

## DOCKETED

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**Appendix 5.3D**  
**Cultural Resources Resumes**

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# **Gloriella Cardenas, M.A., RPA**

Cultural Resources Specialist

**CH2M HILL Santa Ana, California**

## **Education**

M.A., Anthropology, California State University, Fullerton, 2005

B.A., Anthropology, California State University, Los Angeles, 1999

## **Professional Registrations**

Register of Professional Archaeologists (2005, No. 15777)

Riverside County Cultural Register (2007, No. 158)

## **Distinguishing Qualifications**

Meets Secretary of Interior Professional Qualification Standards (36CFR61)

California BLM Cultural Use Permit (CA-10-31)

## **Relevant Experience**

Ms. Cardenas has participated in California archaeology since 1998. She completed her Masters degree in Anthropology at California State University, Fullerton with an archaeological thesis dealing with Southern California prehistoric architecture and the use of household space. Ms. Cardenas has 7 years of experience in cultural resource management, Phase I, II and III investigations, supervision and directing field crew, laboratory processes, curation, artifact analysis, research, and report writing. Projects have been conducted throughout the American Southwest and have involved renewable energies, gas and electric, private developers and military installations in cooperation with agencies such as BLM, California Energy Commission, US Army Corps of Engineers, Native American Tribes, SHPO, and the US Department of Defence. Archaeological investigations for renewable energies have focused in Florida, Georgia, Oklahoma, Texas, New Mexico, Nevada, Arizona, Colorado, and California. Investigations have been conducted in support of state and federal legislature such as Section 106 and 110 of the NHPA, CEQA, and NEPA. Ms. Cardenas meets the Secretary of the Interior's Standards for Qualifications for Archaeologists.

## **Professional Positions Held**

Cultural Resources Specialist, 2008- Present

Project Archaeologist, 2006-2008

Crew Chief, 2005-2006

Research Assistant, 2004-2005

## **Project Experience**

AES-Southland System Repowering Application for Certification. Cultural Lead for three projects, Huntington Beach Generating Station, Redondo Beach Generating Station and Alamitos Generating Station. Lead was responsible for archaeological assessment, pedestrian

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survey, and report of findings in support of CEQA, PRC Chapter 2.6, Section 21083.2 and 21084.1, and the California Code of Regulations (CCR) Title 14, Chapter 3, Article 5, Section 15064.5, and author for cultural documents for the Application for Certification with the California Energy Commission.

National Aeronautics and Space Administration (NASA), Santa Susana Field Laboratory, Areas I and II, Ventura County, California. Cultural Lead responsible for survey, assessments, the Cultural Section of the Environmental Impact Statement in support of NEPA, and the Archaeological Resource Management Report.

Federal Emergency Management Agency for the City of Moreno Valley, San Timoteo Foothill Neighborhood Flood Protection Project. Cultural Lead of an archaeological investigation and consultation in support of Section 106.

Cal Energy Black Rock 5 and 6 Geothermal Project, Imperial County, California. Cultural Resources Lead responsible for archaeological assessment, pedestrian survey, cultural documents and report of findings in support of CEQA, PRC Chapter 2.6, Section 21083.2 and 21084.1, and the California Code of Regulations (CCR) Title 14, Chapter 3, Article 5, Section 15064.5, and the Application for Certification with the California Energy Commission.

Los Angeles World Airports, Los Angeles International Airport, California. Cultural Resources Lead responsible for the monitoring activities and personnel for the modernization activities of Taxilane S and Bradley West projects. Author of technical report.

First Wind, LLC, Painted Hills IV Project, Riverside County, California. Field Director responsible for a cultural resources survey of 400 acres in support of CEQA and the County of Riverside's General Plan, for a proposed wind turbine facility on private land. Responsibilities included being permitted with the County of Riverside, leading the intense pedestrian survey, data management and authoring the technical report.

Solar Reserve, LLC, Rice Solar Energy Project, Riverside County, California. Cultural Resources Specialist and primary author for the Cultural Resources Monitoring and Mitigation Plan.

TerraGen Power, LLC, Alta Infill II Wind Energy Project, Kern County, California. Field Director responsible for a Class III cultural resources survey of 810 acres for a proposed wind turbine facility and testing and evaluation of a prehistoric lithic site. Responsibilities included producing a cultural survey report and testing report. Work was conducted in April and June of 2011.

TerraGen Power, LLC, Morgan Hills Wind Energy Project, Kern County, California. Field Director responsible for a Class III cultural resources survey of 1,200 acres. This cultural resources inventory was conducted in compliance with the California Environmental Quality Act (CEQA) as part of an application to Kern County for a Conditional Use permit to construct and operate the Morgan Hills project. Work was done in April and May of 2011.

Contra Costa County Generating Station, LLC, Oakley Generating Station Project, Contra Costa County, California. Cultural Resources Specialist, Alternate and co-authored the Cultural Resources Monitoring and Mitigation Plan submitted to the California Energy Commission. Work was done in January 2011.

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TerraGen Power, LLC, Loma Verde Solar Energy Park, Riverside County, California. Field Director responsible for a Class III cultural resources survey of 1,000 acres for a proposed PV solar energy generation field. Property was comprised of both private and public lands, the latter is administered by the BLM. Work was conducted in December 2010.

NextEra Energy Resources, LLC, North Sky River Wind Project, Kern County, California. Cultural Resources Specialist involved in a Class III cultural resources survey on public lands administered by the BLM under Use Permit No. CA-10-31. Responsibilities for this project included, analysis of previous studies, systematic pedestrian survey, documentation of new discoveries, data management, and contributions to the technical report. Work was conducted between October and November 2010.

Mariposa Energy Project, Alameda County, California. Ms. Cardenas was the Cultural Resources Specialist, Alternate and co-authored the Cultural Resources Monitoring and Mitigation Plan submitted to the California Energy Commission. Work was done in January 2011.

New River Siphon Project for the All American Canal, Calexico, California. Ms Cardenas conducted a cultural resources archival literature search for historic and archaeological resources with the CHRIS center. Work entailed an analysis of findings, evaluation of a bridge for the NRHP listing and a "critical issues" report. Work was done in January 2011.

Turlock Irrigation District, Almond 2 Power Plant, Stanislaus County, California. Ms. Cardenas was the Cultural Resources Specialist, Alternate and co-authored the Cultural Resources Monitoring and Mitigation Plan submitted to the California Energy Commission. Work was done in January 2011.

Cedar Point Windfarm, Lincoln and Washington Counties, Colorado. A literature search was conducted with the Colorado Historical Society Office of Archaeology and Historic Preservation and the report of findings was written in December 2010.

SNG Suwannee Pipeline Project, Alabama, Georgia and Florida. Ms Cardenas conducted a cultural resources archival literature search for historic and archaeological resources with the cultural resources repositories in each state. Work entailed an analysis of findings and a "critical issues" report. Work was done in November 2010.

Ivanpah Solar Generating Station, San Bernardino County, CA. Ms. Cardenas participated in additional field studies of several locations around the Ivanpah SEGS project area, including pedestrian survey and site recordation in September 2008 and was the Alternate Cultural Resources Specialist and co-author for the Cultural Resources Monitoring and Mitigation Plan submitted to the California Energy Commission and BLM in November 2010.

Southern California Edison (SCE), Tehachapi Renewable Transmission Project (TRTP) - Segments 4-11 Compliance Monitoring. Environmental Scientist involved in photo documentation of transmission line to support post construction restoration. The TRTP includes construction of new and upgrade of 173 miles of transmission lines, construction of one new substation, major upgrade of one existing substation and upgrade of other ancillary facilities. Work was done from July to October 2010.

Southern California Edison (SCE), Devers Palo Verde No. 2 Transmission Line Project

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Environmental Scientist involved in environmental compliance support and development in mitigation plans in support of CPUC requirement. Ms. Cardenas's role on this project involved authoring plans to address CPUC traffic, construction specifications, and cultural resources in response to regulatory requirements, as well as contributions in research for biological restoration, Storm Water Pollution Prevention Plans, construction scheduling and agencies' responsibilities. Work was done from April to July 2010

Phase II Cultural Resources Evaluation of 30 Sites at Edwards, Air Force Base, California. FY09 and FY10 2009-L. Ms Cardenas was Principal Archaeologist and Director of Field and Laboratory, responsible for research design and evaluation of 30 sites consisting of historic refuse deposits, homesteads, and prehistoric camp and lithic deposits, in the Western Mojave Desert. Other project duties included setting up the laboratory facilities, creating project specific documentation forms, the implementation of procedures and training of 6 technicians in lab as well as field methods, site updates (DPR forms) for 30 sites, and report writing. The project was conducted in support of Section 106 and 110 of the National Historic Preservation Act of 1966, as amended, and Air Force Instruction 32-7065, Cultural Resource Management. JT3/CH2M HILL conducted the evaluation under Letter of Technical Direction 1B0220000-0001, Environmental Management Support, as part of contract F042650-01-C-7218, under the command of the Base Historic Preservation Office.

2009-K-PLT42 Phase II Cultural Resources Evaluation of Site EAFB-3897, Air Force Plant 42, Los Angeles County, California. FY09. Project and Field Director for the test excavation and evaluation of a Gypsum Period temporary camp site. Responsibilities included, but were not limited to, coordination with Air Force Plant 42 security personnel, training of field technicians, creation and implementation of procedures for project design and methods, and writing the final report of findings. The project was conducted in support of Section 106 and 110 of the National Historic Preservation Act of 1966, as amended, and Air Force Instruction 32-7065, Cultural Resource Management. JT3/CH2M HILL conducted the evaluation under Letter of Technical Direction 1B0220000-0001, Environmental Management Support, as part of contract F042650-01-C-7218.

Archaeological Inventory FY09 2009-D, Edwards AFB, California.

Archaeologist involved in Phase I investigation of 2500 Acres on EAFB, in support of the continued base-wide inventory. Work was conducted in accordance with the Integrated Cultural Resources Management Plan, under the command of the Base Historic Preservation Office.

2009-C Protection of Historic Properties, Edwards AFB, California.

Archaeologist involved in support of site preservation to assist the Air Force in complying with the provisions of the National Historic Preservation Act, as amended; the Archaeological Resource Protection Act; Native American Graves Protection and Repatriation Act; American Indian Religious Freedom Act; and Air Force Instruction 32-7065, Cultural Resource Management. Work was conducted for the Site Preservation Program for Fiscal Year 2009, as specified in Letter of Technical Direction 1B022000-0001-R2, Environmental Management Support, as part of Contract F42650-01-C-7218.

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Old Ridge Route Project, in the Angeles National Forest, CA. Client Federal High Way Administration. July 2008 to September 2008. Archaeologist involved in the monitoring of the emergency repair of Federally Owned Roads upon the NHPA listed Old Ridge Route, 8N04.

Modesto Irrigation District, 49 MW Power Plant Project, Modesto, CA. Client: Modesto Irrigation District. August 2008. Archaeologist responsible for a Phase I pedestrian survey for a 49-megawatt power plant, a cultural inventory search, and contributions to the report.

Iberdrola Renewables Biological and Cultural Assessment Support Project. Client: Iberdrola Renewables. Ms. Cardenas was responsible for conducting cultural inventories, fatal flaw reports, and field reconnaissance studies. 10 sites were evaluated for solar power plants for possible acquisitions in California, Nevada, Arizona and New Mexico  
Five study areas of this overall project are located in Arizona; two are in Maricopa County, two are in La Paz County, and one project is located partially in La Paz and Yuma Counties. Project acreages range from 5,800 acres to 35,000 acres. Three of these study areas are located in California; two areas are in San Bernardino County and one is located in Imperial County. Project acreages range from 13,000 to 29,000. Three of these study areas are located in Nevada; two are in Nye County and one is located in Clark County. Project acreages range from 7,500 to 12,000. The remaining study area is located in Hidalgo County, New Mexico. Total acreage of this project is 25,000. Work was conducted in July through September of 2008.

### *Experience Prior to CH2M HILL*

Chocolate Mountains Aerial Gunnery Range, Seal Weapons and Tactics Areas 4 and 5, Imperial and Riverside Counties, California. Client: U.S. Navy, San Diego, CA. January 2008 to April 2008. Archaeologist during a Phase I pedestrian survey of 2 areas encompassing 2,200 acres within the Naval Special Warfare Desert Training Facility. Duties included recordation of transects, GPS, field notes and documentation of discoveries, photography, DPR forms, and report writing in accordance to Section 106 guidelines.

Noble Windpark Project, Great Plains, Texas. Client: Noble Environmental Power. Archaeologist during a Phase I survey of a transmission right-of-way the length of which was approximately 8 miles. Other duties included report writing in accordance with the National Historic Preservation Act, Section 106 guidelines.

Noble Mitchell County Wind Farm, Mitchell, Coke, and Sterling Counties, Texas. Client: Noble Environmental Power. Researcher responsible for conducting a cultural inventory search with the Texas Historical Commission and the National Register of Historic Places. Duties also included producing the report of findings.

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Mid County Parkway, Riverside County, CA. Client: Caltrans District 8. November 16, 2007 to January 4, 2008. Archaeologist and Field Supervisor for a Phase II investigation of 9 Prehistoric sites CA-RIV-1512, 1650, 6989, and 8712, as well as 33-16678, 33-16679, 33-16680, 33-16685, and 33-16687. The nine sites investigated were comprised of milling stations in granite outcrops with surface artifacts, quarries, habitation, and multi-used sites. Evaluations are pending for potential of eligibility for the National Register of Historic Places and the California Register of Historical Resources. Responsibilities changed with the needs of the project and were site specific, but everyday duties included crew management, field direction, data management, documentation, collection and transportation of artifacts, analysis, evaluation of site boundaries and placement of STPs, surface collection grids, test units, surface scrape units, and the write-up of weekly reports, analysis and the report write up for ground stone artifacts.

Planning Area 6, Neighborhood 4A, Phase 2 Residential, Irvine, CA. Client: The Irvine Community Development Company (ICDC). January 1, 2007 - November 16, 2007. Project Archaeologist responsible for archaeological discoveries found during rough grade activities. Duties included, but were not limited to hiring technicians, coordination, site inspections, scheduling, managing documentation and finds, GIS, field direction in securing finds/sites, testing, excavation, collection, laboratory processing and curation of artifacts, weekly discoveries report to Army Corps Of Engineers, and technical report writing. Data recovery sites were CA-Ora-244, locus G with twenty three 2-by-2 meter units and PA6-15 with six 2-by-2 meter units. All units at site 15 contained thermal features.

Planning Area 40, Irvine, CA. Client: The Irvine Community Development Company (ICDC). May 2007. Project archaeologist for on call services for site inspection, resource impact analysis and field monitoring. A complete record search at a CHRIS information center was conducted using the following resources: Historical USGS and other historical maps, National Register of Historic Places, California Register of Historical Resources, California Inventory of Historical Resources, California State Historical landmarks, Directory of Properties in the Historical Resources Inventory, and quad maps showing survey footprints, sites, and isolates.

The Irvine Company, Portola Springs (Planning Area 6 Phase II) Data Recovery Irvine, CA. Client: The Irvine Community Development Company (ICDC). December 2005 to June 2007. Project Archaeologist responsible for the supervision of 6 lab technicians, training new personnel in artifact analysis, database quality control, ground stone analysis and its corresponding chapter for the report, data management, photo archiving, further contributions to the technical report included field, wet screen and analysis methods, and an appendix for the site records which were submitted to the CHRIS information center.

The Irvine Company, Portola Springs (Planning Area 6 Phase II) Data Recovery Irvine, CA. Client: The Irvine Community Development Company (ICDC). November 2005 to December 2006 Senior Crew Chief responsible for a 13 month long Phase III investigation. Field responsibilities included, but were not limited to: keeping detailed data logs, photography, site documentation, equipment, directing a 20 person crew which included 2 assistant crew chiefs, scheduling, macrobotanical sampling and floatation, pollen sampling, wet screen station, artifact collections, transporting archaeological materials, maintenance of field supplies, purchasing, and general coordination. Sites investigated were: CA-Ora-244, 650, 762, 1297, 1311, 1588, and 1590 with a combined total of four hundred and forty three 2-by-2 meter units.



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The Irvine Company, Portola Springs, Center Village and Lomas Valley Phase II Irvine, CA. Client: The Irvine Community Development Company (ICDC). January 2005 to September 2005. Crew Chief responsible for Phase II and III investigations, field supervisions, productivity logs, photography, site documentation, equipment, macrobotanical sampling and floating, wet screen station, artifact collections, pollen sampling, transporting archaeological materials, maintenance of field supplies, purchasing, and general coordination. Duties extended to the laboratory post excavation where responsibilities included supervising and training technicians, analysis, quality assessment, cataloging, DPR forms, scheduling maintenance of equipment, and archiving all archaeological data. All sites were tested to assess their significance per CEQA (California Environmental Quality Act) Guidelines and CRHR (California Register of Historical Resources). Sites investigated were PA6-01, 02, 03, 05, 06, 07, 08, 09, and 10.

Marblehead Coastal Development, in San Clemente, CA. Client: SunCal Company. January 2005 to April 2005. Paleontological and cultural monitor during rough grading activities, mapping, photography, GPS, scheduled and supervised other cultural and paleontological monitors

Pelican Hill in Newport Beach, CA. Client: The Irvine Company. September 2005 to November 2005. Field supervisor for rough grade activities. Duties included coordination with contractors, scheduling of paleontological and cultural monitors, and site inspections and assessment of discoveries.

The Irvine Company, Portola Springs, Center Village and Lomas Valley Phase I- Irvine, CA. Client: The Irvine Community Development Company (ICDC). June 2004 to Septmeber 2005. Crew chief responsible for providing cultural resource monitoring and evaluation services for a large scale development involving many previously recorded archaeological sites. All sites were tested to assess their significance per CEQA (California Environmental Quality Act) Guidelines and CRHR (California Register of Historical Resources). During Phase II and III investigations, field responsibilities included technician training and supervision, running field excavations and wet screen stations, macrobotanical sampling and floating, as well as lab analysis and management. Ground stone and lithic artifacts were analyzed for use and prepared for residue analysis

County Sanitation Districts of Los Angeles County, Lancaster Water Reclamation Plant Expansion Project. Client: Los Angeles County Sanitation Districts Nos. 14 and 20. August 2005. Crew chief for Phase I and II investigations, responsible for all pre-field preparations and equipment maintenance. Phase II was conducted on three sites discovered during the Phase I pedestrian survey. Temporary sites name are LWR-01, 02, and 03. Excavation responsibilities included site documentation and mapping, surface collection, photography, transporting of data, materials and crew, supervision of field technicians, and collecting specimens for sampling. Laboratory responsibilities included technician supervision, residue analysis preparations, lithic and ground stone analysis, and macrobotanical sampling and floatation.

El Dorado County Department of Transportation, California Tahoe Conservancy, Lake Tahoe Blvd Lane Reduction & Bike Trial Project, South Lake Tahoe, CA. Client: El Dorado County

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Department of Transportation. July 2005. Researcher responsible for archaeological documentation and organization. Researched historic and prehistoric archaeological sites including prehistoric camps and bedrock mortar sites, and conducted record searches for the cultural inventory in the project area. A write up of the literature search was produced and submitted in the final report.

Planning area 18 in Irvine, California. Client: The Irvine Community Development Company. September 2005 Crew chief responsible for conducting ten sixty meter trench excavations for Phase II testing. Conducted ground stone and lithic analysis of materials recovered during trenching as well as from previous pedestrian surveys.

Watkins House Historical Evaluation, University of California, Riverside. Client: UC, Riverside. July 2005. Research assistant to the historical archaeologist and was responsible for recording existing room dimensions, including storage rooms, vestibules, offices, chapel, halls, and furnishings. Also recorded were the modern modifications, room elements, and original components of the Watkins house. Responsibilities included photo documentation, and historical research. Contributions were included in the final report.

Shady Canyon Development Project, Irvine, CA. Client: The Irvine Community Development Company. September 2004 to December 2004. Lab technician responsible for floating macrobotanical samples, data entry, archiving and accessioning archaeological collection from sites CA-ORA-383, 730, 732, 733, 806, 1420b, 1422, 1423, 1576, 1582, 1584, 1585, 1586, and 1587

CA-ORA-1589, Irvine, California. Client: The Irvine Community Development Company (ICDC). July 2004 to August 2004. Crew member in a Phase III data recovery of a prehistoric site consisting of thirteen two by two meter units, excavated each in quad units. Responsibilities included producing detailed level forms, soil samples, wall profiling, floating macrobotanical samples, running the wet screen station, data entry, artifact analysis in lab as well as preparing documents and other materials from the project into archival formats.

Espana, CA-RIV-7458, Indio, CA. Client: Regency Homes. August 2004. Crew member of a Phase II investigation of a prehistoric Cahuilla site. Site was surveyed and surface materials were documented prior to beginning excavation. Responsible for training field technicians in excavation, documentation, extracting soil samples, and producing wall profiles, as well as excavating three one by three meter units.

### Professional Organizations/Affiliations

Society for American Archaeology  
Society for California Archaeology

### Professional Development

CEQA Workshop November 2007

Section 106 Essentials Workshop September 2011

### Languages

English and Spanish

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## Presentations

California State University, Fullerton 23<sup>th</sup> Annual Anthropology Symposium 2003: A Chronological Synthesis of Southern California

SAA 2007 Conference: Site Structure and Function of Hunter Gatherer Communities of the Tomato Springs Region: A Look at Ground Stone Artifacts

## Employment History

Archaeologist May 2008 to June 2008

Applied Biology

Duties: Archaeologist responsible for conducting 7 intense pedestrian surveys in Riverside County, California for transmission lines and telecommunications projects.

Archaeologist January 2008 to April 2008

Ecology and Environment, Inc.

Duties: archaeologists filling various capacities in Phase I investigations as well as conducting record searches, writing fatal flaw reports, and technical reports in accordance with National Historic Preservation Act, Section 106 guidelines.

Archaeologist November 2007 to January 2008

LSA Associates, Inc.

Duties: Field supervisor for projects in compliance with CEQA, 36 Code of Federal Regulations and Section 106 guidelines. Responsibilities included but were not limited to, supervision and directing of crew, artifact collection, creating and managing documentation, GPS, artifact analysis, scheduling, and report writing.

Archaeologist, July 2004 to November 2007

Stantec Consulting, Inc. Irvine, California

\*Project Archaeologist, December 2006 to November 2007

Director of archaeological investigations that included, but were not limited to, survey, construction monitoring, testing of two prehistoric sites and data recovery of 9 Historic Properties under the jurisdiction of the United States Army Corps of Engineers. Responsibilities included conducting cultural inventory searches, producing research designs, artifact analysis, GIS, coordination with Native American consultants and development contractors, scheduling staff, managing documentation (digital and hardcopy), producing 23 DPR site records updates, and report writing in accordance with CEQA and ARMIR guidelines.

\*Senior Crew Chief, June 2005 to December 2006

Stantec Consulting, Inc. Irvine, California (Formerly The Keith Companies)

Field Supervisor for monitoring, survey, test excavations, and data recovery of Historic Properties under the jurisdiction of the United States Army Corps of Engineers. Ms. Cardenas was also responsible for the supervision of lab technicians, artifact analysis, coordinating with development contractors and staff, archiving documentation, GPS, photo documentation, DPR forms, site updates, research, and assisting in report writing.

\*Junior Crew Chief and Research Assistant, July 2004 to June 2005

The Keith Companies Irvine, California

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Responsibilities included supervising field crews for Phase II test excavations and data recovery, assisting in report writing, digitizing documentation, data entry, cataloging, photography, artifact analysis, curation, paleontological monitoring and coordination, mapping, site forms and record updates.

### Selected Reports

- 2011 Cultural Resources Inventory Report for the Santa Susana Field Laboratory, Areas I and II, Ventura County, California. Prepared for the National Aeronautics and Space Administration, George C. Marshall Space Flight Center, Alabama.
- 2011 City of Moreno Valley San Timoteo Foothill Neighborhood Flood Protection HMGP-DR-1810-CA: Finding of No Historic Properties Affected. Prepared for the City of Moreno Valley, California and Federal Emergency Management Agency.
- 2011 Cultural Resources Inventory Report for the Black Rock 5 & 6 Geothermal Project, Imperial County, California. Prepared for CalEnergy, LLC and the California Energy Commission, Sacramento, California.
- 2011 Application for Certification of the Black Rock 5 & 6 Geothermal Project: Section 5.3 Cultural Resources. Submitted to the California Energy Commission, Sacramento, California.
- 2011 Cultural Resources Monitoring Report for Taxilane S and Bradley West, Los Angeles World Airports, Los Angeles County, California
- 2011 Draft Cultural Resources Inventory Report for the Painted Hills IV Wind Energy Project, Riverside County, California. Prepared for First Wind Energy, LLC, by CH2M HILL, Santa Ana, California.
- 2011 DRAFT Cultural Resources Monitoring and Mitigation Plan, Rice Solar Energy Project. Prepared by Gloriella Cardenas and Aaron Fergusson for the U.S. Bureau of Land Management and the California Energy Commission on behalf of Solar Reserve, LLC.
- 2011 Cultural Testing Report for the Alta Infill II Wind Energy Project, Kern County, California: For Archaeological Temporary Site No. S-11. Submitted to the Kern County Planning Department, Kern County, California.
- 2011 Cultural Resources Inventory Report for the Alta Infill II Wind Energy Project, Kern County, California. Prepared for Alta Windpower Development by CH2M HILL, Santa Ana, California.
- 2011 Cultural Resources Monitoring and Mitigation Plan: Oakley Generating Station Project. CH2M HILL, Santa Ana California. Prepared for Contra Costa Generating Station, LLC and California Energy Commission.
- 2011 Cultural Resources Monitoring and Mitigation Plan: Mariposa Energy Project. CH2M HILL, Santa Ana California. Prepared for Mariposa Energy, LLC and California Energy Commission.

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- 2011 Cultural Resources Literature Search for the All American Canal Service Bridge, Calexico, California. CH2M HILL, Santa Ana, California. Prepared for the Imperial Irrigation District and Federal Emergency Management Agency.
- 2010 Cultural Resources *Monitoring and Mitigation Plan: Ivanpah Solar Electric Generating System*. CH2M HILL, Santa Ana, California. Prepared for Solar Partners I, LLC; Solar Partners II, LLC; and Solar Partners VIII, LLC, U.S. Bureau of Land Management, and California Energy Commission.
- 2010 Cultural Resources for the SNG Suwannee Pipeline Project, Alabama, Georgia and Florida. CH2M HILL, Santa Ana, California. Prepared for Southern Natural Gas Company.
- 2010 Cultural Resources Monitoring and Mitigation Plan: Almond 2 Power Plant Project. CH2M HILL, Santa Ana California. Prepared for Turlock Irrigation District and California Energy Commission.
- 2010 *Devers-Palo Verde No. 2 Transmission Line Project: Construction Transportation Plan – Devers Yard*. Prepared for Southern California Edison. Prepared by CH2M HILL, Santa Ana, California.
- 2010 Memorandum: Tehachapi Renewable Transmission Project Preconstruction Photographic Documentation Mesa Material Storage Yard. Prepared for Southern California Edison. Prepared by CH2M HILL, Santa Ana, California.
- 2010 Cultural Memo for the Schuyler Heim Bridge Replacement and SR 47 Expressway Project - Documentation of Project Description Changes to Land Use, Recreation, and Coastal Zone. Prepared for Caltrans District 7. Prepared by CH2M HILL, Santa Ana, California.
- 2010 *Devers-Palo Verde No. 2 Transmission Line Project: Construction Specifications*. Prepared for Southern California Edison. Prepared by CH2M HILL, Santa Ana, California.
- 2010 *Memorandum: Tehachapi Renewable Transmission Project Preconstruction Photographic Documentation Segment 8 Telecom*. Prepared for Southern California Edison. Prepared by CH2M HILL, Santa Ana, California.
- 2010 *Phase II Cultural Resources Evaluation of EAFB-3897 (CA-LAN-2692, 19-002692), Air Force Plant 42, Los Angeles County, California*. Submitted to the Base Historic Preservation Office, Edwards AFB.
- 2010 *Hidden Hills Project Fatal Flaw Analysis (Cultural)*. Prepared for Bright Source Energy, Oakland, California. Prepared by CH2M HILL, Santa Ana, California.
- 2009 *Cultural Resources Inventory Report for the 9.02 Acre Turner Parcel (Assessors Parcel Number 686-040-021), Section 2, Township 5 South, Range 4 East, Agua Caliente Indian Reservation, City of Palm Springs, Riverside County, California*. Submitted to the Agua Caliente Band Of Cahuilla Indians, Tribal Historic Preservation Office, Palm Springs, California.

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- 2009 *Cultural Resources Inventory Report for the 52.27 Acre Andreas Cove Parcels (Assessors Parcel Numbers 686-040-024, 686-040-025, 686-040-026, and 686-040-027), Section 2, Township 5 South, Range 4 East, Agua Caliente Indian Reservation, City of Palm Springs, Riverside County, California.* Submitted to the Agua Caliente Band Of Cahuilla Indians, Tribal Historic Preservation Office, Palm Springs, California.
- 2009 *Cultural Resources Inventory Report for the 8.45 Acre Turner Parcel (Assessors Parcel Number 686-040-006), Section 2, Township 5 South, Range 4 East, Agua Caliente Indian Reservation, City of Palm Springs, Riverside County, California.* Submitted to the Agua Caliente Band Of Cahuilla Indians, Tribal Historic Preservation Office, Palm Springs, California.



# Clint Helton, RPA

## Senior Cultural Resources Specialist

### Education

M.A., Anthropology, Brigham Young University  
B.A., Language and Literature, University of Utah

### Professional Registration

Registered Professional Archaeologist (1999, No. 11280)

### Distinguishing Qualifications

- 14 years of experience conducting environmental impact evaluations, with particular expertise in conducting cultural resources studies in California, Arizona, Nevada, and Utah
- Extensive experience in regulatory compliance, cultural resources, National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) compliance activities
- Highly experienced managing cultural resources studies for large linear utility, energy, and transportation projects

### Relevant Experience

Mr. Helton has more than 14 years of environmental management experience in the United States. He has a strong background in environmental impact evaluations, having directed technical studies; negotiated with lead agencies, responsible agencies and clients; and has written, edited, and produced a substantial number of environmental review and technical documents. Mr. Helton frequently acts as a senior technical advisor and senior reviewer for projects and clients throughout the United States, with particular expertise in Arizona, California, Nevada, and Utah.

His knowledge of regulatory compliance and cultural and paleontological resources enables him to manage National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) compliance activities and document preparation. Mr. Helton is a particularly skilled practitioner of federal regulations governing treatment of cultural resources, especially Section 106 of NHPA (36CFR800) and the Native American Graves Protection and Repatriation Act (NAGPRA) (43CFR10). Mr. Helton has significant expertise conducting consultation with State and Federal agencies, as well as facilitating formal government-to-government consultation with Native American groups and tribes throughout the western U.S. Mr. Helton has authored numerous environmental technical reports, cultural resources management plans, cultural resources studies, Programmatic Agreements, Memorandums of Understanding (MOU), and contributed to many NEPA documents for a variety of private and public sector clients.

Mr. Helton is experienced with the challenges of preparing environmental documentation for large linear utility and transportation projects and is familiar with the process and guidelines of the California Energy Commission (CEC) and Federal Energy Regulatory Commission (FERC), Western Area Power Administration (WAPA), Bureau of Land Management (BLM), US Forest Service, Bureau of Indian Affairs (BIA) among others.

Additionally, Mr. Helton has conducted environmental impact assessment in Mexico. Mr. Helton is native-level bilingual in Spanish and has extensive knowledge of many Spanish-speaking countries.

## Representative Projects

**Task Lead, Tonto National Forest Control Road Bridge Replacement Project, Gila County, Arizona.** Conducting cultural resources study in compliance with Section 106 of the National Historic Preservation Act. Coordination with Central Federal Lands, US Forest Service, Arizona SHPO, and consultation with Gila County, Arizona. Preparation of technical report.

**Task Manager, US Border Patrol; Customs and Border Protection, Facilities Expansion, Multiple Locations Along United States Southern Border.** Lead preparation of numerous cultural resources studies in support of NEPA Environmental Assessments and Phase I Environmental Site Assessments in support of US Border Patrol facility expansion projects along the US/Mexico border. Included investigations for facilities in New Mexico, Texas, Arizona, and California. Received "Exceptional" performance rating.

**Task Manager/Principal Investigator, SolarReserve, Rice Solar Energy Project, San Bernardino County, California.** Assisted with preparation of AFC for CEC in support of a large proposed solar power generation facility covering over 4,000 acres of land managed by the Bureau of Land Management in San Bernardino County, California. Lead Federal agency is WAPA and also included BLM coordination. Responsible for preparation of cultural resources component of project, including archival research, field surveys, report preparation, and conducting Native American consultation.

**Project Principal; Parker to Blythe Transmission Line Project; Western Area Power Administration; Imperial County, California.** Provided overall management of cultural resources services for the Parker-Blythe #1 161-kilovolt (kV) transmission line project. The inventory extended from Blythe, California, to Parker, Arizona. A total of 147 sites (136 in California and 11 in Arizona) were recorded.

**Task Manager, BrightSource Energy, Ivanpah Solar Electric Generating System Project, San Bernardino County, California.** Assisted with preparation of AFC for CEC in support of a large proposed solar power generation facility covering over 4,000 acres of land managed by the Bureau of Land Management in San Bernardino County, California. Responsible for preparation of cultural resources component of project, including archival research, field surveys, report preparation, and conducting Native American consultation.



**Task Manager, National Science Foundation National Ecological Observation Network (NEON); Multiple Locations in Continental United States (AL, AZ, CA, CO, KS, MA, MD, MI, MN, NH, NM, FL, GA, OK, TX, WA, WI, VA) and Hawaii, Alaska, and Puerto Rico.** Task Lead and overall management of a large national cultural resources study in support of NEPA Environmental Assessment. The study is analyzing environmental impacts of a large and comprehensive network of scientific infrastructure located in a variety of ecological zones designed to monitor environmental conditions and to provide data on climate change. Work included archival research, field visits, and coordination with applicable state archives and preparation of correspondence to multiple SHPO's.

**Task Manager, Terra-Gen LLC Alta Wind Project, Kern County, California.** Task Lead, quality control manager, and overall management of cultural resources studies for this 5,000-acre-plus alternative energy development project near the City of Tehachapi, Kern County, California. Provide regulatory guidance, regional technical expertise in cultural resources and coordination with Kern County. Supervised inventory for cultural resources, technical report preparation, and conducted Native American Consultation.

**Task Manager, Iberdrola Renewables, Multiple Solar Energy Development Projects, Arizona, California, New Mexico, and Nevada.** Led preparation of cultural resources assessments for solar power generation facilities in Arizona, New Mexico, Nevada, and California. Mr. Helton is acting as principal investigator for several critical issues analyses as well as full permit preparation of solar energy development projects in Arizona, California, Nevada, and New Mexico. Project acreages range from 5,800 acres to 35,000 acres.

**Task Manager, PPM Energy, Solar Energy Development, Arizona, Nevada, California. Cultural resources assessments for solar power generation facilities in Arizona, Nevada, and California.** Mr. Helton is acting as principal investigator for literature searches and field visits for several proposed solar energy projects in Arizona, California, and Nevada. Project acreages range from 2,000 acres to 25,000 acres.

## **Professional Organizations/Affiliations**

Association of Environmental Professionals

Register of Professional Archaeologists

Society for American Archaeology

American Anthropological Association

## **Training and Certifications**

CEQA Training

NEPA Training

Section 106/NHPA Training

Federal Antiquities Permit in Arizona, California, Oregon, Washington, Utah, and Nevada

# Natalie Lawson, M.A., RPA

Cultural Resources Specialist

CH2M HILL Santa Ana, California

## Education

California State University, Fullerton, California, M.A., Anthropology

Arizona State University, Tempe, Arizona, B.S., Chemistry, (minor, Anthropology)

Years of Experience: 10

## Professional Registrations

Registered Professional Archaeologist (RPA)

Meets Secretary of Interior Professional Qualification Standards (36CFR61)

Listed on California BLM permit for CH2M Hill

Approved as a Alternate Cultural Resources Specialist and Cultural Resources Monitor by California Energy Commission for Construction Compliance work

## Professional Positions Held

Cultural Resources Specialist, Present

Junior Cultural Resources Manager, 2004-2008

Archaeology Technician, 2002-2004

Graduate Assistant, Anthropology Department, California State University, Fullerton, California, 2001-2003.

## Distinguishing Qualifications

- Strong background in environmental impact evaluations, with particular expertise in conducting cultural resources studies in California
- Has 10 years of cultural resource management experience in the western U.S.
- Meets Secretary of Interior Professional Qualification Standards (36 CFR 61)
- California Energy Commission approved Cultural Resources Monitor and Alternate Cultural Resources Specialist

## Representative Projects

**California Energy Commission Approved Alternate Cultural Resources Specialist, Multiple Power Generation Projects, California.** Conduct literature reviews, records searches, and field

surveys to develop Cultural Resources Assessments, prepare cultural resources impact evaluations and mitigation measures for projects' Application for Certification before the California Energy Commission. Determine cultural resources sensitivity and prepare resource specific documentation for several projects throughout California. Prepare Cultural Resources Monitoring and Mitigation Plans for construction-phase compliance activities.

**Alternate Cultural Resources Specialist, Construction-Phase Mitigation Implementation, Multiple Power Generation Projects, California.** Assist with the development of cultural resources monitoring and mitigation programs for the construction of power generation projects throughout California. Prepare the Cultural Resources Module of the worker education program and visual aids for worker education. Develop site-specific data recovery plans, and to provide client and the California Energy Assist with the preparation of the final monitoring report.

**Cultural Resources Monitor, Construction-Phase Mitigation Implementation, Canyon Power Plant, California.**

**Southern California Edison Canyon Power Plant.** Monitor construction activities for the construction of the Southern California Edison Canyon Power Plant in Orange County, California. Work was done in August 2010.

**Humboldt Bay Repowering Project.** Assist with the preparation of the final monitoring report for the repowering of the existing 105 MW Humboldt Bay Power Plant Units 1 and 2. Work was done in April 2010.

**Los Medanos Energy Center.** Assist with the preparation of the final monitoring report. Work was done in April 2010.

**Contra Costa Generating Station.** Assist with preparation of Application for Certification for California Energy Commission in support of this proposed 500 MW power generation facility in Contra Costa County, California. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation. Work was done in September 2009.

**Turlock Irrigation District, Almond 2 Power Plant.** Assist with preparation of Application for Certification for California Energy Commission in support of this proposed 500 MW power generation facility in Stanislaus County, California. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation. Work was done in February 2009.

**PG&E Humboldt WaveConnect Hydrokinetic Pilot Project FERC License Application.** Assist with preparation of FERC License Application for the construction of a pilot wave farm near Eureka, California. Responsible for preparation of cultural resources component of project, including terrestrial field surveys, a search of the State Land Commission Shipwreck Database, report preparation, and assisting with Native American consultation. Work was done in September and December 2009.

**Ivanpah Solar Generating Station.** Assist with additional studies within the Ivanpah SEGS project area, including pedestrian survey, site recordation and evaluation, and additional archival research of the project area. Assist with the preparation of the final report of this portion of the field studies.

**Fontana Energy Center Project.** Conduct addendum cultural studies for the preparation of the AFC license for the new construction of the Fontana Energy Center Project in San Bernardino County. Conduct the additional literature search, pedestrian survey, and assist with the preparation of the final technical memo the cultural studies. Work was done in November 2008.

**Carlsbad Energy Center Project.** Conduct addendum cultural studies for the preparation of the AFC license for the new construction of the Carlsbad Energy Center Project in San Diego County. Conduct the additional literature search and prepare the final technical memo for the addendum studies. Work was done in October 2008.

**Lodi Energy Center Project.** Assist with preparation of Application for Certification for California Energy Commission in support of this proposed 500 MW power generation facility in Stanislaus County, California. Responsible for preparation of cultural resources component of project, including field surveys, report preparation, and conducting Native American consultation. Assist with geotechnical studies, including the cultural section of the geotechnical report. Work was done in July and August of 2008 and January 2010.

**Additional Third-Party Environmental Compliance/Mitigation Monitoring Experience Supporting Major Construction Projects:**

Cultural Lead and construction monitor: FHWA, Old Ridge Route, Los Angeles County, CA.  
Field Director and construction monitor: Caltrans District 12, Laguna Canyon Road Widening Mitigation, Orange County, CA.

Construction monitor: Hellman Ranch, Orange County, CA.

**Names and telephone numbers of contacts familiar with the work of the CRS on referenced projects:**

Clint Helton, CRS CH2M HILL 6 Hutton Centre Drive, Suite 700 (714) 429-2000	Jerry Salamy, Project Manager, Canyon Power Plant CH2M HILL 2485 Natomas Park Dr # 600 Sacramento, CA 95833-2975 (916) 921-1291
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# Lori Durio Price

Architectural Historian/Cultural Resource Specialist

M.A., Historic Preservation, Savannah College of Art and Design, 1995

B.A., English and Political Science, Louisiana State University, 1985

- Qualified as a historian, an architectural historian, and a historic preservationist under the Secretary of the Interior's Historic Preservation Professional Qualification Standards as defined in 36 CFR 61

## Relevant Experience

- 15 years of experience in dealing with cultural resource issues from local, state, and federal perspectives
- Experience with National Register of Historic Places (NRHP) and state and local landmark eligibility issues
- Extensive survey, evaluation, and preservation planning experience
- Thorough knowledge of Section 106 of the National Historic Preservation Act (NHPA), including drafting and implementation of Programmatic Agreements and Memoranda of Agreement (MOAs)
- Previous regulatory experience as State Historic Preservation Office (SHPO) staff, municipal Historic District Commission staff, and Federal Emergency Management Agency (FEMA) contracted field office staff
- Department of Transportation Act Section 4(f) evaluation experience, and Land and Water Conservation Fund Act Section 6(f) experience
- Extensive experience with National Environmental Policy Act (NEPA) compliance

## Representative Projects and Dates of Involvement

**Cultural Resources Lead; Ongoing Cultural Resources Support; Union Pacific Railroad; Western Region; July 2011 to Present.** Perform senior technical review of multiple, on-going bridge, rail, and culvert determinations of eligibility. Assist program management with cultural resource issues, including staffing, technical review, day-to-day cultural resource support, and strategy for addressing high profile or sensitive issues, such as preparing determination of eligibility for Great Salt Lake Causeway railroad bridge. Has recently included preparation or review of several 20<sup>th</sup> century railroad bridges in California.

**Cultural Resources Senior Technical Staff; Hazard Mitigation Technical Assistance Program (HMTAP); Federal Emergency Management Agency (FEMA) Region IX; Oakland, California; July 2011 to July 2012.** Devise strategy for cultural resource compliance for nine HMTAP projects submitted by the State of California as a result of the November 2008 Southern California Wildfires (FEMA-1810-DR-CA). Includes a total of nine projects: one wildfire, two flood control, and six seismic retrofit projects. Perform senior review of cultural resource technical reports for those projects located in the Tahoe/Truckee, Orinda, and Moreno Valley areas.

**Cultural Resources Program Lead; SR 520 Bridge Replacement and HOV Program; Washington Department of Transportation; Seattle, Washington; March 2004 to July 2011.** Managed a large team responsible for cultural resource compliance for the SR 520 Program, which encompasses three separate projects. Included extensive survey of over 300 built environment properties within urban freeway Area of Potential Effects, including numerous mid-century residential, institutional, commercial, and highway structures. Project included HABS/HAER documentation of the 1963 Evergreen Point Floating Bridge as part of its mitigation. Culminated in a Programmatic Agreement, two Environmental Assessments, and a Final Environmental Impact Statement.

**Special Considerations Liaison for Public Assistance/Historic Preservation; Recovery for Hurricanes Katrina and Rita; Federal Emergency Management Agency (FEMA); New Orleans, Louisiana; January 2006 to December 2007.** Embedded position in the local FEMA office to help ensure FEMA's compliance under Section 106 of the NHPA for a variety of projects in Orleans Parish that may result in adverse effects, including recommending creative solutions for mitigation. Managed government-to-government consultation with as many as 11 Native American tribes; interacted with state agencies and other federal agencies such as the National Guard Bureau and National Park Service; drafted Programmatic Agreements and MOAs; and worked closely with FEMA's NEPA staff to engage in innovative public involvement.

**Architectural Historian; Due Diligence Report for White River Hydroelectric Facilities Acquisition; Cascade Water Alliance; Pierce County, Washington; June 2005 to October 2005.** Produced a Technical Memorandum that provided a historical, cultural, and archaeological resources assessment of the White River Hydroelectric system, owned by Puget Sound Energy. The White River system, determined eligible for the NRHP, is a former power generation facility, constructed in 1910, that is no longer in service for electrical power generation. The facility incorporates not only the power plant structure, but also the entire White River Project system from headgate to tailrace and its accompanying structures. The objective of the memo was to help guide Cascade Water Alliance plan its future operations to protect these resources as needed, once they acquired the property.

**Architectural Historian; Jefferson-Martin 230kV Transmission Project; Pacific Gas and Electric Company; San Mateo County, California; May 2004 to July 2004.** The Lower Crystal Springs Dam, determined eligible for the NRHP and a California State Point of Historical Interest, was impacted as part of an electrical line installation project. Performed field inspection, assessed project effects, and recommended mitigation for restoring the unique historic concrete surface of the dam, which is a character-defining feature of the historic property.

**Architectural Historian; Fireboat *Ralph J. Scott* Preservation Plan; Port of Los Angeles; Los Angeles, California; August 2003 to February 2005.** Developed and wrote a preservation plan for this historic marine vessel, a National Historic Landmark built in 1925, for the Port of Los Angeles and the Los Angeles Fire Department. The project included assessments of multiple sites on port property as potential locations for the vessel display, presentations to City and Port leaders, as well as public involvement including the National Park Service, the California SHPO, and other stakeholders in the community.

**Architectural Historian; Klamath River Hydroelectric Facilities FERC Re-licensing; PacifiCorp; Klamath County, Oregon and Siskiyou County, California; May 2003 to March 2004.** As part of a FERC re-licensing application, conducted survey to document seven historic hydroelectric facilities and their associated sites and properties spanning two states,

culminating in post-field recordation on Oregon Inventory of Historic Properties forms; California State 523 Primary Record forms; and California Building, Structure, and Object forms.

**Architectural Historian; Berth 206-209 Container Terminal Reuse Project; Port of Los Angeles; Terminal Island, Los Angeles, California; October 2003 to January 2004.** Surveyed the former Matson Stevedoring Services of America Terminals facility, an 86-acre site planned for redevelopment by the Los Angeles Harbor Department, to determine the presence and eligibility of cultural resources, including research and writing of brief history of Terminal Island, California, culminating in the Cultural Resources section of the EIS. The project included improvements to the terminal area, access road realignment, and railroad crossing improvements.

### **Publications and Presentations**

2009. "Rolling on the River: New Orleans' Riverfront Revitalization." New Orleans, Louisiana. National Brownfields Conference.

2007. "Innovative Response Under Section 106 in a Disaster." Savannah, Georgia. Vernacular Architecture Forum Annual Conference.

2001. "Urban Revitalization Tools." New Orleans, Louisiana. Tulane Institute for Environmental Law and Policy Annual Conference.

2000. "Revitalization of the Warehouse District." New Orleans, Louisiana. American Planning Association Annual Conference.

### **Employment History Prior to CH2M HILL**

Principal Architectural Historian - City of New Orleans, Historic District Landmarks Commission, New Orleans, Louisiana, 1997 to 2003

Architectural Historian II - State of Louisiana, Office of Cultural Development, Division of Historic Preservation (SHPO), Baton Rouge, Louisiana, 1995 to 1997