenhouse Gas analysis for the project. Construction and operation of the project would result in direct and indirect GHG emissions. The GHG emissions will be estimated using the CalEEMod emissions model. The 2009 Draft EIR estimated GHG emissions for construction, area sources, electricity, and motor vehicles. The Office of Planning and Research (OPR) recommends that projects also include estimated GHG emissions from water demand, wastewater generation, and solid waste generation. GHG emissions from these other indirect sources will be included as part of the CalEEMod emissions modeling. The analysis of GHG

impacts will be conducted in accordance with the SBAPCD Interim Procedures for Evaluating Greenhouse Gas Emissions.

In addition to an emission-based analysis, the *State CEQA Guidelines* require projects to evaluate their consistency with applicable plans that have been adopted for the purpose of reducing GHG emissions. According to the SBCAPCD, projects are recommended to mitigate GHG emissions to the extent reasonably possible whether or not they are determined to be significant. Therefore, in addition to quantifying the emissions, we will also analyze the project's design features and mitigation measures that would reduce GHG emissions, such as exceeding the Title 24 requirements. The reductions from these reasonable measures will be quantified and reported. The analysis will also discuss the consistency of the project design features and mitigation measures with applicable measures recommended by the County. The County released its *Climate Action Strategy: Phase 1 Climate Action Study* in June 2011. The study includes several broad measures to reduce GHG emissions that would apply to the project. The project's design features and mitigation measures will be compared to these applicable measures in the Climate Action Strategy.

Biological Resources

Impact Sciences will review existing documentation pertinent to the biological resources within, or in the vicinity of, the project site. This documentation review will include the following: (1) the 2009 Draft Paradiso del Mare Ocean and Inland Estates EIR prepared by County of Santa Barbara and AMEC, including the biological technical appendices (Storrer Environmental Services Red-legged frog survey and the AMEC Jurisdictional Determination and Delineation); (2) Santa Barbara County Coastal Land Use Plan; (3) the biological technical studies prepared for the ARCO Dos Pueblos Golf Links project, including subsequent reports prepared for the Paradiso del Mare Ocean and Inland Estates project; (4) the most recent edition of the California Natural Diversity Data Base (CNDDB), listing historical and recent occurrences of special-status animal species in the project area; (5) the most recent edition of the California Native Plant Society (CNPS) database, listing historical and recent occurrences of special-status plant species in the project area; (6) California Department of Fish and Game (CDFG) Special Animals List (July 2009); (7) CDFG Special Plants list (September 2010); (8) local municipal codes; and (9) new reports prepared for the applicant by Dudek including updated vegetation map, jurisdictional wetlands delineation, white-tailed kite evaluation and updated tree survey, as available. All biological reports prepared on behalf of the project applicant will be peer-reviewed for accuracy and adequacy, and the results from these reports will be incorporated into the biological resource analysis.

An Impact Sciences senior biologist will complete a one-day reconnaissance level survey of the site to support the peer review of the surveys provided to the County and verify the presence of sensitive biological resources in relation to the new locations for the estate homes and the related site improvements. In particular, the biologist will review the on-site sensitive and special-status species or habitats previously documented on the project site, including coastal sage scrub, southern willow scrub, Valley needle grassland, southern tarplant (*Centromadia parryi australis*), cliff aster (*Malacothrix saxatilis saxatilis*), harbor seal haulout, monarch butterfly (*Danaus plexippus*), California red-legged frog (*Rana aurora draytonii*), southwestern pond turtle (*Actinemys marmorata pallida*), tidewater goby (*Eucyclogobius newberryi*), white-tailed kite, and sensitive wetland habitats. The County Coastal Plan identifies many of these resources as Environmental Sensitive Habitat Areas (ESHAs), including wetlands and vernal pools, butterfly trees, white-tailed kite foraging habitat, native grassland, and marine mammal haulout sites.

After completion of the field investigation and documentation review, Impact Sciences will draft a revised Biological Resources section using the previously prepared 2009 EIR materials as much as possible and consistent with the Santa Barbara County Environmental Thresholds and Guidelines Manual. The revised section will include Environmental Setting and Existing Conditions, review of the Regulatory Framework, Thresholds of Significance, Project Impact Evaluation, Mitigation Measures, Residual Impacts after Mitigation Implementation, and Cumulative Impact. Information on existing conditions, vegetation types, and sensitive species observed will be incorporated, based on the field survey reports and current CNDDB, CNPS, and other data, as appropriate. The vegetation map and descriptions will utilize the information provided by Dudek and will indicate the locations of any special-status species or their habitats, any wetland or riparian areas, and any known sensitive biological resources. Vegetation associations will be described, where possible, in the current CDFG classification of the Manual of California Vegetation, second edition (Sawyer, Keeler-Wolf and Evens, 2009), to replace the earlier classification of Holland (1986).

Direct, indirect, and cumulative, short- and long-term impacts to existing biological resources resulting from proposed development will be assessed, and feasible mitigation measures and alternatives will be identified. Impact analysis discussion will address project impacts to any sensitive habitats, including ESHA and other sensitive coastal resources, and will recommend mitigation and project design features, such as avoidance, to lessen potential significant impacts. The evaluation will include discussion of the potential for any special-status species (e.g., Rare, Threatened, or Endangered species) to be impacted, both on site and off site.

All impacts such as loss of unique or special-status species or their habitats or the reduction of diversity or quality of native or important vegetation will be classified as significant before and after implementation of mitigation and will include a discussion of the effectiveness of the mitigation measures and monitoring procedures. Potential project impacts to special-status biological resources will also be analyzed. The impact discussion will include an analysis of local versus regional impacts and

short-term versus long-term impacts, as well as indirect impacts from human activities. The analysis of impacts will include a contribution to alternative designs, incorporated into the Alternatives section of the Draft EIR, that would lessen or eliminate significant impacts to biological resources. This analysis will be incorporated in the Draft EIR and mitigation measures will be included in the mitigation monitoring and reporting program.

Cultural and Historic Resources

It is our understanding that the project applicant will submit additional archaeological investigations for the following specific project areas: the utility corridor on Gaviota Holdings property immediately east of project site, the utility corridor and coastal trail in the southeast portion of the Ocean Estate between Eagle Canyon and Drainage 1, and the public parking lot and alternative development envelope on the Inland Estate between Eagle Canyon and Drainage 1. In addition, the applicant has provided updated data and archaeological information including a Phase 2 archaeological study for CA-SBA-76 and CA-SBA-3945 for the Gaviota Holding Habitat. The RFP initially requested that the consultant provide peer review on applicant provided archaeological studies. However, based on discussion with County staff, it is Impact Sciences' understanding that the County's archaeologist will peer review these investigations to ensure they meet the County's standards for archaeological studies. The archaeological studies utilized in the previous EIR were previously peer reviewed by the County archaeologist and are considered adequate for inclusion into the revised EIR. Using the previous and new archaeological studies, and based on tribal consultation by the County on the project site and any other new information provided, Impact Sciences and ASM Affiliates will assess potential impacts from project implementation, including the potential for direct or indirect impacts to any known archaeological sites in the project vicinity. The section will also address the potential for the project to cause or contribute to significant cumulative impacts. Appropriate mitigation measures will be developed where significant impacts are noted. To assist Impact Sciences in incorporating the new information and to update the analysis in the existing EIR section in full conformance with Sections 15064.5 and 15126.4 of the State CEQA Guidelines on the significance of impacts and mitigation of impacts to cultural resources, Dr. David Whitley of ASM Affiliates will assist Impact Sciences with the update of this section of the EIR. Dr. Whitley will also participate with County staff in any tribal consultation to discuss the resources on the site, potential impacts and appropriate mitigation strategies.

Energy

Impact Sciences will update the energy analysis (e.g., electrical and propane) and energy section prepared for the 2009 Draft EIR to address the new project design. This EIR section will require minimal updating to address the changes to the location of the proposed estate homes. Impact Sciences will recalculate the

reduction or increase in energy consumption due to the redesign and relocation of the both the Ocean Estate and Inland Estate.

Fire Protection

The fire protection section prepared for the 2009 Draft EIR prepared for this Project was based on information from the Santa Barbara County Fire Department, as well as numerous published County reports. Potential fire hazards to future development in the Project area will be assessed based on consultation with the Santa Barbara County Fire Department to obtain updated information and any available updated information from the County's Comprehensive Plan or other sources. Existing policies and regulations such as the required 100-foot buffer requirement between structure and flammable vegetation that will mitigate these potential impacts will also be identified along with the any specific recommendations from the Fire Department related to the new proposed locations for the estate homes and the revised site access and circulation system.

Geologic Processes

The geology section prepared for the 2009 Draft EIR prepared for this Project was based on information from preliminary geotechnical evaluations prepared for the Ocean Estate and Inland Estate by Earth Systems Pacific, as well as County and state published reports. This EIR section will require minimal updating to address the proposed Project. Potential hazards to future development in the Project area will be based on this existing information and any available updated information from the County's Comprehensive Plan or other sources. Existing policies and regulations that will mitigate these potential impacts will also be identified along with the recommendations in the previously prepared geotechnical studies to mitigate potential impacts.

Hazardous Materials

The project site has been used for oil related activities in the past. The existing documentation on the removal of oil production facilities is thorough. The hazards section prepared for the 2009 Draft EIR was based on Phase I and Phase II Environmental Site Assessments (ESAs), and Remedial Action Plans prepared for this site. These studies remain adequate for use, given the level of analysis needed for the purposes of the revised EIR. Impact Sciences will update the information in this section of the EIR to reflect studies completed since the 2009 Draft EIR based on consultation with County staff.

Land Use

Given that the project has been modified since the initial EIR, the land use section of the EIR will need to be updated in the revised EIR. The land use section in the 2009 Draft EIR contains a full discussion of all relevant land use policies and analysis of the consistency of the original project with these policies. This analysis of the consistency of the revised project with each applicable policy will be updated, addressing both the inland and ocean estate sites, based on the revised analysis of the aesthetic, biological, and cultural resource impacts.

Noise

Impact Sciences will update the noise analysis and section prepared for the 2009 Draft EIR to address the new Ocean Estate and Inland Estate locations. Updated roadway noise modeling will be completed based on existing and projected future roadway noise volumes in the new traffic analysis to be prepared by Associated Transportation Engineers for this EIR. Information on railroad noise will be updated as needed in response to any increase train operations through the project site. We assume that previous noise monitoring conducted on the project site remains sufficient for use in the revised EIR.

Public Facilities

The EIR section prepared for the 2009 Administrative Draft EIR addressed the potential effects of uses proposed on water, wastewater, solid waste disposal, police protection, schools, and hospitals. All baseline information in this section will be fully updated by contacting and consulting with each service agency and by incorporating information from the County's Comprehensive Plan and other available documents as appropriate. In addition, Impact Sciences will review the applicant's on-site wastewater treatment assessment for accuracy prior to the incorporation of this information into the wastewater section of the EIR.

Recreation

The recreation section in the 2009 EIR contains a fully detailed setting discussion describing recreation facilities and uses in the Gaviota Coast. The regulatory setting discussion is equally detailed, including the relevant background discussion on public access issues addressed in the review of the Dos Pueblos Golf Course project originally proposed for this site and adjacent property. Additional comments on existing and future public access were received by the County through review of the 2009 EIR. Minimal update of the setting section will be required

As new locations for public access, parking, and trails are proposed, the impact analysis discussion will be revised to address these new proposals to provide public access to both the beach and the Naples surf break. This analysis will address both horizontal access across the site and vertical access down the existing bluff to the beach. The direct and indirect impact of trail improvements will be addressed.

Transportation and Traffic

Associated Transportation Engineers (ATE) will prepare an updated traffic study evaluating the potential impacts of the proposed Project. ATE previously prepared the traffic and circulation analysis for the proposed Project for the EIR that was being prepared for the Project. ATE will use the previous study to the greatest extent feasible. The following is ATE proposed scope of work:

- Obtain revised project description and site plan. Discuss project and proposed scope of work with Transportation Division staff at Santa Barbara County.
- Collect new AM and PM peak hour turning movement counts at the U.S. Highway 101/Project Access Roadway intersection.
- Calculate Existing levels of service (LOS) for the U.S. Highway 101/Project Access Roadway
 intersection using the County's adopted LOS methodology; and calculate Existing AM and PM peak
 hour levels of service for the segment of U.S. Highway 101 adjacent to the site using the operations
 methodology outlined in the Highway Capacity Manual.
- Calculate average daily and peak hour trip generation estimates for the project uses using rates contained in "Trip Generation," Institute of Transportation Engineers, or other applicable sources.
- Conduct trip generation study at beach parking area in the Gaviota Coast area to confirm the trip
 generation estimates used for the proposed beach parking lot.
- Distribute and assign project traffic based on existing traffic patterns and consideration of the origins/destinations of project traffic.
- Calculate Existing + Project levels of service at the U.S. Highway 101/Project Access Roadway intersection and the segment of U.S. Highway 101 adjacent to the site. Identify Project-Specific impacts based on County thresholds.
- Forecast Cumulative traffic volumes for the study-area facilities using a list of projects provided by Impact Sciences.
- Calculate Cumulative and Cumulative + Project levels of service at the U.S. Highway 101/Project
 Access Roadway intersection and the segment of U.S. Highway 101 adjacent to the site. Identify
 Cumulative impacts based on County thresholds.
- Evaluate site access at the U.S. Highway 101/Project Access Roadway intersection. The site access
 analysis will include review of levels of service, delays, sight distances, and the need to modify the

lane geometry at the intersection based on County and Caltrans criteria, as well as other criteria used in the traffic engineering discipline.

Impact Sciences will update the traffic section prepared for the 2009 Draft EIR based on the updated ATE study to describe the existing conditions, proposed improvements, trip generation, potential impacts to the study intersections and mitigation measures. As more than a "cut and paste" of the traffic study is required to assist the community, Planning Commission, and County Board of Supervisors in understanding the potential effects of this proposal. We will carefully translate the technical information in the traffic study to create an EIR section that provides the information of interest in an understandable manner.

Water Resource and Flooding

Impact Sciences will update water resource and flooding analysis and section prepared for the 2009 Draft EIR to address the new project design. This EIR section will require minimal updating to address the revised project. Impact Sciences will recalculate the reduction or increase in impervious surfaces and water usages due to the redesign and relocation of the both the Ocean Estate and Inland Estate.

Consistency with Plans and Policies

Given that the project has been modified since the initial EIR, the consistency with plans and policies section of the EIR will need to be revisited in the revised EIR. Impact Sciences will identify and analyze potential direct and indirect impacts of the proposed project and related improvements with regard to land use and planning, with a focus on conflicts with policies and regulations designed to avoid or mitigate an environmental effect. This will include a matrix consistent with Santa Barbara requirements that illustrates the proposed project's conformance with applicable plans, goals, policies, objectives, and standards. Impact Sciences will and identify inconsistencies with policies and plans and consult with County staff to develop appropriate mitigation measures.

Other CEQA Sections

This section of the EIR will include the other sections as required by the *State CEQA Guidelines* Section 15126.2, including a discussion of potential growth inducing impacts, unavoidable significant environmental effects, and significant irreversible environmental changes due to project implementation.

Alternatives

The State CEQA Guidelines (Section 15126.6(c)) recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by

the lead agency (but were rejected as infeasible), and briefly explain the reasons underlying the lead agency's determination. This section will address the following alternatives:

- No Project Alternative
- Reduced Scale Alternative (Development Envelope/Building)
- Alternative Development Envelope, Inland Estate East of Drainage #1
- Alternative Development Envelope, Inland Estate West of Drainage #1
- Alternative Development Envelope, Ocean state 1
- Alternative Access Driveway at Highway 101, West Portion of Inland Estate

The introduction to the alternatives section discussion will also briefly address why an alternative location is not a potentially feasible alternative for this project and is, therefore, not addressed in detail in the alternatives section along with

- the extent to which the alternative would avoid or lessen one or more of the identified potentially significant environmental effects of the project;
- the potential feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, comprehensive plan consistency, and consistency with other applicable plans and regulatory limitations;
- the appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit a reasoned choice; and
- the requirements of the State CEQA Guidelines (Section 15126.6(e)) to consider the No Project alternative and to identify an environmentally superior alternative in addition to the No Project alternative.

A narrative description will be developed for each of the alternative along with appropriate diagrammatic plans illustrating these alternatives. Each alternative will be comparatively analyzed on a topic-by-topic basis with the proposed Project. A matrix comparing the impacts of the alternatives to the proposed project will be prepared to provide a visual summary of this topical analysis.

To support the alternatives analysis Associated Transportation Engineers will provide evaluation of up to three project alternatives (include the No Build). It is understood that one of the alternatives may require analyses of a new access connection to U.S. Highway 101 along the project's frontage. That analysis will be prepared at the same level of detail as the proposed project (e.g., Existing + Project and Cumulative + Project levels of service, delays, sight distances, intersection configuration, turn lane requirements, etc.).

Impact Sciences will prepare visual simulations for each of the three alternative locations for the estate homes to be evaluated in the Revised Draft EIR. Three separate visual simulations will be provided for each of the three alternative sites. Our proposal assumes the applicant's team will provide the 3-D models of the homes and landscape features used in the simulations prepared for the proposed home locations for our use in preparing the simulations of the alternative sites.

A brief written summary will also be provided that identifies the environmentally superior alternative, as required by the *State CEQA Guidelines*, and discusses the reason for preferring the proposed project to the alternatives.

Deliverables:

Environmental Setting and Description of Project Alternatives

- 1 reproducible unbound copy
- 6 bound copies
- 5 CD copies

Administrative Draft EIR

- 1 reproducible unbound copy
- 5 bound copies
- 5 CD copies

Task 2: Prepare Public Draft EIR and Technical Appendices

This task provides for revisions to the Administrative Revised Draft EIR in response to comments from County staff and departments. After receipt of Planning and Development Department approval of any revisions, Impact Sciences will print copies of the Draft EIR for public and agency distribution.

Deliverables:

Draft EIR

- 1 reproducible unbound copy
- 20 bound copies
- 25 CD copies

1 electronic copy with files divide into chapters

Task 3: Prepare Administrative Final EIR/Response to Comments

Following the 45-day public review period and pursuant to CEQA and County requirements for implementation of CEQA, Impact Sciences will prepare draft written responses to all comments received during the public review period. This would include responses to all verbal comments obtained through the minutes of the public hearings pertaining to the adequacy of the EIR, and written comments received by the County. The Draft Response to Comments will be provided to the County for review, corrected per staff's direction, and published within the Final EIR. The time necessary to complete this task is highly dependent on the actions or wishes of others. Therefore, beyond the hours budgeted, we propose to be available for as much time as is necessary on a time-and-material basis.

Deliverables:

Administrative Final EIR/Response to Comments

- 1 reproducible unbound copy
- 5 bound copies
- 5 CD copies

Task 4: Prepare Final EIR

This task provides for revisions to the Administrative Revised Final EIR in response to comments from County staff and departments. After receipt of Planning and Development Department approval of any revisions, Impact Sciences will print copies of the Final EIR for public and agency distribution.

Deliverables:

Final EIR

- 1 reproducible unbound copy
- 15 bound copies
- 25 CD copies
- 1 electronic copy with files divide into chapters

Task 5: Meetings and Hearings

Our cost proposal provides for active project management and coordination by the principal-in-charge, Tony Locacciato, AICP, and project manager, Mark Austin, AICP, responsible for the day-to-day management, is also available to attend meetings as required. The Impact Sciences principal and/or project manager or Dr. Daryl Koutnik, our Director of Biology, will attend, up to 20 project meetings, one public workshop, and five public hearings. The public hearings would include a hearing on the Draft EIR, two hearings with the Board of Architecture on the design of the project, and two public hearings with the Planning Commission. If requested by the County, Impact Sciences will attend additional meetings or hearings at cost of \$1,900 per meeting.

Deliverables:

Attendance 20 staff meetings, one public workshop, and up to five public hearings.

Section 5. Cost Proposal

A cost proposal and staffing plan for preparation of the Revised EIR for the Paradiso del Mare Ocean Estate and Inland Estate Project in accordance with the Study Methodology presented in Section 4 is provided on the following page.

Paradiso del Mare Estates Revised EIR Cost Proposal Staffing Plan

Impact Sciences, Inc July 22, 2011

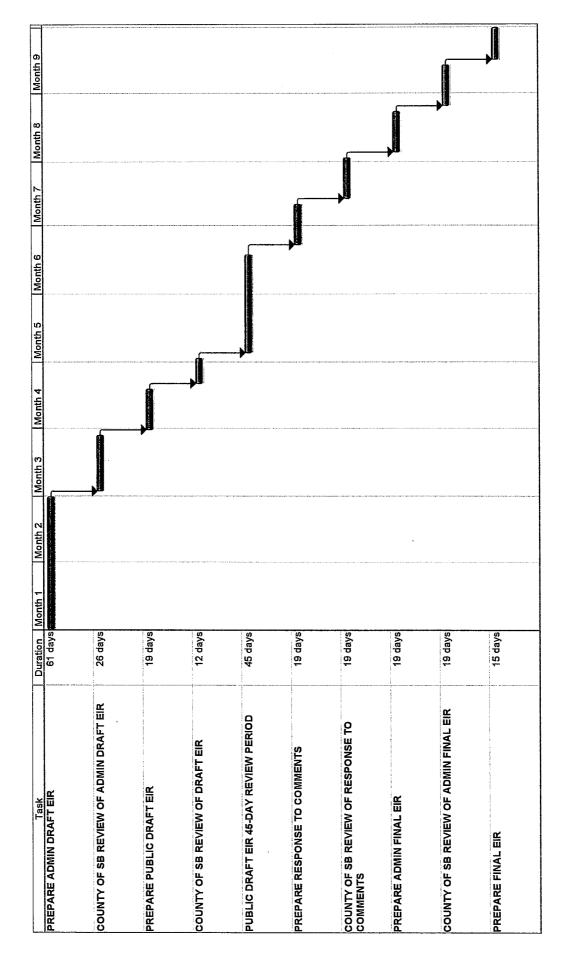
	STAFF CATEGORY	Principal Daryl Koutnik	Project Mgr	Air Quality	Senior Biologist	Planner	Graphic Artist	Publications	TOTAL
	STAFF	Tony Locacciato	Mark Austin	Alan Sako	Joe Decruyenaere	Chris Hampson Evan Sharp			
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TASK 1:	PREPARE ADMINISTRATIVE DRAFT EIR								
	Executive Summary		В			В			\$2,400
	Introduction Project Description		8			24			\$4,240
	Environmental Impact Analysis		16						\$2,96
	Aesthetics/Visual Resources	8	40			 		ļ	
	Agricultural Resources		1			12			\$7,400 \$1,569
	Air Quality, including Climate Change		2	32					\$5,010
	Biological Resources	40		I .	65				\$19,07
	Cultural Resources and Historic Energy		24				L		\$4,440
	Fire Protection		1	ļ		8 8			\$1,10
	Geologic Processes		 			12			\$1,10
	Hazardous Materials		2	 	<u> </u>	12			\$1,565 \$1,750
	Land Use	12		l		36			\$6,840
	Noise		4			16			\$2,580
	Public Facilities Recreation	42	4			32			\$4,420
	Transportation and Traffic	16	2	 		24	<u> </u>		\$6,360
	Water Resource and Flooding		2		 	B 16			\$1,290
	Consistency with Plans and Policies	12	 	 	 	24			\$2,210 \$5,460
	Other CEQA sections		2	i		8			\$1,290
	Alternatives	16	64						\$15,440
	Three Visual Simulations Each for Three Alternative Sites (Nine Total) Document Production						195		\$22,425
	SUBTOTAL	\$23,400	\$33,670	****	640.075			60	\$6,000
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TASK 2:	PREPARE PUBLIC DRAFT EIR AND TECHNICAL APPENDICIES								
	Revise Admin Draft EIR in Response to County Comments	8	32				8		\$8,640
	Document Production							40	\$4,000
	SUBTOTAL	\$1,800	\$5,920	\$0	\$0	\$0	\$920	\$4,000	\$12,640
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TASK 3:	PREPARE ADMINISTRATIVE FINAL EIR/ RESPONSES TO COMMENTS								
	Prepare Administrative Final EIR/Responses to Comments	24	48						\$14,280
	Document Production							32	\$3,200
	SUBTOTAL	\$5,400	\$8,880	\$0	\$0	\$0	\$0	\$3,200	\$17,480
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TASK 4:	PREPARE FINAL EIR								
	Revise Administrative Final EIR in Response to County Comments	4	16						\$3,860
	Document Production							24	\$2,400
	SUBTOTAL	\$900	\$2,960	\$0	\$0	\$0	\$0	\$2,400	\$6,250
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TASK 5	PROJECT MANAGEMENT, MEETINGS AND HEARING ATTENDANCE								
	Project Management (Includes Attending 20 Project Meetings)	50	80						\$26,050
	Attendance at Five Public Hearings	25	25						\$10,250
	SUBTOTAL	\$16,875	\$19,425	\$0	\$0	\$0	\$0	\$0	\$36,300
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TRAFFIC A	ND CULTURAL RESOURCES SUBCONSULTANTS								
	ATE Traffic Analysis (includes \$2,000 for analysis of alternative access)								\$10,000
	ASM Affiliates - Dr. David Whitley - Cultural Resources Support	l							\$5,000
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Section 6. Schedule

Impact Sciences will dedicate the staff resources needed to prepare the Paradiso del Mare Ocean Estate and Inland Estate Project Revised Environmental Impact Report (EIR) as expeditiously as possible within the time frames for the environmental review process defined by CEQA, the *State CEQA Guidelines*, and the County of Santa Barbara.

A detailed graphic schedule for the preparation of the Revised EIR is attached. This schedule includes all the tasks related to preparation of the Draft and Final EIRs in the Preliminary Sample Project Schedule included in the County's RFP and shows completion of the Revised EIR within 9 months of authorization to proceed.

Paradiso Del Mare Ocean and Inland Estates **EIR Schedule**



Impact Sciences, Inc.

July 22, 2011

Section 7. Client References

Impact Sciences

Ms. Lucille T. Breese, Planning Manager City of Lompoc Community Development Department 100 Civic Center Plaza Lompoc, California 93436 (805) 875-8273

Ms. Allison De Busk, Project Planner City of Santa Barbara Community Development 630 Garden Street Santa Barbara, California 93101 (805) 564-5470

Mr. Phil Lanzafame, Redevelopment Director Glendale Redevelopment Agency 633 East Broadway, Room 201 Glendale, California 91206 (818) 548-2005

Associated Transportation Engineers

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Mr. Dave Whitehead Public Works Department City of Santa Maria 110 South Pine Street, Suite 101 Santa Maria, California 93454 (805) 925-0951

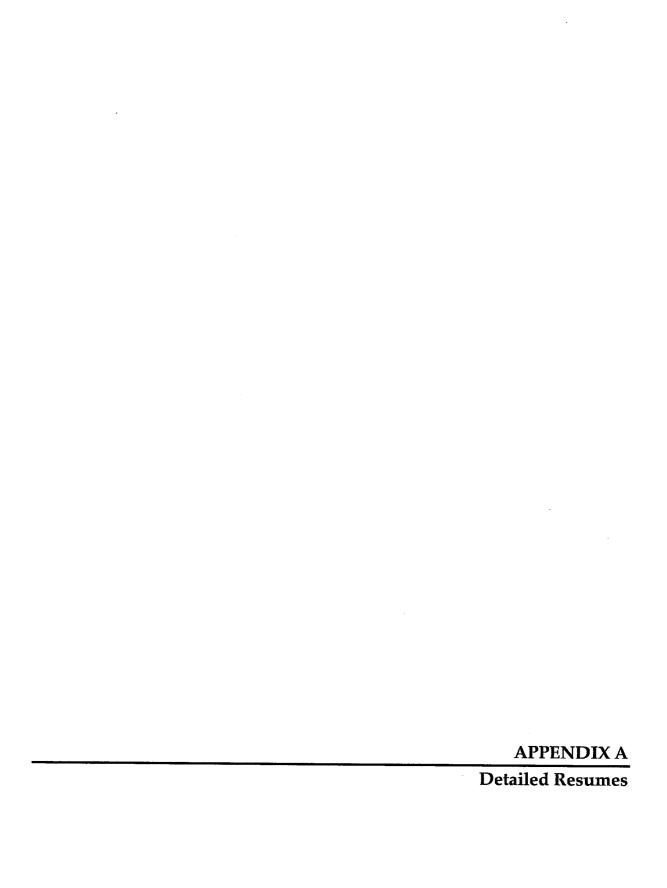
Mr. Steven Wagner Community Services Department City of Goleta 130 Cremona Drive, Suite B Goleta, California 93117 (805) 961-7460

ASM Affiliates, Inc.

Mr. David Redden Planning & Entitlements Tejon Ranch Company P.O. Box 1000 Lebec, California 93243 (661) 858-2161

Mr. Mark Subbotin Vice President Newhall Land and Farming Co. 23823 W. Valencia Blvd. Valencia, California 91355 (661) 255-4003

Mr. David Weiss Environmental Division U.S. Borax, Inc. (Rio Tinto) 14486 Borax Road Boron, California 93516-2000 (760) 762-7460



Tony Locacciato, AICP

Managing Principal

Education

Bachelor of Science, City and Regional Planning California Polytechnic University, San Luis Obispo

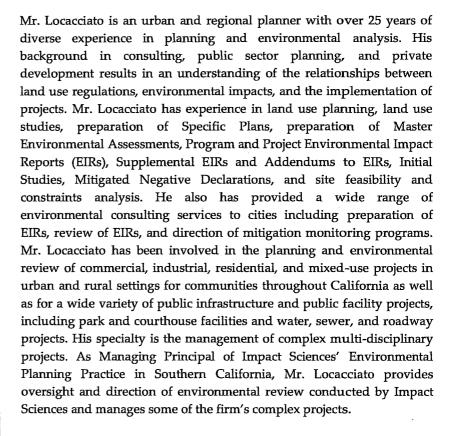
Affiliations

American Planning Association

American Institute of Certified Planners

Association of Environmental Professionals

Urban Land Institute



Representative Professional Experience

Project Director for the preparation of the Glendale Town Center EIR for the Glendale Redevelopment Agency in Glendale, California. This EIR provided comprehensive analysis of a mixed-use commercial and residential project on a key 16-acre site in the center of downtown Glendale. The Glendale Town Center includes 475,000 square feet of retail and entertainment uses with 338 residential units in the upper floors of the buildings. A major objective of this project was to connect major facilities and development in the downtown including the adjacent Glendale Galleria Mall, the existing retail development along Brand Boulevard and the City's Central Library by creating pedestrian connections through the site and the new public park serving as the centerpiece of the project. A full Project EIR was prepared and Impact Sciences managed all phases of the environmental review process for the redevelopment agency. A lawsuit was filed on the adequacy of the EIR. The EIR was found to be adequate by the Los Angeles Superior Court and this decision was upheld on appeal.



- Project Manager for the Burbank Media Center EIR for the City of Burbank, California. Over a period of four years, Impact Sciences prepared two Project EIRs for a mixed-use project proposed on a 4-acre site at a key location in the Burbank Media District. As originally proposed, the Burbank Media Center consisted of 925,000 square feet of development including office uses; a business- and visitor-serving hotel; a health club; a childcare facility; retail space; and a church in 3-, 6-, and 18-story buildings designed by Helmut Jahn. The first EIR included analysis of several alternative configurations of uses and buildings on the site. After the original project was not approved, the City asked Impact Sciences to prepare a second EIR evaluating four additional development scenarios at an equal level of detail to assist the City in determining the appropriate intensity of development for this site. After completion of the second EIR, the City approved a residential and retail commercial project.
- Project Director for the LA County Hall of Justice Environmental Assessment (EA)/EIR for the County of Los Angeles, California. Impact Sciences prepared a National Environmental Policy Act (NEPA) EA for the Federal Emergency Management Agency and an EIR for the County for the repair and renovation of the historic Hall of Justice. Built in 1925 and damaged in the 1994 Northridge Earthquake, the Hall of Justice is the oldest public building in the Civic Center. The full EIR and EA evaluated the County's proposal to renovate the building to provide Class A office space for the County, build a new 1,000-space parking structure next to the Hall of Justice, and make landscape and hardscape improvements to the site. Topics evaluated in the EA/EIR included geology and soils, aesthetics, air quality, noise, traffic, historical resources, and utilities and public services.
- Project Manager for the Warner Bros. Studio Master Plan Expansion EIR for the City of Burbank, California. Organized and conducted public scoping meetings and prepared an Expanded Initial Study to determine the scope of this EIR, which addressed master plans for two separate studio sites in the City of Burbank. The project involved plans to add over 4 million square feet of new studio facilities over a 20-year period. Traffic, aesthetics, historical resources, and neighborhood compatibility were major issues of concern. Mr. Locacciato also prepared an addendum to this EIR for the City, which provided detailed analysis of a multi-level parking garage located next to an existing residential neighborhood.



- Project Director for the Azusa Pacific University Master Plan EIR for the City of Azusa, California. This long-range Master Plan provided for the addition of new educational facilities on the east and west campuses located in Azusa. The objectives of the master plan included balancing the uses on both campuses by providing additional student housing and parking on both campuses in addition to new classroom buildings. Key issues included the compatibility of the proposed increase in intensity of uses on the campus with existing surrounding neighborhoods and the proposed redevelopment of the Azusa Drive-In Theater, designated as a historic resource eligible for listing on the California Register of Historic Resources as the last drive-in theater on historic Route 66 in the state.
- Project Manager for the Chaffey Community Master Plan for the Chaffey Community College District in Rancho Cucamonga, California. This EIR looked at the master plan for expansion of the main campus on Haven Avenue in the City of Rancho Cucamonga. Major issues included the impacts of changes in the access and circulation system for the campus and traffic impacts on the streets surrounding the campus.
- Project Manager for the Wilshire Vermont Joint Use Project Addendum for the Los Angeles Community Redevelopment Agency and the Metropolitan Transportation Agency in Wilshire, California. Impact Sciences prepared a comprehensive addendum to the Wilshire Center and Koreatown Redevelopment Project EIR evaluating a mixed-use residential and retail commercial project proposed on the site above the Metro Red Line Wilshire/Vermont Station. The project included 444 residential apartments planned in six levels above a ground level containing approximately 30,600 square feet of retail commercial space. Parking was provided in a three-story subterranean parking structure containing 732 parking spaces. Reconfiguration of the portal to the Red Line Station was also a part of the project.
- Project Manager for the RiverPark Specific Plan EIR for the City of Oxnard, California. This EIR evaluated the impacts of the largest mixed-use project ever approved in Ventura County. The 700-acre RiverPark Project includes 2,800 residential units and 2.8 million square feet of commercial development. The land plan reflects new urbanism planning principles and incorporates a mixed-use town center. The project involves the annexation and reclamation of an existing sand and gravel mine site located next to the Santa Clara River, a sensitive area for biological resources. Impact Sciences



directed preparation of a full range of detailed technical studies and prepared a detailed full-scope EIR addressing all topics. Impact Sciences also reviewed and directed preparation of the Specific Plan by the applicant.

- Project Manager for the Canyon Oaks Supplemental EIR for the County of Los Angeles, California. This comprehensive Supplemental EIR evaluated a revised project proposed for a sensitive 100-acre site in the Santa Monica Mountains. Previous proposals for this site had been under review for over 12 years. Visual impacts, land use compatibility, effect on community character, biology, grading, geologic stability, and water quality were issues of concern.
- Project Manager for the Santa Monica Studios EIR for the City of Santa Monica, California. Managed a Project EIR on the development of a 390,000-square-foot digital entertainment studio complex with 66 live/work units on 6.5 acres. The project involved demolition of existing uses and construction of studio production offices, production stages, food court, restaurant, retail services, and 66 live/work residential units. The uses will be located on 6.5 acres in seven new four-story, 45-foot-tall buildings with 2.5 levels of belowgrade parking.
- Project Director for the Mountaingate South EIR for the City of Los Angeles, California. Mountaingate South is located in a steep canyon area of the Santa Monica Mountains. The project area totaled 281 acres with development on 61 acres with 29 dwelling units. The remaining portions of the project area are dedicated as permanent open space. A full-scope EIR was prepared for this project with key issues including plant and animal habitat, fire management, and viewsheds.
- Project Manager for the Central LA Middle School No. 3 Project for the Los Angeles Unified School District in Los Angeles, California. This EIR evaluated a new 789 two-semester seat middle school in a new 30-classroom building on a 2.5-acre site above the Metro Red Line Wilshire/Vermont Station.
- Project Director for the Sierra Madre Master Environmental Assessment (MEA) and General Plan EIR in Sierra Madre, California. The MEA was compiled to provide information to the City's General Plan Advisory Committee for use during the process of updating the General Plan. The EIR was prepared after the draft update of the General Plan was completed based on the information in the MEA.



- Project Manager for the Commercial Development Standards EIR for the City of Santa Monica, California. This EIR provided comparative evaluation of 12 different sets of alternative development standards being considered by the City for all commercial and industrial zones in the City.
- Project Manager for preparation of the Sun City Tehama Specific Plan EIR for Tehama County, California. This project proposed development of a master-planned mixed-use community including residential, commercial, and institutional uses. The proposed Specific Plan would allow development of a total of approximately 4,200 residential units, with the majority (approximately 3,700 units) comprised age-restricted retirement community. Approximately 500,000 square feet of commercial uses were also initially proposed. Impact Sciences prepared and circulated a comprehensive full-scope EIR for the County of Tehama and also prepared a revised EIR for recirculation after the project was modified in response to comments on the original Draft EIR. Major issues include the provision of public services to this planned new community and the impact of the project on the adjacent I-5 Freeway.
- Project Manager for the Sun City Shadow Hills Project Master Plan EIR for the City of Indio, California. This full-scope EIR was prepared over a seven-month period with the Final EIR completed in January 2003. This EIR evaluated the first major project proposed in Indio's Gateway Conceptual Specific Plan Area in north Indio. The Shadow Hills project consisted of a proposal to develop a private, age-restricted residential community on approximately 800 acres. 2,500 single-family homes, a golf course, and 65 acres of commercial uses were proposed. Key issues included compatibility with the Bermuda Dunes Airport, changes to the General Plan Circulation Plan for north Indio, and preparation of one of the first SB 610 Water Supply Assessments (WSA) for a major project served by the Coachella Valley Water District. Mr. Locacciato is currently serving as Project Director for EIR for the Sun City Shadow Hills Expansion Project EIR for the City of Indio. This project involves adding 305 acres to the existing Sun City Shadow Hills Community through adoption of a new Specific Plan.
- Project Manager for the Shadow View Specific Plan EIR for the City
 of Coachella, California. This EIR evaluated a residential and retail
 commercial project proposed on an important 455-acre site located at
 the entry of the City's Commercial Entertainment Zone. A full-scope
 EIR addressed all potential impacts of the proposed gated residential
 golf course community and major retail center. Major topics of



- interest included the consistency of the proposed uses with the City's General Plan Land Use and Circulation Elements. After a new plan was developed for the project, the entire EIR was revised and recirculated for additional public review.
- Project Manager for the Desert Lakes Specific Plan for the City of Coachella, California. Impact Sciences is preparing a full-scope EIR for this Specific Plan proposed for approximately 2,500 acres located north of the I-10 Freeway. The project includes 7,300 new homes in three separate residential villages surrounding a town center containing up to 300,000 square feet of retail commercial, office, and high-density residential issues. Services provided include full management of the environmental review process, including conducting scoping and agency consultation meetings, and directing preparation of all technical studies, including traffic, cultural resources, and geology studies. In addition, Impact Sciences is coordinating the preparation of a Water Supply Assessment and consultation with Native American tribal representatives on traditional tribal cultural places as required by SB 18.
- Project Director for the Supplemental EIR for Amendment No. 4 to Specific Plan No. 281 (Sun City Palm Desert) for the County of Riverside, California. This EIR evaluated a major amendment to this Specific Plan to realign major roadways, other infrastructure, and planning area boundaries in the northern half of this 1,575-acre Specific Plan area. Comprehensive evaluation of all aspects of this amendment was provided in this EIR.
- Project Manager for the Northwest Golf Course Community Specific Plan and EIR for the City of Oxnard, California. Managed a multidisciplinary team to prepare a specific plan for the addition of 18 holes of golf to an existing golf course and the creation of a compatible community of 450 homes. The golf course extension was sited on a closed landfill and amendment of the approved closure plan was required as well as adjustment of the sphere of influence for the City and annexation of the property.
- Project Director for the Camarillo Regional Park EIR for the County
 of Ventura. Prepared an environmental database document to
 determine the constraints to further development of this existing
 park site, which included biological and cultural resource studies.
 The EIR evaluated development of a 16,000-seat amphitheater and
 18-hole golf course on this site located at the base of the Santa
 Monica Mountains.



- Project Director for the Rancho La Sierra Specific Plan in Riverside, California. Directed the preparation of the Specific Plan document, which incorporated a land plan designed through a public planning process.
- Project Manager for the City of Santa Monica Master Environmental Assessment (MEA) in Santa Monica, California. This MEA was prepared during a moratorium on commercial and industrial development in the City in order to provide a comprehensive source of information on environmental conditions throughout the City. This MEA also included analysis of the potential cumulative effects of development based on a master list of projects for the entire City. This MEA was prepared based on available published information and is updated on an annual basis.
- Project Manager for the College Park Project Environmental Database for the City of Palmdale, California. This database was compiled for a 640-acre site in the foothills of the San Gabriel Mountains to guide the preparation of a Specific Plan for this site and provide information for the Specific Plan EIR. Planned uses included a community college campus and residential uses. The site was located in a sensitive foothill area adjacent to the San Andreas Fault. Also managed the preparation of a Supplemental EIR on this project that evaluated a set of comprehensive revisions to the Specific Plan.
- Project Manager for the North Shore at Mandalay Bay EIR for the City of Oxnard, California. Managed the preparation of a series of technical studies to determine the feasibility of redeveloping a closed oil field waste site for residential uses. A comprehensive consultation process with responsible agencies was conducted to determine the scope of the EIR for the project. The EIR evaluated a proposal for 450 waterfront homes on this 80-acre site in the coastal zone.
- Project Manager for the Arroyo Linda Crossroads Specific Plan EIR for the City of Arroyo Grande, California. This EIR evaluated the impacts of development of mixed commercial, light industrial, and residential uses on a 290-acre site in San Luis Obispo County. The project involved annexing 185 acres to the City of Arroyo Grande.



- Project Director for the Antelope Valley Enterprise Zone EIR for the
 Cities of Palmdale and Lancaster and the County of Los Angeles,
 California. This program EIR evaluated the potential impacts of
 designating a 28,000-acre area under the jurisdiction of the Cities of
 Lancaster and Palmdale and the County of Los Angeles as an
 Enterprise Zone. The EIR was prepared within a short time frame
 based on existing planning and environmental documents
 previously prepared by the three jurisdictions.
- Project Director for a Master Environmental Assessment (MEA) and General Plan EIR for the City of Lancaster, California. The MEA provided a statement of existing conditions for the city to be used to streamline environmental documentation of future projects. The MEA is formatted for the City to update on an as-needed basis. The General Plan EIR analyzes three potential development scenarios including an expanded sphere of influence area extending to the San Bernardino County line.
- Project Director for a Program EIR on the General Plan Update for the City of South Pasadena, California. The project involved the update of the City of South Pasadena General Plan with the exception of the Housing Element.
- Project Manager for the Douglas Ranch Specific Plan project for the City of Simi Valley, California. The Specific Plan provides for development of several residential areas and a cemetery on a hillside site.
- Managed preparation of an Addendum to the County of Riverside EIR in California. Evaluated the impacts of an amendment to the Specific Plan for the Del Webb Sun City Project. Also managed preparation of an Environmental Assessment and EIR Addendum for the City of Palm Desert evaluating the impacts of a set of preannexation actions on the Sun City Palm Desert project including a General Plan Amendment, Zone Change, and approval of a Development Agreement.



Mark Austin, AICP

Associate Principal

Education Bachelor of Science, Natural

Resources Management California Polytechnic State University, San Luis Obispo

Master of Business Administration California State University, Channel Islands

Professional Affiliations

American Planning Association American Institute of Certified **Planners** City of Fillmore Planning Commissioner

Mr. Austin has over 15 years of diverse experience in planning and environmental analysis. He has successfully managed numerous controversial environmental documents in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). He is responsible for a variety of tasks including technical editing, report organization, project scheduling, personnel assignment and supervision, budget control, subconsultant coordination, and client contact, including presentations to local agency decision makers.

Representative Project Experience

- Managed an Environmental Impact Report (EIR) examining the acquisition of approximately 14 acres to construct the proposed Juan Lagunas Soria Elementary School in the Oxnard area of Ventura County, California. The proposed site to be acquired by the Oxnard School District (OSD) is located west of an existing residential neighborhood and is bounded on the north, east, and south by property in active agriculture. Issues included the use of restricted and non-restricted pesticides, herbicides, and fungicides, near the property; the application of these materials both by aerial spraying and ground methods (i.e., tractors, manually by personnel); and onsite soil contamination associated with residual agricultural chemicals. Other issues included the loss of prime agricultural land; the visual impacts associated with encroaching into an agricultural area; noise due to agricultural activities surrounding the school site; and traffic and circulation.
- Managed an EIR for the Marian Medical Center Expansion Project in the City of Santa Maria, California. The proposed project involves a new four-story, 216,000-square-foot building expansion south of the existing four-story, 177,000-square-foot hospital. After completion, the expansion would house a majority of the beds and essential services provided by the hospital, which would be transferred from the existing facility. The expansion would increase the number of beds currently provided from 132 beds to 188 beds, including 108 medical surgical beds, a 14-bed neonatal unit, a 32-bed obstetric unit, 14 labor-delivery rooms, and 10 additional critical-care beds. The project also involves the expansion and relocation of the emergency department, pharmacy, and dietary services to the new facility. Major topical issues that were addressed in the EIR included visual resources, hazards, and noise issues due to emergency helicopter landings and departures, air quality, and transportation and circulation issues associated with increased traffic through the adjoining neighborhood.



- Managed an EIR for the proposed Los Robles del Mar Specific Plan in the City of Pismo Beach, California. The Los Robles del Mar Specific Plan allowed approximately 263 residential dwelling units to be built on the 182-acre site. The applicant requested approval of two General Plan Amendments, a Specific Plan Zone Change, Annexation by LAFCO, and a Tentative Tract Map. Major issues addressed in the EIR included water supplies, biological resources, and the loss of agricultural/open space.
- Managed the preparation of an EIR analyzing the development of the Lompoc Aquatic Center, City of Lompoc, California. The project was proposed to serve the City of Lompoc and surrounding communities. The proposed aquatic center would consist of three pools including a competition pool, recreation pool, and therapy pool. A glazed pool enclosure would cover all three pools and the interior deck area. In addition to the three pools, a bathhouse/pool mechanical equipment building, a pool accessory and equipment building for the competition pool, and a walled-in rental patio/party area were to be built as part of the aquatic center. The aquatic center would also add additional landscaping and parking to the 4.62-acre site. Major topical issues that were addressed in the EIR included visual resources, cultural resources, land use and planning, cumulative analysis, and growth-inducing impacts.
- Managed an EIR for the Lompoc Hospital Relocation Project, City of Lompoc, California. The proposed project consists of the relocation of the existing 75,000-square-foot, 60-bed hospital from the current location at 508 East Hickory Avenue to the 8.1-acre project site located on the north side of Highway 1/Ocean Avenue between 7th and 12th Streets in the southeastern corner of the City of Lompoc. The new hospital would be contained in an approximately 111,000-gross-square-foot building on the project site. The existing community center, which is currently located on the project site, is proposed to be demolished in order to build the new facility. Major topical issues that were addressed in the EIR included visual resources, noise issues due to ambulance traffic through residential neighborhoods, air quality, and transportation and circulation issues associated with access from Highway 1.
- Managed a focused EIR for the Lompoc Home Depot in the City of Lompoc, California. The project involved the construction of a 102,513-square-foot Home Depot building with attached vestibules covering 2,380 square feet, and an adjacent 35,002-square-foot Outdoor Garden Center, for a total of 139,895 square feet. Major



topics of concern that were addressed in the EIR included impacts to air quality, traffic, noise, and hydrology and water quality. Considerable attention was paid in the EIR to the hydrology and water quality impacts to the Santa Ynez River. Measures were successfully implemented to ensure that runoff that would occur as a result of the project would not result in a net increase of runoff into the Santa Ynez River. Additionally, best management practices were identified to eliminate the possibility of water quality contamination as a result of the development of the site.

- Managed the EIR for the Lent Ranch Marketplace for the City of Elk Grove, California. The project involved the development of approximately 3.1 million square feet of commercial space including a regional shopping mall, community commercial uses, neighborhood commercial uses, office and entertainment uses, visitor-serving commercial uses, and approximately 280 multi-family residential units on a 295-acre site. Major issues addressed in the EIR were the potential public health hazard from the nearby Suburban Propane regional storage facility, the loss of prime agricultural lands, and loss of important biological resources.
- Managed the EIR for the Glendale Town Center Project (now named the Americana at Brand) for the Glendale Redevelopment Agency, City of Glendale, California. This project was located with the located in the Central Glendale Redevelopment Area. The project includes the development of a maximum of 475,000 square feet of retail-commercial floor area, as well as a maximum of 425,000 square feet of residential floor area, consisting of 338 dwelling units. Other components of the project include development of a new street within the project site and the vacation of portions of Orange and Harvard Streets within the project site, landscape and streetscape improvements, architectural and security lighting, building signage, and necessary upgrades to utility systems. A full project EIR was prepared based on direction from the Glendale Redevelopment Agency. Issues addressed in the EIR included land use and planning, population and housing, aesthetics, geologic and seismic hazards, hydrology and water quality, traffic and circulation, air quality, noise, cultural resources, hazards and hazardous materials, public services, utilities and services systems, and recreation.
- Managed the Environmental Assessment (EA)/EIR for the Los Angeles County Hall of Justice Renovation in the City of Los Angeles, California. The project involved the preparation of an EA/EIR for the Federal Emergency Management Agency (FEMA)



and the County of Los Angeles for the proposed repair and renovation of the County Hall of Justice in response to severe damage caused by the January 17, 1994, Northridge earthquake, as well as aging of the building. The Hall of Justice building was built in 1925 and was at the heart of the County's justice system for almost 70 years. The building was designed in the classic Italianate styletypical of architecture of the early 20th century-and is the oldest surviving government building in the Los Angeles Civic Center. The Hall of Justice has been evaluated by the state Office of Historic Preservation (OHP) and determined to be eligible for listing in the National Register of Historic Places (NRHP). At the direction of FEMA and the County of Los Angeles, a full EA/EIR was prepared. Focus issues evaluated in the EA/EIR included geology and soils, visual, air quality, noise, socioeconomic, biology, traffic and circulation, cultural resources including archaeology and historic architecture, utilities and public services, and cumulative impacts. The project was subject to intense review by local historic groups, the Office of Historic Preservation, and the City of Los Angeles.

- Prepared an EA for the Army Corps of Engineers for the Los Angeles Children's Museum in the City of Los Angeles, California. The project involves the relocation and expansion of the Los Angeles Children's Museum from its existing downtown location to a location near Griffith Park. The project involves the construction and operation of a three-story, 80,000-square-foot museum for the promotion of arts, culture, and entertainment to children in Los Angeles. The project is a highly controversial and political one, due to the significance of both Downtown Los Angeles and Griffith Park to the City of Los Angeles. In order to assist the Corps' decisionmaking body in determining the appropriate site to construct the new museum, the EA evaluates two alternative sites. Each NEPA category analyzed in the EA includes a conclusion that identifies the "environmentally superior" and/or preferable alternative. Issues of contention addressed in the EA included site selection criteria, land use compatibility, traffic, air quality, aesthetics, open space, noise, solid waste, and recreation.
- Project Director for the EIR, Mitigation Monitoring and Reporting Program (MMRP), and Findings of Fact/Statement of Overriding Considerations for the Foothill Feeder Repair and Future Inspections Project in unincorporated Los Angeles County along the Santa Clara River, California. The primary purposes of the project were to (1) make repairs to three damaged sections of pre-stressed concrete cylinder pipe (PCCP) on the Foothill Feeder identified during the



February 2005 shutdown and (2) to conduct periodic inspections and maintenance activities on the Foothill Feeder on a five-year cycle to ensure the continued structural integrity of the pipeline. Major topics addressed in the EIR included project impacts associated with dewatering into the Santa Clara River, including hydrology and water quality pertaining to the Federal Clean Water Act; biological impacts associated with dewatering and the affect on species of special concern, including the unarmored threespine stickleback, Santa Ana sucker, arroyo chub, arroyo toad, southwestern pond and two-striped garter, as well the project's compliance with the Federal Endangered Species Act, California Endangered Species Act, and California Fish and Game Code; and air quality and noise issues associated with the dewatering and the ventilation of the feeder line.

- Project Director for EIR, MMRP, and Findings of Fact/Statement of Overriding Considerations for the Foothill Feeder Inspection and Maintenance Project in unincorporated Los Angeles County along the Santa Clara River, California. The project involved both preparation and shutdown activities. Preparation activities in advance of the shutdown included (1) the grading of existing access roads, (2) placement of aggregate base on existing access roads, (3) hand-weed abatement around existing structures and along access roads, (4) minor maintenance of valves and electrical components, and (5) material and equipment staging. Shutdown activities included (1) isolating water in the system, (2) blowing off and pumping out the remaining water in the system, (3) provision of entrance and exit/ventilation locations, (4) conducting eddy current inspections, (5) maintenance and upgrade activities, (6) installation of a riser at the Santa Clara River, and (7) refilling of the Foothill Feeder. Major topics addressed in the EIR included project impacts associated with dewatering into the Santa Clara River, including hydrology and water quality pertaining to the Federal Clean Water Act; biological impacts associated with dewatering and the affect on special of concern, including the unarmored threespine stickleback, Santa Ana sucker, arroyo chub, arroyo toad, southwestern pond and two-striped garter, as well the project's compliance with the Federal Endangered Species Act, California Endangered Species Act, and California Fish and Game Code; and air quality and noise issues associated with the dewatering and the ventilation of the feeder line.
- Project Manager for the Zone 430 Water Reservoirs and In-let/Out-let
 Pipeline EIR in City of Ventura, California. Project involved the
 construction of two reservoirs with a combined storage capacity of
 4.0 million gallons which will be buried with an exposed roof. The
 two reservoirs are proposed to be constructed in the eastern portion



of the City within an existing avocado orchard. In addition, the project includes the construction of a 1.9-mile (10,000 feet) inlet/outlet pipeline with a 24-inch diameter to convey water to and from the reservoirs. The City has determined that this project is needed in the 430 Zone in order to meet immediate and near-term storage requirements through the year 2010. Issues being addressed in the EIR include the loss of prime agricultural land, short-term noise impacts during construction, cultural resource impacts associated with archeological sites, biological impacts associated with the loss of gnatcatcher habitat, and visual impacts both pre- and post-construction.

- Managed an open services contract for the County of Los Angeles to prepare environmental clearances for the largest Community Development Block Grant Program in the United States. Tasks the preparation of all necessary NEPA/CEQA included environmental documents including Environmental Assessments and Negative Declaration, the preparation of blight studies, the supporting of County staff in the National Register of Historic Places Section 106 process, and the review of project prepared Phase I and II Environmental Site Assessments. As part of this program, environmental clearances have been completed for projects in 42 cities within Los Angeles County as well as the unincorporated portions of the County. Projects assessed included roadway and water infrastructure improvements, solid and hazardous waste facilities, commercial and industrial facilities, and affordable housing.
- Responsible for providing environmental and planning services required for proposed federal projects for the U.S. General Services Administration. Preparation of these documents required the collection of baseline environmental data, analysis of environmental consequences, and the presentation of mitigation measures. The issues addressed within these documents required the managing and directing of a multidisciplinary staff with technical expertise in all facets of the physical, biological, and socioeconomic environment. Mr. Austin prepared and managed seven Environmental Impact Statements (EISs) under this contract for projects in Santa Ana, Sacramento (joint EIS/EIR), San Diego, San Francisco (joint EIS/EIR), California, Phoenix and Tucson, Arizona, and Las Vegas, Nevada.
- Prepared NEPA-required expanded EAs for senior and junior enlisted military housing projects throughout the western United States for the U.S. Navy, Western Division (WESTDIV) Naval Facilities Engineering Command. Environmental documents



prepared included projects at NAS Whidbey Island, Washington; NAS Adak (Aleutian Islands), Alaska; NAS Fallon, Nevada; MCAS Tustin, MCAS Twenty-nine Palms; and PMTC Pt. Mugu, NCBC Port Hueneme, California.

- Played a key role in the preparation of the noise, air quality, geology and soils, and public services analysis for an EIR for the Santa Catalina Island Company 15-Year Development Plan, Catalina Island, California. The EIR examined the implementation of a five-phased, 15-year development plan which included a variety of residential, commercial, and industrial land uses. In addition, the EIR examined the expansion of the Avalon Canyon Golf Course, development of a new desalination plant near the Pebbly Beach SCE Desalination Plant, and the relocation of the Catalina horse stables.
- Prepared the preliminary environmental documentation for the proposed extension of the Descanso Beach Resort Pier, Catalina Island. Tasks included the conducting of underwater marine and terrestrial biological surveys, and the assessment of potential for noise impacts to people residing and visiting the island.
- Prepared the preliminary environmental documentation for the proposed construction of the White's Landing dock/pier and the development of a new kitchen facility and cabins for the Glendale YMCA and Girl Scout Camp, Catalina Island. Tasks included assisting in the conducting of marine and terrestrial biological surveys and the assessment of potential noise and soil erosion impacts.
- Managed the Glendale Marketplace EIR for the Glendale Redevelopment Agency in City of Glendale, California. This EIR examined the demolition of approximately 96,400 square feet of existing commercial space and the construction of an 183,000-squarefoot commercial complex with a 1,200-space parking structure in downtown Glendale. Key issues addressed in the EIR included historic resources, geology, and traffic and circulation.
- Served as co-manager for the preparation of an EIR examining the construction of the Cal Poly San Luis Obispo Sports Complex for the California State University Office of the Chancellor. This project consisted of a 10,000- to 12,000-seat football stadium, a 2,500-seat baseball stadium, and a 1,000-seat softball stadium to be constructed on the Cal Poly San Luis Obispo campus. Key issues addressed in the EIR included surface water quality and drainage, biological resources, and air quality.



- Managed the Storke Ranch Residential Project EIR for the County of Santa Barbara, California. This project involved the development of a 275-unit residential project adjacent to the University of California, Santa Barbara. In addition, the project included a daycare center, transitional housing, affordable housing component, and water treatment facility. Key issues addressed within the EIR included biological issues associated with the remnant connection of two regional wetland complexes, geologic issues associated with a regional fault, and aircraft noise associated with the Santa Barbara airport.
- Managed the Supplemental EIR for the Creekside Center for the City of Agoura Hills, California. This project involved the development of 118,000 square feet of specialty retail, restaurant uses, and movie theater (eight-plex) on an approximately 16.6-acre site. As part of the project, a Conditional Use Permit, Specific Plan Amendment, and Parcel Map were required. Key issues addressed in the EIR pertained to biological resources and drainage issues associated with Lindero Creek, a blue line stream which transverses the project site.
- Managed the EIR for the Bristol Relief Sewer for the City of Ventura, California. Project involved the construction of approximately 50,700 linear feet of sewer lines ranging in size from 24 to 42 inches. The project extended through eight of the City's planning areas and was primarily designed to serve approximately 105,000 people within a 10,150-acre area. Key issues included noise, air quality, and traffic impacts during construction and long-term geological impacts.
- Managed preparation of an Initial Study, Mitigated Negative Declaration (MND), and EA for an approximately 1.5-mile reclaimed water distribution pipeline for the Calleguas Municipal Water District in City of Simi Valley and unincorporated Ventura County, California. The pipeline extended from the Simi Valley Water Quality Control Plant to the Simi Valley Landfill. Primary issues associated with the project included short-term impacts to geology, air quality, noise, and traffic during project construction activities, and potential reclaimed water issues pertaining to acceptable uses under Title 22.
- Prepared an Initial Study and MND for the expansion of the Weymouth Filtration Plant sludge dewatering facility for the Metropolitan Water District of Southern California. Primary issues associated with this project included noise impacts to adjoining residents and health and safety concerns associated with cryptosporidum in sludge materials.



- Managed preparation of an Initial Study and MND for the proposed Camarillo Reservoir No. 6 4.0-million-gallon reservoir and approximately 1.5 miles of pipelines in an unincorporated area of Ventura County, California. Primary issues associated with this project include noise and air quality emissions associated with reservoir and pipelines, aesthetics, and geology.
- Prepared the noise, air quality, and aesthetics assessment for the Ahmanson Ranch Specific Plan and General Plan Amendment EIR for Ventura County, California. The EIR examined the construction of 3,000 residential units, 400,000 square feet of commercial and industrial uses, and 18-hole PGA golf course in southeastern Ventura County. In addition, Mr. Austin played a key role in responding to in excess of 3,000 comments received on the Draft EIR.
- Managed the preparation of over 25 Phase I Environmental Site Assessments for various clients in California, Nevada, and Arizona. Reports were prepared in accordance with American Society of Testing Materials standards and included the assessment of commercial, office, and light industrial facilities for hazardous materials and environmental conditions.
- Prepared an oil spill contingency plan for a private oil company in Trinidad and Tobago which outlined the emergency and response procedure in case of oil tanker spill, malfunction of the oil-operating facilities, and/or leakage of oil and gas pipelines.
- Project Manager for the Santa Rosa Widening and Realignment Project Mitigated Negative Declaration for the City of Camarillo, California.
- Project Manager for the Santa Rosa Road Improvement Project Mitigated Negative Declaration for the Ventura County Transportation Department in California.
- Project Manager for the Rose Avenue Interchange Project Environmental Assessment/Mitigated Negative Declaration for the City of Oxnard and California Department of Transportation.
- Project Manager for an Addendum to Pierce College Fill Project EIR for the Los Angeles Community College District in California.
- Project Manager for Arroyo Linda Specific Plan EIR in City of Arroyo Grande, California.



- Project Manager for College Park Palmdale Specific Plan EIR in City of Palmdale, California.
- Project Manager for South of Edison/Haven Gateway Centre EIR in City of Ontario, California.
- Project Manager for Kaiser Permanente Medical Center EA in City of Lancaster, California.
- Project Manager for Live Oak Creek Detention Basin EIR in Live Oak, California.
- Assessed noise impacts for the five-year closure plan for the McCourtney Road Landfill for Nevada County, California. Key issues addressed included the potential impact to on- and off-site receptors from closure of the White Metals Disposal Area, refuse cells, the old landfill mass, relocation of the existing flare system, and borrow site blasting.
- Evaluated the adequacy of proposed noise attenuation features included in the preliminary design of the Bakersfield-Bear Mountain Cogeneration Facility in Bakersfield, California. Using the geographical information system (GIS) algorithms, it was determined that proposed features were not sufficient to reduce noise below City of Bakersfield threshold levels. Several options and additional design features were proposed to aid in the reduction of overall noise levels including the lowering and reorienting intake and outtake fans.
- Evaluated the noise impacts associated with the expansion of U.S.
 Borax mine overburden areas in community of Boron, California.
 The key issue addressed was the potential noise impacts generated by heavy equipment use within residential areas near the City of Boron.
- Evaluated the noise impact associated with the expansion of the Santa Maria Landfill and introduction of a transfer station, materials recovery facility, and compost facility in City of Santa Maria, California. Noise sources assessed include heavy-duty equipment used for moving solid waste, shredders used for wood and green waste composting, balers used to compacting recyclable materials, and conveyor systems used to separate materials.
- Prepared the technical noise and air quality assessment in support of the permitting requirements for the permanent abandonment and removal of Platforms Hilda, Heidi, Hazel, and Hope for Chevron



USA and oil and gas pipelines located in state waters off the Santa Barbara County coast in California. Permit documentation included the assessment of noise levels and air quality emissions associated with the transporting of equipment and removal of platform debris through the Santa Barbara Channel, blasting activities associated with the demolition of the platforms, and short-term dismantling equipment operations.

- Prepared a noise assessment for the receiving, sorting, processing, and transporting of solid waste for the Gold Coast Recycling Facility in City of Ventura, California. Noise sources included heavy equipment, materials-sorting equipment, manufacturing equipment, wastewater processing, recovered-material manufacturing, gas turbines, on-road vehicles, and locomotives.
- Prepared the noise assessment for the Calleguas Municipal Water District in Cities of Moorpark and Simi Valley, and incorporated Ventura County, California. Evaluation of short-term construction impacts associated with the installation of 31 injection wells and an underground storage system for the Las Posas Basin Aquifer Storage and Recovery Project. The project also consisted of several miles of pipelines throughout Thousand Oaks, Moorpark, Simi Valley, Fillmore, and unincorporated portions of Ventura County. Additionally, long-term impacts associated with the locating of injection wells near residential areas were assessed.
- Evaluated noise impacts of two alternative land-use scenarios for the Royal-Madera Specific Plan for the City of Simi Valley in California. These included 50 percent general commercial and 50 percent residential mix; and 50 percent general commercial, 25 percent recreational commercial, and 25 percent high-density residential mix. Key issues addressed included noise impacts generated by construction phases and loading docks due to proposed commercial land uses in proximity to existing and proposed residential land uses and an elementary school.
- Prepared the noise assessment for two comprehensive EIRs for the Granite Construction and Sespe Rock Sand and Gravel Mining Projects for the County of Ventura, California. These assessments examined surface mining for sand and gravel in four separate but contiguous areas along the Santa Clara River. Noise sources assessed included sand and gravel-sorting equipment, heavy-duty equipment movement along the confines of the river area and the transport of materials to processing points.



- Prepared a noise assessment examining Sony Pictures' proposed Comprehensive Plan for the development of its Sony Picture Studio in Culver City, California. The plan involves the consolidation of most of Sony's 23 New York and California locations onto a single facility through the renovation and expansion of the existing Culver facility. Overall, Sony proposed the addition of 1.1 million square feet of office, retail, and other studio space scheduled to occur in 11 phases over a 13-year period. Primary noise sources analyzed included construction equipment, increased long-term vehicle traffic, and helicopter flight patterns and operations associated with a heliport.
- Evaluated the noise impacts associated with the proposed 70,000-square-foot expansion of the Amgen Center in the City of Thousand Oaks, California. Noise sources assessed include increased vehicle access in and around the facility, load dock operations, and mechanical equipment.
- Assessed the noise impacts associated with the Buenaventura Mall in the City of Ventura, California. This project involved expanding the mall from about 813,000 square feet to 1,281,000 square feet. Noise sources assessed included parking garage to be located near a residential neighborhood, increased vehicle traffic, loading dock operations, and mechanical equipment.
- Prepared noise analysis for the Yolo County Community
 Development Commission examining the expansion of the Yolo
 County Landfill and the potential noise increase to sensitive
 receptors surrounding the landfill. Noise sources assessed included
 truck traffic, a methane gas recovery facility, bin transfer facility, a
 wood and yard waste processing area, and household hazardous
 waste collection facility.
- Redding Solid Waste Transfer Station/Recycling Facility and Redding Area Bus Authority Operation HUB Project EIR for the City of Redding, California.
- La Purisima Highland Residential Project EIR for the City of Lompoc, California.
- Allan Hancock Extension College EIR for the City of Lompoc, California.
- North End Residential Project EIR for the City of Lompoc, California.
- Edna Ranch EIR for San Luis Obispo County, California.



- Salinas Area Plan EIR for San Luis Obispo County, California.
- Santa Maria Sphere of Influence Annexation EIR, City of Santa Maria, California.
- Cinnabar Planned Development Project EIR for El Dorado County, California.
- Channel Islands Harbor Expansion and Redevelopment Project EIR in City of Oxnard, California.



Daryl Koutnik

Managing Principal, Biology Group

Education

Bachelor of Arts, Mathematics and Biology California State University, Northridge

Master of Science and Doctor of Philosophy, Botany University of California, Davis Dr. Koutnik has over 25 years of experience in biology, environmental planning and project management. He has directed, managed, prepared and conducted environmental impact assessments, mitigation monitoring plans, plant and wildlife studies, biological resource inventories, sensitive species surveys, biological constraints analyses, and habitat restoration plans for private and public sector clients throughout Southern California.

Dr. Koutnik has a thorough understanding of the California Environmental Quality Act (CEQA), having worked in and managed the environmental review section of the Los Angeles County Department of Regional Planning for more than 14 years. He has managed more than 30 Environmental Impact Reports (EIRs) within Los Angeles County, including residential, commercial, industrial, and educational developments. In addition, he has substantial experience in processing of coastal development projects with the California coastal zone.

Dr. Koutnik has broad knowledge of both state and federal Endangered Species Acts, and state and federal regulations involving biological resources. His biological expertise includes knowledge of biological and ecological relationships, with particular emphasis on habitat impact analysis, special-status plant species, and wildlife movement corridors. He has an exceptional knowledge of Southern California flora, and was an active participant in the drafting of the West Mojave Plan for multispecies habitat conservation.

Dr. Koutnik is a contributor to the *The Jepson Manual: Higher Plants of California* and *The Jepson Desert Manual*. He is recognized internationally as an expert on prostrate spurges and other members of the spurge family (Euphorbiaceae). He is co-author of the book *Cotyledon and Tylecodon*, published in 2004.

Representative Professional Experience

Managed the preparation and certification of the EIR for a 13,000-acre Specific Plan area located near Magic Mountain Entertainment Center in Valencia, California. Environmental factors analyzed included oak resource management per County of Los Angeles requirements, SEA stewardship for both the Santa Clara River and the Santa Susana Mountains, and detailed water resource analysis in completing recertification of the EIR. Coordinated all subsequent environmental reports through 2006, including individual residential and wastewater treatment development located within the Specific Plan area.



- Managing the preparation and certification of the EIR for the multicomponent Neptune Marina residential and hotel project in the community of Marina del Rey, California.
- Managed and coordinated the Significant Ecological Areas
 Technical Advisory Committee of Los Angeles County in implementing that jurisdiction's General Plan designated Significant Ecological Areas (SEAs).
- Initiated and managed the Los Angeles County Environmental Review Board (ERB) for development proposed with the Coastal Zone of the Santa Monica Mountains.
- Managed for the County of Los Angeles the preparation and certification of the EIR for the Cemex Surface Mining project in Soledad Canyon, California.
- Managed the preparation and certification of the EIR for the Athens
 Waste Disposal materials recovery facility near Industry, California.
- Managed the preparation and certification of the EIR for the replacement conditional use permit of the Sunshine Canyon Landfill near Los Angeles, California.
- Managed the preparation of the EIR for the 3,600-unit Northlake residential project in the community of Castaic, California.

Joe Decruyenaere

Senior Project Manager

Education

Bachelor of Science, Biology University of California, Riverside

Master of Science, Botany University of California, Riverside Mr. Decruyenaere has 13 years of professional experience in biological research, environmental impact analysis, and project management. He has been involved in the preparation and review of over a dozen Environmental Impact Reports (EIRs) and has conducted impact analysis and provided guidance on the development of mitigation monitoring plans for dozens of others. Mr. Decruyenaere has conducted a wide variety of field-related work, including general biological surveys, focused sensitive plant surveys, vegetation mapping, small mammal trapping, passerine bird nesting studies, and water chemistry sampling and testing.

Representative Professional Experience

- Served as biologist in the Los Angeles County Department of Regional Planning in California. Advised Department staff, the Regional Planning Commission and the Los Angeles County Board of Supervisors on biological resource issues associated with Countygranted development entitlements. Developed and implemented mitigation/monitoring plans. Coordinated Significant Ecological Areas Technical Advisory Committee (SEATAC) and Environmental Review Board (ERB) activities. Reviewed environmental documents, biological technical reports, and landscaping plans.
- Conducted laboratory, field and data processing work for the USDA
 Forest Service in California. Performed chemical analyses of soil,
 water, and atmospheric deposition samples for nutrient content,
 chiefly nitrogen compounds. Performed data analysis and sample
 collection. Developed experimental designs for studies of
 atmospheric nitrogen deposition and its effect on plant, soil, and
 water processes.
- Taught undergraduate biological laboratory and discussion sessions in human genetics (non-majors course), introduction to ecology and evolution, introduction to cell and molecular biology, and plant anatomy.
- Performed chemical analyses using atomic absorption, mass spectrophotometry, gas chromatography, and radionuclide analysis.
 Designed and conducted experiments in microbial metabolism of selenium compounds in soil, utilizing sterile techniques. Assisted in design and construction of a sampling array for a tracer study to characterize flow behavior of a constructed wetland. Designed apparati for microbial culture and sample collection.
- Conducted small mammal trapping in coastal sage scrub habitats for a number of research projects, including background studies for the San Diego Multiple Species Conservation Program in California.



 Conducted point counts, nest surveys, passerine life-history data collection and transect/quadrant vegetation sampling related to reproductive studies of sage-steppe passerines in southern Idaho, within the Raptor Research Technical Assistance Center for the National Biological Survey.



Alan M. Sako

Air Quality Manager

Education

Bachelor of Science, Atmospheric, Oceanic, and Environmental Science University of California, Los Angeles

Professional Affiliations

Air & Waste Management Association, Member

Publications

Sako, A. M. Sarbanes-Oxley and Environmental Disclosure: An Overview of the Issues. 99th Air & Waste Management Association Conference & Exhibition; 2006 June 20–23; New Orleans, LA: Paper No. 366.

Weaver, M. S., E. Chan, A. M. Sako. Air Pollution Permitting Trends for Turbine-Based Power Plants. 99th Air & Waste Management Association Conference & Exhibition; 2006 June 20–23; New Orleans, LA: Paper No. 367. Mr. Sako has over 6 years of experience in permitting and compliance as well as ambient air quality dispersion modeling and health risk assessments. He has worked on air quality permitting and compliance projects in Central and Southern California. Industrial and commercial experience includes power plants, manufacturing facilities, food processing plants, and agriculture facilities. Mr. Sako has also provided air quality support for the Port of Long Beach and several military installations including the U.S. Air Force and National Guard. In addition to Mr. Sako's air quality experience, he has also conducted noise analyses and developed hazardous materials business plans (HMBPs) and risk management plans (RMPs) for hazardous substances.

Representative Professional Experience

 Provided on-call environmental support for McWane, Inc., (Anaco and Clow Valve Companies) on various air quality and environmental topics as listed below:

Worked on a complete Air Emissions Inventory (AEI) for the Anaco facility for criteria pollutants (CO, lead, NOx, PM10, PM25, SOx, and VOCs). The AEI included all emission sources, including non-permitted equipment and insignificant equipment. Emissions of carbon dioxide (CO2) were also calculated.

Completed the SCAQMD Air Emissions Report (AER) for Clow Valve for the 2004-2005 reporting year. The work included gathering data for chemical usage during the reporting period and calculating VOC amounts from material safety data sheets (MSDSs) as well as determining emissions from forklifts operating on site.

Assisted with Toxics Release Inventory (TRI) toxics reporting under the EPA's TRI Program for the 2000 through 2004 reporting years. The work included gathering historical data on all toxic materials during the reporting years, calculating threshold amounts, and completing the appropriate reporting forms.

Revised the Hazardous Materials Business Plan (HMBP) for both **Anaco** and **Clow Valve** companies. The work included inspecting the site for all hazardous chemicals and updating both facilities' MSDSs.

Assisted with stack testing for volatile organic compounds (VOCs) on a water evaporator at **Anaco** facility. The water evaporator is used to reduce the volume of export of hazardous materials. Oil-laden water is send to the evaporator and heated to the boiling point. The purpose of this test was to determine the VOC compounds emitted during the process, if any, and determine whether a permit was needed or if the equipment was exempt from permitting via SCAQMD Rule 219.



- Prepared an HRA for the proposed Triangle Rock Products expansion
 of an existing aggregate mining facility located in an undeveloped
 region in Sacramento County, California. Air dispersion modeling was
 performed using AERMOD. To assess the impacts due to diesel
 exhaust particulate matter (DPM) emissions from aggregate mining
 equipment associated with operation of the expansion area.
- Provided HRA support for a proposed Wal-Mart Distribution Center in Barstow, California. Updated the dispersion modeling based on new emissions estimates in order to assess the health impacts due to DPM emissions associated with supply trucks, transportation refrigeration units (TRUs), and yard hostlers from operation of the project.
- Provided support for **Wellhead Electric Company** Support Contract on various air quality and environmental topics as listed below:

Conducted an Ambient Air Quality Impact Analysis and HRA for a new Wellhead Electric "peaker" power plant in Colton, California. The client proposed to install a gas turbine unit to produce electricity during periods of peak electrical demand under a contract with Southern California Edison. The analyses were in support of a Negative Declaration (ND). He also assisted with completing the proper SCAQMD permit application forms to construct the facility.

Assisted with Authority to Construct (ATC) permit applications for a variety of **Wellhead** power-generation facilities in California.

Assisted with the preparation of a Risk Management Plan (RMP) for anhydrous ammonia, a regulated toxic substance, at the Panoche, California, facility. Worked with Wellhead staff to obtain the necessary data to perform an Offsite Consequence Analysis (OCA), HAZOP Study, and Process Safety Management (PSM) Program.

Provided air quality support for the Port of Long Beach, California
 Air Quality Support Contract as listed below:

Provided technical support for the **Port's Air Quality Monitoring Network** and assisted with the development of both the modeling protocol and quality assurance protocol.

Provided support for the Port of Long Beach's voluntary Diesel Emissions Reduction Program. Researched alternative-fueled equipment options for various light duty and diesel equipment including passenger cars, trucks, forklifts, loaders, yard hostlers, dozers, and sweepers at the port. Performed cost-effectiveness calculations for NOx emission control technologies using



methodologies adopted by CARB's Carl Moyer Program and helped develop implementation work plans for the installation of diesel oxidation catalysts (DOCs) and diesel particulate filters (DPFs) on equipment located at various terminals. By 2005, the program had reduced annual emissions of NOx and DPM by about 50 and 15 tons, respectively. The reduction of emissions of these two pollutants provided a significant healthful benefit for people in the Southern California region.

- Assisted with the assessment of air pollutant dispersion modeling and HRA of the Gregory Canyon Landfill in northern San Diego County, California using CARB's Hotspots Analysis and Reporting Program (HARP). The modeling and HRA results were used in support of the revised EIR.
- Provided technical services for a boiler relocation project at a Del Monte plant in Modesto, California, for Del Monte, Inc., Air Quality Support. Permitting issues were addressed as well as emission reduction credits (ERCs). He also performed greenhouse gas emission calculations for the Del Monte facility located in Modesto, California.
- Provided technical support for a federal Title V Operating Permit application for O'Neill Vintners located in Parlier, California. A site visit was conducted to ensure the completeness of the application and discuss permitting issues related to the regenerative thermal oxidizer (RTG) emissions control system.
- Provided emissions modeling support for the Albany Airport (New York), Emissions Calculations for Voluntary Airport Low Emissions (VALE) Funding Phase I and II Program funding. Performed emission reduction calculations for ground support equipment (GSE) using emission factors from EPA's MOBILE 6.0 and the Federal Aviation Administration's (FAA) Emissions Dispersion Modeling System (EDMS). Funding was obtained for several alternative-fueled vehicles including dump trucks, shuttle buses, and utility trucks.
- Western Field Team Leader for Air National Guard (ANG) installations located in Salt Lake City, Utah, and Anchorage, Alaska. Emission inventories at ANG installations are conducted every 3 years. Conducted site visits at these installations and performed data collection, personnel interviews and clarified outstanding issues with environmental management. Also analyzed the collected data, completed the necessary 2005 Air Emission Inventory (AEI) forms for state and local regulatory agencies, as needed, and developed a report detailing the emissions calculations.



- Assisted with the development of a Los Angeles Air Force Base (LAAFB) General Conformity Management Plan in Los Angeles, California. The plan provided LAAFB with a customized "Conformity Tool" developed using Microsoft Access. Access is a relational database and uses Visual Basic as a programming language. The Conformity Tool enabled staff to quickly and easily evaluate projects for conformity with the approved Air Quality Management Plan (AQMP) and State Implementation Plan (SIP). The CARB-approved URBEMIS air quality emissions model was also used in the development of the plan.
- Provided support for McWane, Inc., on various air quality and environmental topics for the Tinker Air Force Base (Oklahoma), Air Quality Support Contract, as listed below:

Assisted with two **Prevention of Significant Deterioration (PSD) Applications**: (1) new Maintenance, Repair, and Overhaul (MRO) facility; and (2) approximately 90 fuel component test stands and two 10,000-gallon calibration fluid underground storage tanks (USTs). Performed ambient air quality impact analyses for the PSD applications and modeled emissions of criteria pollutants and Hazardous Air Pollutants (HAPs). The modeling results compared with National Ambient Air Quality Standards (NAAQS) and the State of Oklahoma's Maximum Acceptable Ambient Concentrations (MAAC) thresholds.

Provided support for the client's **Title V Permit Application** preparation, including federal and state regulatory analyses, emissions calculations, and development of data management tools. Also interacted with the Oklahoma Department of Environmental Quality (ODEQ) during the course of the project.

Gateway Cities Dairies and Grimmway Composting Facility Odor
 Assessments: Mr. Sako performed odor assessment for these two
 projects related to ammonia emissions. He utilized data from the San
 Joaquin Valley Air Pollution Control District (SJVAPCD) to determine
 emissions from dairies and composting facilities as well as SJVAPCD
 dispersion modeling guidelines. Odors were assessed based on
 dispersion modeling results and odor thresholds for ammonia from
 the Office of Environmental Health Hazard Assessment (OEHHA).

Chris Hampson

Project Planner

Education

Bachelor of Science, Environmental Management and Protection California Polytechnic State University, San Luis Obispo Mr. Hampson has over 3 years of experience in environmental analysis for a variety of development projects. He has successfully performed analysis for and co-managed environmental documents in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) for federal, state, and local government agencies and private-sector clients. He is responsible for a variety of tasks including technical editing, report organization, project scheduling, subconsultant coordination, and client contact.

Mr. Hampson has assisted in the preparation of environmental documents pursuant to the CEQA, including Environmental Impact Reports (EIRs), Mitigated Negative Declarations (MNDs), and Initial Studies. He has prepared EIRs for a variety of project types including residential, mixed-use, commercial, specific plans, general plans, water projects, and infrastructure projects. In addition, he has prepared and managed a joint CEQA/NEPA document in the form of an MND/Environmental Assessment (EA).

Mr. Hampson has assisted on and prepared various water supply assessments for mixed-use projects in accordance with SB 221 (Subdivision Map Act) and SB 610 (Water Code). He has managed water infrastructure projects which involved the construction of transmission pipelines, water pumps, and water tanks and the direct and indirect environmental issues. He has considerable experience coordinating between various government agencies and clients throughout including the US EPA and US Fish and Wildlife Service.

Representative Professional Experience

Water Resource Projects

Project Manager for the Recycled Water Program, Phase IIA project in Santa Clarita, California. Prepared an MND/EA for the Recycled Water Program, Phase IIA project which tiered from the adopted Recycled Water Master Plan EIR. The applicant proceeded with the project which would provide approximately 511acre-feet per year (afy), or 0.46 million gallons per day (mgd), of recycled water to Castaic Lake Water Agency (CLWA) customers. This project consisted of three phases which would construct a water pump, pipeline, and a water tank for recycled water operations. The environmental documentation complied with both CEQA and NEPA and involved resolutions of issues regarding stream flow and diversion of water from the Santa Clara River and habitat of the listed species Three Spined Stickleback. The project included coordination with US EPA, US Fish and Wildlife Service, and the State Office of Historic Preservation.



- Prepared and managed an IS for the Recycled Water Program, Phase IIC
 project in Santa Clarita, California. The applicant proceeded with the project
 which would provide approximately 910 afy or 0.81 mgd, of recycled water
 to CLWA customers. This project would construct multiple water pumps,
 new transmission and distribution pipelines for recycled water operations.
- Assisted in the preparation of water supply assessments for numerous projects in California in accordance with SB 221 (Subdivision Map Act) and SB 610 (Water Code), including the Travertine Point Specific Plan and the Thousand Oaks Boulevard Specific Plan.

General Plan Projects

- Assisted in the preparation and coordination of the Yorba Linda 2008-2014
 Housing Element and Implementation Programs Program EIR in the city of
 Yorba Linda, California. The EIR analysis focused on the proposed program
 actions presented in the Housing Plan of the Yorba Linda 2008–2014
 Housing Element. In particular, the EIR identifies sites adequate to
 accommodate the City's RHNA of which the City proposed to construct
 1,106 multifamily units.
- Prepared the cultural resources, mineral resources, public services, utilities, unavoidable significant impacts and irreversible environmental changes sections for the One Valley, One Vision General Plan EIR for the planning area consisting of the City of Santa Clarita and the adjacent unincorporated parts of the County of Los Angeles, California. Assisted in the preparation of response to comments which were included in the Final EIR. The purpose of the general plan is to provide goals and policies for the values and principles that will guide the City and County during the next 20 years and to buildout. The EIR analyzed the potential significant impacts from the future buildout of the planning area.

Infrastructure Projects

- Prepared an IS/MND for the Consolidated Fire Protection District of Los Angeles County (Fire Department) for the Fire Station and Helispot 142 project located in Acton, California. The applicant proposed the construction of Fire Station 142 which would be located on approximately 4.7-acres (204,732 square feet) and would consist of one single-story structure totaling 9,746 square feet with a maximum height of 25 feet and would include a helispot.
- Assisted in the preparation of an EA for the Fire Department for the Fire Station 128 project located in the unincorporated Santa Clarita Valley, CA.



The applicant applied to the Department of Homeland Security's Federal Emergency Management Agency (FEMA) for federal financial assistance under the American Recovery and Reinvestment Act Assistance to Firefighters Fire Station Construction Grant to construct Fire Station 128. FEMA has concluded that a need exists for an additional fire station in the area of the proposed Fire Station 128 to provide a timely response to emergency calls.

- Prepared a Staged EIR for the North Newhall Stage I: Lyons Avenue At-Grade Rail Crossing project in Santa Clarita, California. The project applicant proposed the Lyons Avenue At-Grade Rail Crossing project which consisted of the detailed design and analysis of the Lyons Avenue at-grade rail crossing; lane configuration, signal timing, gate design, traffic analysis/traffic study in accordance with CPUC requirements; and closure of the an existing at-grade rail crossing.
- Assisted in the preparation of an EIR for the Via Princessa Roadway
 Extension project in Santa Clarita, California. The City of Santa Clarita
 proposed to extend Via Princessa east which would be one of the primary
 east-west arterials through the City of Santa Clarita. The project involves the
 construction of a new 1.2-mile roadway segment between Golden Valley
 Road and the existing roadway terminus near Sheldon Avenue.

Commercial and Residential Development

- Prepared a Specific Plan that would entitle the land use for an assisted residential facility (ARF) for the Terraces at Hidden Hills project in the Santa Monica Mountains North Area Plan within western Los Angeles County, California. The ARF as defined, licensed, and regulated under state regulations, would be developed on the northern 9 acres of the 26.5-acre site. The ARF would consist of 258 units and 5 hospitality suites within two buildings. Building A would include continuing care operations and Building B would include independent living units. In addition to the Specific Plan, a project level EIR will be prepared to evaluate potential environmental impacts including: air quality, land use and planning, noise, traffic, biota, and utilities and public services.
- Prepared an IS/MND for the Moorpark West Studios project in Moorpark,
 California. The project includes a motion picture studio complex with 12
 soundstages, support buildings, and surface parking on a 44.467 acre site. In
 addition to the studio site, the project includes the widening and
 improvement of Los Angeles Avenue (State Route 118) from Gabbert Road
 west approximately 4,400 feet and a new signalized intersection on Los
 Angeles Avenue approximately 2,600 feet west of Gabbert Road.



- Prepared a Focused EIR for the City of Yorba Linda Town Center Specific Plan in Yorba Linda, California. The purpose of the project was to develop a Specific Plan with clear policies, a strong implementation plan, and a vision consistent with the General Plan, Downtown Master Plan, Town Center Blue Ribbon Committee Report and recent community visioning efforts. The Specific Plan would guide land use decisions, infrastructure improvements, design, and economic development in the Town Center. The Town Center would provide a net potential of new intensity development containing 95,000 square feet, a 1,200 seat performing arts center, and 151 dwelling units. The focused EIR evaluated potential environmental impacts including: land use and planning, air quality, global climate change, traffic, hazards and hazardous materials, noise, and cultural resources.
- Prepared the cultural resources, geology and soils, hazards, hydrology, land use, mineral resource, and alternatives sections for the Lost Canyons Specific Plan EIR, a project located in Simi Valley, California. Assisted in the preparation of the Final EIR and Responses to Comments. The Lost Canyons Specific Plan area consists of approximately 1,770 acres located within the existing Whiteface Specific Plan area in the northern portion of the City of Simi Valley. The Lost Canyons Project is planned as a private community that will include 364 dwelling units, a private golf course and club, and 500 acres of open space. Assisted in the preparation of response to comments and the Final EIR.
- Assisted in the preparation of the hydrology and water quality and population and housing sections for the Travertine Point Specific Plan EIR located in Oasis, California. The Travertine Point Specific Plan was located on the northwest corner of the Salton Sea and proposed the development of approximately 12,300 residential units, approximately 3.5 million square feet of commercial and industrial uses, and recreation and open space areas, within both Riverside County and Imperial County.
- Assisted in the preparation of the Mission Village EIR located in western unincorporated Los Angeles County within the Santa Clarita Valley. The project proposes to develop 1,252.27 acres of property located within the northeastern corner of Newhall Ranch south of the Santa Clara River and State Route 126, and west of Interstate 5 in California. The project requests approval of 5,331 residences (291 single-family homes, and 5,040 multifamily units), 1.299 million square feet of commercial/mixed uses, an 8.97-acre elementary school, 46.98 acres of parks, public and private recreational facilities, trails, and road improvements on the Mission Village site within the boundary of the approved Newhall Ranch Specific Plan.



- Prepared the Focused EIR and Final EIR for the Santa Rita Hills Wine Center project. This EIR analyzed the following resource areas: aesthetics, hazards and hazardous waste materials, and hydrology and water quality for the project located in the City of Lompoc, California. The project site is approximately 9.6 acres and consists of a single parcel. The proposed project would include the development of 145,545 square feet (sf) of indoor space consisting of a resort hotel, spa, event center, restaurant-bar, commercial-retail and office uses, a wine processing and storage facility, and other associated amenities to serve the City of Lompoc and visitors to the community.
- Assisted in the preparation of a Focused EIR for the Walmart Expansion Project located in Lompoc, California. The project included the demolition of approximately 5,200 square feet of the exiting Walmart store for addition of approximately 41,433 net new square feet.



Evan Sharp

Project Planner

Education

Bachelor of Science, Environmental Studies University of California, Santa Cruz Mr. Sharp has over 3 years of experience in environmental analysis for a variety of development projects, and has successfully preformed analysis for and co-managed controversial environmental documents in compliance with both the CEQA. He is responsible for a variety of tasks including technical editing, report organization, project scheduling, subconsultant coordination, and client contact. Mr. Sharp has prepared EIRs for a variety of project types including residential, mixed-use, commercial, specific plans, general plans, water projects, and infrastructure projects. Mr. Sharp has assisted in the preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA), including Initial Studies, Addendums and Environmental Impact Reports (EIRs).

He has prepared Hazards and Hazardous Materials sections and worked with Phase I and II Environmental Site Assessments and EDR Reports. Mr. Sharp has worked on projects that involved issues such as contaminated soils, contaminated groundwater, mine pit reclamation reuse, and hazardous materials. He also has considerable experience preparing analysis of Public Services based on information compiled from various public agencies including fire departments, police departments, and school districts. Mr. Sharp has prepared documents for a variety of agencies including the State, Counties, and Cities; and has worked within locations through California including the City of Paso Robles.

Representative Professional Experience

- Prepared public services, utilities, land use, and project description sections for the Riverwalk Marketplace Phase II Project. Impact Sciences is conducting the environmental review on the Riverwalk Marketplace Phase II retail project in the City of Porterville. The 21-acre project site is located on the southeast corner of Indiana Street and Springville Drive, immediately northeast of the State Route 190/State Route 65 interchange. The project involves construction and operation of a retail-commercial center containing 219,772 square feet of floor space distributed among four building pads. The principal anchor tenant of the project will be a Wal-Mart totaling 184,109 square feet of gross leasable space. Impact Sciences is serving as the lead consultant for the project. Environmental issues to be considered include increased traffic congestion on local and regional roads, interface with adjacent residential uses, and the potential to create urban decay, among others.
- Prepared a traffic section for the Quest Ranch Project. Impact Sciences is preparing the EIR for a do-unit residential project in



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unincorporated Los Angeles County. The site is located on Topanga Canyon Boulevard at the south end of the San Fernando Valley, and it is presently developed only with equestrian uses. Los Angeles County is serving as the lead agency on this project, which will require a tentative track map, hillside permit, and oak tree permit. The primary issues on this project involve hydrology, biology, aesthetics, and traffic (primarily circulation and safety).

- Prepared the Initial Study for the Barstow Wal-Mart expansion, and sections for the Draft EIR including geology, project description, hazards and hazardous materials, and environmental setting. The project applicant proposes to expand an existing Wal-Mart to a Wal-Mart Supercenter and adding additional outlots to the project site.
- Prepared the Initial Study for the Hollywood Gower Project, and sections of the Draft EIR including project description, environmental setting, aesthetics, land use, geology, hazards and hazardous materials, hydrology, public services, utilities, and alternatives. The project applicant proposes a 21-story mixed-use development located on the Hollywood Walk of Fame.
- Prepared the Initial Study for the Wilshire Crescent Heights Project, and sections of the Draft EIR including project description, environmental setting, geology, hazards and hazardous materials, hydrology, public services, utilities, and alternatives. The project applicant proposes a 21-story mixed-use development located on the Hollywood Walk of Fame.
- Prepared an Initial Study/Mitigated Negative Declaration for the Santa Susana Field Lab ENTS Project.



Paul Manzer

Manager, Visual Services Group

Education

Associate of Arts in Technical Arts, Los Angeles Pierce College

Videography and Screen Writing Graduate University of California, Los Angeles

Certified Proposal Manager, Litton Systems, Inc.

Mr. Manzer manages all project graphics and designs the graphic formats of all reports and exhibit materials. He has over 25 years of experience in graphic design and cartography. Mr. Manzer is experienced in the use of numerous computer illustration and document layout programs. His experience also includes the preparation of Visual Simulations, Shade & Shadow Studies, visual and viewshed analyses, photography, multimedia presentations, and marketing videos.

Mr. Manzer's computer experience includes, but is not limited to, power usage of Autodesk Studio Max; Autodesk AutoCAD; ESRI ArcMap; Adobe Illustrator, Photoshop, Acrobat, InDesign, Premier; and Microsoft Excel, Word, and PowerPoint.

Representative Experience

- Manager of graphic and exhibit work for all of Impact Sciences documents, which include visual simulations, Environmental Impact Reports (EIRs), Environmental Impact Statements (EISs), Specific Plans, biological resource studies, air quality studies, traffic studies, and noise studies.
- Provided Visual Simulations for extremely sensitive high-profile projects such as The Newhall Ranch EIR/EIS, Woodfin Hotel & Timeshares, Limoneira Development, Montecito Development, Sandman Hotel, La Quinta Resort, Lost Canyons Specific Plan, CSU Hayward, University of California Berkeley, Loyola Marymount University, Student Housing at USC, St. John's Seminary, Wal-Mart Barstow, Crimson Biodiesel Facility, Altamont Raceway, KRLA Radio Towers, Terraces at Hidden Hills, Highland Estates, and Hidden Creeks.
- Provided Shade & Shadow studies for highly scrutinized projects such as The Beverly Hilton Hotel, 9900 Wilshire Apartments, Woodfin Suites & Timeshares, Intercorp Mixed-Use, Lankershim Lofts, Fisherman's Village, Figueroa & Adams Apartments, Verdugo Mixed-Use, Gallery at Central Park, Dynasty Plaza, Grosvenor Court Apartments, North Hollywood Lofts, and Orange & Wilson projects.
- Provided Visual and Viewshed simulation analyses for projects such as Woodfin Suites & Timeshares, St. John's Seminary, Mecca, Travertine Pointe, Lost Canyons, CSU East Bay, Quest Ranch, Hidden Creeks, East Area 1 Santa Paula, and Wildwood.
- Provided Mitigation and Restoration simulations of the North Shore,
 McGrath, and Mariposa Malibu projects.



 Developed all visual simulations, graphics, exhibits, and environmental documents for the major California cities of Los Angeles, San Francisco, Beverly Hills, Santa Monica, Santa Barbara, Ventura, San Mateo, Palo Alto, San Jose, Thousand Oaks, Simi Valley, Santa Maria, Glendale, Pasadena, Santa Clarita, Palm Desert, Lancaster, Sierra Madre, Camarillo, Lancaster, and Sierra Madre.



ASSOCIATED TRANSPORTATION ENGINEERS

SCOTT A. SCHELL, AICP, PTP

Principal Transportation Planner

CERTIFICATION: American Institute of Certified Planners

EXPERIENCE:

Mr. Schell is a transportation planning specialist with a broad background in traffic operations, transportation planning theory and environmental regulations (CEQA, NEPA, etc.). Mr. Schell joined ATE as a Transportation Planner in 1983 and became a partner in During his tenure with ATE, he has been the firm in 1992. responsible for and participated in over 600 transportation planning studies, traffic impact reports, and parking studies for projects located throughout both northern and southern California. These projects include Circulation Element updates, Sphere of Influence Annexation proposals, and Environmental Impact Reports/Statements for large scale residential, commercial, and institutional developments, as well as Redevelopment Agency projects. Mr. Schell serves as a project manager responsible for the preparation, review, and public presentation of the various traffic impact reports and transportation planning studies.

Mr. Schell also participated in the California Energy Commission FETSIM (Fuel Efficient Traffic Signal Management) programs for the cities of Santa Barbara, Santa Maria, and Ventura and the community of Goleta, thus gaining a working knowledge of the traffic signal timing optimization programs TRANSYT and PASSER II, as well as a solid background in traffic signal operations. Mr. Schell also has extensive knowledge of the TMODEL transportation modeling software program.

EDUCATION:

B.A. Environmental Studies and Economics, University of California, Santa Barbara, High Honors, 1982

Continuing Education: University of California, Institute of Transportation Studies, Fundamentals of Traffic Engineering, Traffic Engineering Operations, Traffic Engineering Planning, and Traffic Engineering Modeling

PROFESSIONAL AFFILIATIONS:

Institute of Transportation Engineers, Member American Planning Association, Member University of California, Santa Barbara, Guest Lecturer

ASSOCIATED TRANSPORTATION ENGINEERS

DAN L. DAWSON, PTP

Supervising Transportation Planner

EXPERIENCE:

Mr. Dawson joined ATE as Transportation Planner in 1989. Since that time he has participated in over 1,000 Transportation Planning/Traffic Engineering/ and/or Parking Studies throughout California, Nevada and Arizona. This work includes analyses of urban and rural transportation facilities in conjunction with circulation elements, general plans, redevelopment plans, specific plans, project study reports, and traffic impact assessments for individual development projects. Mr. Dawson has also participated in several traffic modeling studies using TMODEL2, including the City of Santa Maria Circulation Element and Traffic Fee Program, the City of Santa Maria Sphere of Influence Study, U.S. Highway 101 Widening Study in Montecito and Carpinteria, the Orcutt Community Plan and the Goleta Transportation Improvement Plan.

Prior to his employment with ATE, Mr. Dawson worked as a Transportation Planner for the City of Santa Barbara. In that position he was responsible for reviewing and preparing written summaries of traffic reports, recommendations and informational reports on site plans, EIR's, traffic studies and development plan proposals. He also examined development plans for compliance with City design standards. Mr. Dawson was a Transportation Staff member assigned to the SBCAG Transportation Technical Advisory Committee (TTAC) and also the City's Development Review Committee (DRC).

EDUCATION:

B.A Economics, California State University at Chico, 1983.

Continuing Education: University of California Institute of Transportation Studies, Fundamentals of Traffic Engineering and Traffic Congestion, TMODEL2 Traffic Modeling Workshop. CELSOC Future Leaders Program.

PROFESSIONAL AFFILIATIONS:

Certified Professional Transportation Planner and Member of Institute of Transportation Engineers.

David S. Whitley, Ph.D. Principal

ASM Affiliates, Inc. 122 E. Tehachapi Blvd., Suite F Tehachapi, CA 93561 661-823-7690/805-794-6037 dwhiltey@asmaffiliates.com

Total Years of Experience: 35 years

Employment History:

2009-	Principal, ASM Affiliates, Inc., Carlsbad, California			
1982-2009	Owner, W & S Consultants, cultural resource management consultants			
1989-2000	Instructor, Division of Social Sciences and Humanities, UCLA Extension.			
1987-1989	Postdoctoral Research Fellow, Rock Art Research Unit, Archaeology			
	Department, University of the Witwatersrand.			
1983-1987	Chief Archaeologist, Institute of Archaeology, and Lecturer, Dept. of			
	Anthropology, UCLA.			

Education:

Ph.D.	1982/Anthropology/University of California, Los Angeles
M.A.	1979/Geography/University of California, Los Angeles
B.A.	1976/Anthropology and Geography/University of California, Los Angeles

Additional Training:

2011	PASSPORT Certified
1998	MSHA Certification, Surface Mining

Registrations:

1979	Register of Professional Archaeologists
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Professional Memberships:

1981	American Anthropological Association
1977	Society for American Archaeology
1977	Society for California Archaeology
2010	Association of Environmental Professionals

Awards/Commendations:

Listed in Who's Who in America and Who's Who Among Hispanic Americans.

- 2006 Introduction to Rock Art Research received *Choice Magazine* Outstanding Academic Book award.
- 2004 Fulbright Senior Specialist Grant, Universidad de San Carlos, Guatemala.
- 2001 Thomas F. King Award for Excellence in Cultural Resource Management, Society for California Archaeology.
- 2000 Art of the Shaman (University of Utah Press) reached #4 on Amazon.com LA Best Seller list; French edition selected by U.S. State Department, African Section, as Ambassadorial Presentation volume.
- 1999 Special Appreciation Award, California Indian Council.
- 1993 Fellow, American Anthropological Association.
- 1993 Special Appreciation Award, California Indian Council.
- 1991 Special Appreciation Award, Simi Valley Historical Society.
- 1989 Special Appreciation Award, Candelaria Indian Tribal Council.
- 1987-1999 Postdoctoral Research Fellowship, Rock Art Research Unit, University of the Witwatersrand.
- 1983 Golden Eagle Award, CINE Film Festival, Washington, D.C.
- 1983 Silver Medal, New York Film and Television Festival.
- 1983 Postdoctoral Research Fellowship, Association for Field Archaeology.
- 1976 A.B. degrees in Anthropology and Geography awarded Magna Cum Laude.
- 1971-1976 Honors at Entrance and College of Letters and Sciences Honors Program, UCLA.

Citizenship: USA

Languages: Spanish

References:

Dr. Jean Clottes, Conservateur General du Patrimoine, Ministere de la Culture (retired) Foix, France 011 (33) 5-61-65-0182

Dr. David Lewis-Williams, Professor Emeritus and University Mentor, Rock Art Research Institute, University of the Witwatersrand, South Africa (fax) 011-27-11-339-1620

Dr. Ronald I. Dorn, Professor of Geography Arizona State University Tempe, AZ 480-966-4245

Dr. Kelley Hays-Gilpin, Associate Professor, Department of Anthropology, Northern Arizona University, 520-523-6564

Professional Profile:

Dr. Whitley specializes in the prehistoric archaeology and ethnography of far western North America, with particular interests in sacred sites, rock art, chronometrics and cultural heritage management. He has also worked in southern Africa, the European Upper Paleolithic and Guatemala. His professional publications include 17 books/monographs and approximately 100 articles and chapters. Included among his recent books are *The Rock Art of California* (University of Utah Press, 2000), the edited volume *Handbook of Rock Art Research* (AltaMira Press, 2001), and *Introduction to Rock Art Research* (Left Coast Press, 2005, second edition 2011), which received a *Choice* Outstanding Academic Book Award for 2006. His latest book is *Cave Paintings and the Human Spirit: The Origin of Creativity and Belief* (Prometheus Books, 2009).

Dr. Whitley has written nominations for 470 sites that are now listed on the National Register of Historic Places (NRHP), and has a nomination for a 100 site National Historic Landmark (NHL) district that is currently under consideration. For a decade he served on the Council of Directors of the ICOMOS International Rock Art Committee. In 2001 he received the Thomas King Award from the Society for California Archaeology for Excellence in Cultural Resource Management.

Research Specializations

Hunter-gatherer ethnography, ethnohistory & archaeology Religion and art Culture and cognition/ Evolutionary psychology Western North America, southern Africa, Mesoamerica Method, theory and philosophy of science

Selected Project Experience:

Class III inventories, Occidental of Elk Hills, Inc., Vintage California Production Company, and OXY California Growth Team, Bakersfield, Kern County, California. As Project Manager, coordinate on-call contracts involving Class III large-scale block surveys for NHPA compliance, including crew assignment and scheduling, consultation with agency personnel, and preparation of draft and final reports. Client reference: Kevin Malamma, Occidental of Elk Hills, Inc.; (661) 412-5440.

California Valley Solar Ranch Phase II test excavation, Ecology and Environment, Inc., San Luis Obispo County, California. As Project Manager, coordinate a contract involving a Phase II test excavation for CEQA and NHPA compliance, preparation and implementation of a mitigation monitoring plan, and preparation of a workers environmental awareness program, including crew assignment and scheduling, consultation with agency personnel, preparation of draft and final reports, and consultation on regulatory compliance. Client reference: Karen Ladd, Ecology and Environment; (415) 981-2811.

Kern River Pipeline Mountain Pass Class III inventory, Ecology and Environment, Inc., San Bernardino County, California, 2010-ongoing. As Project Manager, coordinated a contract involving an inventory of an 8.65 miles lateral ROW and 24.5 miles of access roads, including crew assignment and scheduling, consultation with BLM and Molycorp Mine personnel, and preparation of draft and final reports. Client reference: Ryan Clerico, Ecology and Environment; (801) 990-3320.

Coso NHL Management Plan, NAVFAC Southwest, NAWS China Lake, Inyo County, California, 2009-ongoing. Co-Principal Investigator and report co-author of a management plan for the Coso NHL district, a 57-square-mile area containing the largest concentration of petroglyph sites in North America. This has involved coordination with stakeholders, including Native American tribes, development of management and conservation protocols, and identification and prioritization of future preservation tasks for the only rock art NHL situated west of the Rockies. Client Reference: Mike Baskerville, NAWS China Lake; (760) 939-1350.

SDG&E On-Call Cultural Resource Studies, Sunrise Powerlink Archaeological Evaluations and Monitoring, and East County Substation archaeological evaluations, SDG&E and Burns and McDonnell Engineering, San Diego County, California, 2008-ongoing. As Project Manager, coordinating contract to provide archaeological services for powerline installation and maintenance projects involving 37 site evaluations for NRHP/CRHR eligibility and archaeological monitoring for the construction of the 118-mile-long Sunrise Powerlink transmission line from Imperial County to the coast in San Diego. Overseeing project coordination, assignment and scheduling of personnel, preparation of technical reports, and providing technical expertise in prehistory and Federal compliance. Client Reference: Steven Riggs, Burns and McDonnell, (858) 790-5512; Dayle Cheevers, SDG&E, (858) 654-1856.

Parowan Gap Ethnographic Study, Bureau of Land Management, Parowan, Utah, 2009-2010. Report co-author for an ethnographic overview of the Parowan Gap rock art site, including a review of regional ethnographic and archaeological data, and an evaluation and recommendations concerning a Traditional Cultural Property nomination. Client Reference: Noel Logan, Bureau of Land Management Cedar City Field Office, (435) 586-2410.

Carrizo Plain Ecological Reserve Land Management Plan, Jodi McGraw Consulting/U.S. Department of Fish and Game, Carrizo Plain, San Luis Obispo County, California, 2009-2010. Principal investigator, field director and report author for an archaeological reconnaissance, overview and management plan for cultural resources on four California Department of Fish and Game units totaling 39,016 acre, and authorship of cultural sections for a Fish and Game Land Management Plan. Client Reference: Jodi McGraw, Jodi McGraw Consulting, (831) 768-6988.

Draft Environmental Impact Statement, MCAGCC Twentynine Palms Marine MAGTF Land Expansion, TEC Inc., San Bernardino County, California, 2009-2010. Co-Principal

Investigator and co-author for cultural resources sections of a NEPA draft EIS for a proposed 150,000-acre land expansion. Client Reference: Craig Bloxham, TEC, Inc., (805) 564-4940

Tejon Mountain Village Project, Tejon Mountain Village LLC, Tejon Ranch, Kern and Los Angeles counties, California, 1999-ongoing. Principal Investigator and report author for a Phase I surveys of 28,000 acres and Phase II testing of 37 prehistoric and 3 historic sites, for CEQA and NHPA Section 106 compliance. Client Reference: Steve Letterly, DMB, Inc., (661) 663-4282.

Assessment of CA-INY-434 and -7117, Epsilon Systems Solutions, NAWS China Lake, Inyo County, California, 2008. Principal Investigator, field director and report author for condition assessments of petroglyph sites CA-INY-434 and -7117, involving site documentation and mapping, evaluation of current conditions and identification of natural and cultural impacts to the sites, and management recommendations for long-term preservation. Client Reference: Greg Halsey, Epsilon Systems Solutions, (760) 446-6400.

Riverwalk Marketplace Survey, Impact Sciences, Porterville, Tulare County, California, 2009. Principal Investigator, field director and report author for Phase I archaeological survey of 22 acres. Client Reference: Ken Koch, Impact Sciences, Inc., (805) 437-1900.

Vista Canyon Survey and Test Excavation, Impact Sciences, Santa Clarita, Los Angeles County, California, 2008-2009. Principal Investigator and report author for a Phase I survey and Phase II test excavations and determination of significance on a prehistoric archaeological site within the 200-acre Vista Canyon project area. Client Reference: Susan Tebo, Impact Sciences, Inc., (805) 437-1900.

Pomona Survey, Archdiocese of Los Angeles, Pomona, Los Angeles County, California, 2009. Principal Investigator and report author for a Phase I survey of APN 8331-003-900, an 8.5-acre study area. Client Reference: Ron Koester, CRC Enterprises, Inc., (661) 297-2336.

Rosamond Space-Port Survey, United Engineering Group, Rosamond, Kern County, California, 2008. Principal Investigator, field director and report author for Phase I archaeological survey of 546 acres, resulting in the identification and recording of nine sites. Client Reference: Cassie Cuaresma, EIT, United Engineering Group, (909) 466-9240.

Centennial Project Survey and Testing, Centennial Partners LLC, Tejon Ranch, Los Angeles County California, 2001-2008. Principal Investigator and report author for a Phase I survey of 14,000 acres and Phase II testing of 22 prehistoric sites for CEQA compliance. Client Reference: Todd Turley, Pardee Homes, (661) 222-3261.

Clipper Windpower Class III Inventory, Clipper Windpower, Inc. Barstow, San Bernardino County, California, 2008. Principal Investigator, field director and report author for Class III inventory of seven anemometer pads and access roads. Client Reference: Casey Willis, AICP, Clipper Windpower, Inc., (805) 690-3275.

Boeing Corporation Santa Susana Field Lab Projects, MWH Americas, Inc., Los Angeles County, California, 2001-2008. Principal investigator, field director and report author for six Class III inventories/Phase I surveys required for maintenance, hazardous waste clean-up and other activities on the Santa Susana Field Lab; and evaluation and preliminary condition assessment for an NRHP-listed rock art site CA-LAN-1072 (Burro Flats). Client Reference: Bronwyn Kelly; MWH Americas, Inc., (626) 796-9141.

Carrizo Plain National Monument Projects, Carrizo Plain National Monument/BLM Bakersfield Field Office, San Luis Obispo and Kern counties, California, 2001–2008. Principal Investigator, field director and senior report author for six projects/contracts, consisting of NHPA Class II and III inventories of over 14,400 acres for Section 110 compliance; documentation and condition assessment of the Saucito pictograph site; NRHP nomination and listing, at national level of significance, of a 24 site district, for Section 106 compliance; and a NHL nomination of an 89-site district for Section 106 compliance. Client Reference: Duane Christian, BLM Bakersfield (retired), (661) 391-6080.

Agua Dulce Airfield Survey, Impact Sciences, Agua Dulce, Los Angeles County, California, 2008. Principal Investigator and report author for a Phase I archaeological survey of 150 acres. Client Reference: Ms. Meighan Jackson, Impact Sciences, Inc., (805) 437-1900.

St. John's Seminary Testing, Impact Sciences, Camarillo, Ventura County, California, 2008. Principal Investigator and report author for a Phase II test excavation and determination of significance on a prehistoric site within the St. John's Seminary. Client Reference: Mr. Joe Gibson, Impact Sciences, Inc., (805) 437-1900.

Terrace at Hidden Hills Survey, Impact Sciences, Hidden Hills, Los Angeles County, California, 2008. Principal Investigator and report author for Phase I archaeological survey of 26 acres. Client contact: Ms. Lucy Barraza, Impact Sciences, Inc., (805) 437-1900.

KRLA Survey, Impact Sciences, San Dimas, Los Angeles County, California, 2008. Principal Investigator and report author for Phase I survey of the 73-acre KRLA AM radio station broadcast facility located on Buzzard Peak. Client Reference: Mr. Greg Ainsworth, Impact Sciences, Inc., (805) 437-1900.

Dead End Canyon Site Assessment, Epsilon Systems Solutions, NAWS China Lake, Inyo County, California, 2007. Principal Investigator, field director and report author for a petroglyph site condition assessment, and an NRHP evaluation of a large village site for Section 106 compliance, involving surface collection and mapping of house pits. Client Reference: Greg Halsey, Epsilon Systems Solutions, (760) 446-6400.

East Area 1 Survey and Testing, Parkstone Companies, Santa Paula, Ventura County, California, 2007. Principal Investigator, field director and report author for a Phase I archaeological survey and a Phase II test excavation and determination of significance at four

historical sites on the 500-acre Teague-McKevett Ranch, part of the Limoneira Company holdings. Client Reference: Mr. Michael Penrod, Parkstone Companies, (805) 373-8808.

Sports Village Survey, Impact Sciences, Bakersfield, Kern County, California, 2007. Principal Investigator, field director and report author for Phase I archaeological survey of 222 acres. Client Reference: Mr. Ken Koch, Impact Sciences, Inc., (805) 437-1900.

Lancaster Retention Basin Survey, Impact Sciences, Lancaster, Los Angeles County, California, 2007. Principal investigator and report author for Phase I archaeological survey of 1.5-acre retention basin. Client Reference: Mr. John Holson, Impact Sciences, Inc., (805) 437-1900.

Amargosa Creek SPEIR Survey, Impact Sciences, Lancaster, Los Angeles County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of a 151-acre specific plan study area. Client Reference: Ken Koch, Impact Sciences, Inc., (805) 437-1900.

River Ranch Survey, Impact Sciences, Barstow, San Bernardino County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of 150 acres. Client Reference: Joe Gibson, Impact Sciences, Inc., (805) 437-1900.

Quest Ranch Survey, Impact Sciences, Los Angeles County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of 40 acres near Topanga Canyon. Client Reference: Julie Berger; Impact Sciences, Inc., (805) 437-1900.

San Francisquito Canyon Survey, Sirius Environmental, Los Angeles County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of APN 3244-029-024, a 35-acre parcel near Valencia. Client Reference: Wendy Lockwood, Sirius Environmental, (626) 808-0031.

Smiser Ranch Survey, Sikand Engineering, Santa Clarita, Los Angeles County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of the Smiser (mule) Ranch. Client Reference: Mr. Matt Beneviste, Sikand Engineering, (818) 787-8550.

Romero Canyon Survey, Sikand Engineering, Castaic Junction, Los Angeles County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of a 200-acre parcel in Romero Canyon, near Castaic Junction, involving the discovery and recording of a single prehistoric archaeological site. Client Reference: Matt Beneviste, Sikand Engineering, (818) 787-8550.

Camarillo Outlet Mall Survey, Gorian and Associates, Camarillo, Ventura County, California, 2007. Principal Investigator and report author for Phase I archaeological survey of a 40-acre expansion of the Camarillo Outlet Mall. Client Reference: Mr. Randal L. Wendt, Gorian and Associates, Inc., (805) 375-9262.

US Borax Life of the Mine and Land Exchange Projects, US Borax/Rio Tinto Minerals, Boron, Kern County, California, 1996-2006. Principal Investigator, field director, and report author for eleven projects/contracts consisting of NHPA Class III inventories and CEQA Phase I surveys of 5,422 total acres; Phase II test excavations at 16 prehistoric sites; and Phase III data recoveries (salvage excavations) at four sites. Client Reference: Dave Weiss, Rio Tinto Minerals, (760) 762-7460.

Vintage Well Pad Survey, Vintage Production California, Tejon Ranch, Kern County, California, 2006. Principal Investigator and report author for a Phase I archaeological survey of a well-pad. Client Reference: Mr. Joey Barulich, Vintage Production California LLC, (661) 869-8000.

Hueneme Pipeline Survey, City of Port Hueneme, Wastewater Division, Hueneme, Ventura County, California, 2006. Principal Investigator, field director, report author for a Class III inventory/Phase I survey of a 3400 linear feet pipeline route, requiring SHPO consultation and concurrence. Client Reference: Fred Camarillo, City of Port Hueneme Wastewater Division, (805) 986-6561.

CA-VEN-693 Test, C.A. Rasmussen Company, Simi Valley, California, 2006. Principal Investigator and report author for a Phase II test excavation and determination of significance at site CA-VEN-693. Client Reference: Ms. Kathleen Rasmussen, C.A. Rasmussen Company, LLC, (800) 479-2888.

Rancho Victoria Survey, D.R. Horton, Oxnard, Ventura County, California, 2006. Principal investigator and report author for a Phase I archaeological survey of the 15-acre Rancho Victoria property. Client Reference: Matthew Hanson, D.R. Horton, Inc., (805) 382-9244.

Hidden Creek Estates Survey, Impact Sciences, Inc., Los Angeles County, California, 2006. Principal Investigator and report author for Phase I archaeological survey of 260 acres in the northwestern San Fernando Valley. Client contact: Nicole Cobleigh; Impact Sciences, Inc., (805) 437-1900.

Centex Survey, Centex Homes; Thousand Oaks, Ventura County, California, 2006. Principal Investigator and report author for a Phase I archaeological survey of the 36-acre TT 5484, Thousand Oaks. Client Reference: Kimberley Lewis, Centex Homes, (661) 288-5777.

McAllister Ranch Archaeological Evaluation, Suncal, Bakersfield, Kern County, California, 2006. Principal investigator and report author for test excavations at nine prehistoric sites within the McAllister Ranch. Client Reference: Darryl Tucker, Suncal Companies, (661) 294-0000.

Hidden Hills Survey, Ashley Construction, Hidden Hills, Los Angeles County, California, 2006. Principal Investigator and report author for Phase I archaeological survey of 18 acres in

western Los Angeles County. Client Reference: Mike Ashley, Ashley Construction, (818) 888-6469.

Bean Springs Survey, Suncal, Rosamand, Kern County, California, 2005-2006. Principal Investigator, field director and report author for Phase I archaeological survey of 1,280 acres, resulting in the identification and recording of 19 sites. Client Reference: Tom Speirs, Suncal, (661) 294-0000.

Barstow Wal-Mart Survey and Test Excavation, Impact Sciences, Barstow, San Bernardino County, California, 2006. Principal Investigator and report author for Phase I archaeological survey of 143 acres and the test excavations at two sites, CA-SBR-7125 and -12279H. Client Reference: Ms. Christine Danko, Impact Sciences, Inc., (805) 437-1900.

Neighborhood Project Survey, Impact Sciences, Bakersfield, Kern County, California, 2006. Principal Investigator, field director and report author for Phase I archaeological survey of 78 acres along Rosedale Highway. Client Reference: Mr. Ken Koch, Impact Sciences, Inc., (805) 437-1900.

VTT No. 062358 Survey, Pacific Coast Civil, Palmdale, Los Angeles County, California, 2006. Principal Investigator and report author for Phase I archaeological survey of 27 acres. Client Reference: Richard E. Doss; Pacific Coast Civil, Inc., (877) 722-4845.

Marina del Rey Towers Survey, Christopher A. Joseph and Associates, Marina del Rey, Los Angeles County, California, 2006. Principal Investigator and report author for a Phase I archaeological survey of the Platt Marina del Rey Tower property, which proved to include the historical Gabrieliño village of *Sa-Anga* (CA-LAN-47). Client Reference: Mr. Marc Melinkoff, Christopher A. Joseph & Associates, (818) 735-8838.

Searles Lake High-Stand Shoreline Survey, Bureau of Land Management, San Bernardino County, California, 2005. Principal Investigator, field director and report author for a Class III inventory of the high-stand (Late Pleistocene) pluvial lake shoreline (2,343 acres) of the Christmas Canyon sub-basin of Searles Valley. Client Reference: Judyth Reed, BLM, (307) 638-8722.

Tejon Ranch Water Management and Exchange WRMWSD 850 Canal/Reservoir No. 1 Pumpback Project, Tejon Ranch Company, Tejon Ranch, Kern County, California, 2003-2004. Principal Investigator, field director and report author for a Phase I archaeological survey of 1268 acres related to water rights and usage. Client Reference: Rob Peterson, Tejon Ranch Company, (661) 663-4258.

Fairmont Buttes Survey, Malloy Family Partners, LLC, Antelope Valley, Los Angeles County, California, 2004. Principal Investigator, field director and report author for a Phase I archaeological survey of 322 acres resulting in the recording of four archaeological sites. Client Reference: Mr. Tom Reu, Malloy Family Partners, (951) 739-0508.

Christmas Canyon Site Assessment, Bureau of Land Management, San Bernardino County, California, 2003. Principal Investigator, field director and report author for an assessment of 16 surface sites within the Christmas Canyon area of the Searles Lake Basin. Client Reference: Judyth Reed, BLM, (307) 638-8722.

Timbisha Trust Parcel Inventory, Bureau of Land Management, Inyo County, California, 2000-2001. Principal Investigator, field director and report author for a Class III inventory of 1600 acres near Death Valley Junction and upper Centennial Flat. Client Reference: Russ Kaldenberg, BLM California State Office (retired), (307) 772-9317.

Hoover Dam By-Pass Project, CH2M Hill, Colorado River Valley, California and Nevada, 2000. Principal Investigator and report co-author of an ethnohistoric overview and Traditional Cultural Properties nomination for sites associated with the Hoover Dam By-Pass. Client Reference: Jeff Bingham, CH2M Hill, (714) 429-2020.

Newhall Ranch Projects, Newhall Land and Farms/Lennar Homes, Valencia, Los Angeles County, California, 1993-2009. Principal Investigator, field director and report author for 24 separate studies/contracts involving Phase I CEQA studies and NHPA Class III inventories of approximately 20,000 acres, Class II test excavations at 11 prehistoric sites, and Class III data recovery at one site. Client Reference: Alex Herrell, Newhall Land and Farms, (661) 255-4000.

Golden Queen Mine Projects, Golden Queen Mining Company, Rosamond, Kern County, California, 1994-2007. Principal Investigator, field director and report author for five projects/contracts involving a CEQA Phase I study of 640 acres total, Phase II test excavations of nine historical (1900-1910 mining related) sites, and Phase III data recoveries (including HABS/HAER documentation) of four sites, one of which was a large historical mining ghost town with about 60 structures. Client Reference: Lutz Klingmann, Golden Queen Mining Company, Canada; (604) 921-7570.

Fort Irwin Rock Art Projects, NTC Fort Irwin, Barstow, San Bernardino County, California, 1997-1999. Principal Investigator, field director and report author for three projects/contracts, involving a NHPA Class III inventory of 2000 acres at "The Whale;" rock art site documentation and assessment of three petroglyph sites; testing, rock art documentation and Section 106 evaluation at Sally's Rockshelter. Client contact: Dr. Bob Rechtman, NTC Fort Irwin.

CA-INY-3003 Assessment, SBA, Inc., Inyo County, California, 2002. Principal Investigator, field director and report author for assessment and determination of NRHP eligibility for site CA-INY-3003. Client Reference: Steve Thomas, SBA, Inc.

BLM Land Exchange Inventories and Assessment, Conservation Partners, Inc., Santa Barbara, Tulare, Kern and Kings counties, California, 1999-2000. Principal Investigator, field director

and report author for seven projects/contracts requiring NHPA Class III inventories of 5,221 acres, and one project requiring limited testing and determinations of NRHP eligibility for four sites. Client Reference: Eunice Calvert-Banks, Conservation Partners, Inc.

Lava Beds National Monument Rock Art Documentation and Conditions Assessment, Stratum Unlimited, Tulelake, California, 1999. Co-principal Investigator, and report co-author for detailed documentation, mapping and condition assessment of ten pictograph sites within the Lava Beds National Monument. Client Reference: Dr. Johannes Loubser, Stratum Unlimited, (770) 619-9964

UCLA Archaeological Field School; for UCLA Department of Anthropology; Inyo County, California, 1983-1985. Principal investigator, field director and instructor for Spring and Summer Field Schools at site CA-INY-2284.

Class II Inventory, NAWS China Lake, Inyo and San Bernardino counties, California, 1982-1983. Co-principal Investigator, field director and report co-author of a sample survey of the North and South Ranges of the China Lake NWC, representing approximately 10,000 inventoried acres. Client Reference: Mike Baskerville, NAWS China Lake; (760) 939-1350.

LADWP Well Pad Study, Los Angeles Department of Water and Power, Inyo County, California, 1982. Principal Investigator, field director and report author, archaeological assessments of four geothermal well pads locations in the Coso KGRA, adjacent to Sugarloaf Mountain.

Coso Range Petroglyphs Study, NAWS China Lake, Inyo County, California, 1981-1982. Principal Investigator and dissertation author, site documentation, chronometric dating and ethnographic research. Client Reference: Mike Baskerville, NAWS China Lake; (760) 939-1350.

Feral Burro Management Plan, NAWS China Lake, Inyo and San Bernardino counties, California, 1980. Co-principal Investigator, field director and report author for a Class II inventory addressing the impacts of feral burros on archaeological sites. Client Reference: Mike Baskerville, NAWS China Lake; (760) 939-1350.

Coso KGRA Inventory, Bureau of Land Management, Inyo County, California, 1978-1980. Co-principal Investigator, field director and report co-author of a Class II Inventory of the Coso Known Geothermal Research Area, involving a sample survey totaling approximately 10,000 acres. Client Reference: Mike Baskerville, NAWS China Lake; (760) 939-1350.

Professional Appointments

2006- Advisory Board, Institute of Cognition and Culture, Queen's University,

Belfast.

2003- Adjunct Professor, School of Geographical Sciences, Arizona State University.

- Series Editor, AltaMira Press, Archaeology of Religion.
 Chair/Organizer, Society for American Archaeology, Rock Art Interest Group.
 Chauvet Cave Research Advisory Committee, Ministere de la Culture, France.
 Archaeological & Anthropological Advisor, Ventura County Cultural Heritage Board.
 United States Representative, International Council on Monuments and Sites (ICOMOS), Comité International d'Art Rupestre (CAR), Council of Directors, 1997-2004.
 Prehistoric Archaeologist State of California Historical Resources
- 1986-1987 Prehistoric Archaeologist, State of California Historical Resources Commission.

Editorial Advisory Boards:

Time and Mind: Journal of Archaeology, Consciousness and Culture Heritage Management California Archaeology American Archaeology Magazine Australian Archaeology

Publications: Books and Monographs

- 2011 Introduction to Rock Art Research, second revised edition. Walnut Creek: Left Coast Press, Inc.
- 2009 Cave Paintings and the Human Spirit: The Origin of Creativity and Belief. New York: Prometheus Books.
- 2008 Belief in the Past: Theoretical Approaches to the Archaeology of Religion, ed. DS Whitley & K Hays-Gilpin. Walnut Creek: Left Coast Press, Inc.
- 2006 The Archaeology of Ayer's Rock, Inyo County, California, by DS Whitley, TK Whitley and JM Simon. Ridgecrest: Maturango Museum Publication #19.
- 2005 Introduction to Rock Art Research. Walnut Creek: Left Coast Press, Inc.
- 2005 Discovering North American Rock Art, ed. L Loendorf, C Chippindale, & DS Whitley. Tucson: University of Arizona Press.
- 2001 Handbook of Rock Art Research, ed. DS Whitley. Walnut Creek: AltaMira Press.
- 2000 The Art of the Shaman: Rock Art of California. Salt Lake City: Univ. of Utah Press.

- 2000 L'Art des Chamanes de Californie: Le Monde des Amerindien. Paris: Editions du Seuil.
- 2000 Arheologija Spolov. Ljubljana: Skuc.
- 1998 Reader in Archaeological Theory: Postprocessual and Cognitive Approaches, ed. D.S. Whitley. London: Routledge.
- 1998 Reader in Gender Archaeology. ed. K. Hays-Gilpin and D.S. Whitley. London: Routledge.
- 1998 Following the Shaman's Path: A Walking Tour of Little Petroglyph Canyon. Ridgecrest: Maturango Museum.
- 1996 Guide to Rock Art Sites: Southern California and Southern Nevada. Missoula, MT: Mountain Press Publishing, Inc.
- 1994 New Light on Old Art: Recent Advances in Hunter-Gatherer Rock Art Research, ed. DS Whitley and LL Loendorf. UCLA Institute of Archaeology, Mon. 36.
- 1989 Investigaciones Arqueológicas en la Costa Sur de Guatemala, ed. DS Whitley and MP Beaudry. UCLA Institute of Archaeology, Mon. 31.
- 1982 Pictographs of the Coso Region: Analysis and Interpretation of the Coso Painted Style, ed. RA Schiffman, DS Whitley et al. Bakersfield College Publications in Archaeology No. 2. (2nd edition 1986; Coyote Press, Salinas).
- 1980 Inland Chumash Archaeological Investigations, ed DS Whitley, EL McCann and CW Clewlow, Jr. UCLA Institute of Archaeology, Mon. 15.
- 1979 Archaeological Investigations at the Ring Brothers Site Complex, Thousand Oaks, California, ed. CW Clewlow, Jr., DS Whitley and EL McCann. UCLA Institute of Archaeology, Mon. 13.
- 1979 The Archaeology of Oak Park, Ventura County, California, Volume III, ed CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Mon. 11.

Professional Papers: Refereed Journals

- 2010 The Coso Petroglyph Chronology, by DS Whitley and RI Dorn. Pacific Coast Archaeological Society Quarterly 43:135-157.
- The Rock Art Stability Index (RASI): Improving the Sustainability of Rock Art Sites, by R.I. Dorn et al. *Heritage Management* 1:37-70.

- 2008 Archaeological Evidence for Conceptual Metaphors as Enduring Knowledge Structures. *Time and Mind* 1(1):7-30.
- 2006 A New Strategy for Analyzing the Chronometry of Constructed Rock Features in Deserts, by N Cerveny et al. *Geoarchaeology* 21(3):281-303.
- 2006 Sympathetic Magic in Western North American Rock Art, by J Keyser & DS Whitley. *American Antiquity* 71(1):3-26.
- 2003 Faith in the Past: Debating an archaeology of religion, DS Whitley & J Keyser. *Antiquity* 77:415-424.
- 1999 Sally's Rockshelter and the Archaeology of the Vision Quest, by D.S. Whitley et al; Cambridge Archaeological Journal 9:221-246.
- 1998 Cognitive Neuroscience, Shamanism and the Rock Art of Native California.

 Anthropology of Consciousness 9:22-37.
- By the Hunter, For the Gatherer: Art, Social Relations and Subsistence Change in the Great Basin. *World Archaeology* 25:356-373.
- New Perspectives on the Clovis vs. Pre-Clovis Controversy, by DS Whitley and RI Dorn. *American Antiquity* 58:626-647.
- 1992 Prehistory and Post-Positivist Science: A Prolegomenon to Cognitive Archaeology. Archaeological Method and Theory, Volume 4: 57-100.
- 1992 Shamanism and Rock Art in Far Western North America. Cambridge Archaeological Journal 2:89-113.
- 1992 New Approach to the Radiocarbon Dating of Rock Varnish, with Examples from Drylands, by RI Dorn et al, *Annals Assoc. American Geographers* 82:136-151.
- 1989 Archaeology after the Revolution: The ideological use of the past in the development of Mexican nationalism. *Latin American Reports* 5(2):10-22.
- 1988 Cation-Ratio Dating of Petroglyphs Using PIXE, by DS Whitley and RI Dorn, Nuclear Instruments and Methods in Physics Research B35:410-414.
- 1988 The Late Prehistoric Period in the Coso Range and Environs, by DS Whitley et al. Pacific Coast Archaeological Society Quarterly 24(1):2-10.
- 1987 Socioreligious Context and Rock Art in East-Central California. *Journal of Anthropological Archaeology* 6:159-188.

- 1987 Rock art chronology in eastern California, by DS Whitley and RI Dorn. World Archaeology 19:150-164.
- 1986 Cation-Ratio and Accelerator Radiocarbon Dating of Rock Varnish on Mojave Artifacts and Landforms, by RI Dorn et al. *Science* 231:830-833.
- 1985 Spatial Autocorrelation Tests and the Classic Maya Collapse: Methods and Inferences, by DS Whitley and WAV Clark. *Journal of Archaeological Science* 12:377-395.
- 1985 El Balsamo Residential Investigations: A Pilot Project and Research Issues, by BL Starke et al. *American Anthropologist* 87:100-111.
- 1984 Chronometric and relative age-determination of petroglyphs in the Western United States, by RI Dorn and DS Whitley. *Annals, Association of American Geographers* 74:308-322.
- 1984 The Use of Relative Repatination in the Chronological Ordering of Petroglyph Assemblages, by D Whitley et al. *Journal of New World Archaeology* 4(3):19-25.
- 1984 Chemical and Micromorphological Analysis of Rock Art Pigments from the Western Great Basin, by DS Whitley and RI Dorn. *Journal of New World Archaeology* 4(3):48-51.
- An Unusual Petroglyph from Horse Creek, Tulare County, California, by F Fenenga et al. *Journal of New World Archaeology* 4(3):52-58.
- 1983 Cation-ratio dating of petroglyphs from the Western United States, North America, by RI Dorn and DS Whitley. *Nature* 302:816-818.
- Notes on the Coso Petroglyphs, the Etiological Mythology of the Western Shoshone, and the Interpretation of Rock Art. *Journal of California and Great Basin Anthropology* 4:262-271.

Publications: Book and Monograph Chapters

- 2011 Rock Art, Religion and Ritual. In *Oxford Handbook of the Archaeology of Ritual and Religion*, ed. Tim Insoll, pp. 307-326. Oxford: Oxford University Press.
- Ways of Knowing and Ways of Seeing: Spiritual Agents and the Origins of Native American Rock Art. In Working with Rock Art: Recording, preservation and

- indigenous knowledge, ed. B. Smith. Johannesburg: Witwatersrand University Press (in press).
- Art and belief: The ever-changing and the never-changing in the Far West. In *Seeing and Knowing: Understanding rock art with and without ethnography*, ed. G. Blundell, C. Chippindale and B. Smith, pp. 108-129. Johannesburg: Witwatersrand University Press.
- 2009 Re-reading People of the Eland. In *The Eland's People: New Perspectives in the Rock Art of the Maloti-Drakensberg Bushmen, Essays in Memory of Patricia Vinnicombe*, ed. P. Mitchell and B. Smith, pp. 193-203. Johannesburg: Wits University Press.
- 2009 The Past in the Present Tense: Aspects of Contemporary California Archaeology. In Festschrift for Paul Ezell, ed. R. Kaldenberg. San Bernardino: San Bernardino County Museum Association Quarterly 54(4):74-81.
- 2008 The Long View of Old Art: Rock Art in the 22nd Century. In *Proceedings of "Set in Stone: A Binational Workshop on Petroglyph Management in the United States and Mexico,"* ed. Joseph Sanchez, pp. ix-xvi. Albuquerque: National Park Service, Petroglyph National Monument.
- 2008 Religion Beyond Icon, Burial and Monument: An Introduction, by D Whitley and K Hays-Gilpin. In *Belief in the Past: Theoretical Approaches to the Archaeology of Religion*, ed. DS Whitley & K Hays-Gilpin, pp. 11-22. Walnut Creek: Left Coast Press, Inc.
- 2008 Cognition, Emotion and Belief: First Steps in an Archaeology of Religion. In Belief in the Past: Theoretical Approaches to the Archaeology of Religion, ed. DS Whitley & K Hays-Gilpin, pp. 85-104. Walnut Creek: Left Coast Press, Inc.
- 2008 Religion. In *Handbook of Archaeological Theories*, ed. A Baxter, H Maschner and C Chippindale, pp. 547-66. Lanham, NJ: AltaMira Press.
- 2007 The Carrizo Collapse: Art and Politics in the Past (w/J Simon and J Loubser). In A Festschrift Honoring the Contributions of California Archaeologist Jay von Werlhof, ed RL Kaldenberg, pp. 199-208. Ridgecrest: Maturango Museum Publication 20.
- High-Stand Shoreline Survey of the Christmas Canyon Sub-Basin of Searles Lake, Inyo County, California (w/ J Simon et al.). In *A Festschrift Honoring the Contributions of California Archaeologist Jay von Werlhof*, ed RL Kaldenberg, pp. 209-224. Ridgecrest: Maturango Museum Publication 20.
- 2006 Ethnohistory and Rock Art in South-Central California. In *American Indian Rock Art* 21:241-259. American Rock Art Research Association.

- 2006 Rock Art and Rites of Passage in Far Western North America. In *Talking with the Past: The Ethnography of Rock Art*, ed. JD Keyser, G Poetschat & MW Taylor, pp. 295-326. Portland, Oregon Archaeological Society.
- 2006 Etiology and Ideology in the Western Great Basin. In *Numic Mythologies:*Anthropological Perspectives In the Great Basin and Beyond, ed. LD Myers, pp. 103-116. Boise State University, Occasional Papers and Monographs in Cultural Anthropology and Linguistics, Vol. 3. Boise.
- 2006 Issues in Archaeoastronomy and Rock Art. In *Viewing the Sky Through Past and Present Cultures*, ed T. Bostwick and B. Bates, pp. 85-102. Pueblo Grande Museum Papers No. 15. Phoenix.
- 2005 The Iconography of Bighorn Sheep Petroglyphs in the Western Great Basin. In Onwards and Upwards: Papers in Honor of Clement W. Meighan, ed. K. Johnson, pp. 191-205. Stansbury Press, Chico.
- 2005 Rock Art Analysis (with L. Loendorf). In *Handbook of Archaeological Methods, Vol. II*, ed. H Maschner and C Chippindale, pp. 919-973. Lanham, NJ: AltaMira Press.
- 2005 Steward's Shadow: History of rock art research in western North America and France, DS Whitley and J Clottes, *Discovering North American Rock Art*, eds L Loendorf C Chippindale & DS Whitley, pp. 161-180. Tucson: University of Arizona Press.
- 2005 The Discovery of North American Rock Art and Its Meaning, by L Loendorf, C Chippindale and DS Whitley, pp. 3-11 in *Discovering North American Rock Art*,eds L Loendorf C Chippindale & DS Whitley, pp. 161-180. Tucson: University of Arizona Press.
- The Archaeology of Shamanism. In *The Encyclopedia of Shamanism*, 15-21. Santa Barbara: ABC-Clio.
- 2004 Shamanism and Rock Art. In *The Encyclopedia of Shamanism*, 219-223. Santa Barbara: ABC-Clio.
- 2004 Management Plan for Rock Art Sites on BLM Lands in California, in *The Human Journey and Ancient Life in California's Deserts: Proceedings from the 2001 Millennium Conference*, M.W. Allen and J. Reed, eds, pp. 225-228. Maturango Museum Publication No. 15, Ridgecrest.
- 2004 Rock Art Research and Management in the U.S.A., in *The Future of Rock Art -A World Review: Rapport fran Riksantikvarieambetet 2004:7*, ed. by U. Bertillson and L.

- McDermott, pp. 188-197. Stockholm, National Heritage Board of Sweden.
- 2004 Friends in Low Places: Rock art and landscape on the Modoc Plateau, w/ J. Loubser and D. Hann, in *The Figured Landscapes of Rock Art: Looking at Pictures in Place*, ed. C. Chippindale and G. Nash, pp. 217-238. Cambridge: Cambridge University.
- 2003 What is Hedges Arguing About? American Indian Rock Art 29:83-104.
- 2001 Science and the Sacred: Interpretive Theory in US Rock Art Research. In *Theoretical Perspectives in Rock Art Research*, ed. Knut Helskog, pp. 130-157. Novus Press, Oslo, Norway.
- 2001 Rock Art and Rock Art Research in Worldwide Perspective: An Introduction. In *Handbook of Rock Art Research*, ed. D.S. Whitley, pp. 7-54. Walnut Creek: Alta Mira Press.
- 2001 Cognitive Archaeology. *International Encyclopedia of the Social and Behavioral Sciences*. Elsevier Science, London.
- 2000 Use and abuse of ethnohistory in the far west. 1999 International Rock Art Congress Proceedings, Vol. 1:127-154. Tucson: American Rock Art Research Association.
- 2000 Technologie der Jager und Sammler, pp. 28-33 in *Am Anfang War Das Bild*, ed. by A. Damm. Copenhagen: United Exhibits Group. (Danish edition: Jaeger-Og Samlerteknologi, pp. 28-33 in På Sporet Af Mennesket, ed. by A. Damm. Copenhagen: United Exhibits Group, 2001.)
- 2000 Felsmalerei und das Erwachen des Menschlichen Bewusstseins, pp. 34-45 in *Am Anfang War Das Bild*, ed. by A. Damm. Copenhagen: United Exhibits Group. (Danish edition: Hulemalerier Og Klipperistninger, pp. 34-45 in På Sporet Af Mennesket, ed. by A. Damm. Copenhagen: United Exhibits Group, 2001.)
- 2000 Bemalte Schluchten, pp. 76-81 in *Am Anfang War Das Bild*, ed. by A. Damm. Copenhagen: United Exhibits Group. (Danish edition: Bemalede Kløfter, pp. 76-81 in På Sporet Af Mennesket, ed. by A. Damm. Copenhagen: United Exhibits Group, 2001.)
- 1999 The vision quest in the Coso Range, with J Simon & R Dorn. American Indian Rock Art 25:1-32.
- A possible Pleistocene camelid petroglyph from the Mojave Desert, California. *Tracks Along the Mojave: A Field Guide from Cajon Pass to the Calico Mountains and Coyote Lake*, R.E. and J. Reynolds, eds. San Bernardino County Museum Association

- Quarterly 46(3):107-108.
- 1998 Finding rain in the desert: landscape, gender, and far western North American rock art. In *The Archaeology of Rock-Art*, ed. C Chippindale & PSC Taçon, pp. 11-29. Cambridge University.
- 1998 Meaning and Metaphor in the Coso Petroglyphs: Understanding Great Basin Rock Art. In Coso Rock Art: A New Perspective, ed. E Younkin, pp.109-174. Ridgecrest: Maturango Museum.
- 1998 History and Prehistory of the Coso Range: The Native American Past on the Western Edge of the Great Basin. In *Coso Rock Art: A New Perspectives*, ed E Younkin, pp. 29-68. Ridgecrest: Maturango Museum.
- 1998 New Approaches to Old Problems: Archaeology in Search of an Ever Elusive Past. In *Reader in Archaeological Theory: Postprocessual and Cognitive Approaches*, ed. D.S. Whitley, pp. 1-28, London: Routledge.
- 1998 The Archaeology of Sex and Gender: An Introduction, by K. Hays-Gilpin and D.S. Whitley. In *Reader in Gender Archaeology*, ed. K. Hays-Gilpin and D.S. Whitley, pp. 1-5. London: Routledge.
- 1996 Recent Advances in Petroglyph Dating and Their Implications for the Pre-Clovis Occupation of North America, by D.S. Whitley et al. In *Proceedings of the Society for California Archaeology*, Volume 9:92-103. Sacramento: Society for California Archaeology.
- 1994 Shamanism, Natural Modeling and the Rock Art of Far Western North American Hunter-Gatherers. In *Shamanism and Rock Art in North American*, ed. S Turpin, pp. 1-43. Special Publication 1, Rock Art Foundation, Inc., San Antonio.
- 1994 Cation-ratio dating of rock engravings from Klipfontein, Northern Cape Province, South Africa, by DS Whitley and HJ Annegarn, pp. 189-197. In *Contested Images: diversity in Southern African rock art research*, ed. TA Dowson and JD Lewis-Williams. Johannesburg: Univ. Witwatersrand Press.
- Introduction: Off the Cover and Into the Book, by DS Whitley and LL Loendorf, pp. xi-xx. In *New Light on Old Art: Recent Advances in Hunter-Gatherer Rock Art Research*, ed. DS Whitley and LL Loendorf. UCLA Institute of Archaeology, Monograph 36.
- 1994 Ethnography and Rock Art in the Far West: Some Archaeological Implications, pp. 81-93. In *New Light on Old Art: Recent Advances in Hunter-Gatherer Rock Art Research*, ed. DS Whitley and LL Loendorf. UCLA Institute of Archaeology,

- Monograph 36.
- 1991 Chiefs on the Coast: Developing Chiefdoms in the Tiquisate Region in Ethnographic Perspective, by DS Whitley and MP Beaudry, pp. 101-120. In *The Formation of Complex Society in Southeastern Mesoamerica*, ed. W Fowler. Boca Raton: CRC Press.
- 1989 Introduccion del Volumen, by MP Beaudry and DS Whitley, pp. 1-3. In *Investigaciones Arqueológicas en la Costa Sur de Guatemala*, ed. DS Whitley and MP Beaudry. UCLA Institute of Archaeology, Monograph 31.
- 1989 Investigaciones en el Sitio Sin Cabezas 1986: Introduccion y Resumen de los Resultados, by DS Whitley and MP Beaudry, pp. 84-97. In *Investigaciones Arqueológicas en la Costa Sur de Guatemala*, ed. DS Whitley and MP Beaudry. UCLA Institute of Archaeology, Monograph 31.
- 1989 Artefactos de Sin Cabezas, pp. 163-180. In *Investigaciones Arqueológicas en la Costa Sur de Guatemala*, ed. DS Whitley and MP Beaudry. UCLA Institute of Archaeology, Monograph 31.
- 1988 Bears and Baskets: Aspects of Shamanism in North American Rock Art, pp. 34
 45. In *The State of the Art: Advances in World Rock Art*, ed. TA Dowson.
 Johannesburg: Archaeology Department, University of the Witwatersrand.
- Obsidian Hydration Dates from the Coso Range, pp. 75-77. In *Obsidian Dates IV*, ed. CW Meighan and JL Scalise. UCLA Institute of Archaeology, Monograph 29.
- 1982 Practical Mapping for the Field Archaeologist, pp. 14-22. In *Practical Archaeology: Field and Laboratory Techniques and Archaeological Logistics*, ed. BD Dillon. UCLA Institute of Archaeology, Archaeological Research Tools #2.
- 1982 Introduction, by DS Whitley and RA Schiffman, pp. 1-4. In *Pictographs of the Coso Region: Analysis and Interpretation of the Coso Painted Style*, ed. RA Schiffman, DS Whitley et al. Bakersfield College Publications in Archaeology 2.
- Perspectives on the Painted Rock Art of the Coso Region, by DS Whitley et al,pp. 97-105. In *Pictographs of the Coso Region: Analysis and Interpretation of the Coso Painted Style*, ed. RA Schiffman, DS Whitley et al. Bakersfield College Publications in Archaeology No. 2.
- 1980 Brief Notes on the History of Inland Chumash Archaeology, by DS Whitley et al,pp. 3-10. In *Inland Chumash Archaeological Investigations*, ed. DS Whitley, EL McCann and CW Clewlow, Jr. UCLA Institute of Archaeology, Monograph 15.

- Preliminary Investigations at a Site Complex on the North Ranch, Westlake, Ventura County, California, by DS Whitley et al, pp. 43-120. In *Inland Chumash Archaeological Investigations*, ed. DS Whitley, EL McCann and CW Clewlow, Jr. UCLA Institute of Archaeology, Monograph 15.
- An Unusual Lithic Feature from an Inland Chumash Site, by DS Whitley and CW Clewlow, Jr., pp.153-166. In *Inland Chumash Archaeological Investigations*, ed. DS Whitley, EL McCann and CW Clewlow, Jr. UCLA Institute of Archaeology, Monograph 15.
- 1980 Intra-Site Variability on Ven-261: A Test Case, by DS Whitley et al, pp. 167-186. In *Inland Chumash Archaeological Investigations*, ed. DS Whitley, EL McCann and CW Clewlow, Jr. UCLA Institute of Archaeology, Monograph 15.
- Introduction to Oak Park Prehistory, by CW Clewlow, Jr. and DS Whitley, pp.1In *The Archaeology of Oak Park, Ventura County, California*, Volume III, ed. CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Mon. 11.
- 1979 A Historical Perspective on the Research at Oak Park, pp. 6-29. In *The Archaeology of Oak Park, Ventura County, California*, Volume III, ed. CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Monograph 11.
- 1979 Surface Archaeology at Oak Park, by DS Whitley et al, pp. 30-83. In *The Archaeology of Oak Park, Ventura County, California*, Volume III, ed. CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Monograph 11.
- 1979 Preliminary Excavations at CA-Ven-122, by DS Whitley et al, pp. 84-130. In *The Archaeology of Oak Park, Ventura County, California*, Volume III, ed. CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Monograph 11.
- 1979 The Excavation of the Oak Park Rockshelters, by CW Clewlow, Jr., et al, pp. 131148. In *The Archaeology of Oak Park, Ventura County, California*, Volume III,ed. CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Monograph 11.
- 1979 The Organizational Structure of the Lulapin and Humaliwo, by DS Whitley and CW Clewlow, Jr., pp. 149-174. In *The Archaeology of Oak Park, Ventura County, California*, Volume III, ed. CW Clewlow, Jr. and DS Whitley. UCLA Institute of Archaeology, Monograph 11.
- 1979 The Ring Brothers Site Complex, by CW Clewlow, Jr., DS Whitley and EL McCann, pp. 1-10. In *Archaeological Investigations at the Ring Brothers Site Complex, Thousand Oaks, California*, ed. CW Clewlow, Jr., DS Whitley and EL McCann. UCLA Institute of Archaeology, Monograph 13.
- 1979 Artifacts from the Ring Brothers Site Complex, by DS Whitley et al, pp. 11-100. In

- Archaeological Investigations at the Ring Brothers Site Complex, Thousand Oaks, California, ed. CW Clewlow, Jr., DS Whitley and EL McCann. UCLA Institute of Archaeology, Monograph 13.
- Subsurface Features, Tools Kits and a Sweathouse Pit at the Ring Brothers Complex, pp. 101-110. In *Archaeological Investigations at the Ring Brothers Site Complex, Thousand Oaks, California*, ed. CW Clewlow, Jr., DS Whitley and EL McCann. UCLA Institute of Archaeology, Monograph 13.
- 1979 Perspectives on the Ring Brothers Site Complex and the Archaeology of the Arroyo Conejo, by DS Whitley and CW Clewlow, Jr., pp. 111-126. In *Archaeological Investigations at the Ring Brothers Site Complex, Thousand Oaks, California*, ed. CW Clewlow, Jr., DS Whitley and EL McCann. UCLA Institute of Archaeology, Monograph 13.

Publications: Reviews and Miscellaneous

- 2011 Review of Handbook of Landscape Archaeology, by B. David and J. Thomas. Australian Archaeology 72:60-61.
- 2010 Review of The Impossible Land: Story and Place in California's Imperial Valley. Time and Mind 3:107-110.
- 2009 Comment on Howey and O'Shea. American Antiquity 74:183-8.
- 2007 Guest Editor, SAA Archaeological Record 7(2).
- 2007 Indigenous Knowledge and 21st Century Archaeological Practice: An Introduction. *SAA Archaeological Record* 7(2):6-8.
- 2006 Is There A Shamanism and Rock Art Debate? Before Farming 4(7):1-7.
- 2006 US Rock Art in the 21st Century: Problems and Prospects. *Conservation* 26(3):16-19.
- 2006 UNESCO International Conference on Rock Art. *International Newsletter on Rock Art* (INORA) 43:26-27.
- 2005 Putting the Art Back in Rock Art. Review feature on Aesthetics and Rock Art, ed. T Heyd and J. Clegg. Before Farming 3(4):1-12.
- 2005 Terrestrial 3D Laser Scanner: A New Method for Recording Rock Art, by T. Waslewicz, D. Staley, H. Volcker and D. Whitley, *International Newsletter On Rock Art* (INORA) 41: 16-25.

- Aboriginal (pre)History, in Black and White (Review article on Landscapes, Rock Art and the Dreaming: An archaeology of preunderstanding, by B. David). *Cambridge Archaeological Journal* 14:152-6.
- 2004 Comments on Kehoe's Attacks on Research About Shamanism, by J. Keyser and DS Whitley. *International Newsletter on Rock Art* (INORA) 38:17-24.
- 2004 Review of the Archaeology of Cult and Religion, by P.F. Biehl and F. Bertemes. *American Antiquity* 69:174-175.
- 2003 Minding the Past (Review article on The Mind in the Cave: Consciousness and the Origins of Art, by J.D. Lewis-Williams). *Cambridge Archaeological Journal* 13:271-273.
- 2002 Reply to Huyge and Watchman, with J.M Simon. *International Newsletter on Rock Art (INORA)* 34:12-21.
- 2002 Foreword, pp. *vii-ix*, In David Lewis-Williams, A Cosmos In Stone: InterpretingReligion And Society Through Rock Art. Walnut Creek, AltaMira Press.
- 2002 Invited comment on "Shamanism and Cognitive Evolution," by M. Winkelman, *Cambridge Archaeological Journal* 12:87-88.
- 2002 Recent AMS Radiocarbon Rock Engraving Dates, with J.M. Simon. *International Newsletter on Rock Art (INORA)* 32:10-16.
- 2001 Photographing Rock Art. American Archaeology Magazine 5(1):26.
- 2000 Ce n'etait pas la le langage des être humains. Notre Histoire 179:52.
- 2000 Caches of Power: The Shamanic Origins of California Rock Art. *Shaman's Drum* 56:16-29.
- 2000 A New Ethnographic Reference for Columbia Plateau Rock Art: Documenting a Century of Vision Quest Practices. *International Newsletter of Rock Art*, with J. Keyser 25:14-20.
- 2000 Invited comment on "Ghost Dancing the Grand Canyon", by R. Stoffle et al. *Current Anthropology* 41:31.
- 2000 Response to Quinlan. *Journal of California and Great Basin Anthropology* 22:108-129.
- 1999 Heart and soul (Review article on Instinct and Revelation: Reflections on the Origins of Numinous Perception, by A.Y. Oubré. *Cambridge Archaeological*

- Journal 9:142-144.
- 1998 Review of L'Art des Origines Au Yemen, by M Garcia & M Rachad. *La Pintura* 25(1):10-11.
- 1998 Shamanism, Rock Art and Landscape Symbolism in Native California. *3rdStone* 31:17-18.
- 1998 The Bighorn Sheep and the Petroglyphs of Black Mountain. Fieldguide, San Bernardino County Museum, 1998 Mojave Desert Quarternary Research Symposium.
- 1998 Review of L'Art des Cavernes en Pays Basque: Les Grottes D'Ekain et D'Altxerri, by Jesus Altuna. *La Pintura* 24(4):10.
- 1998 Remembering Clem Meighan. Society for California Archaeology Newsletter 32(1):21-22.
- Reading the Minds of Rock Artists. American Archaeology 1(3):19-23 (reprinted in *Exploring the Past: Readings in Archaeology*, edited by J. Bayman and M. Stark, Carolina Academic Press, 2000; and *Faces of Anthropology: A Reader for the 21st Century*, edited by K. Rafferty and D.W. Ukaegbu, Pearson Publishing, 2002).
- 1997 Rock Art in the U.S.: The State of the States. International Newsletter on Rock Art (INORA) 16:21-27.
- 1997 Native American Rock Art at Fort Irwin. Natural and Cultural Resources Series, No.1. Fort Irwin NTC: Directorate of Public Works.
- Invited comment on "Entering Alternative Realities: Cognition, Art and Architecture in Irish Passage-Tombs," by J Dronfield. *Cambridge Archaeological Journal* 6(2):49-51.
- 1994 Invited comment on "Australia's Ancient Warriors" by PSC Taçon and C Chippindale. *Cambridge Archaeological Journal* 4(2):237-238.
- Review of Representations in Archaeology, by J-C Gardin and CS Peebles. *American Antiquity* 59:375-376.
- The Raw and the Half-Baked: Structuralism and Archaeological Interpretation (review article of Material Culture and Text: The Art of Ambiguity, by C Tilley). *Cambridge Archaeological Journal* 3:118-121.
- 1992 Rock Art in California, USA. International Newsletter on Rock Art, No. 2:27-31.
- 1991-2006 Numerous contributions of professional news items to the International

- Newsletter on Rock Art (INORA).
- 1989 Review of Visions of the Sky, ed. R Schiffman. *Journal of California and Great Basin Anthropology* 11:121-124.
- 1988 Invited comment on "The signs of all times" by JD Lewis-Williams and TA Dowson. *Current Anthropology* 29:238.
- 1987 Invited comment. Rock Art Research 4(2):158-159.
- 1986 Archaeological Investigations at the Coso Junction Ranch Site, by DS Whitley and G Gumerman IV, *Backdirt* 1(1):4-6.
- 1985 Review of California Archaeology, by JL and KK Chartkoff. *Masterkey* 59(2):52.
- 1983 Review of Rock Art of the Spanish Levant, by A Beltran. UCLA Insitute of Archaeology *Bibliographical Leaflet Series* No. 30.
- 1982 Review of Hunters of the Northern Forest, by RK Nelson. UCLA Insitute of Archaeology *Bibliographical Leaflet Series* No. 20.
- 1977 Review of Soil Science and Archaeology, by Susan Limprey. UCLA Institute of Archaeology. *Bibliographical Leaflet Series*, No. 17.

Papers Presented at Professional Meetings

- Matters of Fact and Matters of Fiction: Ethnography, Epistemology and Ontology in the Interpretation of Rock Art. Society for American Archaeology, Sacramento.
- 2011 California: A Land of Vision, with T.K. Whitley. Society for American Archaeology, Sacramento.
- 2010 Early Rock Art in Far Western North America, with RI Dorn. Arte Pleistocenico del Mundo, Congreso IFRAO 2010, Foix, France.
- 2010 Paleodemography and Climate Change on the Carrizo Plain National Monument, California. BLM National Landscape Conservation Service, Decade of Discovery, Albuquerque.
- 2010 Add Madness and Stir? Cognitive and Emotional Difference and the Origins of Human Behavioral Modernity, with CMT Whitley. Society for American Archaeology, St. Louis.
- 2010 The Coso Petroglyph Chronology. Society for California Archaeology, Riverside.

- 2009 Sense and Essence in Native California Iconography. Society for American Archaeology, Atlanta.
- 2009 The Coso Connection. Wyoming Archaeological Society meetings, Cody, WY.
- Archaic Rock Art and the Mid-Holocene Climatic Optimum in the Far West. Society for American Archaeology meetings, Austin.
- 2006 Liminal States and Liminal Archaeology: Science, CRM and Sacred Sites in the U.S., Chacmool Conference, Calgary.
- 2006 Culture and Continuity in the Numic Realm. Great Basin Anthropological Conference, Las Vegas.
- 2006 Rock Art Conservation and Management in Guatemala: The Case of Naj Tunich. Society for American Archaeology meetings, San Juan.
- 2005 Antiquity of North American Shamanism. Society for American Archaeology meetings, Salt Lake City.
- 2004 Origins of New and Old World Shamanism. American Anthropological Association, Atlanta.
- 2004 Cognition, emotion and belief: first steps towards an archaeology of religion. Society for American Archaeology, Montreal.
- The Carrizo Collapse: Art and Politics in the Past. w/ J. Simon and J. Loubser. Society for California Archaeology, Riverside.
- 2003 La etnografía y el arte rupestre mundial. IV Colloquio Guatemalteco de Arte Rupestre, Museo Popul Vuh, Guatemala.
- 2003 Ethnographic interpretation and scientific method, Society for American Anthropology, Milwaukee.
- 2002 Landscape symbolism and Modoc Plateau rock art, Society for American Anthropology, Denver.
- 2001 Metaphoric representation in shamanistic rock art: a discussion from the Mojave Desert, Millennium Conference on the Mojave Desert, Barstow.
- Archaic (Gypsum Period) pictographs at Newberry Cave. (w/ J.M. Simon and R. Kaldenberg). Millennium Conference on the Mojave Desert, Barstow.

- 2000 Art Beyond Belief: Culture Change, Cognitive Neurosciences and Shamanism in the Far West. Society for American Anthropology, Philadelphia.
- 2000 Ethnography and Archaeology in South-Central California. Society for Applied Anthropology, San Francisco.
- 1999 Cognitive Theory, Traditional Thought Systems and Rock Art Interpretation. International Rock Art Conference, Ripon.
- 1999 Use and Abuse of Oral Traditions in the American Far West. International Rock Art Conference, Ripon.
- 1999 Issues in the Commodification of the Past. Society for American Archaeology, Chicago.
- 1998 The vision quest in the far west. Plains Anthropological Conference, Bismark, ND.
- 1998 Interpretive Theory in U.S. Rock Art Research: Science and the Concept of the Sacred. Alta Conference on Rock Art II, University of Trømso, Alta, Norway.
- 1998 Varieties of Ritual Landscapes in Western North America. Alta Conference on Rock Art II, University of Trømso, Alta, Norway.
- 1998 The vision quest in the Coso Range, w/ RI Dorn. American Rock Art Research Association, Ridgecrest.
- 1998 Sally's Rockshelter and the Archaeology of the Mojave Desert Vision Quest, w/ RI Dorn & J Simon. Society for California Archaeology, San Diego.
- 1998 The Excluded Past and the Divided Present in the Far West. Society for American Archaeology, Seattle.
- 1997 Explanatory Bridges, Epistemological Divides: Cognition, Rock Art and Archaeological Method and Theory. Society for American Archaeology, Nashville.
- 1996 Numic Bands and Headmen Revisited. Great Basin Anthropological Conference, Lake Tahoe.
- 1996 Landscape, Gender and Sacred Places in the Far West; Society for American Archaeology, New Orleans.
- 1996 Foreign Materials Analysis of Petroglyphs, with RI Dorn; Society for American Archaeology, New Orleans.
- 1995 The Vision Quest in Southern California; Eleventh Annual California Indian

- Conference, UCLA.
- 1995 Art, Ideology and Gender: A Great Basin Case Study; Durango Conference on Southwest Archaeology, Ft. Lewis College.
- 1995 Art, Myth and Ritual in the Far West; Society for American Archaeology, Minneapolis.
- 1995 The Long and the Short of It: California Archaeology, Varnish Dating and the Peoplingof the Americas, with RI Dorn and JM Simon; Society for California Archaeology, Eureka.
- 1994 Sacred Land, Mythic Country: Supernatural Landscape in Far Western North America; American Anthropological Association, Atlanta.
- 1994 Migrations and Metaphors; Arizona Archaeological Council, Phoenix.
- 1994 The Numic Spread Reconsidered, with J Francis and L Loendorf; Great Basin Anthropological Conference, Elko.
- 1994 Rock Art and the Origin of Great Basin Political Systems; Southwest Symposium, Tempe.
- 1994 Rock Art and the Peopling of the Americas, with RI Dorn; Southwest Symposium, Tempe.
- 1994 Re-Thinking the Clovis/Pre-Clovis Debate, with RI Dorn and J Simon; Society for California Archaeology, Ventura.
- 1994 Ethnohistory and South-Central California Rock Art; Society for California Archaeology, Ventura.
- 1994 The Origins of Numic Political Differentiation; Society for American Archaeology, Anaheim.
- Rock Art and the Pre-Clovis Colonization of the Americas, with RI Dorn and J Simon; Society for American Archaeology, Anaheim.
- 1994 Shamanism, Ethnohistory and South-Central California Rock Art; American Rock Art Research Association/International Rock Art Conference, Flagstaff.
- 1993 Dinwoody Rock Art in a Numic-Wide Perspective; with L Loendorf; First Rocky Mountain Archaeological Conference, Jackson.
- 1992 Ethnography and rock art in the far west; Society for American Archaeology,

Pittsburgh.

- 1992 Cation-ratio dating of rock engravings from Klipfontein, South Africa; Society of Africanist Archaeologists, Los Angeles.
- 1992 Clovis versus Pre-Clovis: Perspectives on the Peopling of the New World, with RI Dorn; International Geographical Union, Washington, D.C.
- 1992 The vision quest in the Great Basin; Great Basin Anthropological Conference, Boise.
- 1990 "To Have Died": Shamanism and rock art in far western North America; American Anthropological Association, New Orleans.
- 1990 Etiology and ideology in the Great Basin; Great Basin Anthropological Conference, Reno.
- 1990 Rock art conservation in southern Africa; Society of Africanist Archaeologists, Gainesville.
- 1988 Cation-ratio dating of petroglyphs with PIXE (Invited Address); Eighth International Conference on Ion Beam Analysis, International Union of Pure and Applied Physics, Johannesburg.
- 1988 Chiefs on the Coast: the Tiquisate region in ethnographic perspective, with M Beaudry; American Anthropological Association, Philadelphia.
- 1988 Bears and Baskets: aspects of aboriginal southern Sierra Nevada symbolism; Southern African Association of Archaeologists, Johannesburg.
- 1987 Ethnography of communication and rock art in the active voice; Society for American Archaeology, Toronto.
- 1987 Cation-ratio dating and rock art chronology in the western Great Basin, with RI Dorn; Society for American Archaeology, Toronto.
- 1987 The Late Prehistoric Period in the Coso Range and Environs, with G Gumerman, J Simon and T Rose; Society for California Archaeology, Fresno.
- 1986 Excavations at Sin Cabezas, Tiquisate, 1986, with M Beaudry; Society for American Archaeology, New Orleans.
- 1986 Archaeology and geomorphology at the Coso Junction Ranch Site, with J Simon; Great Basin Anthropological Conference, Las Vegas.

- 1985 Pre-Clovis evidence from the Coso Range; Society for California Archaeology, San Diego.
- 1985 Style, style areas and southern Sierra Nevada pictographs; Society for American Archaeology, Denver.
- 1984 Rock art chronology in the western Great Basin; Great Basin Anthropological Conference, Boise.
- 1984 Chronometric age-determination of surface artifacts from Lake Mohave, CA, with RI Dorn; Society for American Archaeology, Portland.
- 1983 Cation-ratio dating of petroglyphs from the Coso Range; Society for California Archaeology, San Diego.
- Notes on the etiological mythology of the Shoshone and the Coso petroglyphs; Great Basin Anthropological Conference, Reno.
- 1980 Shell beads to glass bangles: the evolution of a chiefdom in southern California; Society for Historical Archaeology, Albuquerque.

Invited Lectures & Conferences

- 2011 Rock Art International Working Group, Quebec, Canada.
- 2011 Rock Art Dating and the Peopling of the Americas. Pacific Coast Archaeological Society.
- The Origins of Creativity and Belief. Crow Canyon ArchAeological Center, Distinguished Lecture Series, Cortez, CO.
- 2010 Mojave Desert Petroglyph Chronology and the Peopling of the Americas. Tehachapi Historical Museum Society, Tehachapi, CA, 2010.
- 2009 Jay von Werlhof's Trail of Dreams. Keynote address, Symposium Honoring the Career of Archaeologist Jay von Werlhof. Imperial Valley College Museum, Ocotillo, CA.
- 2009 Cave Paintings and the Human Spirit. Keynote address, International Society for Shamanistic Research, Anchorage, AK.
- 2009 The Art of Immigration Into the Americas. First Harvard Australian Studies Symposium: People Colonizing New Worlds. Harvard University.
- 2009 Shamanism and the Origins of Artistic Creativity. The Dawn of Art: Recent Developments, Savannah College of Art and Design, Atlanta.

- 2007 The Long View of Old Art: Rock Art in the 22nd Century. Keynote Address, Set in Stone Bi-National Rock Art Management Workshop, Petroglyph National Monument, Albuquerque.
- New Perspectives on the Evolution of the Chumash Chiefdom, California State University, Los Angeles.
- Ways of Seeing and Ways of Knowing: Supernatural Agents and Native American Rock Art. SACRA III (South African Conference on Rock Art). Kimberley, South Africa.
- 2006 The Origins of Art and Belief: A Cognitive Sciences Perspective. ASU Deer Valley Rock Art Center, Phoenix.
- 2005 Rock Art in the US: Past, Present & Future. UNESCO International Conference on Rock Art, Musée National de Préhistoire, Les Eyzies, France.
- 2005 Coso Petroglyphs and the Origin of Art. Marin Museum of the American Indian.
- 2005 Tracing the Creation: Rock Art of the Lower Colorado River Region. Museum of Northern Arizona, Flagstaff.
- 2005 The Origins of Art and Belief. Museum of Northern Arizona, Flagstaff.
- Hawai'ian cupules and Numic vulva-forms: two case studies in gender and rock art. International Symposium on Gender and Rock Art: From cave art to contact. Foix, France.
- 2004 Issues in rock art and archaeoastronomy. VII Oxford Conference on Archaeoastronomy, Flagstaff.
- 2004 Ritual Intensification, Social Evolution & Climate Change: The Carrizo Collapse in the Far West, Arizona State University, Tempe.
- The Origin Of Art & Belief (Or What Charles Darwin Knew And We Ignored, And Why It Matters), Pomona College.
- 2003 Mesa Redondas: Arte rupestre de España y Francia: similitudes y diferencias; and Antropologia y arte rupestre, with Ramon Viñas. IV Colloquio Guatemalteco de Arte Rupestre, Museo Popul Vuh, Guatemala.
- 2002 Paleolithic Art and the Origins of Religion, Winthrop University, Rock Hill.

- 2002 Shamanism and California Rock Art, Winthrop University, Rock Hill.
- 2002 Shamanism and the Origin of Art, Oregon Archaeological Society, Portland.
- 2002 The Ethnography of World Rock Art, US Forest Service and the Oregon Archaeological Society, Portland.
- 2002 Backtracking to the Beginning: Chauvet Cave and the Origin of Art & Belief. Keynote address, Northwest Anthropological Conference meetings, Boise.
- 2001 Chauvet Cave and the Origins of Human Consciousness, Department of Anthropology, Northern Arizona University.
- 2001 Scientific Method and Rock Art Research. Department of Anthropology, Northern Arizona University.
- 2001 Chauvet Cave and the Origins of Art, El Camino College.
- 2001 Minding the Past: Shamanism and Far Western Rock Art. Written in Stone: Shamanism, Rock Art and the Origins of Art. Museum of the Rockies and the Bradshaw Foundation, Bozeman.
- 2000 Third DJ Sibley Family Conference on World Traditions of Culture and Art, University of Texas, Austin.
- 2000 Recent Advances in Paleolithic Rock Art Research, Dept of Anthropology, Texas A&M University.
- 2000 Shamanism and California Rock Art, El Camino College.
- 1999 Bighorn Sheep and North American Rock Art: Stormy Weather in Rock Art Interpretation. Plenary lecture, International Rock Art Conference, Ripon.
- 1999 Archaeology of Hunter-Gatherer Religion, Dept of Anthropology, Northern Arizona University.
- 1999 The Archaeology of Shamanism, Museum of Northern Arizona, 1999 Sedona Lecture Series.
- 1999 Rock Art of the Southern Sierra Nevada. Kern County Archaeological Society, Bakersfield.
- 1999 Dating the Coso Petroglyphs. Maturango Museum, Ridgecrest.
- 1998 L'art rupestre et le tourisme culturel en Amérique du Sud-Ouest: situations et

- perspectives. UNESCO Forum: Préservation du Patrimoine et dévelopement touristique. Perigueux, France
- 1997 Rock Art and Cultural Tourism. BLM PACKRAT meetings, Barstow.
- 1997 Native California and the Origins of Art. California Art Educators Association, Palm Springs.
- 1997 Prehistoric and Ethnographic Chumash Culture. California Indian Council Foundation, Thousand Oaks.
- 1997 Rock Art of Ft. Irwin and the Central Mojave Desert. Southern Nevada Rock Art Enthusiasts, Las Vegas.
- 1997 Shamanism and Great Basin Rock Art. Oregon Museum of Science and Industry, Young Scholars Program, Burns, OR.
- 1997 Native California Rock Art. California Indian Council Foundation, Thousand Oaks.
- 1997 The Origin of Shoshonean Bands. Anthropology Dept, San Diego State University.
- 1997 The Rock Art of Southern Africa. Dept of History, UCLA.
- 1996 The Vision Quest in South-Central California. Santa Barbara Museum of Natural History, Keynote Address, Archaeology Week, Santa Barbara.
- Shamans, Myths and Ritual Pilgrimages: Recent Research on Lower Colorado River Rock Art. Southern Nevada Rock Art Enthusiasts, Archaeology Week, Las Vegas.
- 1995 Pre-Clovis Peopling of the Americas and the Buck Wheeler Site, Nevada. Friends of Calico, 31st Annual Meeting.
- 1995 Shamanism and North American Rock Art. Oregon Museum of Science and Industry, Young Scholars Program, Fossil, OR.
- 1995 Rock Art: A Global Perspective. Kern County Archaeological Society, Keynote Address, Archaeology Week, California State University, Bakersfield.
- The Latest on the Oldest: Recent Research on the Peopling of the Americas. Archaeological Institute of America/Minnesota Archaeology Week, Minneapolis.
- 1995 Shamanism and Rock Art in Far Western North America. Oregon

- Archaeological Society, Portland.
- 1995 Neuropsychology and the Origins of Art. Dept. of Anthropology, Northern Arizona University, Flagstaff.
- 1995 With a Place in Mind: The Geography of Rock Art and the Invention of the Cultural Landscape. Dept. of Geography, Arizona State University, Tempe.
- Altered States of Consciousness, Neuropsychological Models and Shamanistic Iconography. Dept. of Art History, University of Texas, Austin.
- 1994 Art, Gender and Subsistence Change in the Coso Range. Dept. of Anthropology, California State University, San Bernardino
- 1994 The Latest on the Oldest: Pre-Clovis Rock Art in California. Friends of Calico, Thirtieth Annual Meeting.
- 1994 Recent Advances in Coso Range Petroglyph Research. Maturango Museum, Ridgecrest.
- 1994 Ethnography and Rock Art. University of Arizona, Rock Art field class, La Junta, CO.
- 1994 Ethnography and Great Basin Rock Art. USFS PIT Program, Bend, OR.
- 1993 Shamanism and Natural Modeling in Far Western North America. Second DJ Sibley Family Conference on World Traditions of Culture and Art: Cosmology and Natural Modeling Among Aboriginal American Peoples. University of Texas, Austin.
- 1993 Rain Shamanism in the Coso Range. Trinity University/Witte Museum, San Antonio.
- 1993 Recent developments in African rock art research. Dept. of History, UCLA.
- 1993 Cognitive Archaeology in the Coso Range. Dept. of Anthropology, Occidental College, Los Angeles.
- 1993 New Perspectives on the First Peopling of the Americas. Friends of Calico, 29th Annual Meeting.
- 1992 Clovis versus Pre-Clovis in the Quincentenary year. Archaeological Society, UCLA.
- 1991 The Early Horizon/Intermediate Period Transition. Antelope Valley Archaeological Society.

- 1990 Archaeology and ideology in the southern Sierra Nevada. Dept. ofAnthropology, UC Santa Cruz.
- 1989 Peopling of the New World; Southern African Archaeological Society, Johannesburg.
- 1989 New light on old art: recent advances in dating African rock art; UCLA Friends of Archaeology.
- 1988 Shamanism and Rock Art in North America. University of the Witwatersrand, Johannesburg.
- 1988 Prehistory of Mesoamerica. Johannesburg College.
- 1987 Sitio Sin Cabezas y cultura de la Costa Sur; Asociation Tikal, Guatemala.
- 1987 Recent advances in Mesoamerican archaeology. Southern African Archaeological Society.
- 1986 Recent advances in rock art research. Eastern Sierra Museum, Annual Meeting.
- 1986 Recent advances in Coso Range petroglyph studies. Antelope Valley Archaeological Society.
- 1986 Excavations at Tiquisate, Guatemala. UCLA Institute of Archaeology.
- 1986 Hidratacion de obsidiana: un metodo chronometrico. Universidad de San Carlos, Guatemala.
- 1985 Site types and site-environment relationships in inland Ventura County. Dept. Anthropology, UC Davis.
- 1985 Cation-ratio dating and the peopling of the New World. Friends of Calico, Annual Meeting.
- 1983 Prehistory of the Coso Range. UCLA Institute of Archaeology.
- 1983 Rock art of California. American Association of University Women, Westchester.
- 1982 Rock Art of the Coso Range. Maturango Museum.

Teaching Experience:

North American Prehistory North American Ethnography Eastern Mesoamerica (Maya sphere) Western Mesoamerica (Aztec sphere) California Prehistory California Ethnography Archaeological Field Training World Rock Art

1989-2005	Instructor, Division of Social Sciences and Humanities, University of California, Los Angeles Extension
1987-9 1983-1987	Post-doctoral Fellow, University of the Witwatersrand, South Africa Chief Archaeologist/ Lecturer, University of California, Los Angeles

Professional & Public Service

- 2011 Organizer and presenter, workshop on Rock Art Site Management, Society for American Archaeology, Sacramento.
- 2011 Organizer and presenter, workshop on Cultural Resources for Planners and Attorneys, Association for Environmental Professionals, Monterey.
- 2010 Lunch talk on CRM archaeology, Rotary Club, Tehachapi.
- 2009 Panelist/discussant, Mythos-1: The Shaping of Our Mythic Tradition. Joseph Campbell Foundation, Interfaith center at the Presidio, San Francisco.
- 2009 Panelist, Site Preservation and Protection: Problems and Solutions; Society for California Archaeology meetings. Modesto.
- 2008 Discussant, symposium on Circumpolar Rock Art Research, Society for American Archaeology meetings, Vancouver.
- 2007 Chair, symposium on 'The Sacred & the Secular: Recent Rock Art Research;'
 Discussant for 'Structuring Rock Art "Site" Studies; 'Ethics Bowl judge, Society for American Archaeology meetings, Austin.
- 2004-6 Media coordinator, web-master and photographer, California High School Rodeo Association, District 6.
- 2006 Career Day lecturer, La Reina High School, Thousand Oaks.
- Organizer and Chair, symposium on Archaeologies of New World Shamanism, Society for American Archaeology meetings, Salt Lake City.
- 2005 Organizer, chair and instructor, Rock Art Site Management Workshop, Society

- for American Archaeology meetings, Salt Lake City.
- 2004 Public lecture, the Origins of Art, Hollenbeck Home, Los Angeles.
- 2004 Organizer and chair, symposium on the Prehistory of New World Shamanism (AAA Executive Committee Invited Session), American Anthropological Association meetings, Atlanta.
- 2004 Organizer, symposium on Faith in the Past: Theorizing and Archaeology of Religion, Society for American Archaeology meetings, Montreal (Finalist for First SAA-Amerind Foundation Symposium Award).
- 2004 Discussant, symposium in honor of Joan Vastokas, Society for American Archaeology meetings, Montreal.
- 2002 Discussant, symposium on Anthropological Approaches to Rock Art Research, American Anthropological Association meetings, New Orleans.
- 2001 Intensive Coso Range rock art study workshop, Maturango Museum.
- 2001 Educational fieldtrip to Black Mountain petroglyph sites, California Indian Council Foundation.
- 2001 Career Day lecturer, La Reina High School, Thousand Oaks.
- 2001 Public lecture, "Chauvet Cave and the Origin of Art and Belief," Stagecoach Museum, Thousand Oaks.
- 2001,2,4 Science Fair judge, La Reina High School, Thousand Oaks.
- 1999 Public lecture, "Shamanic symbolism in California rock art," Friends of Ethnic Arts, Santa Barbara.
- Rock art site management workshop, Consejo de Arqueologia, Instituto de Cultura Puertoriqueña and El Yunque National Forest, Puerto Rico.
- 1999 Intensive Coso Range rock art study workshop, Maturango Museum.
- 1999 Classroom lecture, "Early man", Fillmore Middle School.
- 1999 Organizer and chair, "Theory in Rock Art Research", International Rock Art Conference, Ripon.
- 1999 Organizer, "Archaeology and Cultural Tourism: Practice, Theory and Prospect", Society for American Archaeology meetings, Chicago.

- 1998 Scientific Advisor, "The Dawn of the Human Spirit" museum exhibit, Koln Museum (Germany), Naturalis Museum (Brussels), Museum of Natural History (Denmark).
- 1999 Public lecture, "Rock art and the origins of belief". Adventurers' Club, Los Angeles.
- 1999 Public lecture, "Chelonians and Native Californians", California Turtle and Tortoise Club.
- 1998 Chair, President's Symposium: "Recent Research in the Coso Range". American Rock Art Research Association meetings, Ridgecrest, CA.
- 1998 Organizer and chair, "The Excluded Past in Archaeological History: Histories of American Rock Art Research", Society for American Archaeology meetings, Seattle.
- 1998 Classroom lecture, California gold mining history, St. Sebastian School.
- 1997-8 Grant Writer, St. Sebastian School. (Recipient of grants for classroom microscope purchases from Hansen Agricultural Trust and Amgen Foundation)
- 1997 Classroom lecture, "Indians of California", St. Sebastian School.
- 1997 Classroom lecture, "Introduction to Archaeology", Fillmore Middle School.
- 1997 Facilitator and committee member, Rocky Hill Advisory Committee, The Archaeological Conservancy.
- 1997 Organizer and Instructor, Workshop on rock art recording and analysis, BLM, California State Office.
- 1997 Organizer and chair, "The State of the Art: A Critical Appraisal of American Rock Art Studies", Society for American Archaeology meetings, Nashville.
- 1996 Co-organizer and chair (with D. Myers and R. Clemmer), "Re-Reading Julian Steward: History, Theory and Subsistence in Great Basin Research", Fiftieth Biennual Great Basin Conference, Lake Tahoe.
- Organizer, "In Steward's Shadow: Iconography, Neuropsychology, Landscape and Gender in Rock Art", Society for American Archaeology meetings, New Orleans.
- 1997 Public lecture, Rock Art at Fort Irwin, 11th Armored Cavalry, Fort Irwin NTC.

- 1995-7 Classroom lecture, Chumash Indians, St. Sebastian School, Santa Paula.
- Organizer and co-chair (with L Loendorf and J Keyser), "Time, Culture and Art I: Small Scale Societies"; and "Time, Culture and Art II: Large Scale Societies and Culture Contact and Change", Society for American Archaeology meetings, Minneapolis.
- Public lecture, Recent Discoveries in Upper Paleolithic Rock Art, Optimist Club, Thousand Oaks.
- 1995 Lecture for park docents, Rock Art of eastern California; Tomokhani State Park, Tehachapi.
- 1994-6 Adult advisor, Fillmore-Piru 4H turtle and tortoise project.
- 1994 Co-organizer (with the Getty Conservation Institute), Rock Art Site Management Workshop, Society for American Archaeology meetings, Anaheim.
- 1994 Organizer and co-chair (with L Loendorf), "Rock Art: Implications for Culture Process and Culture History", Society for American Archaeology meetings, Anaheim.
- 1994 Classroom lecture, St. Sebastian School Honors Program, Gold mining and gold mining history in southern California, Santa Paula.
- 1993 Participant, National Park Service, Petroglyph National Monument planning symposium, Albuquerque
- 1993 Classroom lecture, "Mesoamerican archaeology", Crestview School, Simi Valley.
- 1992 Organizer, Society of Africanist Archaeologists meetings, fieldtrip, Los Angeles.
- 1992 Co-organizer and co-chair (with Lawrence Loendorf), "New Light on Old Art: Advances in Hunter-gatherer rock art studies"; Society for American Archaeology meetings, Pittsburgh.
- 1992 Maturango Museum of the Indian Wells Valley, Exhibit Consultant, "From Rock Art to Rockets".
- 1992 Classroom lecture, Peopling of the Americas, Our Lady of Lourdes School, Tujunga.
- 1987 Co-organizer and co-chair (with C Chippindale), "Beyond Counts, Catalogs and Chronologies: New Directions in Rock Art Research"; Society for American

- Archaeology meetings, Toronto.
- Organizer and instructor, lab course in obsidian hydration dating for the Instituto de Antropologia e Historia, Guatemala, and the Instituto de Antropologia e Historia, Honduras, IDEAH, Guatemala City.
- 1986 Chair, "Recent research in the Coso Range"; Great Basin Anthropological Conference, Los Vegas.
- 1985 Classroom lecture, Introduction to Archaeology, St. Matthews School, Santa Monica.

Film & Recording Credits

- Archaeological consultant, "A Light in the Darkness" feature film, Bearsmouth Productions.
- 1998 Executive producer, Giant Records artist Chris Ward, "Angels Fly" CD.
- 1997-8 Archaeological consultant, "Visions on Stone" video, Maturango Museum.
- 1992 Executive producer, Giant Records artist Chris Ward, "Faith 'Aint Faith" CD.
- 1991-2 Anthropological consultant, "Blackfeather/Mystic" TV pilot, Hearst Entertainment/CBS.
- 1986 Senior script writer, "Invitation to Adventure", Institute of Archaeology, UCLA.
- 1986 Archaeological consultant, "Vibes" Columbia Pictures feature film.
- 1982 Script writer, "Rock Art Treasures of Ancient America", Dave Caldwell Productions.
- 1982 Script consultant, "Rock Art from the Mountains of Fire", RUJAC Productions.

Photo Awards & Credits

Awards: Director's Award; 2nd Place, Action Photography; 3rd Place, Photo Journalism, Ventura County Fair, 2006.

Photo spreads: California High School Rodeo Magazine (various issues, 2005-6).

American Archaeology Magazine 1(3), Fall 1997, pp. 19-23.

Discover Magazine 19(6), June 1998, pp. 52-58.

Discovering Archaeology Magazine 2(4), September 2000, pp.18-21.

Shaman's Drum Magazine 56, Fall 2000, pp.16-29.

American Archaeology Magazine, 5(1), Spring 2001, pp. 26-27.

Cover photos: Mind in Many Places_(Ralph Allison, 1999).

Prehistoric Art: The Symbolic Journey of Humankind (Randall White, 2003).

Professional Manuscript Reviews

Antiquity

Journal of Anthropological Archaeology

Journal of Archaeological Science

Nuclear Instruments and Methods in Physics Research

Journal of California and Great Basin Anthropology

Cambridge Archaeological Journal Canadian Journal of Archaeology

South African Humanities

Southern African Archaeological Bulletin

Before Farming

Journal of Archaeological Method & Theory

Journal of California Archaeology

Reviews in Anthropology

University of New Mexico Press

Cambridge University Press

University of Utah Press

Stanford University Press

Sage Publications

Routledge Press

Research Proposal Reviews

John Simon Guggenheim Foundation National Endowment for the Humanities

National Geographic Society

Schools of the Pacific Foundation

LSB Leakey Foundation

Association for Field Archaeology

Lawrence Livermore Laboratory - University of California Program

National Park Service, National Center for Preservation Technology & Training

South African National Research Foundation

McDonald Institute for Archaeological Research, Cambridge University, England Dumbarton Oaks

American Antiquity Geographical Analysis Studies in Conservation

Chungara

Plains Anthropologist

Ancient Mesoamerica

Journal of Social Archaeology

Expedition Magazine

Time & Mind

Current Anthropology

The Kiva

Australian Archaeology

MIT Press

Texas A&M University Press

Smithsonian Institution Press

AltaMira Press

Rowman & Littlefield

Left Coast Press

University of Arizona Press

EXHIBIT B

PAYMENT ARRANGEMENTS

- A. For CONTRACTOR services to be rendered under this contract, CONTRACTOR shall be paid on a time and material basis. Total contract amount, including cost reimbursements, shall not exceed \$228,310.00. An additional 20 percent contingency up to \$45,660.00 may be authorized by the Director of Planning and Development for additional work not included in the original scope of work.
- B. Payment for services and 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.
- C. CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury each month for the service performed in accomplishing each milestone. These invoices or certified claims must cite the assigned Board Contract Number and shall provide a detailed itemization of costs in relation to services performed. COUNTY DESIGNATED REPRESENTATIVE shall evaluate the quality of the service performed and/or item(s) delivered and if found to be satisfactory shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of presentation, provided that COUNTY shall withhold 15 percent of the amount of each invoice pending completion of the milestone for which the invoice applies. COUNTY shall pay any such withheld amounts within 30 days following satisfactory and timely completion of the milestone. CONTRACTOR shall not commence work unless and until COUNTY issues a Notice to Proceed.

Maximum Amount Chargeable of Total Contract Amount	Milestone Description	
\$126,930	1.	Prepare Administrative Draft EIR (Task 1)
\$12,640	2.	Prepare Public Draft EIR and Technical Appendices (Task 2)
\$17,480	3.	Prepare Administrative Final EIR/Responses to Comments (Task 3)
\$6,260	4.	Prepare Final EIR (Task 4)
\$36,300	5.	Project Management, Meetings and Hearing Attendance
\$15,000	6.	Traffic and Cultural Resources Subconsultants
\$13,700	7.	Expense Allowance and Printing

D. 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

STANDARD INDEMNIFICATION AND INSURANCE PROVISIONS

INDEMNIFICATION

Indemnification pertaining to other than Professional Services:

CONTRACTOR shall defend, indemnify and save harmless the COUNTY, its officers, agents and employees from any and all claims, demands, damages, costs, expenses (including attorney's fees), judgments or liabilities arising out of this Agreement or occasioned by the performance or attempted performance of the provisions hereof; including, but not limited to, any act or omission to act on the part of the CONTRACTOR or his agents or employees or other independent contractors directly responsible to him; except those claims, demands, damages, costs, expenses (including attorney's fees), judgments or liabilities resulting from the sole negligence or willful misconduct of the COUNTY.

CONTRACTOR shall notify the COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement.

Indemnification pertaining to Professional Services:

CONTRACTOR shall indemnify and save harmless the COUNTY, its officers, agents and employees from any and all claims, demands, damages, costs, expenses (including attorney's fees), judgments or liabilities arising out of the negligent performance or attempted performance of the provisions hereof; including any willful or negligent act or omission to act on the part of the CONTRACTOR or his agents or employees or other independent contractors directly responsible to him to the fullest extent allowable by law.

CONTRACTOR shall notify the COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement.

Without limiting the CONTRACTOR'S indemnification of the COUNTY, CONTRACTOR shall procure the following required insurance coverages at its sole cost and expense. All insurance coverage is to be placed with insurers which (1) have a Best's rating of no less than A: VII, and (2) are admitted insurance companies in the State of California. All other insurers require the prior approval of the COUNTY. Such insurance coverage shall be maintained during the term of this Agreement. Failure to comply with the insurance requirements shall place CONTRACTOR in default. Upon request by the COUNTY, CONTRACTOR shall provide a certified copy of any insurance policy to the COUNTY within ten (10) working days.

- 1. Workers' Compensation Insurance: Statutory Workers' Compensation and Employers Liability Insurance shall cover all CONTRACTOR's staff while performing any work incidental to the performance of this Agreement. The policy shall provide that no cancellation, or expiration or reduction of coverage shall be effective or occur until at least thirty (30) days after receipt of such notice by the COUNTY. In the event CONTRACTOR is self-insured, it shall furnish a copy of Certificate of Consent to Self-Insure issued by the Department of Industrial Relations for the State of California. This provision does not apply if CONTRACTOR has no employees as defined in Labor Code Section 3350 et seq. during the entire period of this Agreement and CONTRACTOR submits a written statement to the COUNTY stating that fact.
- 2. <u>General and Automobile Liability Insurance</u>: The general liability insurance shall include bodily injury, property damage and personal injury liability coverage, shall afford coverage for all premises, operations, products and completed operations of CONTRACTOR and shall include contractual liability coverage

sufficiently broad so as to include the insurable liability assumed by the CONTRACTOR in the indemnity and hold harmless provisions of the Indemnification Section of this Agreement between COUNTY and CONTRACTOR. The automobile liability insurance shall cover all owned, non-owned and hired motor vehicles that are operated on behalf of CONTRACTOR pursuant to CONTRACTOR's activities hereunder. CONTRACTORS shall require all subcontractors to be included under its policies or furnish separate certificates and endorsements to meet the standards of these provisions by each subcontractor. COUNTY, its officers, agents, and employees shall be Additional Insured status on any policy. A cross liability clause, or equivalent wording, stating that coverage will apply separately to each named or additional insured as if separate policies had been issued to each shall be included in the policies. A copy of the endorsement evidencing that the policy has been changed to reflect the Additional Insured status must be attached to the certificate of insurance. The limit of liability of said policy or policies for general and automobile liability insurance shall not be less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Any deductible or Self-Insured Retention (SIR) over \$10,000 requires approval by the COUNTY.

Said policy or policies shall include a severability of interest or cross liability clause or equivalent wording. Said policy or policies shall contain a provision of the following form:

"Such insurance as is afforded by this policy shall be primary and non-contributory to the full limits stated in the declarations, and if the COUNTY has other valid and collectible insurance for a loss covered by this policy, that other insurance shall be excess only."

If the policy providing liability coverage is on a 'claims-made' form, the CONTRACTOR is required to maintain such coverage for a minimum of three years following completion of the performance or attempted performance of the provisions of this agreement. Said policy or policies shall provide that the COUNTY shall be given thirty (30) days written notice prior to cancellation or expiration of the policy or reduction in coverage.

3. Professional Liability Insurance. Professional liability insurance shall include coverage for the activities of CONTRACTOR's professional staff with a combined single limit of not less than \$1,000,000 per occurrence or claim and \$2,000,000 in the aggregate. Said policy or policies shall provide that COUNTY shall be given thirty (30) days written notice prior to cancellation, expiration of the policy, or reduction in coverage. If the policy providing professional liability coverage is an on 'claims-made' form, the CONTRACTOR is required to maintain such coverage for a minimum of three (3) years (ten years [10] for Construction Defect Claims) following completion of the performance or attempted performance of the provisions of this agreement.

CONTRACTOR shall submit to the office of the designated COUNTY representative certificate(s) of insurance documenting the required insurance as specified above prior to this Agreement becoming effective. COUNTY shall maintain current certificate(s) of insurance at all times in the office of the designated County representative as a condition precedent to any payment under this Agreement. Approval of insurance by COUNTY or acceptance of the certificate of insurance by COUNTY shall not relieve or decrease the extent to which the CONTRACTOR may be held responsible for payment of damages resulting from CONTRACTOR'S services of operation pursuant to the contract, nor shall it be deemed a waiver of COUNTY'S rights to insurance coverage hereunder.

In the event the CONTRACTOR is not able to comply with the COUNTY'S insurance requirements, COUNTY may, at their sole discretion and at the CONTRACTOR'S expense, provide compliant coverage.

The above insurance requirements are subject to periodic review by the COUNTY. The COUNTY's Risk Manager is authorized to change the above insurance requirements, with the concurrence of County Counsel, to include additional types of insurance coverage or higher coverage limits, provided that such change is reasonable based on changed risk of loss or in light of past claims against the COUNTY or inflation. This option may be

exercised during any amendment of this Agreement that results in an increase in the nature of COUNTY's risk and such change of provisions will be in effect for the term of the amended Agreement. Such change pertaining to types of insurance coverage or higher coverage limits must be made by written amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of acceptance of the amendment or modification.